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SIUE Undergraduate Catalog, 1976

Southern Illinois University Edwardsville

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announcements

undergraduate edition

june, 1976

SIU at edwardsville

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 5, Number 6 of the *Southern Illinois University Announcements*.

THE FOLLOWING ISSUES of the *Southern Illinois University Announcements* may be obtained free from University Graphics and Publications, Southern Illinois University, Edwardsville, Illinois 62026.


Graduate School Catalog.

Guidelines for Prospective Students.

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. A copy of the catalog may be purchased at the University Bookstore for \$1; mail orders should be sent to University Graphics and Publications and must include remittance payable to Southern Illinois University.

announcements

 Southern Illinois University at Edwardsville

Southern Illinois University Announcements / Vol. 6, No. 4, June 1976.

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University Calendar

FALL, 1976

September 27 (7:30 a.m.)—December 18
Thanksgiving Vacation—November 21-28
Final Examinations—December 13-18

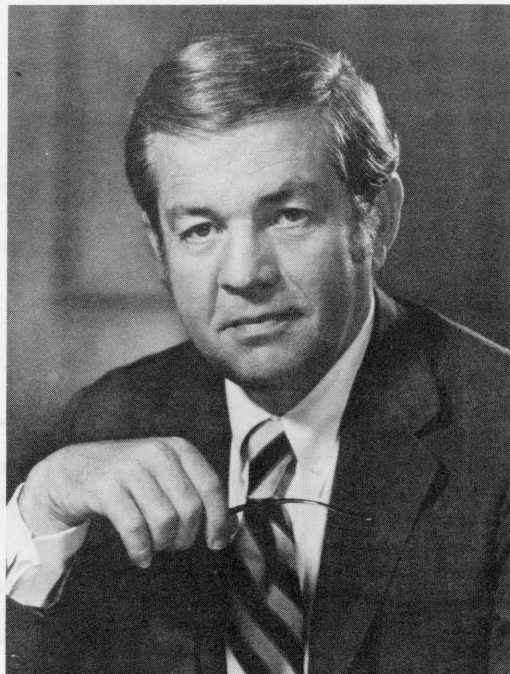
WINTER, 1977

January 4 (4:30 p.m.)—March 19
Final Examinations—March 14-19

SPRING, 1977

March 28 (7:30 a.m.)—June 11
Final Examinations—June 6-11

DEDICATION



JOHN SAMUEL RENDLEMAN
1927 — 1976

John S. Rendleman believed in Southern Illinois University at Edwardsville. He believed in the University as a facility for presenting all people an opportunity for attaining a better life through further education. He translated this belief during his seven-year tenure as leader of this University into the establishment of classroom buildings, the University Center, the Tower Lake Complex, the School of Dental Medicine, the Mississippi River Festival, and numerous new academic and public service programs.

John Rendleman also saw this institution as an avenue of cultural and economic opportunity for all citizens of the region who sought to improve their lives and fulfill their humanity. Acutely aware of the diversity of social levels, breadth of interests, and severity of problems the University faced, he bent every energy to realize as much as possible the vast potential of the institution in the time allotted to him.

John Rendleman loved, believed in, and stood for his family, his friends, his University. Let them be his enduring monument.

The University

Southern Illinois University is a multi-purpose and diversified public university that was established in 1869. It has sought to meet contemporary educational needs for those it serves. It is fully accredited by the North Central Association of Colleges and Secondary Schools.

Southern Illinois University at Edwardsville has been involved in educational and service programs for the Metro-East St. Louis Area since 1949, when the Belleville Residence Center was established. In 1957, residence centers were established in Alton at the former Shurtleff College campus and in East St. Louis. Specialized programs continue to function at both locations today, urban-oriented programs in East St. Louis, and a dental program in Alton. New resident centers were opened in 1974, at Scott Air Force Base and at Greenville College. A third center was opened in 1975 at Litchfield, Illinois.

Southern Illinois University at Edwardsville offers programs of instruction, research, and public service that are appropriate to the mission of the major educational institution in urban-industrial Metro-East Illinois, the second most populous region in the State. Program development is based on a sensitivity to regional needs and on the prudent use of available resources. The University is committed to an improvement of the quality of life in the Metro-East region through programs directly related to societal needs, such as health care, social services, environmental protection and continuing education.

Educational programs are wide ranging, covering baccalaureate degrees in nearly forty different concentrations, approximately forty different master's degrees and three areas of the specialist's degree. A doctoral degree in Instructional Processes was approved in 1976.

In the fall of 1965, major academic operations of the University were centralized on the new Edwardsville Campus. Six buildings presently comprise the main academic core, and two additional buildings will be in use by fall, 1976. The campus is located on 2600 acres of rolling land and woods dotted with lakes along the bluffs flanking the Mississippi River southwest of Edwardsville. Lovejoy Memorial Library, named for Elijah P. Lovejoy, an abolitionist newspaper editor who was America's first martyr to freedom of the press, houses over a half million volumes, over 200,000 government documents, a collection of 10,000 sound recordings, a map collection exceeding 80,000 maps, and thousands of films and other visual materials. Students have access to several art collections including Rodin's *Walking Man*.

The John Mason Peck Building is a general classroom building which houses fifty classrooms in addition to numerous faculty offices. The Science Laboratory Building contains both general classrooms and special laboratories and offices for

science faculty. The Communications Building has general classrooms and special purpose rooms for music, fine arts, speech and theater students. Student theatrical productions are presented in the theater. Broadcasting studios and facilities are housed in the Communications Building. Programs for radio station WSIE-FM originate in that building and facilities for a proposed education television station are in the building, also.

The University Center, which has received international awards for its total design, has 220,000 square feet of diversified space. It provides food service for students, faculty, and guests. The Center provides recreational facilities including a sixteen-lane bowling alley, table tennis facilities, billiards room, and a card and game lounge. Other facilities are a bookstore, barber shop, 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.

The John S. Rendleman Building, named for the University's first president, has approximately 60,000 square feet of office space which provides for the various administrative, student service, and academic functions.

Near the academic core is the new geodesic dome interdenominational Religious Center which was constructed through private donations.

Additional buildings such as the Supporting Services Building, Heating and Refrigeration Plant, and the Wagner Complex of fine art studios are located at various points away from the center of the campus area.

There are approximately 550 full-time Edwardsville faculty members, seventy-five percent of whom possess the doctoral degree. Although many faculty are distinguished nationally and internationally through special talents, publications, and research, teaching is of primary concern. Awards are made annually for outstanding teaching. Faculty are committed to quality instruction, maximum communication and involvement with students. Student representation on major policy-making bodies such as the University Senate is considered to be an advantage to the University and to facilitate students' learning and understanding.

Enrollment at Edwardsville the past three years has been approximately 12,000 students, with eighty-four Illinois counties, thirty states and twenty-eight foreign nations represented. Madison and St. Clair Counties provide eighty percent of the total enrollment. Missouri residents account for seven percent of the total student population. Southern Illinois University at Edwardsville is primarily a commuter campus with students living in the many communities within a sixty-mile radius of the campus. Approximately 1,250 people live in the 432 student apartments at the Tower Lake complex on campus, within walking distance of the central academic core.

Numerous cultural, entertainment, education and athletic activities abound in this metropolitan area. The campus is approximately thirty minutes driving time from downtown St. Louis. Interstate Highways 70 and 270 facilitate access to the campus from all parts of the southwestern Illinois region.

The University has received national recognition for its Mississippi River Music Festival which has completed its seventh season. The St. Louis Symphony is featured, as are many popular musical groups, during the summer season.

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.

General Information



Admission Policy and Procedures
Determination of Residency
Advisement and Registration
Tuition and Fees
Housing
Financial Assistance
Veterans' Information

1

Admission

Admission Policies, Requirements, Procedures

Our policy is to accept well-qualified students whom we can reasonably expect to complete our degree requirements. In general we select our students from the upper fifty percent of high school graduating classes. It has been our experience that the best measures of success in college are motivation and ability. We judge these qualities by evaluating a student's past educational record and test scores. We feel our admission criteria help to select a student body capable of maintaining acceptable academic standards.

High school graduation or the equivalent is required for admission to the University. Advanced placement and college credit can be earned through the College Level Examination Program (CLEP) or Advanced Placement Program.

When entering the University for the first time a student must have a pre-entrance physical examination. This is to be completed by a private physician and submitted on a form provided by the Health Service prior to reporting on campus to register.

New Student Life

New Student Life, coordinated through the Student Activities Office, is a unique approach to orientation. The program is designed to help the new student adjust to the campus community quickly and comfortably so that his or her academic and social experiences at the University will be as rewarding as possible.

In order to assure all new students the opportunity of attending an orientation session, regularly scheduled sessions 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 session. All workshops are conducted prior to the quarter of matriculation. Every undergraduate student admitted to the University is required to participate in an orientation session.

Requirements for Admission of Freshman Students

High school students who rank in the upper half of their graduating class or who achieve a composite score of 20 or higher on the American College Test (ACT) may be admitted 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 have an ACT composite score less than 20, will be permitted to enter on a conditional basis 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 being admitted to the University. Admission granted to students who are still in high school is subject to the completion of high school and maintenance of the rank in class upon which they were admitted.

Admission Procedures for Freshman Students

There are two procedures, which may be followed by prospective students applying as first time freshmen. Both procedures, ACT/APP and the traditional method, are explained below.

ACT/APP PROGRAM

High school students in the final semester of their junior year or first semester of their senior year may take advantage of the ACT/APP Program. The University

no longer requires an admission application from high school students who take the American College Test and select us to receive a copy of their scores. The ACT data accompanying the results is sufficient for us to create an admission file. However, before final processing of a file can be completed, we must have an authorization to obtain high school information necessary to determine admission status. Therefore, each person who provides test scores will be sent an ACT/APP form which allows the individual to accept the offer of admission and sign the authorization of information release for high school records. It is essential that we have this signed form before we can admit the student to the University. Receipt of the form will automatically insure the applicant of consideration for admission and regular mailings concerning the University and its programs and services.

TRADITIONAL ADMISSION PROGRAM

The second procedure which is recommended for those individuals who have already completed high school or did not send their ACT results to us is as follows:

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 your high school transcript be sent directly to the Office of Admissions and Records from the high school.
3. Take the American College Test (ACT) and have official scores sent directly to the Office of Admissions and Records from the American College Testing Program.

Requirements for Admission of Transfer Students

For academic purposes an undergraduate applicant for admission to the University is considered to be a transfer student when 12 quarter hours or more of work is presented for consideration; otherwise the student will be considered a new freshman.

Students applying for admission from two-year institutions are admissible to any quarter of the school year, provided they had a 3.00 (C) grade-point average at the school of last attendance. A student who did not have a 3.00 average at the institution of last attendance, but who is eligible to return to that school, may be considered for admission on scholastic probation for the summer, winter, or spring quarters provided there has been an interruption in schooling of at least two quarters, and there is tangible evidence that additional education can be successfully completed.

Students applying from four-year institutions are admissible to any quarter, provided they maintained a 3.00 (C) average at the school of last attendance. Those who do not have 3.00 at the institution of last attendance, but who are eligible to return, may be considered for admission on scholastic probation for the summer, winter, or spring quarters provided there has been an interruption in schooling of at least two quarters, and there is tangible evidence that additional education can be successfully completed.

In the event a student has attended more than one institution, the institution of last attendance is considered to be the one last attended on a full-time basis for at least one academic term.

Students graduating with an associate degree in a baccalaureate-oriented program (Associate in Arts or Associate in Science degree) from an accredited two-year college may enter the University with junior standing and as having

met the General Studies requirements. These students may enter any quarter provided they have not taken additional work at another institution since completion of the associate degree. 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. All grades earned at other institutions are used in determining the student's grade-point average. 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.

Semester hours transferred are computed on the basis of 3 quarter hours credit for each 2 semester hours accepted. A student transferring a course carrying 3 semester hours credit, for example, will receive 4.5 quarter hours credit.

Admission Procedures for Transfer Students

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 the following items before admission will be granted:

1. The application for undergraduate admission submitted at least 30 days prior to the quarter for which applying.
2. An official transcript sent directly from each institution previously attended.
3. In addition, transfer students presenting fewer than 36 quarter hours (24 semester hours) of completed work must provide a copy of their high school transcript and entrance examination scores (ACT).

Requirements for Admission of Foreign Students

For foreign applicants, basically the same admissions criteria prevail as are imposed upon native students, except that all documentation must be on file no later than two months prior to the beginning of the quarter to which candidates seek admission.

Each foreign applicant must submit an application for admission and a "Questionnaire for Foreign Students" which lists all previous schooling. Individual marks sheets (transcripts) from the applicant's secondary or middle schools are also required. Transfer applicants from foreign universities must provide, in addition to transcripts *per se*, a detailed description (syllabus) of the content of the individual courses for which they seek transfer credit. This material must be on file before any evaluation of credits will be performed. All documentation must be in English, and it is the applicant's responsibility to provide any translations required. All translations must be accompanied by the signed certification of the translator, attesting that the translation is a veritable representation of the contents of the original.

Foreign applicants are also required to provide scores on the Test of English as a Foreign Language (TOEFL), unless English is the traditionally recognized language of their homeland. A total score of 500 on the TOEFL is required for undergraduate study and 550 for graduate study. Only under unusual circumstances will a substitute for TOEFL be considered. Successful completion of an intensive training course in English as a second language removes the require-

ment. Students must make provision for their own financial need and are required to certify their financial stability before their application can be considered. The University assumes no financial obligation to students because of the fact of admission.

ADMISSION PROCEDURES FOR FOREIGN STUDENTS

Before being admitted to the University, the foreign applicant must provide the following supporting material:

1. A complete set of application documents, including (a) an application for admission, (b) the admission questionnaire listing a year-by-year account of past educational experiences, and (c) a financial statement indicating means of financial support, and showing that funds will be available for the entire projected period of study.
2. English language proficiency scores. The Test of English as a Foreign Language (TOEFL) is the preferred examination. Only with the approval of the Director of Admissions and Records will any other examination be allowed as a substitute.
3. Secondary school records. The freshman applicant must provide a copy of his/her final diploma verifying completion of secondary school education, and marks sheets indicating each year's grades. These transcript documents must be translated into English.
4. Transcript of university study. A transfer applicant must also provide a syllabus from the foreign university which he/she attended, stating course content, to assist the Foreign Student Admission Officer with the evaluation of transfer credit. If the applicant has completed less than one full year's study at the university level, he/she must also provide his/her secondary school records. These documents must be translated into English.

Admission of Former Students

A student who has registered and paid fees for any of the four quarters immediately prior to the one he/she wishes to attend is considered a continuing student and need not re-apply for admission.

Continuing students who have declared a major may obtain registration appointments by contacting the Enrollment Center, John S. Rendleman Building 1308. Those who have not declared a concentration should contact the General Studies Division, John S. Rendleman Building 1310, for advisement and registration appointments.

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 re-admission. (See Academic Regulations in Chapter 3.)

Admission of Non-Degree Students

Those individuals who desire to take classes at the University for their own interest, knowledge, or job upgrading, but are not interested in pursuing a degree may be admitted as non-degree students. Students in this category may enroll in any undergraduate course for which they have met the prerequisite. However, they are not permitted to enroll in 500-level courses.

The only document required for admission as a non-degree student is the Non-Degree Application. Should 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 non-degree student will be applicable toward such a degree. The decision regarding acceptance of credit earned as a non-degree student toward a baccalaureate degree is at the discretion of the major department. All non-degree student applications for admission are processed in the Office of Admissions and Records.



Determination of Residency

Regulations governing the determination of residency for admission to the University and for assessment of tuition and fees are contained in this section.

For the purpose of these regulations an *adult* student is considered to be a student eighteen years of age or over; a *minor* student is a student under eighteen years of age. The words *he* or *his* also apply to a female unless otherwise stated or clearly indicated. The term *the State* means the State of Illinois. Except for those exceptions clearly indicated in these regulations, in all cases where records establish that the person does not meet the requirements for resident status as defined in these regulations, the nonresident status shall be assigned.

Residency Determination

Evidence for determination of residence status of each applicant for admission to the University shall be submitted to the Office of Admissions and Records at the

time of application. A student may be reclassified at any time by the University upon the basis of additional or changed information. However, if the University has erroneously classified the student as a resident, the change in tuition shall be applicable beginning with the quarter following the reclassification; if the University has erroneously classified the student as a nonresident, 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 these regulations. If the University has classified a student as a resident based on false or falsified documents, the reclassification to nonresident status shall be retroactive to the first quarter during which residency status was based on the false or falsified documents.

ADULT STUDENT

An adult, to be considered a resident, must have been a bona fide resident of the State for a period of at least three consecutive months immediately preceding the beginning of any term for which he registers at the University, and must continue to maintain a bona fide residence in the State, except that an adult student whose parents (or one of them if only one parent is living or the parents are separated or divorced) have established and are maintaining a bona fide residence in the State and who resides with them (or the one residing in the State) or elsewhere in the State will be regarded as a resident student.

MINOR STUDENT

The residence of a minor shall be considered to be, and to change with and follow: (a) that of his parents, if they are living together, or living parent, if one is dead; or (b) if the parents are separated or divorced, that of the parent to whom the custody of the person has been awarded by court decree or order, or, in the absence of a court decree or order, that of the parent with whom the person has continuously resided for a period of at least three consecutive months immediately preceding his registration at the University; or (c) that of the adoptive parents, if the person has been legally adopted and, in the event the adoptive parents become divorced or separated, that of the adoptive parent whose residence would govern under the foregoing rules if that parent had been a natural parent; or (d) that of the legally appointed guardian of the person; or (e) that of the "natural" guardian, such as a grandparent, adult brother or adult sister, adult uncle or aunt, or other adult relative with whom the person has resided and by whom he has been supported for a period of at least three consecutive months immediately preceding his registration at the University for any quarter, if the person's parents are dead or have abandoned him and if no legal guardian of the person has been appointed and qualified.

PARENT OR GUARDIAN

No parent or legal or natural guardian will be considered a resident of the State unless he: (a) maintains a bona fide and permanent place of abode within the State, and (b) lives, except when temporarily absent from the State with no intention of changing his legal residence to some other state or country, within the State.

EMANCIPATED MINOR

If a minor has been emancipated, is completely self-supporting, and actually resides in the State, he shall be considered to be a resident even though his parents or guardian may reside outside the State. An emancipated minor who is completely self-supporting shall be considered to "actually reside in the State of

Illinois" if he has maintained a dwelling place within the State uninterrupted for a period of at least three consecutive months immediately preceding the beginning of any quarter for which he registers at the University. Marriage or active military service shall be regarded as effecting the emancipation of minors, whether male or female, for the purposes of this regulation. An emancipated minor whose parents (or one of them if only one parent is living or the parents are separated or divorced) have established and are maintaining a bona fide residence in the State and who resides with them (or the one residing in the State) or elsewhere in the State will be regarded as a resident student.

MARRIED STUDENT

A nonresident student, whether male or female, or a minor or adult, or a citizen or noncitizen of the United States, who is married to a resident of the State, may be classified as a resident so long as he continues to reside in the State; however, a spouse through whom a student claims residence must demonstrate his or her own residency in compliance with the requirements applicable to students seeking resident status.

PERSONS WITHOUT UNITED STATES CITIZENSHIP

A person who is not a citizen of the United States of America, to be considered a resident, 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.

ARMED FORCES PERSONNEL

A person who is actively serving in one of the Armed Forces of the United States and who is stationed and present in the State in connection with that service and submits evidence of such service and station, shall be treated as a resident as long as the person remains 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 in one of the Armed Forces of the United States and who is stationed outside the State may be considered a resident only if he was a resident of the State at the time he entered military service.

A person who is separated from active military service will be considered a resident of Illinois immediately upon separation providing he: (a) was a resident of the State at the time he entered military service, (b) became treated as a resident while in the military by attending school at this University while stationed within the State, or (c) has resided within the State for a period of three months after his separation.

STATE AND FEDERAL PENITENTIARY

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 as long as he remains 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.

MINOR CHILDREN OF PARENTS TRANSFERRED OUTSIDE THE UNITED STATES

The minor children of persons who have resided in the State for at least three consecutive months immediately prior to a transfer by their employers to some location outside the United States shall be considered residents. However, this shall apply only when the minor children of such parents enroll in the University

within five years from the time their parents are transferred by their employer to some location outside the United States.

DEPENDENTS OF UNIVERSITY EMPLOYEES

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

DEFINITION OF TERMINOLOGY

To the extent that the terms "bona fide residence," "independent," "dependent," and "emancipation," are not defined in these regulations, definitions shall be determined by according due consideration to all of the facts pertinent and material to the question and to the applicable laws and court decisions of the State of Illinois.

A bona fide residence is a domicile of an individual which is his true, fixed, and permanent home and place of habitation. It is the place to which, whenever he is absent, he has the intention of returning. Criteria to determine this intention include but are not limited to year around residence, voter registration, place of filing tax returns (home state indicated on federal tax return for purposes of revenue sharing), property ownership, driver's license, car registration, vacations, and employment.

PROCEDURE FOR REVIEW OF RESIDENCY STATUS OR TUITION ASSESSMENT

A student who takes exception to the residency status assigned or tuition assessed shall pay the tuition assessed but may file a claim in writing to the appropriate official for a reconsideration of residency status and an adjustment of the tuition assessed. 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 made within said period, he may appeal the ruling to the Legal Counsel by filing a written request with the appropriate official within twenty days of the notice of the ruling.

Academic Advisement and Registration Procedures

Advisement

The University maintains an advisement system which is available to all students. This system requires all new undergraduate students to have initial advisement through the General Studies Advisement Office. After declaring a major concentration, the student is assigned to an adviser in the major area. Each student is required to declare a major prior to his/her senior year. Probationary students are also required to receive advisement prior to registration. Upperclass students with a declared major, except those in Education, may be self-advised for registration purposes.

Registration

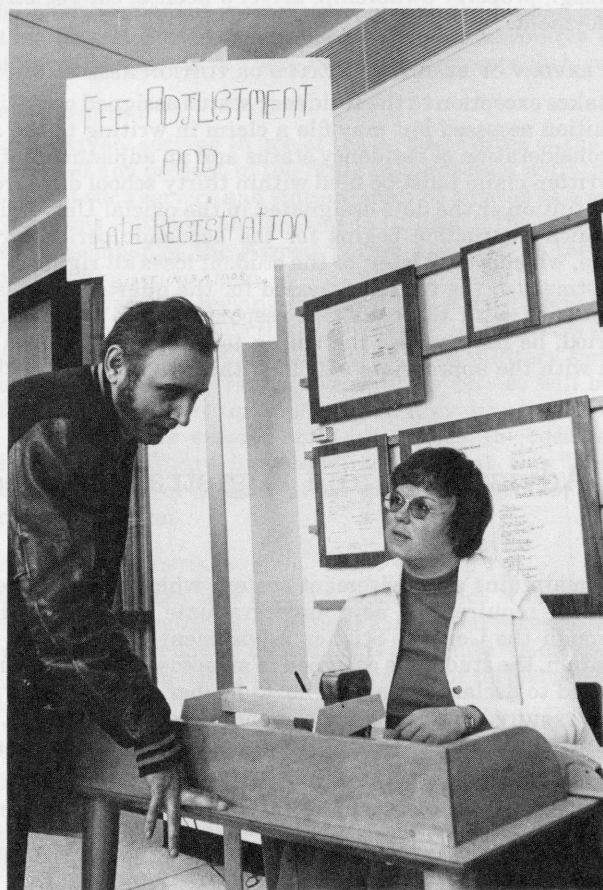
An early registration is conducted several weeks prior to the beginning of each quarter in the Meridian Ballroom of the University Center.

The first two days of early registration are conducted on an appointment basis, and appointments are issued at announced times by the Enrollment Center. No appointment is necessary to register on the third day of early registration. To obtain specific information regarding appointment registration, contact the Enrollment Center at (618) 692-3866.

A final day of registration is held prior to the beginning of each quarter. At this time, appointments are not necessary; registration is conducted on a first-come, first-served basis. Since students will find a broader selection of courses available during the earlier registration times, they are encouraged to register during the appointment 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.

Detailed information about the dates and procedures for advisement and registration appears in the quarterly Announcements, available from University Graphics and Publications.



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. Current tuition and fees charges are shown below. Graduate students must purchase their textbooks, and therefore, are not assessed the textbook rental fee.

	Not more than 5 hrs.	More than 5, less than 12	12 or more
Tuition Fee—Illinois Resident	\$48.00	\$95.00	\$143.00
Tuition Fee—Out-of-State Resident	(143.00)	(286.00)	(429.00)
Student Welfare and Recreation			
Building Trust Fund Fee	5.00	10.00	15.00
Athletic Fee	3.00	6.50	10.00
Book Rental Fee	4.00	7.00	10.00
Student Activity Fee	3.50	7.00	10.50
University Center Fee	10.00	10.00	10.00
Student to Student Grant*	1.50	1.50	1.50
Total—Illinois Resident	\$75.00	\$137.00	\$200.00
Total—Out-of-State Resident	(170.00)	(328.00)	(486.00)

Students enrolled in the Open University Project pay the following tuition and fees:

	Fewer than 12 hours	12 or more
Tuition Fee—Illinois Resident	\$95.00	\$143.00
Tuition Fee—Out-of-State Resident	(286.00)	(429.00)
University Center Fee	10.00	10.00
Textbook Rental Fee	7.00	10.00
Program Fee	25.00	37.00
Total—Illinois Resident	\$137.00	\$200.00
Total—Out-of-State Resident	(328.00)	(486.00)

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

	Not more than 5 hrs.	More than 5, less than 12	12 or more
Illinois Resident	\$75.00	\$137.00	\$200.00
Out-of-State Resident	(170.00)	(328.00)	(486.00)

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

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

Other charges which a student may incur are those for departmental field trips, library fines, and excess breakage. Also, students taking courses which involve the use of materials, as distinct from equipment, will ordinarily pay for such materials.

*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. The refund station is located outside the Bursar's Office, in the John S. Rendleman Building.

Textbook Service

One of the truly unique services offered by the University is the system of supplying textbooks to students in the most economical manner. The service supplies the basic instructional texts which have been designated by the departmental faculty through their respective department heads.

The textbook system provides for the sale of textbooks to graduate, unclassified, and off-campus students for their courses. It also provides for the quarterly rental of textbooks to on-campus undergraduate students. Textbooks are sold at discount prices. The income from the sale of texts and rental system fees support the system.

Information concerning issue dates, return schedules, deadlines for return, etc., are posted and published for each quarter.

Withdrawal from School and Refunds

A student who finds it necessary to withdraw from school while the quarter is in progress must report to the Office of Student Affairs to initiate official withdrawal action. No withdrawal will be permitted during the last two weeks of classes except under extraordinary circumstances. A refund of fees is permitted only if the withdrawal and refund requests are officially completed within the first two weeks of the quarter. See the Registration Calendar in the quarterly Announcements 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.

A student who registers and pays fees and then finds that he/she cannot attend school that quarter must also officially withdraw through the Office of Student Affairs.

A student who receives notification of academic suspension after he/she has completed registration for the next quarter will automatically be withdrawn from school and sent a full refund.

In compliance with 45C.F.R.177.63 a prorated refund policy is in effect for Guaranteed Loan Recipients if withdrawal and refund requests are completed by the end of the sixth week of the quarter. The following prorated schedule based upon fees paid at the time of withdrawal is permitted.

1st 2 weeks of the quarter	100%—no service charge
3rd-4th weeks of the quarter	60%—service charge in amount no greater than \$100.00
5th-6th weeks of the quarter	40%—service charge in amount no greater than \$100.00
After the 6th week	No refund

Housing

The Student Housing Office seeks to provide and continually improve a living environment which assists each student in making the most effective use of the opportunity for higher education. The Housing Office has established a range of services, available to students on a voluntary basis, to include both on-campus housing and off-campus housing.

On-Campus Housing

There is a shortage of available on-campus housing facilities. Normally students must wait at least 10-12 months after making application before being assigned to Tower Lake Apartments. *Apply at the earliest possible date.*

Students living outside a 50-mile radius of campus will be given priority for on-campus facilities. However, this does not guarantee on-campus housing.

The University's housing facilities, Tower Lake Apartments, provide housing for approximately 1000 single students and 250 families. The University's objective is to provide temporary housing for faculty and staff members, and long-term housing for single and married students. Single students live in a co-op arrangement (furnished two- or three-bedroom apartments) which emphasizes individual responsibility, academic and personal growth and development, and community involvement through social and service projects and programs. Married students have the option of two- or three-bedroom apartments, furnished or unfurnished, with easy accessibility to playground areas and laundry facilities. Resident housing staff members are available to handle those problems residents encounter in their living situation. A community center provides meeting rooms, lounge areas, social and recreational facilities, snack-bar facilities, laundry facilities, arts and crafts, programs for children and adults, and maintenance and administrative offices. Further information concerning application procedures can be obtained from the Housing Office.

HOUSING COSTS*

Rates for Married Students

Two-Bedroom Unfurnished	\$125.00
Two-Bedroom Furnished	145.00
Three-Bedroom Unfurnished	145.00
Three-Bedroom Furnished	155.00

Rates for Single Students

Two-Bedroom	
4 single students per unit	\$ 50.00
Two-Bedroom	
2 single students per unit	100.00
Three-Bedroom	
6 single students per unit	40.00
Three-Bedroom	
3 single students per unit	85.00

*Rental rates listed are subject to change whenever conditions make changes necessary.



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.

Student Work and Financial Assistance

The financial aid program of the University is designed to assist students who may be financially unable to meet the expenses of attending college. Financial aid may be awarded in the form of grants, scholarships, and loans, and through student employment. Grants and scholarships do not have to be repaid. Loans normally carry low interest rates with repayment beginning after the completion of studies. A combination of scholarships, grants, loans, and/or work is referred to as a "package," and packages are designed to meet 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 and 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 Basic Educational Opportunity Grant Program (BEOG), Illinois State Scholarship Commission awards (ISSC), or the Parents' Confidential Statement (PCS).

How to Apply for Financial Assistance

Applications for financial assistance should be filed as early as possible for the academic year in which aid is requested. In order to receive maximum consideration for financial assistance, applications must be received by the following deadline dates:

Fall Quarter	June 1
Winter Quarter	November 1
Spring Quarter	February 1
Summer Quarter	May 1

Before any consideration can be given for financial aid based on need, dependent students are required to file the Parents' Confidential Statement (PCS). Self-supporting or independent students are required to file the Student's Financial Statement (SFS). NOTE: The financial statement should be mailed at least four weeks prior to the established deadline dates above. The applicable financial statement 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 apply first to the Basic Educational Opportunity Grant Program (BEOG). Undergraduate residents of Illinois who are applying for other forms of financial aid based on need are also required to first apply for the Illinois State Scholarship Commission Monetary Award (ISSC).

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 Programs

COLLEGE WORK STUDY

The College Work Study Program is designed to assist students with great financial need to secure employment and help defray educational 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. The repayment schedule may be deferred up to three years if the borrower enters the military service or becomes a volunteer in the Peace Corps or VISTA. After graduation, up to five years may be deferred during periods enrolled and attending college for advanced degrees as a full- or half-time student. Repayment begins approximately one year from the date the borrower ceases to attend school on at least a half-time basis. Interest at the rate of three percent begins to accrue at the time of repayment. A ten-year period in which to repay the loan is available. Cancellation of the loan for full-time teaching is also available to qualified students.

Eligible undergraduate students may receive \$1250 per academic year. Total amount of all undergraduate loans may not exceed \$5000. Eligible graduate students may receive \$2500 per academic year. Total amount of all loans, undergraduate and graduate, may not exceed \$10,000.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS

The basic purpose of the Supplemental Educational Opportunity Grant (SEOG) Program is to assist students of exceptional financial need who are from low-income families (normally below \$9000 per year) and who would be unable to enter or remain in school without this financial aid. The grant is not repayable, and must be matched with an equal amount of financial aid through a National Direct Student Loan, College Work Study, scholarship, or grant-in-aid. It is possible, therefore, that a student may have a National Direct Student Loan, a Supplemental Educational Opportunity Grant, and also participate in the student work program.

NURSING STUDENT LOANS AND SCHOLARSHIPS

The Nursing Student Loan and Scholarship Programs assist students with exceptional financial need to pursue nursing careers by providing financial assistance in the form of long-term, low-interest loans or scholarships. Only students who are officially admitted to the School of Nursing are eligible for participation.

Under the Nursing Scholarship Program, a student may receive a maximum of \$2000 per academic year to help defray educational expenses. The scholarship is not repayable, and must be matched with an equal amount of Nursing Loan.

Under the Nursing Student Loan Program, a student may borrow up to \$2500 per academic year, with a total loan not exceeding \$10,000. The interest rate is three percent, with deferment and cancellation provisions provided.

LAW ENFORCEMENT EDUCATION LOANS AND GRANTS

Law Enforcement Education Program (LEEP) grants are available to in-service law enforcement officers of local, state, or federal government agencies for the payment of tuition and fees only. These grants are awarded without regard to financial need. Officers who receive awards must enter into an agreement to remain in the service of a law enforcement agency for a period of two years following completion of the academic year for which the grant funds were provided.

LEEP loans are available to full-time students who are taking courses leading toward a certificate or a degree in a program related to law enforcement. Law enforcement personnel on academic leave may borrow in excess of tuition and fees by demonstrating financial need. The principal amount of any loan, plus interest, will be cancelled for service as a full-time officer or employee of a law enforcement agency, at the rate of 25 percent per annum for each year of service or its equivalent.

BASIC EDUCATIONAL OPPORTUNITY GRANTS

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 BEOG Program is used as the basis in determining the total financial aid "package" of every undergraduate student. All undergraduates applying for financial assistance from this University must first apply for the Basic Grant Program. Students are considered for this award if they are enrolled for at least half-time attendance. Awards for full-time students (12 quarter hours or more) range up to \$1400 per academic year. Only the three quarter academic year is covered by the Basic Grant Program. (No summer awards are available.)

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 first apply for this award.

SPECIAL EDUCATION TRAINEESHIPS AND FELLOWSHIPS

State and federal traineeships and fellowships are offered to students concentrating in special education. Special education students should apply through the Department of Special Education for these traineeships and fellowships which provide tuition, fees, and a stipend.

GUARANTEED STUDENT LOAN PROGRAMS

The Illinois Guaranteed Student Loan Program is designed to make it possible for students who are enrolled at least half-time to borrow from private lenders with

the federal government paying the interest for qualified students. (Loans are either guaranteed by state or private agencies or insured by the federal government). If a borrower is eligible for federal interest benefits, the federal government will pay the seven percent interest which accrues on the loan while the student is enrolled in school and during authorized periods of deferment. If the borrower is not eligible for these benefits, or does not wish to apply for them, he/she must make arrangements with his lender to pay the interest while enrolled in school.

Up to \$2500 per academic year may be borrowed depending upon the applicant's year in school. The amount of all undergraduate loans may not exceed \$7500. Total amount of all loans, undergraduate and graduate, may not exceed \$10,000.

A ten-year period in which to repay the loan is available. This begins nine months after graduation or withdrawal from school.

Applications can be obtained from banks participating in the program. Lists of approved banks and financial statements (not required in every case) are available in the Office of Student Work and Financial Assistance.

The Federally Insured Student Loan is available for students who are not residents of Illinois. Eligibility requirements are the same as for the Illinois Guaranteed Loan. The processing for these loans takes approximately one month.

ILLINOIS VETERANS SCHOLARSHIP

This scholarship is available to students with at least one year of active military service who entered service as a resident of Illinois and received an honorable discharge. An additional requirement is that the student returned to Illinois within six months following discharge.

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.

ILLINOIS GENERAL ASSEMBLY SCHOLARSHIP

These scholarships are awarded by representatives 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 in the employee.

Students normally begin at the federal minimum wage and progress with merit and 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.

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.

SIUE TUITION WAIVER

The Board of Trustees of the University provides a limited number of tuition waivers 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 waivers are awarded by the Office of Student Work and Financial Assistance. NOTE: Illinois residents are required to first apply for the Illinois State Scholarship Monetary Award.

STUDENT-TO-STUDENT GRANT

The Student-to-Student Grant Program (STS) provides cash grants of \$25 to \$100 to students attending the University. The Program was established through a \$1.50 per student fee assessment each quarter. Grants are made to full-time students who demonstrate financial need. Awards are made on a quarterly basis, and separate applications are required for each quarter for which the STS Grant is requested.

JUNIOR/COMMUNITY COLLEGE SCHOLARSHIP

Scholarships providing tuition are available to Illinois residents who are graduates of a community college or junior college within the State of Illinois. Application can be made to the Office of Student Work and Financial Assistance.

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 \$50 and proof of the emergency must be demonstrated to the Short-Term Loan Advisor. 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 and have an acceptable academic record. Applications and information regarding specific requirements can be obtained by contacting the Office of Student Work and Financial Assistance.

Veterans' Information

GI Bill

Southern Illinois University at Edwardsville is fully approved by the Veterans Administration for veterans desiring to use the GI Bill while attending the University. Veterans who qualify for the Illinois Veterans Scholarship may use this award concurrently with their GI Bill benefits. Veterans do not receive GI Bill benefits for courses taken on an audit basis. 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 dependents, 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 as soon as practicable.

For students qualifying under the GI Bill (P.L. 358) the following benefits apply:

Academic Load	Benefits	Monthly Check	
		Single	Married (No Children)
12 or more hrs.	Full	\$270	\$321
9-11 hrs.	3/4	203	240
6-8 hrs.	1/2	135	160

Credit for Military Experience

Students who have completed military basic training may receive 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.

Illinois Veterans' Scholarships

For information concerning this award, refer to a preceding section on State Programs of financial assistance.

Veterans' Service Programs

The Office of Veterans Affairs is located in the office of the Executive Dean of Student Affairs. 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, financial aid referral, and admission and registration assistance.

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.

Veterans Upward Bound

Administered by the Delinquency Study 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 which are not deducted from their normal entitlement under the GI Bill. For more information, contact either Veterans Upward Bound or the Office of Veterans Affairs.

V.A. Man on Campus

The Veterans Administration has placed counselors on college campuses throughout the United States. SIUE has two V.A. representatives on campus to assist students and the public in matters concerning the Veterans Administration. Located in Room 1207, John S. Rendleman Building, the "Vet Reps" communicate directly with the V.A. Regional Office in Chicago on any problem relating to V.A. matters.

Student Activities and Services



CHARLES E. STIKES, *Vice President for Student Affairs*

Student Development Services
Student Activities
The University Center
Campus Recreation
Men's Intercollegiate Athletics
Women's Intercollegiate Athletics
Religious Center
Health Service
Placement Services

2

Student Affairs Division

The University recognizes the importance of providing students every opportunity to benefit in the fullest manner from their university experiences. The primary goals of Student Affairs are to provide services which help students to continue their education and to be in the best possible mental and physical condition for classroom learning. We also seek to facilitate the growth and development of students through a variety of extra-curricular programs and activities.

The University is concerned with an integrated approach to student needs and problems in intellectual, social, spiritual, and physical areas. Students may learn about and be referred to specialized services throughout the University by publications describing the services and by various offices within the Student Affairs Division.

Vice President for Student Affairs

The Vice President for Student Affairs is the chief executive and administrative officer. He is responsible for the proper management of all aspects of the Student Affairs Division. The Vice President for Student Affairs is responsible for developing and maintaining a suitable organizational structure and employing competent personnel. He is responsible for formulating divisional policies.

The Vice President for Student Affairs reports directly to the President and is accountable to him. He is a member of the Academic Deans' Conference. The following positions are accountable to the Vice President for Student Affairs: Dean of Students, Assistant to the Executive Dean of Student Affairs, Foreign Student Advisor, Director of Student Activities, Director of Student Work and Financial Assistance, Director of Student Development Services, Director of University Placement Services, Director of University Health Services, Director of University Housing, Director of Recreation, Director of Men's Athletics, and Director of Women's Athletics.

Student Development Services

Student Development Services functions as an aid in helping students evaluate their strengths and limitations. The tests which are used may include measures of interest, aptitude, personality, and achievement. Testing programs for selection, placement, and research purposes are also provided. The American College Testing Program is administered regularly on the Edwardsville Campus. Personal and career counseling services are offered by trained personnel who can help students solve problems related to selecting careers, choosing and succeeding in academic programs, and surviving in a college environment. The office is located in Room 2308 of the Rendleman Building.

Identification Cards as Certificate of Registration

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 discipli-

nary 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.

Vehicle Registration

Each person who operates a motor vehicle in connection with attendance or employment at Southern Illinois University at Edwardsville must register that vehicle with the Vehicle Registration and Fees Section of the Bursar's Office, Room 1102, John S. Rendleman Building.

Vehicle Regulatory Policies which are in effect at property owned or controlled by the University are sanctioned by the Board of Trustees and are under the jurisdiction of the President of the University. Copies of the regulations are available at the Vehicle Registration Desk located in the Bursar's Office and other locations throughout the University. Correspondence regarding Parking and Traffic can be conducted through Vehicle Registration and Fees, Box 42, Southern Illinois University, Edwardsville, Illinois 62026.

Student Activities Office

The staff of 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: a Cultural Arts Series highlighting national and international performing artists in dance, theater, and music; Winterfest and Springfest involving three 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. 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.

During the academic year 1975-76, the following organizations were registered by Student Government.

All-University clubs

Alestle
Cheerleaders
Community Involvement Program
Cougar Guard
Fraternity-Sorority Conference
Major Events (Spring/Winter Fests)
Student Government
Tower Lake Area Council
University Center Board

Special interest organizations

(ACV) Association of Collegiate Veterans
Black Student Association
Chess Club
Crisis Intervention Unit
Disabled Student Association
Internationale Club
Sailing Club
(SIMS) Student International Meditation Society
Tribe
University Ambassadors
Wagner Potters Association

Subject-area organizations

Accounting Club
Anthropology Club
Art Student Society
Chemistry Club
Economics Association
Geography Club
German Club
Graduation Association of Sociology Students

History Club
La Sociedad Hispanica
Le Cercle Francais
Marketing Club
Nurses Association, Students
Philosophy Club
Physics Club
Pre-Law Club
Sanitation Technologists' Association
Student Social Work Association

Religious-affiliated organizations

Baha'i Organization (Baha'i Faith)
Baptist Student Union (Baptist)
Christian Science Organization (Christian Science)
Deseret Club (Church of Jesus Christ of Latter Day Saints)
Inter-Varsity Christian Fellowship (Interdenominational)

Professional and/or honorary organizations

Activities Honors Society
Administrative Management Society
Arnold Air Society
Association of Planners, professional urban planning
Civil Engineers, American Society of Delta Sigma Pi, national professional business fraternity
Gamma Theta Upsilon, national honorary in geography
Horn Society, music
Institute of Electrical and Electronics Engineers

Kappa Delta Pi, national honorary in education
 Lambda Alpha, national Anthropological Honor Society
 Lambda Iota Tau, national honorary in literature
 Master in Business Administration Association
 Mu Phi Epsilon, women's international music society
 Music Educators' Conference, national
 National Student Speech and Hearing Association
 Phi Beta Lambda, national student business fraternity
 Phi Chi Theta
 Phi Mu Alpha, men's national music fraternity

Pi Delta Phi, national French honorary society
 Pi Kappa Delta, national speech honorary
 Pi Mu Epsilon
 Pi Omega Pi, national business teacher education honorary
 Psi Chi Honor Society, national in psychology
 Samothrace, women's professional business
 Student Council for Exceptional Children, special education
 Student Speech Communication Association
 Association of Women's Sports
 Zeta Phi Eta, women's speech sorority



In addition to those organizations listed, there are sixteen 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.

There are other organizations and activities which are difficult to categorize. For example, the Co-recreation and Intramural Organization offers men and women competitive and noncompetitive activities such as tennis, basketball, cross-country and track, soccer, canoe racing, billiards, bowling, etc. SIUE has several choral groups, a debate team, other well-known forensics clubs, and a modern dance company which travels across the United States. There are regular judo and karate meetings, yoga classes and transcendental meditation groups. In

addition, many spontaneous "on the spot" groups form and disband, publicizing times and places via handwritten notes placed on bulletin boards throughout the campus.

University Center

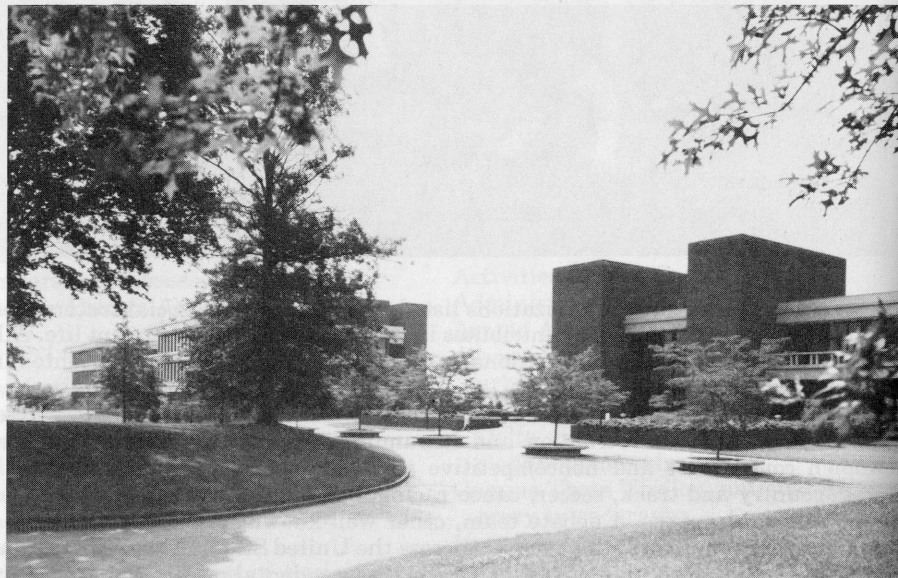
University Center Philosophy

The University Center is an integral part of the educational and community service program of Southern Illinois University at Edwardsville. As the center of the campus community, it serves many needs outside the classroom related to personal services and programs. The University Center represents a well-considered plan for the campus life of University constituencies.

The Bookstore, Food Service facilities, lounges, meeting rooms, Information Desk, Scheduling Center, Student Activities Center and Recreation facilities fulfill the daily needs on the campus for thousands of students, faculty, staff and guests from the surrounding communities.

The building serves an important educational function through the involvement of students in the management and development of a comprehensive experience which allows opportunities for self-direction, self-realization and creativity. A person becomes what he becomes through academic interaction, social encounters, group integration, formulation of values from the campus culture and the atmosphere of flexibility or rigidity which permeates the University environment.

An important aspect of the University Center educational philosophy includes the University Center Board. As a formal student organization, the University Center Board is charged with the development of a coordinated program of activities in the areas of visual arts, films, performing arts, leisure activities and issues and ideas. An additional responsibility is the advisement of



the University Center Director on matters of policies, procedures and services. This organization formally involves students in the operation of the University Center and provides students educational experiences through the performance of their responsibilities. The combination of facilities, services and programs results in activities planned and presented by students while creating opportunities for fulfillment of individual needs, personal development and leisure time activities.

History of Building Development

In January, 1961, a committee of students, faculty and staff was initiated to develop the University Center for the Edwardsville campus of Southern Illinois University. Each member of the University was encouraged to complete a facilities and services questionnaire while the planning committee visited eight commuter campuses to gain further knowledge of University Centers. The initial work of the committee led to the construction of a facility costing approximately \$8,000,000 with an estimated 220,000 square feet of space. The facilities and services include a large cafeteria, snack bar, meeting rooms, production kitchen, ballroom, art galleries, student activities center, craft shop, patio, restaurant, bowling lanes, billiards room, table tennis room, lounges, information and scheduling centers, University store, barbershop, and ticket office.

Highlights of Facilities and Services

FOOD SERVICE

Taste buds receive top priority at the University Center. From pastrami on rye to a sit-down banquet for 1,000, the restaurant, cafeteria, fast food service and catering personnel are ready to serve. The quality and efficiency of the Food Service operation have earned national recognition in the institutional food service industry.

University Club Restaurant. Linen tablecloths and napkins, crystal and the rolling cougar campus for a backdrop make the University Club, located on the second floor, an excellent place for a quiet, inexpensive luncheon or dinner. Open Monday through Friday, the University Club has specials, salads, steaks and a wide variety of other menu entrees.

Cafeteria. Hot breakfasts, luncheon specials, salad bar, "protein specials," selections for the diet conscious, fresh doughnuts, a deli and pizza bar are featured in the cafeteria, located on the lower level. Extras such as silverware and china service help to create a "home away from home" atmosphere. The cafeteria services are available Monday through Friday.

Catering Services. If you belong to an organization or wish private meals for a small group, the catering service can provide brunches, buffets, and complete banquet menus.

All University Center Food Services are open to students, faculty, staff and their guests.

UNIVERSITY STORE

Located on the first floor, the University Store offers a current selection of textbooks, best-sellers, paper supplies, office items, and a carefully selected stock of gift and personal items. In order to better serve the campus community, the store also has seasonal and occasional greeting cards, stationery, and a variety of

competitively priced items designed to meet your needs. The only way to appreciate the selection is to browse the store at your convenience.

RECREATION

This service was established to serve the campus community and its use is limited to students, faculty, staff and invited guests. Included in this area on the lower level are sixteen bowling lanes, billiards, table tennis, air hockey and a variety of amusement machines.

HAIR CARE SERVICES

The latest in hair styles and hair care products is available through the Hair Care Center located on the lower level.

TICKET OFFICE

Located on the first floor, the ticket office handles ticket sales for most University events and the Mississippi River Festival.

SCHEDULING CENTER

The Scheduling Center staff ensures that the University Center's facilities and services are available for University activities as they are needed. Coordinated scheduling of facilities and arrangement for event set-ups of seating, water services and audio-visual equipment are functions of this office.

INFORMATION CENTER

A weekly bulletin of events and general campus information are available in this office. Special information displays, "for-sale" boards, and University Ambassador tours are services provided to individuals and groups.

INFORMATION DESK

Convenience needs are served through a wide variety of items—newspapers, candy, cigarettes, stamps and check cashing.

STUDENT ACTIVITIES CENTER

The SAC area includes the offices of major student organizations—Student Government, University Center Board, Fraternity/Sorority Conference, Black Students Association and Major Events Council. Staff members of the Program Department and the Student Activities office provide assistance to organizations and individuals interested in contributing involvement to University activities.

CRAFT SHOP

This area of the University Center serves as a duplicating center, sign shop, and informal educational class area. Craft workshops are offered each quarter in pottery, photography, jewelry, macrame and other popular media.

LOUNGES AND MEETING SPACE

Several lounge spaces enable students to study, converse with friends, view contemporary art works, or rest between classes. The Opapi lounge features comfortable furniture, study booths, and several rooms. The Opapi serves as the main art gallery in the University Center with current art exhibits displayed each month. The magnificent, open Goshen Lounge is the scene of many student activities—bands, speakers, contests, card games, studying, and conversation. Also included in the University Center, on all levels, are meeting rooms providing space for meetings and banquets from 5 to 1,000.

The University Center was created by students for students to serve the needs outside the classroom and to enrich the total educational experience. You are encouraged to utilize the facility and services and to become involved in this aspect of the University life.

Campus Recreation

The interaction and participation in the recreation program is a vital and necessary phase of the physical and social development of all members of the University community. It is the goal of Campus Recreation to provide the necessary facilities, equipment, and programs that will 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 10:00 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 is 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 and/or float trips and bicycle tours. The equipment is also available for individual use for a small rental fee.

Additional information about Campus Recreation programs can be obtained by calling the Intramural Office at (618) 692-3984 or by calling the Office of Student Affairs at (618) 692-2020.

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 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. Five soccer players have been selected as United States Olympic Team players. Coach Bob Guelker coached the 1971 Pan Am and 1972 Olympic Team to the final qualifying rounds.



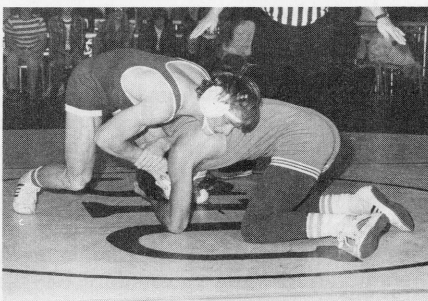
SIUE wrestlers earned third place and second place team honors in Division II tournament championship competition in 1974 and 1975 respectively. Coach Larry Kristoff was named as the 1976 United States World Cup Wrestling Coach.

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.

In 1975 SIUE golfers finished tenth in NCAA tournament play.

Roy Lee is baseball coach, Harry Gallatin coaches golf, Jim Dudley is the head basketball coach, Jack Whitted is the head track coach, John Flamer leads the cross-country team, and Kent DeMars is the mentor of the tennis squad.

Facilities for home contests include a 4000 seat field enclosed for soccer, a 1500 seating capacity enclosed for baseball contests, a cross country course, and a newly constructed track. The wrestling team holds its home meets in the



ballroom of the University Center. Six newly constructed tennis courts serve as the site for home tennis matches. The golf team utilizes the Sunset Hills Country Club for its home matches. The SIUE basketball team plays home games at Edwardsville High School.

Women's Intercollegiate Athletics

SIUE presently fields four intercollegiate teams for its women students: field hockey, basketball, softball, and tennis. Outdoor sports are conducted at the Bluff Road field complex, while basketball practices and games are held at Edwardsville Senior High School. SIUE does not recruit its women student athletes from high school, so team positions in all cases are completely open to any woman student. SIUE offers a modest program of financial assistance for women student athletes. Contact Dr. Rosemarie Archangel, Women's Athletic Director, for further information.

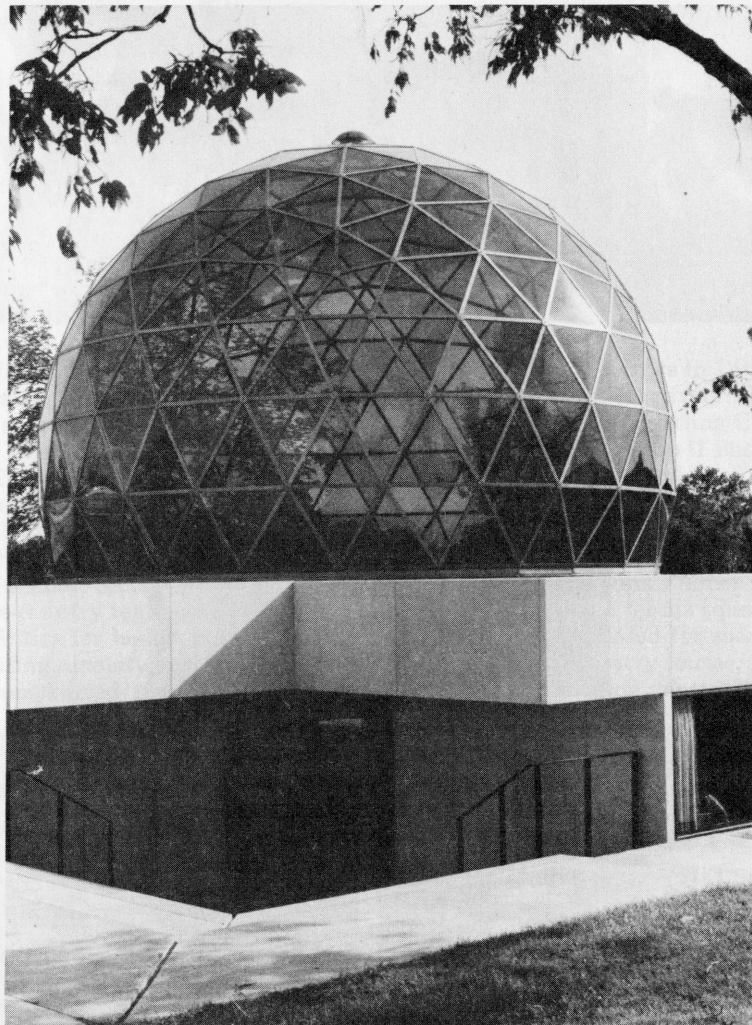


Religious Center

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 religion. Worship is celebrated at the Center daily and Sunday.

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



Health Service

Health Service provides medical services to the students, faculty, and staff within the limits imposed by the size and professional status of the staff, by legal obligations, and by the available facilities and funds.

When entering the University for the first time a student must have a pre-entrance physical examination. This is to be completed by a private physician and submitted on a form provided by the Health Service prior to reporting on campus to register.

Physical examinations from other colleges will not be accepted if the examinations are more than one year old. A physical examination must be in the hands of the Health Service prior to registration.

Detailed information about the services provided and the voluntary health insurance program available to students at special rates may be obtained through a brochure available at Health Service.

Emergency services may be obtained by calling 692-2525 during the hours when Health Service is closed.

Health Service is located in the basement of the Rendleman Building, and works closely with Student Development Service and ABCDVD in the care and treatment of physical and emotional problems.

ABCDVD

ABCDVD (Abortion, Birth Control, Drugs, Venereal Disease) is an information and referral center staffed completely by students. It deals with pregnancies, drug and alcohol related problems, birth control, venereal diseases, legal services information, and other student needs. ABCDVD, supervised by Student Development Services and the Health Service, maintains close contact with referral agencies and has a library of pamphlets and reference books on the above areas. ABCDVD is located in the Student Activities area of the University Center.

University 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. The services offered by the Post Office include: domestic and international mail; parcels mailed; 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. The Branch Post Office is located in Room 0111 of the John S. Rendlemann Building.

University Placement Services

Placement Services at Southern Illinois University at Edwardsville is operated on a centralized and university-wide basis. The office is maintained as a service to students, graduates, alumni, and employers. The function of the office is to serve as a career counseling center to advise students of career 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 compiled from mate-

rials furnished by various employers. This information is located in open files 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 organization.

Placement Services also assists those interested in teaching positions. Student teaching evaluations are a part of the prospective teacher's file. A complete file on current teaching positions is maintained by Placement Services. Other services available are: Career Counseling; Resume Development; Letter of Inquiry Advice; Interview Pointers; and Interview Arrangements with Employers. Individuals 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. For further information contact the Director of University Placement Services.

Academic Information



Degrees and Majors
Graduation Requirements
Academic Regulations
Grading System
Transcripts
The General Studies Program

3

Degrees and Majors

Undergraduate degrees available at Southern Illinois University at Edwardsville are the Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science, and Bachelor of Science in Engineering. A bachelor's degree normally requires four years of study. Below are listed the major and minor areas in which course work is offered at the undergraduate level. Information pertaining to secondary education and student teaching may be found in the School of Education section of Chapter 4.

Aerospace Studies ¹	Human Services
American Studies	Instructional Technology ¹
Anthropology	Latin American Studies ¹
Art	Mass Communications
Art and Design	Mathematical Studies
Biological Sciences	Music
Black American Studies ¹	Nursing
Business Administration	Peace Studies ¹
Business Education	Philosophy
Chemistry	Physical Education
Comparative Literature ¹	Physical Science
Early Childhood Education	Physics
Economics	Psychology
Elementary Education	Recreation
Engineering	Sanitation Technology
English	Social Work
Environmental Science ¹	Sociology
Foreign Languages	Special Education
Geography	Speech Communication
Government	Speech Pathology and Audiology
Health Education ¹	Theater
History	Women's Studies ¹

¹Minor concentration only.

Graduation Requirements

In order to graduate from the University with a bachelor's degree, students must satisfy the General Studies requirements which are explained in this chapter. They must also satisfy the requirements of their major concentration, and in many cases, a minor concentration. If students plan to teach, they should meet the requirements for teacher certification. There are also specific requirements for graduation for each degree, and these are explained in appropriate sections of this catalog.

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. In no case will an application be processed after the announced final deadline which will be three months prior to commencement. Application forms are available in

the Office of Admissions and Records. All deficiencies for graduation (incompletes, etc.) must be made up within two weeks following commencement; otherwise, the student will be graduated at the end of the next quarter.

At the time of application students must pay their graduation fee. Subsequently, the cap and gown must be ordered through the University Bookstore. Prospective graduates also must register with University Placement Services. Students who will be unable to attend the commencement exercises must notify the Graduation Section in the Office of Admissions and Records of their intentions.

Bachelor's Degrees

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 degree candidate must complete a minimum of 48 quarter hours in residence at Southern Illinois University at Edwardsville as well as meeting all degree program requirements.

Students seeking a second baccalaureate degree must complete a minimum of 48 quarter hours, in addition to those required for the first degree, and must satisfy the requirements of their primary concentration. At least 32 of these hours must be in residence.

Foreign Language Requirements for Bachelor of Arts Degrees

In addition to the University's general requirements for a bachelor's degree, a person working toward a Bachelor of Arts degree must complete 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.

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 Student Development Services, or by satisfactorily completing one of the following courses: Government 203, GSS 220, 300, 301, 302, or History 426.

Advanced Degrees

For information concerning master's degrees or the sixth-year specialist degree, refer to the Graduate School Catalog or direct inquiries to the Dean, Graduate School, Southern Illinois University at Edwardsville.

Academic Regulations

Unit of Credit

Southern Illinois University at Edwardsville operates on the quarter system. Therefore, references to hours of credit mean quarter hours rather than semester hours. One quarter hour of credit is equivalent to two-thirds of a semester hour. One quarter hour of credit represents the work done by a student in a lecture course attended fifty minutes per week for one quarter, and, in the case of laboratory and activity courses, the stated additional time.

Course Numbering System

Generally, those courses which are numbered at the 100- and 200-level are for freshmen and sophomores. The 300-level courses are for juniors and seniors. Only students who have graduate standing or more than 96 hours of undergraduate credit may register in a 400-level course. Courses numbered 500 or higher are open to graduate students only.

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 number of programs may carry different requirements and 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.

Class Standing

An undergraduate student is classified as a freshman, sophomore, junior, or senior, depending upon the number of hours that have been successfully completed toward the degree. A freshman is a student who has completed fewer than 42 hours; a sophomore, from 42 through 89; a junior, from 90 through 137; and a senior, 138 or more.

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 does not maintain a correspondence division, 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.

Scholastic Standards

1. When students' cumulative grade-point averages fall below 3.00, they are given a Scholastic Warning. They will be returned to a 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 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 be permitted by the dean of their unit to resume their studies at any time.

Honors Day

In recognition of high scholarship, an Honors Day convocation is held each spring. Candidates for a bachelor's degree in June or August who have maintained a grade-point average of 4.50 or more for all their work through the winter quarter of their senior year are honored. Each junior having a 4.50 grade-point average is also honored. Each sophomore and freshman who has a 4.25 grade-point average is honored at the convocation. In the case of a transfer student the average at Southern Illinois University at Edwardsville as well as the cumulative average must meet the specified requirement. A senior is eligible for only one Honors Day ceremony and normally would be a candidate for graduation in June or August. 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 passed and earn a minimum grade average of 4.25 in order to be included on the Dean's List.

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.
- INC—Incomplete. Has permission of instructor to be completed. An INC grade may be changed to completed grade within time period to be designated by instructor, not to exceed one year from close of quarter in which course was taken. Instructor ordinarily changes INC to E after one year if work is not completed.
- 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.

Authorized course withdrawals made through the program change process do not receive grades when made during the first four weeks of a quarter. Thereafter, authorized withdrawals receive W.

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.

A student registering for a course on an audit basis receives no letter grade and no credit hours. An auditor's registration card must be marked accordingly and fees paid on the same basis as are credit courses. An auditor is expected to attend regularly and is to determine from the instructor the expected amount of work. If an auditing student does not attend regularly, the instructor may determine that the student should not have the audited course placed on the record card maintained in the Office of Admissions and Records. A student registering for a course for audit or credit may change to a credit status or vice versa through the official program change method during the first four weeks of a quarter. Thereafter the change may not be made.

In the event of repeat courses—or whenever an undergraduate student at Southern Illinois University at Edwardsville takes the same course more than once, receiving a grade each time—all grades shall be recorded on the transcript, but only the last grade shall be used in computing the grade-point average. Students may repeat a course originally taken at another school by taking the same course at Southern Illinois University. It should be determined in advance by the Office of Admissions and Records or the appropriate Department that the Southern Illinois University course is a repeat. Students who repeat Southern Illinois University courses at other schools will have both grades counted in their grade-point average. However, only the hours of the last completed course will count toward graduation.

The official record of a student's academic work is maintained in the Office of Admissions and Records.

Transcripts

Students are entitled to a free transcript of their university 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.

Proficiency Examinations

Students with superior backgrounds in certain subjects may qualify to receive credit in related courses by demonstrating their achievement in most General Studies courses as well as certain courses in other subjects. A listing is maintained in the General Studies Division (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 General Studies Division, and by Student Development Services.

The Proficiency Examination Program (including non-General Studies courses as well as General Studies courses) is administered by the Dean of the General Studies Division.

A student who desires to take a proficiency examination in any course should initiate the procedure with the General Studies Division Office. In many cases, course guides and reading lists are available from the appropriate academic department, for persons interested in taking the proficiency examination.

Any student may take any available proficiency examination subject to the following limitations: (a) A maximum of 48 hours, including credit earned through the College Entrance Examination Board's Advanced Placement Program, may be gained through proficiency examination. (b) 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: (a) 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. (b) 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, and a notation, "credit granted by proficiency examination" and the grade earned does not count in the student's grade-point average. (c) If a student receives a grade of D or E on a proficiency examination, no credit is received and the record shows nothing regarding the proficiency examination. However, the proficiency examination grade report form is filed in the student's folder for reference purposes, and to prevent re-examination.

An alternative procedure available in certain General Studies courses for proficiency examination involves student enrollment in the corresponding course. (The procedure is sometimes referred to as an in-class proficiency examination.) Under this plan, proficiency examinations are available to students in some classes for which they have registered. 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.

Advanced Placement Program (CEEB)

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 Entrance Examination 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 exami-

nation 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 on the examination provided by the College Entrance Examination Board at the completion of the high school course.

Ordinarily, the maximum credit granted through CEEB 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.

The following courses are those in which a student may currently earn credit through the Advanced Placement Examination of the College Entrance Examination Board.

- (1) Physics: 206a-5, 206b-5, 206c-5.
- (2) Chemistry: Chemistry 105-5; 125a-5; 125b-5; GSM 120-4.
- (3) Biology: Biology 200, GSM 130-4, 131-2, 230-4.
- (4) History: European: GSS 101-4, 102-4; American: GSS 300-4, 301-4, 302-4.
- (5) English: GSK 101-4, 102-4.
- (6) Foreign Languages: French: 123-12, 201-3; German: 126-12, 201-3; Spanish: 140-12, 201-3.
- (7) Mathematics: 150a-4, 150b-4.

As previously indicated, students who achieve a grade of 5, 4, or 3 on the CEEB Advanced Placement Examinations receive credit for the appropriate courses, except in chemistry where a score of 3 does not provide credit.

College Level Examination Program

Southern Illinois University 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 units (hours) can be earned through CLEP via General and/or Subject Examinations. This credit is applicable toward the Bachelor of Science or Bachelor of Arts degree or to undergraduate certificates offered by the University.
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.

The tests are administered locally at the official CLEP Testing Center in the General Studies Division. General Examinations are given on the second Saturday of each month and Subject Examinations are given on the third Wednesday.

Individuals who take the tests and who wish to apply for credit through Southern Illinois University should have the results sent to: Records Department, Office of Admissions and Records, Southern Illinois University, Edwardsville, Illinois 62026.

GENERAL EXAMINATIONS

The following amount of credit is offered for the corresponding General Examination: English Composition—8 quarter hours; Humanities—4 quarter hours; Mathematics—4 quarter hours; Science—8 quarter hours; Social Science—History—4 quarter hours.

SUBJECT EXAMINATIONS

When approved, as described in the preceding paragraph, credit will be awarded for Subject Examinations on the basis of the number of credit hours in the pertinent courses.

Pass/No Credit Grade Option

The objectives and structure of the General Studies Program are such that students must sometimes take courses in subjects for which they do not feel especially well prepared. Students may feel that they are at a disadvantage with respect to grades in such a class. The pressure to make good grades may also keep students from attempting a course in which they have some moderate interest but for which they feel that they may be at a disadvantage in competing with other students.

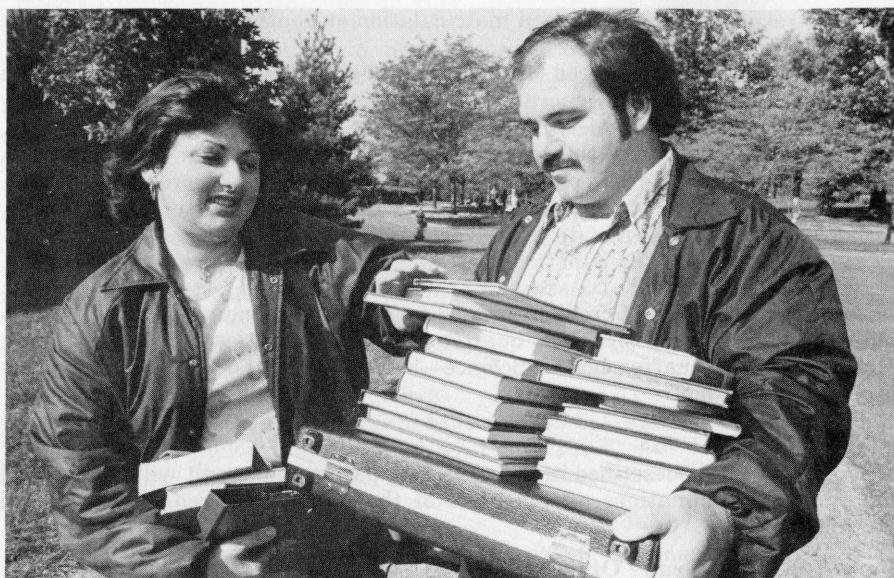
A student may elect to enroll in up to 20 hours in the General Studies Program under a Pass/No Credit option. Under this option the student receives a Pass for grades of A, B, or C and a No Credit for grades D or E. Students, at the time of declaring Pass/No Credit, may stipulate that they would rather receive the grade of D than No Credit when appropriate. (Dates for declaring Pass/No Credit option are announced by the Office of Admissions and Records.)

The instructor keeps and records grades in the usual way and the Office of Admissions and Records converts the grades to a Pass/No Credit basis in those cases in which the student has requested that option.

The General Studies Program

Students who expect to receive the baccalaureate degree from this University with the exception of those in the Dean's College must complete the General Studies Program.

A General Studies Committee, composed of faculty representatives, student representatives, and administrators, is responsible for determining broad policies and approving specific courses and sequences of courses to be offered. The Dean of the General Studies Division is responsible for the implementation of these policies. The individual courses are taught by the academic unit for which the courses were approved.



Aims and Purposes of the General Studies Program

The education of an enlightened people through the transmission of the culture of our times is a basic objective of higher education. Specialists themselves realize that rigid concentration within any field of study may deprive them of broader understandings so important for participation in life as citizens and parents. Our educational efforts, therefore, must produce individuals with an ability to use knowledge in a way which also advances social and cultural life. Our kind of free and democratic society cannot endure without such citizens.

General Studies are only part, not the whole, of man's education. While General Studies can conceivably help students in their choice of occupation and can contribute to their success in a given occupation, their principal objective is not to develop vocational skills. They comprise that portion of the total curriculum which is concerned with the common needs of man and which assist the student to be more at home in a world that increasingly demands more of all men in terms of the intellectual, spiritual, and social. It is necessary to prepare each student to assume his proper responsibilities in a world of rapidly expanding knowledge, rapidly expanding population, technological advance, and consequent changes.

There is a basic unity of knowledge which the General Studies Program attempts to exhibit. The General Studies Program tries to lay a foundation upon which the student will build a superstructure of understanding and achievement. Such a background should complement the specialized studies which the student undertakes in pursuing his concentration.

An opportunity is provided for the student to gain experience in several subjects and, hopefully, to make an unhurried selection of a professional goal and an area of concentration for his total educational program. If students have made a tentative choice of their educational goal, they may carry courses in their area of special interest concurrently with the basic courses of the General Studies curriculum.

The General Studies curriculum at Southern Illinois University at Edwardsville is one of unique quality, and accommodates many different levels of preparation for college. This philosophy permits the greatest possible number of persons an opportunity to reach their fullest potential while concurrently directing their efforts towards a stronger and happier democratic society.

The Five General Studies Areas

The General Studies Program utilizes a classification for knowledge into five comprehensive areas, each of which has a special contribution to make toward the development of the individual. Anyone, to be truly educated, should have some familiarity with each of these areas. Each area is designated by three letters.

GSK—Skills—This area includes courses which offer students the opportunity to develop their skills in written expression, oral communication and reasoning-problem solving. Effective communication of ideas is basic to an organized society. Transmission of information from one individual to another enables the second person to benefit from the experiences and insights of the first. All of us can benefit from the development of greater ability to think critically and to analyze the situations and problems which constantly confront us.

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 Science—It is the aim of the courses in this area to help the students develop an awareness of man's role in society, an ability to think intelligently about their environment, and an alertness to the complexities of the modern world. The courses in Social Science should assist the students in understanding the way men are shaped by the social processes. Study in the area should make students aware that their attempt to define these processes may increase their ability to determine their own destinies. It is easy to see the importance of the great technological advances of the industrial revolution. But, it should not be overlooked that all scientific and mechanical innovations must attain their significance in a setting of human interrelationships and responsibilities.

GHA—Humanities and Fine Arts—Amid all the changes in history, man in many basic ways is the same as he has always been. Human beings today experience the same basic desires and hopes, the same fears and failures, that 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 that these unchanging elements have been dealt with, with the unique ways man has expressed himself about them, but underneath is the permanency of the human experience itself. The title Humanities and Fine Arts aptly describes the concepts to be studied in this area. The student has an opportunity to enrich his own insights and appreciations. It is further hoped that students will be able to develop their own sense of values. For example, in philosophy and design, one can discover fundamental connections among various areas of human experience. In literature and philosophy one confronts various problems of good and evil and may be stimulated to clarify his own values. In the study of the various arts one ought to be able to come to a better appreciation of the creativity of others and

even share 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."

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

The specific requirements, which must be met by all students except those in the Dean's College, are listed and explained in this section. These general requirements must be qualified in many cases by the variations and exceptions explained in the section following this one.

The General Studies requirements are classified into the five areas previously discussed. These areas, with the requirements in each, are:

<i>GSK Skills</i>	16
The student is required to take 8 hours of written communication (courses which meet this requirement are numbered from 101 through 119)	8
The student must take 4 hours of oral communication (courses which meet this requirement are numbered from 120 through 139)	4
The student must take 4 hours of reasoning or problem solving (courses which meet this requirement are numbered from 150 through 169)	4
<i>GSM Natural Science and Mathematics</i>	16
The student selects any courses listed in the GSM Area to total 16 hours.	
<i>GSS Social Science</i>	16
The student selects any courses listed in the GSS Area to total 16 hours.	
<i>GHA Humanities and Fine Arts</i>	16
The student selects any courses listed in the GHA Area to total 16 hours.	
<i>GIS Interdisciplinary Studies</i>	4
The student selects any one course (or two courses if each provides 2 hours credit) listed in the GIS Area.	
	68
	- 8*
<i>General Studies requirements</i>	60

*The student is automatically excused from 8 hours in the one Area among GSM, GSS and GHA closest to his concentration. However the 8 hours remaining to be taken in that Area must be in courses offered by departments other than that of the concentration. The list of approved waivers appears on a later page.

GENERAL STUDIES REQUIREMENTS FOR THE TRANSFER STUDENT

A transfer student who has received an associate degree, in a baccalaureate-oriented program, from an accredited two-year institution may enter the University with junior class standing and be considered to have met the require-

ments of the General Studies Program. (See Chapter 1 for admission policies and procedures.)

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.

Flexibility, Variations, and Exceptions

The total requirements of General Studies may be partially satisfied, reduced, or modified by several considerations which are discussed in this section.

THE WAIVER

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

Area GSM—Biology, chemistry, engineering, general science and mathematics, industrial engineering, mathematics, nursing, physical education, physical science, physics, recreation, sanitation technology, and urban and environmental engineering.

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

Area GHA—American studies, art, elementary education, English, foreign language, language arts, mass communications, music, philosophy, special education, speech, speech pathology and audiology, theater, and early childhood education.

ADVANCED STANDING

It is possible for a student to gain advanced standing (that is, to by-pass certain requirements without credit in the corresponding courses) in some areas. Eligibility for advanced standing is determined upon the basis of high school preparation in the area, scores on the ACT test, and/or scores on special advanced standing examination. Students should consult their General Studies 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

- 101—4 English Composition
16 or below student should take a developmental section.
26 or above student eligible to take examination for advanced standing.
- 123—4 Oral Communication of Ideas (speech)
A course in speech in high school, 23 or above on ACT English.

GSM Area

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

- 111—4 Earth and Its Geologic Environment.
One year of earth science in high school, 28 or above on ACT natural science.
- 120—4 Contemporary Chemistry
One semester of high school chemistry, 13 or above on ACT mathematics, and 28 or above on ACT natural science.
- 130—4 Contemporary Biology
One year of high school biology, 28 or above on ACT natural science.
- 131—2 Life: Ecology and Diversity
or
230—4 Man and His Diseases
Two years of high school biology with a minimum grade of B, 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, 24 or higher on ACT mathematics.

GSS Area

- 101—4, Introduction to the History of Western Civilization
102—4 One year of world, western, or European history in high school, 27 or above on ACT social science.
- 130—4 Sociology
A course in sociology in high school, 27 or above on ACT social science.
- 150—4 Economics
A course in economics in high school, 27 or above on ACT social science.
- 220—4 U.S. Constitution
A course in American government or civics in high school, 27 or above on ACT social science.
- 240—4 Geography for Modern Man
A course in geography in high school, 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, 26 or above on ACT social science and 28 or above on ACT natural science.
- 300—4 History of the United States
301—4, One year of U.S. History in high school with a grade of B, 27 or
302—4 above on ACT social science.

GHA Area

- 203—4 Literary Masterpieces of Antiquity.
By examination only.
- 224—4 Philosophical Masterpieces.
By examination only.

SUBSTITUTIONS

Students are permitted to substitute certain courses in other areas for the regular General Studies courses. They cannot count either General Studies courses or non-General Studies courses taught by the faculty of their own primary concen-

tration toward meeting the General Studies requirement in their General Studies area of waiver. Specific information regarding course substitution may be obtained from the General Studies Advisement Office.

The General Studies Advisement Office

The General Studies Division maintains an advisement office, in Room 1310 of the Rendleman Building, for the assistance of students. Each student in the Division is required to be advised for each term of attendance by a General Studies adviser. Appointments for such advisement should normally 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 students need not make individual appointments for advisement.

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 a General Studies adviser while the student is in the General Studies Division.

The Advisement Office does the initial processing for declarations of concentration, change of concentration, and declarations and changes of secondary concentration.

STUDY SKILLS

A 1-hour elective course in Study Skills (GSK 100a) is offered which is 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.

DEVELOPMENTAL READING

A 1-hour elective course in Developmental Reading (GSK 100b) is offered each quarter. This course is designed to assist both students with nonorganic reading deficits and those who simply want to improve their reading rate and efficiency.

CONTINUING EDUCATION FOR WOMEN

The General Studies Division offers special help, including conferences and workshops, for women who may need information and counseling about opportunities in education and careers. Anyone who desires such services should contact the General Studies Advisement Office.

VOCATIONAL AND EDUCATIONAL INFORMATION AND COUNSELING

As an outgrowth of needs of General Studies students and other advisees for career information and guidance, certain materials are maintained including reading files for careers, college and proprietary school catalogs, and curriculum guides for all 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, concentration 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 General Studies Division also participates in Catalyst, a

nationwide network which provides career information and resume services for college women.

PROBATIONARY STUDENTS

The General Studies Advisement Office advises those students who are on probation and have not yet officially declared a concentration. Advisement for probationary students with officially declared concentrations is the responsibility of the students' own academic units.

A student on probation may not take more than 14 hours without special permission. If a probationary student is employed full-time, 7 hours is the normal maximum.

It is especially important that students on probation understand the rules relating to scholastic standing.

TRANSITION FROM THE GENERAL STUDIES DIVISION TO ANOTHER ACADEMIC UNIT

Students ordinarily are classified in the General Studies Division until they officially declare an area of concentration. They are required to declare an area of concentration at any time prior to their senior year. The student initiates the declaration of concentration in person in the General Studies Advisement Office, and after a student has officially declared a concentration, is classified into the academic unit which grants the degree sought by the student.

A student who wishes to change the area of concentration, or to declare or change the area of secondary concentration, should return to the General Studies Advisement Office to initiate a new declaration or change.

Courses

Skill Requirements (GSK)

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.

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.

Natural Science and Mathematics (GSM)

101-4 Introduction of Physical Science. A nonmathematical study of motion, matter, electricity, magnetism, and the atom.

102-4 An Observational Approach to Physical Science: Energy. Through simple experimentation, the student explores energy in its various forms: thermal, electrical, gravitational, chemical, kinetic, and solar. Two lectures, four laboratory hours per week.

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.

131-2 Life: Ecology and Diversity. A study of living organisms and the environmental factors and evolutionary mechanisms influencing their diversity and distribution.

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 Basic Concepts of 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.

223-4 Nutrition. The nature, function, and metabolism of nutrients and of their effects on health.

230-4 Man and His Diseases. A study of the various types of diseases that can afflict man, 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 various organ systems, endocrine disorders, the immune response, and the mode of action of antibiotics and antimicrobial agents. Prerequisite: 130.

231-2 Human Heredity and Society. Principles of human heredity as applied to individuals, kindreds, and populations. Genetic aspects of contemporary biological social problems. Prerequisite: one year high school biology.

232-2 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: two years high school algebra or equivalent.

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, optical 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.

322-4 Radiation and Life. A study of types, sources, and uses of radiation, its effects on biological systems, and the impact of its use on society. Prerequisite: one year high school biology.

340-4 Mathematics and Civilization. Designed for the non-mathematics 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.

350-4 Concepts of Technology. Feedback, stability, system modeling, optimization, and simulation with analog and digital devices—the most general concepts for possible application to problems in many other fields, such as business, economics, politics, social study, and individual activities. Study of simple examples from actual engineering situations, with discussion to consider the possible application to broader social areas.

365-4 Human Origins. A consideration of the fossil record and basic principles of human evolution.

Social Science (GSS)

101-4 Introduction to the History of Western Civilization. Political, economic, and cultural history of Europe from the early Middle Ages to the end of the Napoleonic Age.

102-4 Introduction to the History of Western Civilization. The methods and materials of western civilization through analysis and interpretation of historical topics selected from the period since 1763.

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.

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 Economics. A historical development of economic ideas and an introduction to economic concepts, institutions, and problems.

210-4 Anthropology. Development of man as a biological and social being; 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.

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.

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.

300-4 History of the U.S. A general survey of the political, social, and economic development of the United States. 1492 to 1815.

301-4 History of the U.S. A general survey of the political, social, and economic development of the United States. 1815 to 1900. Prerequisite: sophomore standing.

302-4 History of the U.S. A general survey of the political, social, and economic development of the United States. 1900 to present. Prerequisite: sophomore standing.

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.

332-4 Contemporary Social Problems. Discussion and analysis of selected contemporary social problems with consideration of alternative courses of action.

351-4 Economic History of the United States. European and colonial backgrounds of American economic history; industrialization and economic growth, 1790-1865; great transition from an agricultural to a predominantly industrial economy, 1865-1920; the dynamic 1920s, the Great Depression and the New Deal; challenges of a mixed economy, 1939-1973.

352-4 Comparative Economic Systems. Concepts of economic systems; capitalism in historical perspective; Smith to Marx, neoclassical to Galbraith; socialist thoughts, utopian and scientific socialism, liberal and authoritarian socialism; corporatism and fascism; case studies.

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. (Same as GHA 388.) A critical examination of modern theories of communism, including those of Marx, Engels, Lenin, Stalin, and Mao. Prerequisite: junior standing.

Humanities and Fine Arts (GHA)

101-4 Introduction to Literature. The reading and discussion of English and American literary masterpieces in all genres in order to be able to read literature with enjoyment and understanding.

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 Man. 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.

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.

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. An introduction to the evidences of the changes in English across time from the pre-English period to 449 A.D., from earlier English 449 to 1500 A.D. (pre-printing), and modern English 1500 A.D. to today (printing), illustrating through readings the changes in words, meaning, and linguistic patterns which are inherited from the past.

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.

240-24 (4,4,4,4,4,4) Modern Literature in Translation. A study of modern literature in translation concentrating on the most significant works of major writers. (a) French; (b) German; (c) Italians; (d) Russian; (e) Spanish; (f) Spanish American.

282-4 Issues in Feminism. 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, discussing, 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 1900 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.

315-5 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. Prerequisite: Philosophy 200.

322-4 Ethics. An investigation of the basic problems related to deciding how men ought to act and of modern discussions of individual 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 or 230.

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

342-24 (4,4,4,4,4,4) Foreign Culture and Civilization. Study of the culture and civilization approached through its literature. Taught in English. Not applicable to primary or secondary concentration. (a) France; (b) Germany; (c) Italy; (d) Russia; (e) Spain; (f) Spanish America.

345-12 (4,4,4) Masterpieces of World Literature in Translation. A study of the representative literary works of selected cultures. (a) Medieval, renaissance, and baroque; (b) enlightenment, romanticism, and realism; (c) contemporary.

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.

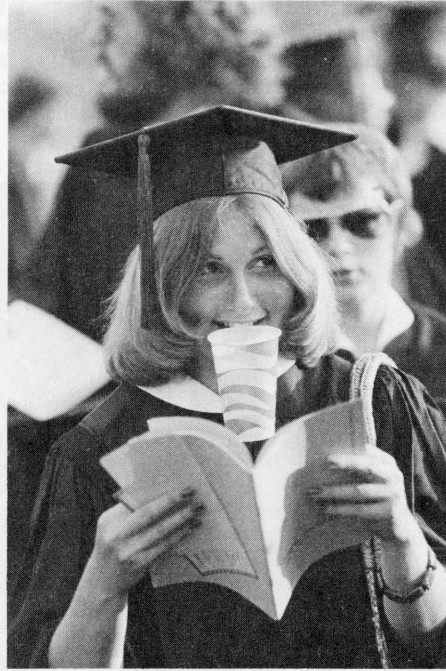
388-4 Communism. (See GSS 388.)

Interdisciplinary Studies (GIS)

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.

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.

Degree Programs



School of Business
School of Education
School of Fine Arts
School of Humanities
School of Nursing
School of Science and Technology
School of Social Sciences
Other Programs

4

School of Business



DAVID J. WERNER, *Dean*

Offering degrees in:
Business Administration
Business Education
Economics

School of Business

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.

Three degree programs are offered at the undergraduate level to achieve the above objectives. The three programs are the Bachelor of Science degree in Business Administration, which has been accredited by the American Assembly of Collegiate Schools of Business, the Bachelor of Science degree in Economics, and the Bachelor of Science degree with a concentration in Business in cooperation with the School of Education.

The Professional Experience Program (PEP) and the Management Problem Laboratory (MPL) provide enriching modes of study and experience for undergraduate business students. The PEP and MPL are described later.

Admission and Transfers

The University admission criteria are applicable to students applying as freshmen or by transfer who wish to follow a curriculum in the School of Business. 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 may contact the School of Business Advisement and Counseling Office concerning the transferability of previous course work (618) 692-3840.

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.

Scholastic standards governing academic probation and suspension are consistent with the University's academic regulations. (See Chapter 3.)

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. To contact an adviser, phone (618) 692-3840.

Bachelor of Science Degree in Business Administration Program

To obtain a Bachelor of Science degree in Business Administration (BSBA) a student must complete the following:

1. General Studies Requirements (See Chapter 3.)
2. Program Core Requirements.
3. Specialization requirements in any one of eleven possible specializations.

PROGRAM CORE REQUIREMENTS

All BSBA students except those specializing in Administrative Services take the

BSBA Core listed below; Administrative Services students may take the core described on page 66.

General Studies Requirements¹ (See Chapter 3.)

School of Business Core Requirements

Accounting 230, 232, and either 233 or 341²

Economics 200, 201, 300

Finance 320

General Business Administration 140, 340, 341, 390, 440, 441

Management Science 311, 313, 380, 381

Marketing 370, 371

Production 315

¹Should include GSS 150, GSM 144, and GSM 244.

²Those students specializing in accounting should take 341.



Core Curriculum

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 encompasses the common body of knowledge in business as defined by the American Assembly of Collegiate Schools of Business (AACSB) including the following areas: (a) the concepts, processes and institutions in marketing, distribution and production, and financing functions of business enterprise; (b) the economic, legal, social, and political environment of business; (c) the concepts and methods of accounting, quantitative methods, and information systems; (d) the concepts of organization theory, inter-personal 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.

PROFESSIONAL ACCOUNTING

Accounting 335, 351, 352, 432 or 453, 441, 456

General Business Administration 342

GENERAL ACCOUNTING

Accounting 351, 352, 441, 453

ADMINISTRATIVE SERVICES

Administrative Services 301, 426, 427, 428

ECONOMICS

Economics 440, 441 and elective in economics

FINANCE

Finance 420, 423, 424, 425

GENERAL BUSINESS ADMINISTRATION

(To be worked out on an individual basis)

MANAGEMENT SYSTEMS

Management Science 382, 480

Production 410, 462

MANPOWER AND INDUSTRIAL RELATIONS

Economics 410, 411, General Business Administration 430, 434

MARKETING

MARKETING 377, 473, and two of 372, 452, 471, 472, 474

ORGANIZATIONAL BEHAVIOR AND DEVELOPMENT

General Business Administration 430, 431, 432, 433

PRODUCTION AND OPERATIONS MANAGEMENT

Production 410, 461, 462, 463

Areas of Specialization

Students should make their choice of specialization considering career objectives. 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 approved sequences of courses in such fields as mathematics, government, sociology, etc., as part of the general business administration specialization.

ACCOUNTING

The profession of accounting is practiced generally in three distinct yet related career patterns in our society. One, as an independent public accountant; two, as an internal, private business accountant; and three, as a government accountant at the federal, state and local levels.

Three professional career examinations are administered within the profession, namely, the CPA, CMA, and CIA examinations. Respectively, they are administered by the American Institute of Certified Public Accountants (AICPA); the National Association of Accountants (NAA); and the Institute of Internal Auditors (IIA).

Each of these examinations has a common purpose of measuring the educational achievement at the entrance level to chosen careers. The accounting programs are responsive to the requirements of these examinations and for entering the profession.

An education for a professional career in accounting is not to be equated with accounting courses alone. In fact, accounting perceptions rely significantly on

courses in the functions of business, economics, organization and information theories, and management concepts. This realization accounts for the balanced treatment reflected in the accounting program.

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, and office systems and procedures.

Students who complete the administrative services specialization will have career opportunities in such areas as office administration, data processing, 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.

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 functioning of the economic system, which are fundamental to forecasting, planning, and budgeting. Graduates of the program are basically qualified for careers in administration and management of business firms (including production, transportation, marketing, and finance), 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, government service, teaching, and research. Courses in finance are therefore designed to develop analytical ability and fuller comprehension of the nature of financial problems as encountered in business and industry.

The flow of funds from saver to users is studied in courses on financial markets and institutions. Decision rules involving sources and utilization of funds within business, government agencies, and other institutions are concerned with the development of tools of analysis and determination of policies for managing investment portfolios of individuals and of groups such as pension funds and investment trusts. Studies of specific financial institutions such as commercial banks, insurance, and real estate are offered in seminars.

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 SYSTEMS

The specialization in management systems emphasizes the integration of information analyses, electronic data processing, and quantitative methods in the design of information systems for management. The rapid social and technologi-

cal change prevalent in our society has increased the need for well designed information systems to operate organizations.

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 management systems program is designed for students preparing to take this examination.

A student who completes this specialization is prepared for an entry level position as a systems or information analyst or as an assistant to a computer center manager or systems manager. Positions of this type are found in service, governmental, and business organizations.

MANPOWER AND INDUSTRIAL RELATIONS

The specialization in manpower and industrial relations provides an opportunity to study manpower problems in all aspects—resource development and utilization, the role of government and labor, the uses of collective bargaining, arbitration, and grievance machinery. It is designed for the business student planning to enter industry, government, or a service-oriented career.

MARKETING

The marketing curriculum is designed to enable the student to approach analytically the problem of providing consumer and industrial goods and services to a wide variety of markets by equipping him with modern problem-solving tools. 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.

The integrated sequence of courses gives students broad training in the field of marketing. There is a common body of knowledge basic to understanding of the discipline. Beyond that the student may choose from among a group of elective courses to attain greater depth and sophistication in the field of interest.

ORGANIZATIONAL BEHAVIOR AND DEVELOPMENT

The purpose of the organizational behavior and development specialization is to develop skills and understanding important to the effective leadership and administration of formal organizations. The concentration focuses on the following broad areas: interpersonal competence; developing leadership effectiveness; understanding small group processes and developing collaborative skills; understanding and managing change including planning, implementation, and evaluation; developing understanding and skills for the management and productive utilization of conflict at interpersonal and intergroup levels within organizational contexts; developing healthy and effective organizational environments through the understanding of the relationships between individuals, technology, physical and social environments, and organizational structures and values; and the assessment of group and organizational effectiveness and definition of developmental needs for individuals, groups, and organizations.

PRODUCTION AND OPERATIONS MANAGEMENT

The planning and control of operations, inventory, purchasing, costs, 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 interface 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.

Administrative Services Option

Administrative services include office and management services, data processing, and information analysis. The specialization in administrative services has its own core program and two optional study areas—data processing and executive secretary. Either option leads to a Bachelor of Science degree with a concentration in business administration.

Core Requirements: Administrative Services Specialization

Finance 320

General Business Administration 140, 340, 341, 390, 430, 441

Marketing 371

Accounting 230, 232

Administrative Services 300, 426, 427, 428

Economics 200, 201, 300

Options in one of the following:

Data Processing

Accounting 232, 351, 352

Administrative Services 301

General Business Administration 440

Management Science 311

Electives

Executive Secretary

Business Education 304, 324a,b, 327

General Business Administration 342

Elective Specializations

DATA PROCESSING

The specialization in data processing provides a background in the fundamental principles of data processing, computer programming, corporate services management, and the design of systems and procedures that are used in business offices. Upon completion of the degree requirements, the graduate is prepared to enter the field of office management, data processing, systems analysis, and corporate services administration.

EXECUTIVE SECRETARY

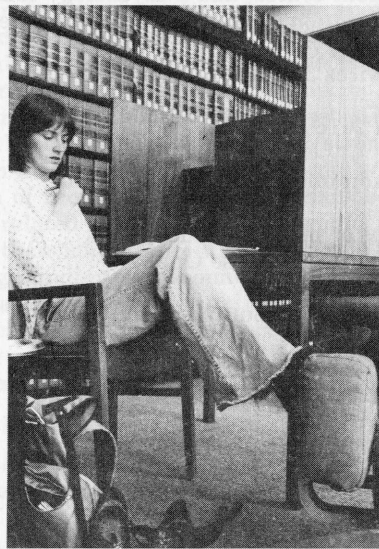
The executive secretary specialization provides a background in office management and procedures, principles of data processing, informational analysis, and the systems and procedures that are used in business offices. In addition, the

executive secretary student selects an area of secretarial specialization in a specific field. Upon completion of the degree requirements, the graduate is prepared to enter a position as executive secretary, administrative assistant, supervisor, or office manager.

Minor Concentration for Non-Business Majors

A minor concentration in business consists of 28 hours which must include courses from at least three of the following areas: accounting, administrative services, economics, finance, manpower and industrial relations, management science, marketing, organizational behavior and development, and production.

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



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 his efforts. Interested students should contact the PEP Office in the School of Business.

Management Problem Laboratory

The Management Problem Laboratory (MPL) is an inter-disciplinary program for the development of managerial problem-solving skills. Students investigate current problems of organizations through interaction with an extensive data base and view the problems from the perspectives of several courses in which they are simultaneously enrolled.

This program received the 1975 Western Electric Award from the American Assembly of Collegiate Schools of Business as the most innovative undergraduate program.

BUSINESS EDUCATION

The business teacher education curriculum is designed to prepare teachers of business subjects for secondary schools, junior 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

<i>General Studies Requirements</i> (See Chapter 3.)	60
(This area should include one mathematics and one statistics course, a government course, and a psychology course.)	
<i>Health and Physical Education</i> (Required for teaching certification)	6
<i>Business Teacher Education Core</i>	59
Administrative Services 300, 426	
Accounting 230, 232	
Business Education 201c ¹ , 350, 402 ¹	
Economics 200, 201	
General Business Administration 340, 342, 390	
Marketing 371	
Electives in business or business education-8	
<i>Subject Matter Specializations</i> (Choose One)	16
ACCOUNTING-DATA PROCESSING	
Accounting 233 (Or other accounting elective)	
Administrative Services 301, 428	
Business Education 408	
SECRETARIAL ADMINISTRATION	
Administrative Services 427	
Business Education 324a, 327, 404	
MARKETING AND DISTRIBUTIVE EDUCATION	
Marketing 472, 474	
Business Education 414, 416	
ECONOMICS	
General Business Administration 440	
Economics 440, 441, 481	
<i>Free Electives</i>	14
<i>Professional Development Sequence</i> (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	
Education Foundations 355	
Secondary Education 352c (12-16 hours)	
Business Education/Secondary Education 405	
Elective (0-4 hours) ²	

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¹May be substituted in exceptional cases by the Program Director.

²Secondary Education 315 is recommended for those interested in additional teaching methodology.

Minor Concentration for Non-Business Students

A 24-hour minor concentration in general administrative services consists of Administrative Services 300, 426, 427, 428; either Administrative Services 301 or Mathematics 225 or 226; and an appropriate business or data processing elective.

A 24-hour minor concentration in executive secretary consists of Administrative Services 300, 426, 427, Business Education 304, 324a, and an appropriate elective in business.

ECONOMICS

The Department of Economics offers a Bachelor of Science degree with a major in economics under the auspices of the School of Business. Candidates for this degree must complete 68 quarter hours in the economics concentration and a minor concentration in business, mathematics, or another social science. Students completing the degree requirements should be prepared to continue with graduate work in economics, enter professional schools in such areas as business, law, or urban planning, or begin careers in banking, marketing, operations research, labor and industrial relations, or investment counseling. Students planning to enter a Ph.D. program in economics are strongly advised to take their minor concentration in mathematics.¹ Those students who plan to seek employment upon completion of their baccalaureate are advised to take a minor concentration in an area related to the career they would like to pursue. Students choosing economics as their major concentration 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, mathematical economics, comparative economic systems, and public finance. The student's program is planned through consultations with an undergraduate economics adviser.

Bachelor of Science Degree, School of Business

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major Concentration in Economics</i>	68
GSS 351	(4)
GSM 144, 244	(9)
Accounting 230, 232, 233	12
Economics 200, 201, 300, 440, 441	20
Economics Electives	16
Management Science 311, 313 ²	8
Economics 467 ³	4
Courses in Finance, Marketing, or Management Science	8
<i>Minor Concentration</i>	27
The minor concentration must be approved by the student's adviser.	
<i>Electives</i>	37
	<hr/> 192

¹The following courses constitute a secondary concentration in mathematics: 150a,b-8, 260a,b,c-12, 321-4, and either 305-4 or 480a-3.

²If the student elects to take his secondary concentration in mathematics, the management science requirements 311 and 313 will be satisfied. Those students electing a secondary concentration in mathematics must take 8 hours of electives in finance, marketing, or management science in lieu of Management Science 311 and 313.

³Production 315 may be substituted for Economics 467.

The Department of Economics also offers a Bachelor of Science degree under the auspices of the School of Education. Candidates for this degree must complete either a 36 or 48 hour major in economics and the School of Education's requirements for certification in secondary education. Students completing this degree will be able to pursue advanced work in economics or teach economics at the secondary school level. Students should develop their programs in consultation with an economics adviser.

Bachelor of Science Degree, School of Education

The following courses constitute a 48 hour major in economics: GSS 150, 351, GSM 244, Economics 200, 201, 300, 440, 441, and 16 hours of economics electives.

The following courses constitute a 36 hour major in economics: GSS 150, 351, GSM 244, Economics 200, 201, 300, 440, 441, and 4 hours of economics electives.

For the requirements for certification, see secondary education.

Minor Concentration in Economics

A minor concentration in economics shall consist of 24 hours and must include Economics 200, 201, 440 and 441. The remaining 8 hours shall consist of electives in economics chosen in consultation with an adviser from the Department of Economics.

Bachelor of Science/Arts Degree, School of Social Sciences

See School of Social Sciences section of this chapter.

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 breakeven 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: 230.

301-1 to 6 Accounting Readings.

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.

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; relevant cost information in decision making; contribution 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. Prerequisites: 352.

456-4 Auditing. Objectives, standards, and procedures involved in examining and reporting on financial statements of business organizations. Prerequisites: 341, 352.

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 Advanced C.P.A. Problems. Problems from the American Institute of Certified Public Accountants' examinations given in recent years and supplementary problems from selected sources. Prerequisites: 341, 352.

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. Prerequisites: consent of instructor and department chairman.

Administrative Services

300-4 Introduction to Data Processing. An introduction to the principles underlying unit record equipment, information theory, electronic data processing applications, and management systems. Includes applications to demonstrate systems, concepts, and computer capabilities through the use of data processing equipment.

301-4 COBOL Programming. A study of the COBOL programming language, reserved words, programmer-supplied names, symbols, literals, level numbers, and pictures. Work requires preparation of flow charts, source programs, coding, testing, and debugging using the IBM-360 computer. Prerequisite: 300 or equivalent.

426-4 Office Management. The principles of management as applied to office problems. Emphasis on the role of the office in business management; office organization; physical facilities and layout of the office; office services, procedures, standards, and controls.

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.

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.

Business Education

201-9 (3,3,3) 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. (a) Prerequisite: may not be taken for credit by students who have had previous high school or other formal instruction in typewriting. (b) Prerequisite: 201a or one semester of

other formal instruction in typewriting and the ability to type at least 30 words per minute. (c) Prerequisite: 201b or two semesters of other formal instruction in typewriting and the ability to type at least 40 words per minute and to prepare simple business correspondence, tables, manuscripts, and forms.

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 223 or 224.

223-4 Forkner Shorthand for Communication Specialists. Designed to provide students majoring in TV, radio, journalism, and other communication specialties with skill in using Forkner shorthand to record notes of interviews, speeches, programs, and record ideas swiftly. May not be taken for credit by students with credit in 222 or 224.

224-4 Forkner Shorthand. The development of dictation and transcription skills in Forkner shorthand. Designed for students preparing for secretarial or business teaching careers. Students wishing to further their skills should follow 224 with 221b. May not be taken for credit by students with credit in 222 or 223. Prerequisite: 201a or equivalent.

225-8 (4,4) Machine Shorthand. The development and application of skill in the use of machine shorthand. Students wishing to further their skills should follow 225b with 221c. Prerequisites: for (a): 201a or equivalent; for (b): 201b or equivalent.

304-3 Advanced Typewriting. Development of advanced skills in typing business correspondence, manuscripts, forms, and tables; preparation of copy from rough draft materials. Prerequisites: 201c or three semesters of other formal instruction in typewriting and the ability to type at least 50 words per minute and to prepare business correspondence, tables, and manuscripts.

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.

324b-4 Advanced Shorthand and Transcription II. A continuation of 324a. Prerequisites: 324a or four 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 90 words per minute.

327-4 Office Theories and Procedures. A study of office efficiency, techniques, filing procedures, financial and legal responsibilities, and other office activities. Opportunities to explore reference sources, to prepare for and participate in interviews, to make self evaluations, and to pursue areas of special interest. Operation of dictating and transcribing equipment. Prerequisite: 201c 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.

351-4 Foundations of Business Education. The role of the business teacher in the secondary and post-secondary school. An analysis of business education objectives and curriculum. A survey of trends and external influences as they affect business education. Should be taken in junior year.

360-4 Practicum in Vocational Education. Pre-student teaching clinical experiences in business education which develop an understanding of and techniques for working with economically disadvantaged students and give the prospective business education teacher an awareness of the needs of the disadvantaged youth and the techniques used in meeting these needs of these particular youth.

402-4 Teaching Typewriting and Office Practice. Instructional procedures, skill-building principles and techniques, selection and preparation of instructional materials, stand-

ards of achievement, and evaluation of pupil performance. Prerequisites: 351, 304 or equivalent.

404-4 Teaching Shorthand and Transcription. Instructional procedures, skillbuilding principles and techniques, selection and preparation of instructional materials, standards of achievement, and evaluation of pupil performance. Prerequisites: 324a, 351.

405-4 Teaching General Basic Business Subjects. Instructional procedures, analysis and selection of materials, preparation of teaching units, evaluation of pupil performance. Prerequisite: 351.

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. Prerequisite: 351.

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.

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. Prerequisite: consent of instructor or department chairman.

Economics

200-4 Macroeconomics. An introduction to national economic systems with attention to the meaning and measurement of national income, and the causes of fluctuations therein. National economic objectives and policies, including the distribution of income, the level of employment factors affecting stability and growth, the role of taxation. Prerequisite: sophomore standing.

201-4 Microeconomics. Principles and characteristics of the market economy. Theory of the business firm, supply, demand, and prices. Analysis of earnings of productive resources, including wages, rent, interest, and profit. Introduction to market structure and public policy. Prerequisite: sophomore standing.

300-4 The Monetary System and Economic Policy. Study of relationships between money, credit, prices, and economic activity. How the banking system creates money; the Federal Reserve System. Introduction to public finance and fiscal policy; the role of public finance in full employment policy. Introduction to international financial relationships. Prerequisite: 200.

310-4 Labor Problems. Survey of labor force, wage and employment theory, unemployment including economic insecurity, trade unionism, and collective bargaining from the standpoint of public policy. Prerequisites: 200, 201.

330-4 Public Finance I: 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 fiscal policy. Prerequisite: 300.

341-4 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, two years of college mathematics, junior standing.

410-4 Government and Labor. A study of labor relations and legislation considering both constitutional and economic aspects. Prerequisite: 310.

411-4 Collective Bargaining and Dispute Settlement. An analysis of the collective bargaining process as determined and changed by labor legislation. Collective bargaining contracts, their scope and significance, together with the methods of dispute settlement such as grievance procedures and arbitration. Prerequisite: 410 or consent of instructor.

416-4 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: 300.

418-4 Economic History of Europe. A survey of the economic growth of Europe with emphasis on the development of European agriculture, industry, finance, and international trade since 1750. Prerequisite: 201.

422-4 Introduction to Economic Development. The preconditions, processes, and problems involved in economic development. The theory and policy relevant to development, with emphasis on the "developing" or "emerging" economies. Prerequisites: 200, 201.

423-2 Survey of Development Economics. An introduction to the theories and concepts associated with the process of economic development. Particular emphasis on barriers to development process in the less developed countries of the world. Prerequisite: consent of instructor.

429-4 International Economics. An introduction to the causes and effects of international trade, the reasons for and the impact of tariffs and common markets. The balance of payments and its impact upon income and employment. Gold, the international role of the dollar, and the international monetary system. Prerequisites: 200, 201.

430-4 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. Prerequisites: 200, 201.

431-4 Public Finance II. State and local. Prerequisite: 330.

433-4 An Introduction to Urban Economics. The economic causes of urban growth and the economic-social problems which rapid unregulated growth creates. The growth of cities including a study of location theory, the effects of agglomeration, the structure of the economic base, and regional income accounting. A solution to the problems of cities including a designation of goals to eliminate the misuse of resources and an examination of possible techniques to attain these goals. Prerequisites: 200, 201.

440-4 Intermediate Micro Theory. An intensive treatment of price and income theory with emphasis on degrees of price and other competition. Prerequisite: 201.

441-4 Intermediate Macro Theory. Basic analytical concepts of the modern theory of aggregative income. Prerequisite: 200, 201 or consent of instructor.

450-4 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: 200, 201.

455-4 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: 440 or consent of instructor.

465-4 Mathematical Economics I. A systematic survey of mathematical economic theory. Conditions of static equilibrium (including stability conditions), dynamic models using difference equations, and linear production models of input-output analysis and activity analysis (linear programming). Prerequisites: 440 or consent of instructor.

467-4 Econometrics I. Introduction to resource allocation under uncertainty. Probabilistic economic models, theory of games and economic choices, and stochastic economic processes. Prerequisite: consent of instructor.

481-3 Comparative Economic Systems. Capitalism, socialism, fascism, and other forms of the economy. Prerequisites: 200, 201.

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 332, 333; 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 is given 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.

430-4 Small Business Finance. An introductory course combining both a description of the structure of small business financing and an analysis of functional finance from the viewpoint of small business management. Prerequisite: 320.

490-1 to 8 Independent Study in Finance. An investigation of topical areas in greater depth than regular 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 chairman.

General Business Administration

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. Introduction to business and economic terminology and to the case method of developing analytical ability.

340-4 Organization and Decision-Making. Development of understanding of organizational behavior and decision theory and of analytical skills through case analysis and discussion. Examination of processes group formation and development, conformity and direction, influence and decision-making, problem solving, role specialization and differentiation, status and social power distribution, satisfaction, and goal internalization and commitment. Prerequisites: 140, GSS 210.

341-4 Organizational Problems. Application of the concepts, understanding, and techniques to major categories of recurring organizational problems faced by complex business units and described in case situations. Features such as position specifications, authority structures, territorial imperatives, performance measurements, and procedures involving compensation, communication, and employee selection and promotion. Designing organizational patterns to meet specific situational needs. Prerequisite: 340.

342-4 Contracts — 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.

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. Opportunities to learn effective use of a business library; to collect and interpret data; to present information in a logically organized and acceptable form. Prerequisite: completion of General Studies written skills requirement.

430-4 Personnel Administration. The manager's role in effectively using manpower resources to achieve company objectives is the major focus. The personnel function as a corporate staff organization with its specialized task and liaison/service role to management and employees. Case discussion on topics assist in developing the varied responsibilities of managing personnel.

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.

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.

433-4 Advanced Studies in Organizational Behavior and Development. A capstone course to develop an understanding of relationships between individuals, social interaction patterns, technology, and organizational arrangements and their environmental contexts. The objective is to explore the dimensions of effective organizational environments. The relationships between man and systems (technical and organizational) and the broader environment is the focal point. Emphasis on analyzing and evaluating related contemporary theories and issues.

434-4 Management of Human Resources. Contemporary issues in manpower utilization, including retraining of displaced technical personnel, problems of manpower development with minority groups, data banks as tools for human resources planning, pre-employment interviewing and selection, man and machine system considerations, and employee counseling for individual development. Prerequisite: senior standing.

440-4 The Legal Environment of Business. Varied facets of the external and internal legal environments within which business firms operate. Use of cases and readings which describe and analyze the legal framework supporting, facilitating, and guiding everyday business decisions. Common law, statutory law, administrative law as they affect business environment. Prerequisite: 140.

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 the reappraisal of objectives, plans, and action-patterns in the light of evolving situations. Prerequisites: 341, 440.

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.

490-1 to 8 Independent Study in 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 and department chairperson.

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.

313-4 Introduction to Quantitative Methods. Introduction to modern mathematical concepts and methods applicable to business decisions including matrix algebra, linear programming, and elementary calculus. Prerequisite: GSM 244.

380-4 Management Systems I. A study of organizational decision making within the concept of a systems with emphasis on information flows, decision centers and the applica-

tion of data processing techniques. A major portion of the course is student development of an information, decision-making, and control system for a specific small-scale business enterprise.

381-4 Management Systems II. The study of the application of principles of systems analysis and systems design to business problems. Attention upon the complexities involved in the simultaneous design and integration of production, marketing, and other sub-systems. Prerequisite: 380.

382-4 Management Systems Simulation. (See Engineering 487.) Prerequisite: course in statistics recommended.

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. Prerequisite: consent of instructor.

480-4 Integrated Management Systems. The study of organizations from a total systems concept—integrated decisions, physical, and information systems. Prerequisite: senior standing in business or 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 chairman.

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. Prerequisites: GSS 130, 150.

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 his operating efficiency. Emphasis is placed on the use of marketing management factors in the areas of markets, products, distribution, price, and promotion. Prerequisite: 370.

372-4 Transactional Marketing. The study and analysis of the activities relating to the presentation of goods and services in the marketing delivery system. The processes involved in presenting goods and services to purchasers as resellers and as consumers. This includes the industrial selling process and the sale to the general public of goods and services. The course prepares the student to practice the specific technology of product and service presentation aimed at achieving a transaction and/or transfer of goods and services to the consumer. Prerequisite: 371 or consent of instructor.

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.

452-4 Physical Distribution Management. A systematic integrated treatment of problems of managing the flow of raw materials, parts, semi-manufactured and finished goods from their sources to the ultimate consumer. Stress on the application and logic of quantitative decision tools to the problems of spatial relationships of plant capacity and storage facilities and their connecting transportation linkages. Prerequisites: 470, Management Science 315.

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: 470.

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: 470.

473-4 Advanced Marketing Management. Development of the student's ability to identify marketing problems, investigate alternative solutions, and render decisions. Should be the final marketing course taken by the undergraduate marketing major. Prerequisite: senior standing.

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.

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. Prerequisites: 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.

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, Management Science 311, Management Science 313 or consent of instructor.

463-4 Advanced Production Management. (See Engineering 473.) Prerequisite: pre-registration or concurrent registration in 462.

489-4 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 or projects. Prerequisite: consent of instructor and department chairman.

School of Business Faculty

Donald Aucamp, Sc.D., Associate Professor of Management Science

David Ault, Ph.D., Chairman, Economics Program Director, and Professor of Economics

Robert Barringer, Ph.D., Lecturer of Management Science

Haluk Bekiroglu, Ph.D., Assistant Professor of Management Science

James Benjamin, Ph.D., Associate Professor of Management Science

Walter Blackledge, Ph.D., Professor of Management

Dale Blount, M.S., Associate Professor of Management

Daniel Bosse, Ph.D., Assistant Professor of Marketing

Marshall Burak, Ph.D., Professor of Management

Morris Carr, M.S., Instructor of Management

Robert Carver, M.B.A., Chairman and Lecturer of Accounting

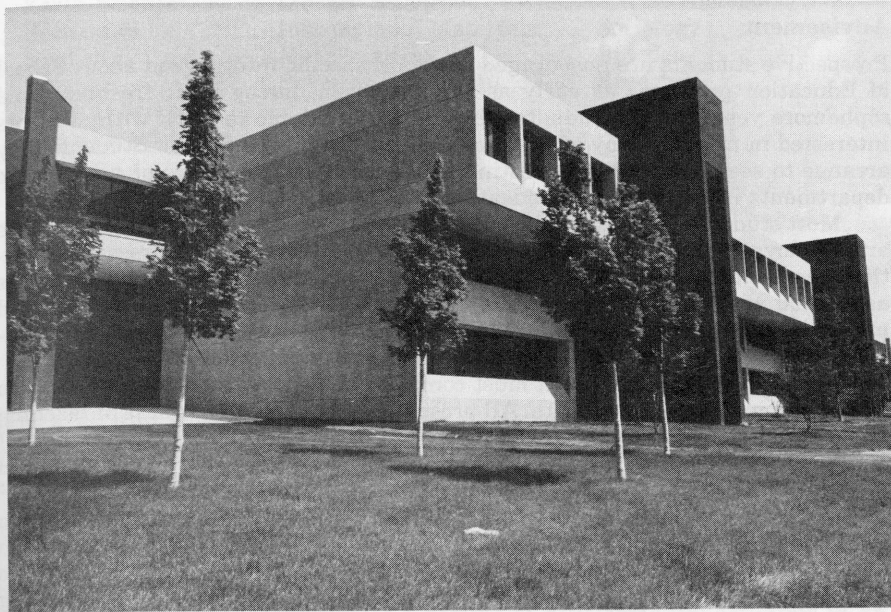
Reber Casstevens, B.S.E.E., Assistant Professor of Management

John Clow, Ed.D., Business Education Program Director and Associate Professor of Business Education

Leo Cohen, Ph.D., Professor of Economics
Curtis Cook, D.B.A., Associate Professor of Management
Homer Cox, Ed.D., Professor of Management
Albert Cummings, M.B.A., Assistant Professor of Management Science
Louis Drake, Ph.D., Professor of Economics
James Eaton, Ph.D., Associate Professor of Accounting
Walter Eckardt, D.Sc., Assistant Professor of Finance
Donald Elliott, Ph.D., Assistant Professor of Economics
Darryl Enos, Ph.D., Associate Professor of Management
Donald Fogarty, Ph.D., BSBA Program Director and Professor of Management Science
Arnold Franke, M.S., Lecturer of Management
Gareth Gardiner, Ph.D., Chairman and Associate Professor of Management
John Glynn, Ph.D., Professor of Finance
Jack Hale, Ph.D., Associate Professor of Accounting
Max Hansel, M.A., Instructor of Business Education
James Hansen, Ph.D., Assistant Professor of Management
Melvin Hanson, Ph.D., Associate Professor of Finance
Edward Harrick, Ph.D., Associate Professor of Management
Rasool Hashimi, Ph.D., Associate Professor of Economics
Maurice Hirsch, M.S., Lecturer of Accounting
Robert Hoeke, Ph.D., Professor of Management Science
Jerome Hollenhorst, Ph.D., Professor of Economics
Arthur Hoover, Ph.D., MBA Program Director and Professor of Management
B. D. Hudgens, L.L.B., Assistant Professor of Management
Anele Iwu, Ph.D., Assistant Professor of Finance
Kumar Jain, Ph.D., Professor of Management
Donna Kaputa, M.B.A., Instructor of Management Science
Robert Kohn, Ph.D., Professor of Economics
Lester Krone, D.Sc., Associate Professor of Management Science
Wayne Label, Ph.D., Associate Professor of Accounting
Raymond LaGarce, Ph.D., Associate Professor of Marketing
Stanford Levin, Ph.D., Assistant Professor of Economics
An-Yhi Lin, Ph.D., Professor of Economics
Vaughnie Lindsay, Ed.D., Dean of Graduate School and Professor of Business Education
Don Livingston, Ph.D., Professor of Economics
Gene Lovel, M.A., Lecturer of Economics
David Luan, Ph.D., Associate Professor of Economics
David Luck, Ph.D., Professor of Marketing
Richard McKinney, Ph.D., Associate Professor of Management
John Megley, Ph.D., Professor of Management Science
Boulton Miller, Ph.D., Professor of Management Science
James Miller, M.S., Assistant Professor of Management
Richard Milles, Ph.D., Associate Professor of Accounting
David Palit, M.A.S., Lecturer of Accounting
Patricia Patsloff, Ed.D., Associate Professor of Business Education
John Phillips, Ph.D., Associate Professor of Management Science
Arthur Prell, Ph.D., Chairman and Professor of Marketing
Willie Pyke, Ed.D., Professor of Business Education
Gilbert Rutman, Ph.D., Professor of Economics
James Sagner, Ph.D., Associate Professor of Management
William Schmeltz, Ph.D., Professor of Accounting and Finance

Norbert Schmitt, M.S., Assistant Professor of Accounting
Robert Schultheis, Ph.D., Professor of Business Education
Ann Schwier, Ph.D., Professor of Economics
Ralston Scott, Ph.D., Professor of Management
Luther Statler, M.S., Instructor of Management
Hans Steffen, Ph.D., Professor of Management
Paul Sultan, Ph.D., Professor of Management and Economics
Paul Tarpey, M.S., Assistant Professor of Management Science
Linda Tinney, M.B.A., Lecturer of Accounting
Vern Vincent, Ph.D., Professor of Accounting
John Virgo, Ph.D., Associate Professor of Management
William Wait, Ph.D., Professor of Management
Edward Welch, L.L.B., Assistant Professor of Management
David Werner, Ph.D., Dean of School and Professor of Management Science
William Whitmore, Ph.D., Associate Professor of Marketing
Glenn Wilson, Ph.D., Associate Professor of Management Science

School of Education



FRED D. CARVER, *Dean*

Offering degrees in:

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

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, 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.

Students who plan to teach must complete an approved program in order to qualify for a teaching certificate. All prospective teachers, regardless of teaching field or academic major, should consult with a departmental adviser in the School of Education to make sure that they meet the requirements of an approved program.

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 Office of Education, and are accredited by the National Council for the Accreditation of Teacher Education (NCATE).

*Elementary Certificates*Early Childhood¹

Elementary (K-9)

Secondary Certificates (6-12)

Art	Geography	Physical Science
Biology	German	Physics
Business Education	Government	Psychology
Chemistry	Health	Safety and Driver
Dramatics	History	Education
Driver Education ²	Language Arts	Social Science
Earth Science ²	Library Science ²	(Inc. History)
Economics	Instructional Materials ²	Sociology
English	Mathematics	Spanish
French	Physical Education	Speech
General Science—		
Mathematics		

Special Certificates (K-12)

Art	Emotionally Disturbed ³
Music	Gifted
Physical Education	Learning Disabilities ³
Educable Mentally Handicapped	Mentally Retarded ³

¹Approved November, 1975²Approved December, 1968³Approved 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.

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 become familiar with and use these facilities, which 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. Students enrolled in the sequence of reading courses get practical experience in the Center working with pupils who are transported to campus from the surrounding elementary and secondary schools. The Reading Center also serves the public and parochial schools of the area by providing a facility where current materials can be studied and evaluated.

Special Education Center. The Special Education Center provides educational and diagnostic services for children with learning and/or behavior disorders. Programs for such children are provided at the pre-school and primary levels. Students may utilize the Center for observation of and participation with the instructors in such areas as classroom management, material development, and special education teaching techniques.

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 EDUCATION

The Department of Elementary Education offers a four year program leading to the Bachelor of Science Degree in Education. By completing requirements under this degree students may qualify for the Illinois Standard Elementary Certificate, K-9, or for Early Childhood Education Certification. Although it is possible to qualify for certificates in other states, students should consult an Elementary Education adviser to determine what additional requirements may be necessary.

Students should plan to complete their general studies requirements during the first two years, reserving most of the junior and senior years for professional courses in elementary education. The Elementary Education program consists of 48 hours of professional requirements, 49 hours of nonprofessional requirements, and an academic teaching field of 36 hours. The latter may be met by combining General Studies courses and other selected courses. The course Elementary Education 200-4 should be taken before any other professional requirements. Students should consult an adviser in Elementary Education for specific information about requirements.



The Department of Elementary Education also offers a program in Early Childhood Education which prepares students for professional careers in early childhood centers, nursery schools, and day care centers. Students have the option of majoring in Early Childhood Education or in Early Childhood Education and Elementary Education.

Completion of the Early Childhood Education major qualifies the student for the Illinois Early Childhood Education teaching certificate, valid for teaching children up to six years of age, exclusive of those enrolled in kindergarten. The major in Early Childhood and Elementary Education leads to the Illinois Standard Elementary Certificate, and is valid for teaching grades K-9 in addition to the Illinois Early Childhood Education Certificate.

It is possible to combine a major in Early Childhood Education with other areas such as Special Education, Psychology, and Human Services. Students interested in such combinations should consult with an Elementary Education adviser.

The Elementary Education program consists of the following:

<i>General Studies Requirements (See Chapter 3. No Waiver.)</i>	68
<i>Professional Education Requirements</i>	48
Elementary Education 200	4
Field Experience I (Elementary Education 314, 337, and 365).	12
Field Experience II (Elementary Education 415, 437, and Instructional Technology 417)	12
Field Experience III (Student Teaching)	16
Professional Education Elective	4
<i>Non-professional Requirements</i>	49
Science and mathematics	16
Social science	12
Humanities and art	6
Speech, communication, or grammar skills	4
Health and physical education	11
<i>Electives and Additional Courses for an Academic Teaching Field¹</i>	27
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Early Childhood Education

Bachelor of Science Degree, School of Education

<i>General Studies Requirements (See Chapter 3. No Waiver)</i>	68
<i>Professional Education Requirements</i>	48
Freshman Year: Elementary Education 200, 201	8
Sophomore Year: Elementary Education 202	4
Junior Year: Elementary Education 317, 420	8
Senior Year: Elementary Education 350, 412, 421, 422	28
<i>Nonprofessional Requirements</i>	49
Science and mathematics	16
Social science	12
Humanities and arts	6
Speech or grammar skills	4
Health and physical education	11
<i>Electives and Additional Courses for an Academic Teaching Field¹</i>	27
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¹An academic teaching field consists of 36 hours. General Studies and nonprofessional courses taken in an academic teaching field count toward the required 36 hours.

HEALTH, RECREATION AND PHYSICAL EDUCATION

The Department of Health, Recreation and Physical Education offers three program options for students interested in careers as physical education teachers, and an additional program for those interested in careers in the field of recreation.

A broad teaching field program is available for those who want to prepare for teaching physical education across all grade levels from kindergarten through high school. Upon completion of the program, students may qualify for the Illinois Standard Special Teaching Certificate.

The basic major in physical education is designed for prospective secondary teachers and leads to the Illinois Standard Secondary Teaching Certificate which is valid from grades 6 through 12. A modification of the basic major is available for students who expect to teach primarily at the elementary level. The requirements for each of the teaching options is presented in the sections below.

Prior to admission as a degree candidate in Physical Education, all students must complete a health examination, the Motor Abilities Test, and Physical Education 304a and 304b. In addition, they must present evidence of work with youth groups.

In the broad teaching field program, students may develop specialized options by combining electives and certain required courses. These options include: coaching, driver education, health education, and/or dance. Students should consult an adviser in Physical Education for specific information about requirements.

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 recreational skills, activities and knowledge. Program experiences and courses are in General Studies and appropriate disciplines. All students will work closely with the faculty adviser 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 concentrating in recreation receives upon graduation the Bachelor of Science degree in Recreation, a non-teaching degree offered within the School of Education.

Students must be admitted to the program before fulfilling the requirements. A transcript of previous college work and an application for admission must be on file. Admitted students will be notified by letter from the Department of Health, Recreation and Physical Education.

The degree programs available through the Department of Health, Recreation and Physical Education are outlined below. (NOTE: All activity courses are open to men and women; courses numbered 102 through 199 are for non-physical education majors and may be taken on a Pass/No Credit option. Courses numbered 300, 301, and 302 are for physical education majors.)

Broad Teaching Field

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Physical Education Theory Core</i>	60
Health Education 334s	4
Physical Education 303a,b, 304a,b, 305, 350, 382, 383, 387, 470	37
Electives from Physical Education or Theater-Dance	19
<i>Physical Education Activity Courses</i>	12
For Men	
Physical Education 300a,b,c,d,e	10
Physical Education 302c,d, or e (one only)	2

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For Women	
Physical Education 301a,b,c,d,e	10
Physical Education 302c,d, or e (one only)	2
Professional Education Requirements	32
Counselor Education 305	
Foundations of Education 355	
Secondary Education 215	
Student Teaching distributed between Elementary Education 351 and Secondary Education 352	
Four hours of professional education electives	
Electives	28
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Secondary Level

General Studies Requirements (See Chapter 3)	60
Physical Education Theory Core	33
Health Education 334s	4
Physical Education 303a,b, 304a,b, 350, 382, 470	29
Physical Education Activity Courses	12
For Men	
Physical Education 300a,b,c,d,e,	10
Physical Education 302c, d, or e (one only)	2
For Women	
Physical Education 301a,b,c,d,e,	10
Physical Education 302c, d, or e (one only)	2
Professional Education Requirements	32
Counselor Education 305	
Secondary Education 215, 315	
Foundations of Education 355	
Student Teaching (Secondary Education 352)	
Minor Concentration and Electives	55
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Elementary Level

General Studies Requirements (See Chapter 3.)	60
Physical Education Theory Core	42
Health Education 334s	4
Physical Education 303a,b, 304, 382, 383, 384, 385, 387, 388, 389, 470	38
Physical Education Activity Courses	6
Physical Education 300a or 301a	
Physical Education 300b or 301b	
Physical Education 302a	
Professional Education Courses	33
Counselor Education 305	
Secondary Education 215, 315	
Education Foundations 355	
Student Teaching (Elementary Education 351)	
Minor Concentration and Electives	51
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Recreation

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Professional Courses</i>	26
Recreation 100, 200, 348, 349, 365	
Recreation 390, 410, 420	
<i>Professional Experiences</i>	20-22
Recreation 312 or 389	
(Must be taken after sophomore year)	
Recreation 400	
<i>Interdisciplinary Requirements</i>	42
Accounting 230	
Health Education 201, 334s	
Music 370	
Nursing 270	
Physical Education 117a,b,c, 118z, 302e, 383, 385, 402, 427	
Psychology 303 or 304, 307	
Theater 410a	
<i>Electives</i>	44-42

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Minor in Health Education

In addition to the degree programs mentioned previously, the Department of Health, Recreation and Physical Education also offers a minor concentration 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, 471, and one of the following: Health Education 313s, Psychology 301, 303, 432.

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 concentration, 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

The undergraduate courses in psychology introduce the student to the methods and findings of the scientific study of human behavior. The student is given an opportunity to learn what research has shown about how we perceive, learn, and think; how individuals differ from one another; how the personality develops from infancy to maturity; and how interpersonal factors affect human relations in the home, on the job, and in the community.

The psychology program is offered both as a nonprofessional bachelor's level concentration and as a preprofessional program for students who wish to pursue

careers as psychologists. The undergraduate concentration is also valuable as preparation for professional careers in medicine, dentistry or law.

The undergraduate program provides a high degree of flexibility. It is designed to prepare students with practical career oriented skills and a theoretical and basic foundation for understanding of human psychological processes. Elective courses in psychology are open to all undergraduate students, regardless of concentration.

Psychology is at one time a scholarly discipline, a scientific field, and a professional activity. Its overall focus is on the study of both animal and human behavior and related mental and physiological processes.

1. As a *scholarly discipline*, psychology represents a major field of study in academic settings, with emphasis on the communication and explanation of principles and theories of behavior.
2. As a *science*, it is a focus of research through which investigators collect, quantify, analyze, and interpret data describing animal and human behavior, thus shedding light on the causes and dynamics of behavior patterns.
3. As a *profession*, psychology involves the practical application of knowledge, skills, and techniques for the solution or prevention of individual or social problems; the professional role also provides an opportunity for the psychologist to develop further his understanding of human behavior and thus to contribute to the science of psychology.

Careers in Psychology

Careers involving the specific application or use of psychological knowledge or skills, and having the title "psychologist" usually require advanced, graduate degrees. However, persons with a bachelor's degree in psychology who do not wish to pursue graduate training may select from a large variety of careers in which basic knowledge of psychological processes is not only of considerable value, but highly recommended. These careers may include mental health worker, youth counselor, probation or parole officer, child care worker, drug counselor, statistician/research analyst, prison warden, occupational therapist, mental retardation program worker, social research analyst, migrant services worker, recreation instructor, public relations specialist, suicide prevention worker, consumer protection specialist, family planning counselor, Peace Corps, Vista, or Teacher's Corps worker, insurance claims adjuster, personnel officer, lab technician, to name a few.

For students who do plan to seek graduate degrees in psychology, the career opportunities are as follows:

ACADEMIC

Psychologists who work in academic settings (colleges and universities) may be primarily teachers of psychology, or they may combine teaching with research into psychological questions, or with clinical counseling, consulting, or the provision of services to outside community agencies. Academic psychologists usually concentrate their research or study on one of the following subject areas:

1. *Experimental psychology* involves the application of experimental methods to the study of certain behavioral processes, particularly learning, perception, motivation, emotion, language and thinking.
2. *Comparative psychology* focuses on the comparison of human behavior with the behavior of other species.
3. *Physiological psychology* probes the relationship between behavior and the biological and physiological processes of the body.

4. *Social psychology* is concerned with human interaction in social settings, including such phenomena as attitude change, group dynamics, social pressures.
5. *Developmental psychology* focuses on the development of the organism from its prenatal origins through old age.
6. *Psychology of personality* involves the processes by which a person becomes a unique individual.
7. *Psychometrics* deals with the development and application of procedures for measuring psychological variables.

In addition, *clinical psychologists* and *industrial psychologists* (described below) are often employed in academic settings.

APPLIED

The following are specialty areas in which psychologists apply various combinations of subject matter to specific kinds of problems in unique settings.

1. *Clinical psychology* specializes in the assessment and therapeutic treatment of persons suffering emotional or adjustment problems.
2. *Counseling psychology* places greater emphasis on facilitating normal development and on helping people cope with important problems of everyday living.
3. *School psychology* is concerned with increasing the effectiveness of educational institutions in facilitating the intellectual, social, and emotional development of children.
4. *Industrial psychology* involves research on problems that people encounter at work and the application of techniques for alleviating these problems.
5. *Engineering psychology* is concerned with the development and improvement of man-machine systems.
6. *Community psychology* emphasizes the contribution of environmental forces in both fostering and in alleviating human behavior problems.

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 (See Chapter 3.)* 60

GSS 260 does not count toward major concentration

<i>Requirements for Major in Psychology</i>	57
Foreign Language	12
Psychology 300a,b,c	13
Psychology electives	32
<i>Minor Concentration</i>	27
<i>Electives</i>	48

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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 60 hours of electives. All students should plan the program in consultation with the psychology adviser.

Minor Concentration

A minor concentration in psychology consists of a minimum of 28 hours. Psychology 300a is required plus 24 hours of psychology electives. Psychology 432 and GSS 260 do not count toward a psychology minor. Students intending to pursue an occupation related to psychology (e.g., counseling, personnel work, or teaching psychology) 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 concentration in psychology.

Teacher Education Certification

Students interested in a career in secondary education can complete a major concentration in psychology as part of the secondary education Bachelor of Science degree program. The course of study is designed for the student who intends to teach at the secondary level or pursue graduate studies in educational psychology or counselor education. Student teaching is a requirement for this degree. A student, in consultation with the secondary education adviser, should plan to have a strong second teaching field. For degree requirements, see Secondary Education.

<i>Requirements for Major in Psychology</i>	48
Psychology 300a,b,c	13
Psychology electives	35

A student should plan his psychology course requirements in consultation with the psychology adviser. Psychology electives should be selected from the following: Psychology 301, 303, 304, 305, 307, 308, 311, 312, 313, 314, 320, 404, 405, 410, 414, 420, 421, 430, 431, 437, 440, 451, 465, 473, 474, 490, 495.

SECONDARY EDUCATION

The Secondary Education Program is a four-year professional degree program culminating in a teaching certificate for secondary schools. The program includes work in General Education, Teaching Fields, and Professional Education.

In the first two years the student completes a general program of studies in Natural Science/Mathematics, Social Science, Humanities/Fine Arts, and Skills. During this time the student also enrolls in an introductory Education course designed to develop for the student a clearer focus regarding his/her professional goals. Information concerning employment opportunities is given in this course along with opportunities for career guidance in consultation with a Secondary Education advisor.

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 experience 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 includes successful completion of the introductory Education course, recommendation 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 from kindergarten through grade twelve. The teaching certificate is recognized in the twenty-eight states which hold membership in the National Council for Accreditation of Teacher Education.

Teaching Fields

In cooperation with other Schools at the University, a wide range of teaching fields is available to students concentrating 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 (the number of hours required is usually 48):

Art	Geography
Biology	Government
Business Education	History
Chemistry	Mathematics
Dramatics	Physical Education
Earth Science	Physics
Economics	Psychology
English	Sociology
Foreign Languages:	Speech
French, German, or Spanish	

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

Art	History
Biological Sciences	Instructional Materials:
Chemistry	Library Science or
Economics	Audio-Visual Option
English	Mathematics
Foreign Languages:	Music
French, German, or Spanish	Physics
Geography	Psychology
Government	Sociology
Health Education	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
General Science and Mathematics (junior high school)	85
English	72
Language Arts (junior high school)	75
Music Education (K-12 certification)	78-93
Physical Education (K-12 certification)	72
Physical Science Education	75
Social Studies (junior or senior high school option)	91

The program outline for secondary education students is as follows:	
<i>General Studies Requirements (See Chapter 3.)</i>	60
These must include General Psychology, United States History or American Government	
<i>Professional Education Requirements</i>	37
Secondary Education 215	
Secondary Education 401a,b,c	
<i>Teaching Field Requirements and Electives</i>	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.	
<i>Health Education</i>	3
<i>Physical Education Activity Courses</i>	3
<i>Electives</i>	14
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SPECIAL EDUCATION

The Department of Special Education offers teaching preparation programs at the undergraduate level in the areas of emotional disturbance, learning disabilities, and mental retardation. The Department also offers course work directed toward the socially maladjusted, 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 disabilities 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 with a major in one of the three areas listed above as well as a major in elementary education. This program requires student teaching in both elementary and special education, and results in a Standard Elementary Certificate and a Standard Special Certificate. The recommended program outlines for each of the options is shown below.

Option A—Single Certification

<i>General Studies Requirements</i>	78
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 300a or a course in American government which satisfies the Illinois constitu- tion requirement	20
GSK Area Courses: GSK 101, GSK 102, GSK 123, and GSK 152	16
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

<i>Health and Physical Education</i>	6
Health Education 201	
Three 1-hour physical education activity courses	
<i>Professional Education Requirements</i>	16
Counselor Education 305	
Elementary Education 314, 337, 437	
<i>Special Education Requirements</i>	64
One of the following specializations: (Must be taken in sequence)	
EDUCABLE MENTALLY HANDICAPPED	
Special Education 414, 410g, 411, 430, 420b	20
Physical Education 350	4
Psychology 432	4
Special Education 470, 410b, 481b, 353, and one elective course	32
Counselor Education 422	4
EMOTIONALLY DISTURBED	
Special Education 414, 410g, 411, 430, 420a	20
Physical Education 350	4
Psychology 432	4
Special Education 470, 496, 481g, 353, and one elective course	32
Counselor Education 422	4
LEARNING DISABLED	
Special Education 414, 410g, 411, 430, 420a	20
Physical Education 350	4
Psychology 432	4
Special Education 470, 496, 481g, 353, and one elective course	32
Counselor Education 422	4
<i>Elective hours</i>	28
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Option B—Dual Certification

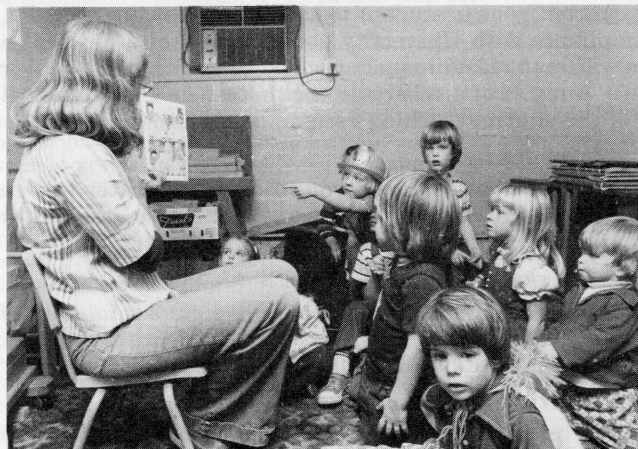
<i>General Studies Requirements</i>	84
GSM Area Courses: GSM 130, GSM 212, one physical science course, two mathematics courses, and three science elective courses	32
GSS Area Courses: GSS 260, 370, one GSS course in Anthropology, Geography, Economics, or Sociology, GSS 300 or a course in American government which satisfies the Illinois constitution requirement, one GSS course in Anthropology, Geography, Economics, or Sociology, and one GSS elective course or History 308	24
GSK Area Courses: GSK 101, 102, 123, 152	16
GHA Area Courses: GHA 110 or GHA 136, and one GHA literature course	8
GIS Area: any course	4
<i>Certification Requirements</i>	7
English 391a, or 391b, or Speech Pathology 200, or Speech Communication 399	

Art 300a, or Music 200 or 300 ¹	
<i>Health and Physical Education</i>	10
Health Education 201	
Physical Education 350	
Three physical education activity courses	
<i>Professional Education Requirements</i>	40
Elementary Education 200, 365, 314, 337, 437, 415	24
Instructional Technology 417	4
Counselor Education 422 or Psychology 421	4
Student Teaching (Elementary Education 351a)	8
<i>Special Education Requirements</i>	52
One of the following specializations: (Must be taken in sequence)	
EDUCABLE MENTALLY HANDICAPPED	
Special Education 414, 410g, 410b, 411, 420b, 430, 470, 481b ..	32
Special Education 353	16
Psychology 432	4
EMOTIONALLY DISTURBED	
Special Education 414, 410g, 411, 420a, 430, 410a, 470, 481a ..	32
Special Education 353	16
Psychology 432	4
LEARNING DISABLED	
Special Education 414, 410g, 411, 420a, 430, 496, 470, 481g ...	32
Special Education 353	16
Psychology 432	4

¹Students must take one art and one music course, i.e., if a student elects GHA 110 from the General Studies courses, he/she must then take Music 200 or 300.

Minor Concentration

Students wishing a minor concentration in special education must complete 28 hours in one or more of the areas of specialization.



Student Teaching

Student teaching is the culminating experience in all professional teacher education programs. It is needed in order to meet the degree requirements of the School, the certification requirements of the States of Illinois and Missouri, and the standards of the National Council for the Accreditation of Teacher Education.

A fully satisfactory student teaching experience necessitates 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 appropriate departmental coordinator of student teaching. Student teaching during the summer quarter is not available.

Application Procedure

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 to Student Teaching

GENERAL

The following are prerequisites that need to 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. Each student 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 3.2 grade-point average two quarters in advance of the teaching assignment. This grade-point average must be maintained for the assignment to be allowed. Transfer students need to 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

In addition to meeting the elementary education prerequisites, students majoring in early childhood education must complete a 16-hour sequence in that specialization, culminating in Elementary Education 317.

ELEMENTARY EDUCATION

Students majoring in elementary education complete a minimum of 24 quarter hours in professional education courses prior to student teaching. Courses to be included are Elementary Education 200, 314, 337, and 365.

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 chosen 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 Chairman. 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

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 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.

410-4 (2,2) Dynamics of Campus Leadership. An organized presentation of accurate information about the University's historical development and plans for future growth, organizational structure, philosophy, administrative policies, and goals with emphasis on the role of student groups in the educational community. (a) Elected or potential student leaders. (b) Resident assistants. Prerequisite: consent of instructor.

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.

442-4 Introduction to Guidance. Introductory course on student personnel services. Survey of philosophy, principles, and organization of guidance services. Not to be taken for graduate credit. Prerequisite: 305 or consent of instructor.

443-4 Introduction to Counseling the Disadvantaged Student. A study of the affective and cognitive factors in personal development and positive mental health with particular emphasis upon special problems encountered in aiding in the fullest development of disadvantaged students.

483-4 to 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.

485-4 to 9 Workshop in Educational Utilization of Community Resources.

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.

200-4 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 own interests, skills, and abilities as related to that role. Satisfactory performance is required for admission to the teacher education program. Prerequisite: registration by permit only.

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.

203-4 Understanding the Elementary School Child. Concepts needed to understand the child in the elementary school situation. Three hours lecture and two hours observation. Prerequisite: GSS 260.

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. Prerequisite: 365.

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: 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. Prerequisite: 314.

350-4 to 16 Early Childhood Student Teaching. Prerequisites: 317, 365.

351a-4 to 16 Elementary Student Teaching. Prerequisites: 314, 337, 365.

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.

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. Curriculum theory, design, and implementation of pre-primary education. Developing original sequences for field testing. 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. Prerequisite: Elementary Education 365.

415-4 Teaching Mathematics in the Elementary School. Items to be taught, the grade placement of content, newer instructional practices and materials of instruction, and means of evaluating achievement. Prerequisite: 314.

420-4 Development and Trends in Early Childhood Education. Exploration of the history, philosophy, and current trends underlying strategies for teaching the young child. Prerequisites: 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. (1) Curriculum, (2) Language Arts, (3) Science, (4) Reading, (5) Social Studies, (6) Mathematics, (7) Early Childhood Education, (8) Elementary Organization and Supervision, (9) Open Education. May not be repeated for credit.

437-4 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. Prerequisite: 337.

442-4 Teaching Science in the Elementary School. Study of content and methods of elementary school science. Prerequisite: 314.

443-4 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.

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. Prerequisite: 314.

470-4 Workshop in Sex Education for Elementary Teachers. (Same as Health Education 470.) Designed to encourage elementary school teachers to integrate sex education concepts into their teaching program. Current theories and knowledge concerning the psychosocial aspects of the maturation process are related to the content used for teaching pupils at various grade levels. Specialists in psychology, public health, and social welfare offer a multi-discipline approach to help teachers plan a program based upon characteristics and needs of pupils.

480-4 Backgrounds of Urban Education. (Same as Secondary Education 480.) Social, economic, and demographic factors as they impinge upon programs in urban schools. Prerequisite: consent of instructor.

490-1 to 8 Independent Projects: Independent Readings and Projects in Elementary Education. (a) Curriculum, (b) language arts, (c) science, (d) reading, (e) social studies, (f) mathematics, (g) early childhood education, (h) elementary organization and supervision, (i) individually guided education, (j) environmental 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. Prerequisite: Counselor Education 350.

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.

431-4 History of Education in the United States. Theory and practice of formal education in the United States since the seventeenth century in the perspective of contemporary issues.

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.

300-3 Communicable Disease. A study of the communicable diseases with emphasis on control and principles of prevention, and application of these principles to the individual school and community.

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 Introduction to Safety Education. Preparation for safety education in the public schools. Concerned with safety as a social problem, development of safety skills, accident causes, teacher liability, and research in the field.

334s-4 First Aid. Red Cross First Aid Course with lectures, demonstrations, and practical application. Red Cross Instructor's Certificate given.

350-4 Methods and Materials in Elementary Health Education. Designed to show the prospective teacher fundamental processes, techniques, and material aids involved in elementary school health teaching.

355-4 Introduction to Public Health. Philosophy, organization, administration, and functions of federal, state, and local, official and voluntary public health agencies. Periodic field trips involved.

400-4 Health Appraisal of School Children.

410-4 Community and Environmental Health. A study of community health problems concerned with the aging process, chronic and degenerative diseases, mental health, communicable diseases, human ecology and conservation of human resources. Prerequisites: 205, 355.

415s-4 Workshop in Driver Education and Traffic Safety.

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.

461-4 Workshop in Health Education.

470-4 Workshop in Sex Education for Elementary Teachers. (See Elementary Education 470.)

471-4 Organization and Administration of School Health.

480s-4 Workshop in Safety Education.

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.

405-4 Instructional Materials for Children. Study of the aids, methods, and criteria for the selection and use of books and other instructional materials for children in the elementary schools.

406-4 Instructional Materials for Adolescents. Study of the aids, methods and criteria for the selection and use of books and other instructional materials for students in the middle school and the high school.

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.

420-4 School Library Activities and Practice. Supervised practice and observation integrated with instruction in typical activities of school librarianship: storytelling, publicity, developing units of library instruction, and work with students. Prerequisites: 403, 405, or 406 and 407.

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.

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 are produced with video equipment.

461-4 Graphics for Instructional Television. Preparation of visual materials for instructional television programs for teaching in schools. Prerequisites: 445, 460.

490-1 to 8 Seminar: Selected Topics in Instructional Technology. Varied content. Topics selected from instructional technology field which are considered innovative and of immediate concern to existing educational needs. May be repeated to maximum of 8 hours with no topic repeating itself. Prerequisite: senior standing.

Physical Education

All courses are open to both men and women. Courses numbered 102 through 199 may be taken on a Pass/Fail option or taken to receive a letter grade.

102-1 Physical Fitness.

104-(1 per activity) Individual and Team Activity. (c) Basketball, (f) Soccer, (g) Speedball, (j) Softball, (n) Cross Country, (t) Touch Football, (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, (c) Diving.

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, (f) Basic Rhythms, (g) Modern Jazz Dance.

118-(1 per activity) Individual and Team Activity. (a) Archery, (b) Badminton, (d) Bowling, (e) Golf, (f) Billiards, (h) Tennis, (i) Volleyball, (k) Horseback Riding, (l) Sailing, (m) Fencing, (o) Boating and Canoeing, (p) Ice Skating, (q) Fly and Bait Casting, (r) Stunts and Tumbling, (s) Gymnastics, (w) Track and Field, (y) Judo, (z) Recreational Sports.

300-10 (2,2,2,2,2) Techniques for Men. (a) Soccer, Flag Football, and Speedball. (b) Stunts, Tumbling, and Gymnastics. (c) Fitness and Wrestling. (d) Softball and Track and field. (e) Basketball and Volleyball. Prerequisite: primary or secondary concentration in physical education.

301-12 (2,2,2,2,2,2) Techniques for Women. (a) Soccer, Flag Football, and Field Hockey. (b) Stunts, Tumbling, and Gymnastics. (c) Basic Movement and Modern Dance. (d) Softball and Track and Field. (e) Basketball and Volleyball. (f) Fitness, Flag Football and Speedball. Prerequisite: primary or secondary concentration in physical education.

302-14 (2,2,2,2,2,2,2) Techniques for Men and Women. (a) Basic Rhythms, Folk Dancing, and Square Dancing. (b) Golf and Tennis. (c) Archery and Bowling. (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.

303-10 (5,5) Homokinetics. (a) Structural and functional basis of human performance; elements of physiology essential to physical activity. (b) Mechanics applied to physical performance; analysis of selected motor activities; application of physical principles to specific instructional problems. Must be taken in sequence. Prerequisite: course in general biology or zoology.

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.

305-3 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: 303.

323-1 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.

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.)

355-2 Techniques of Teaching Swimming. Methods of teaching, analysis of strokes, and the devices for teaching swimming and life saving. Prerequisite: senior lifesaving.

382-5 Methods and Organization of Physical Education for the Secondary School. 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 physical education foundation 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 of equivalent.

387-2 Development Skills. Stresses basic developmental skills that should be included in physical education program 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/301b.

389-4 Affiliation in Physical Education. Observing and assisting instructor in planning, scheduling, and conducting a physical education program by working in area schools. Prerequisite: consent of instructor.

390-3 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.

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 co-ordinating extramural activities commonly associated with physical education.

404-4 Workshop in Dance for In-Service Teachers. Includes 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 graduate standing.

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.

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. Prerequisite: course in elementary statistics.

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. An introduction to the methods used in the interpretation of psychological data including organizing and presenting data, describing individual and group performance, model distributions, measures of relationships, measures of reliability, and tests of significance. Three lecture, two laboratory hours per week.

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. Prerequisite: 300a,b.

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 others' nonverbal behavior. Prerequisite: GSS 260 or consent of instructor.

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. Prerequisite: 300a or consent of instructor; 300c recommended.

313-4 Experimental Psychology: Motivation. An examination of both biological and social variables influencing the activation, direction, and maintenance of behavior. Laboratory work examines the effects of motivation upon behavior. Lecture and laboratory. Prerequisite: 300a, 300b, 300c, or consent of instructor.

314-4 Experimental Psychology: Comparative and Physiological. An examination of the physiological and phylogenetic 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 the 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: 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, or GSS 130 or GSS 210 or equivalent.

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 different 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. Prerequisites: 300a, GSS 260, or consent of instructor.

415-4 Environmental Psychology. 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 problems 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 respondent 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, 307, or consent of instructor.

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 consent of instructor.

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.

473-4 Personal Psychology. Psychological methods in selection, placement, evaluation, and criterion development. Emphasis is 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: 301, 303, 304 or consent of instructor.

490-1 to 8 Independent Projects. Independent readings and projects in psychology. Prerequisite: consent of instructor and chairman.

495-1 to 8 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.

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 Camp and Community Leadership. Fundamentals of scouting, camping, and counseling. A weekend camping trip required.

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.

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.

Rehabilitation

480-2 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. Prerequisite: Special Education 470 and/or consent of instructor.

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 micro-teaching 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.

443-4 Teaching of Geography. (See Geography 443.)

444-4 Teaching of Earth Sciences. (See Geography 444.)

480-4 Backgrounds of Urban Education. (See Elementary Education 480.)

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.

488-4 Teaching Social Studies in Secondary Schools. Objectives, scope and sequence of curriculum, methods of teaching different courses and age groups, materials and evaluation. Prerequisite: 315.

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

351d-8 Elementary Student Teaching.

353-8 to 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.

354-8 Elementary Student Teaching. Student teaching in elementary grades. Regular student teaching experience coordinated with special education experience. Prerequisite: concurrent registration with 353.

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. Prerequisites: 414, Psychology 301 or 303.

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 and talented children. Prerequisite: Counselor Education 305 or Psychology 301 or 303.

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 pre-school, 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.

410t-4 Problems and Characteristics of the Trainable Mentally Handicapped. Basic concepts in the dimensions of intelligence, psychological testing, educational assessment, causation of retardation as they relate to educational and therapeutic considerations for the trainable mentally handicapped child. Prerequisite: 414.

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. Prerequisites: 410a or g, 414.

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 chairman.

413b-4 Directed Observation of the Educable Mentally Handicapped. Student observation and participation in group and individual work with mentally retarded children. Often taken concurrently with 410b. Prerequisite: consent of department chairman.

413c-4 Directed Observation of the Gifted. Taken concurrently with 410c. Provides student observation and participation in individual work with gifted children. Prerequisite: consent of instructor.

414-4 The Exceptional Child. Physical, mental, emotional, and social traits of all types of exceptional children. Effects of handicaps in learning situations. Methods of differentiation and techniques for rehabilitation. Individual case studies used; observations and field trips.

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. Prerequisites: 410a,g, consent of instructor.

420b-4 Methods and Materials in the Education of the Educable Mentally Handicapped. Offered in conjunction with practice teaching. Methods and materials needed in teaching educable mentally handicapped children.

420c-4 Methods and Materials in the Education of the Gifted. Offered in conjunction with practice teaching. Methods and materials needed in teaching gifted children.

420t-4 Methods and Materials in the Education of the TMH Child. Basic educational remediation processes needed to assist in the overall academic development of the trainable mentally handicapped child. Methods and materials, both commercial and teacher developed, are examined. Prerequisites: 410g, 410t, 414.

427-4 Physical Education and Recreation for the Handicapped. (See Physical Education 427.)

428-4 Speech Correction for the Classroom Teacher. (Same as Speech Pathology and Audiology 428.) Etiology and therapy of common speech defects. Open to in-service teachers and administrators, seniors, and graduate students in education.

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. Prerequisites: 414, Psychology 420.

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 410-4.

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.

453-4 or 8 Practicum. Supervised classroom, small group, or individual teaching experiences in a school or institutional program for atypical children. Open only to graduate students with no prior student teaching experiences with the exceptional child in the area of specialization. Prerequisites: 410, 420, candidate in the area of specialization, consent of staff.

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. Prerequisites: 410, 420.

480r-2 Introduction to Rehabilitation. (See Rehabilitation 480r.)

481a-4 Seminar: Teaching Children with Behavior Disorders. A concluding and synthesizing experience for students training to be classroom teachers of children with behavior disorders. Focuses on prescriptive teaching methods, individual and group behavior management techniques and methods and materials for instruction. Prerequisites: 410a, 410g, 411, 420a, 430, concurrent with 353 or 453.

481b-4 Seminar: Educable Mentally Handicapped.

481c-4 Seminar: Gifted.

481g-4 Seminar: The Learning Disabled. Focus on specific classroom settings, management and teaching of the learning disabled child. The role of the teacher of the learning disabled as a professional practitioner, and as a member of the educational team is stressed. Student teaching can be taken concurrently. Prerequisites: 410g, 411, 420a.

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. Prerequisites: 414, consent of staff.

498-4 Seminar: Selected Topics in Special Education. Special educational concepts, teaching strategies, or current concerns to various educational personnel. Prerequisite: consent of department chairman.

School of Education Faculty

George C. Ackerlund, Ph.D., Professor of Educational Administration and Supervision

William P. Ahlbrand, Ph.D., Chairman and Associate Professor of Secondary Education

Gene D. Allsup, Ph.D., Professor of Foundations of Education

Ina Anderson, Ph.D., Assistant Professor of Health, Recreation and Physical Education

Robert G. Andree, Ed.D., Professor of Educational Administration and Supervision

James F. Andris, Ph.D., Assistant Professor of Foundations of Education

Rosemarie Archangel, Ph.D., Professor of Health, Recreation, and Physical Education

Donald Baden, Ed.D., Assistant Professor of Elementary Education

David E. Bear, Ed.D., Chairman and Professor of Elementary Education

Eldon Bigham, M.S., Instructor of Health, Recreation, and Physical Education

Louis Bobka, M.S., Instructor of Health, Recreation, and Physical Education

Henry T. Boss, Ed.D., Associate Professor of Secondary Education

Fritz Brecke, Ph.D., Assistant Professor of Instructional Technology

Erwin H. Brinkmann, Ph.D., Professor of Psychology

Warren L. Brown, Ed.D., Associate Professor of Secondary Education

H. Bruce Brubaker, Ed.D., Professor of Educational Administration and Supervision

Robert M. Bruker, Ph.D., Associate Professor of Secondary Education

Wilfred Buddell, M.S., Instructor of Health, Recreation, and Physical Education

William Burcky, Ph.D., Assistant Professor of Counselor Education

Regan Carpenter, Ed.D., Professor of Elementary Education

Sara Carpenter, B.S., Lecturer of Health, Recreation, and Physical Education

Fred D. Carver, Ph.D., Dean of School and Professor of Educational Administration and Supervision

Joann Chenault, Ed.D., Professor of Counselor Education

John Childers, Ed.D., Visiting Assistant Professor of Counselor Education

Charles Combs, Ed.D., Professor of Counselor Education

James Comer, Ed.D., Professor of Elementary Education

Ruth Cook, Ph.D., Associate Professor of Special Education

A. Dudley Curry, Ph.D., Associate Professor of Foundations of Education

Donald Darnell, Ed.D., Associate Professor of Elementary Education

Robert A. Daugherty, Ph.D., Associate Professor of Psychology

Howard Davis, Ed.D., Professor of Counselor Education

John R. Davis, M.S., Adjunct Instructor of Secondary Education

- Barbara J. DeLong, Ph.D., Associate Professor of Health, Recreation, and Physical Education
- Kent DeMars, M.A.T., Instructor of Health, Recreation, and Physical Education
- Kirby Detraz, Ed.D., Assistant Professor of Special Education
- Jimmie Dudley, M.S.E., Instructor of Health, Recreation, and Physical Education
- Helen Ederle, Emerita Professor of Counselor Education
- Robert O. Engbretson, Ph.D., Professor of Psychology
- Thomas D. Evans, Ph.D., Associate Professor of Counselor Education
- Eva Ferguson, Ph.D., Professor of Psychology
- John Forhertz, Ph.D., Associate Professor of Counselor Education
- Anita Foxworth, Ph.D., Assistant Professor of Special Education
- Ruges Freeman, Ph.D., Associate Professor of Secondary Education
- Harry Gallatin, M.A., Assistant Professor of Health, Recreation, and Physical Education
- George H. Goodwin, Ed.D., Associate Professor of Secondary Education
- S. Joseph Gore, Ph.D., Professor of Secondary Education
- Dean Gray, Ph.D., Associate Professor of Counselor Education
- Arthur Grist, M.S., Assistant Professor of Health, Recreation, and Physical Education
- Robert Guelker, M.S., Associate Professor of Health, Recreation, and Physical Education
- Dorothy Happel, M.S., Lecturer in Elementary Education
- Merrill Harmin, Ph.D., Professor of Secondary Education
- Jesse Harris, M.Ed., Adjunct Instructor of Counselor Education
- Barbara Havis, M.S., Instructor of Elementary Education
- Raymond A. Helsel, Ed.D., Associate Professor of Educational Administration and Supervision
- Zadia C. Herrold, Ph.D., Chairman and Professor of Health, Recreation, and Physical Education
- Robert Hildebrand, Ph.D., Chairman and Professor of Foundations of Education
- Olin T. Hileman, Emeritus Professor of Elementary Education
- David Hofmann, Ph.D., Associate Professor of Foundations of Education
- I. Brooks Holder, Ph.D., Adjunct Assistant Professor of Counselor Education
- Gary L. Hull, Ph.D., Chairman and Associate Professor of Instructional Technology
- Arthur Jordan, Ed.D., Associate Professor of Elementary Education
- Orville Joyner, Ph.D., Associate Professor of Instructional Technology
- Donald R. Keefe, Ph.D., Associate Professor of Secondary Education
- Donald T. King, Ed.D., Chairman and Professor of Counselor Education
- Walter C. Klein, H.S.D., Associate Professor of Health, Recreation, and Physical Education
- Kenneth Kleinman, Ph.D., Associate Professor of Psychology
- Bobbi Anne Knewitz, M.S., Instructor of Elementary Education
- David Kohfeld, Ph.D., Associate Professor of Psychology
- Stefan P. Krchniak, Ph.D., Associate Professor of Educational Administration and Supervision
- Larry D. Kristoff, M.S., Assistant Professor of Health, Recreation, and Physical Education
- Robert Lamp, Ph.D., Professor of Psychology
- Charles A. Lee, Emeritus Professor of Foundations of Education
- Roy E. Lee, M.A., Assistant Professor of Health, Recreation, and Physical Education

- Ruby Long, Ed.D., Professor of Special Education
Raymond L. Lows, Ph.D., Chairman and Associate Professor of Educational Administration and Supervision
Goerge C. Luedke, Jr., M.P.E., Instructor of Health, Recreation, and Physical Education
Eldon Madison, Ph.D., Associate Professor of Instructional Technology
Donald C. Madson, Ed.D., Associate Professor of Secondary Education
Myrna Martin, M.S., Instructor of Health, Recreation, and Physical Education
Robert E. Mason, Ph.D., Professor of Foundations of Education and Professor of Secondary Education
Patrick McBride, M.S., Instructor of Health, Recreation, and Physical Education
John N. McCall, Ph.D., Professor of Psychology
Robert McLaughlin, Ph.D., Chairman and Associate Professor of Psychology
Frank B. McMahon, Jr., Ph.D., Professor of Psychology
Cameron Meredith, Ph.D., Professor of Counselor Education
William Mermis, Ph.D., Associate Professor of Counselor Education
Robert Meyers, B.S., Instructor of Health, Recreation, and Physical Education
Boyd Mitchell, Ed.D., Professor of Instructional Technology
Larry N. Moehn, M.S., Assistant Professor of Health, Recreation, and Physical Education
Virginia Moore, Ed.D., Associate Professor of Counselor Education
Frederick Mundt, Ph.D., Professor of Instructional Technology
Susan Nall, Ph.D., Assistant Professor of Elementary Education
Charles E. Nelson, Ph.D., Assistant Professor of Instructional Technology
Jeanne Nolan, Ph.D., Assistant Professor of Instructional Technology
Thomas O'Brien, Ph.D., Professor of Elementary Education
James Owens, Ph.D., Assistant Professor of Elementary Education
Catherine Phee, Ph.D., Assistant Professor of Secondary Education
Jerome A. Popp, Ph.D., Associate Professor of Foundations of Education
John R. Reiner, Ph.D., Associate Professor of Counselor Education
Donald Repovich, Ed.D., Assistant Professor of Counselor Education
Nicholas Reuterman, Ph.D., Associate Professor of Psychology
Rosanda Richards, Ph.D., Associate Professor of Foundations of Education
Ruth Richardson, Ed.D., Emerita Professor of Elementary Education
Margaret Rissman, Ph.D., Visiting Instructor of Psychology
Gerold Robbins, Ph.D., Assistant Professor of Psychology
Dean Rochester, Ed.D., Professor of Counselor Education
Robert Rockwell, Ph.D., Associate Professor of Elementary Education
Billy J. Rogers, Ph.D., Assistant Professor of Psychology
Terry Rohen, Ph.D., Assistant Professor of Counselor Education
Ivan Russell, Ph.D., Professor of Elementary Education
Robert Russo, Ed.D., Professor of Psychology
Vera Ellen Sappington, M.S., Instructor of Health, Recreation, and Physical Education
John H. Schnabel, Ed.D., Professor of Secondary Education
Ann Schonlau, M.S., Instructor of Health, Recreation, and Physical Education
Mary Sue Schusky, M.S., Assistant Professor of Instructional Technology
Virginia F. Shafer, Emerita Associate Professor of Special Education
Thomas Shea, Ed.D., Professor of Special Education
Norman E. Showers, Ed.D., Associate Professor of Health, Recreation, and Physical Education
Patricia Simms, B.S., Instructor of Special Education
Kathryn K. Skinner, Ph.D., Associate Professor of Psychology

Myllan Smyers, Emeritus Professor of Secondary Education
Dartha Starr, Ph.D., Assistant Professor of Elementary Education
Fay H. Starr, Ph.D., Professor of Psychology
Roy S. Steinbrook, Ed.D., Associate Professor of Elementary Education
Lawrence E. Taliana, Ph.D., Professor of Psychology
Harvey M. Taylor, M.A., Instructor of Foundations of Education
Anthony J. Traxler, Ph.D., Associate Professor of Psychology
Raymond Troyer, Ph.D., Emeritus Professor of Counselor Education
Mark M. Tucker, Ed.D., Professor of Special Education
Charles J. Turner, Ed.D., Associate Professor of Elementary Education
David VanHorn, M.S., Instructor of Counselor Education
Keith Wadell, M.S., Visiting Instructor of Health, Recreation, and Physical Education
Robert Wagner, Ph.D., Associate Professor and Chairman of Special Education
Richard Walsh, Ph.D., Professor of Psychology
Dale Wantling, Emeritus Professor of Foundations of Education
Leslie J. Wehling, Ed.D., Associate Professor of Secondary Education
Leonard Wheat, Emeritus Professor of Educational Administration and Supervision
William Whiteside, Ph.D., Associate Professor of Special Education
Jack J. Whitted, M.S., Instructor of Health, Recreation, and Physical Education
W. Deane Wiley, Ph.D., Professor of Educational Administration and Supervision
George T. Wilkins, Emeritus Professor of Educational Administration and Supervision
Robert Williams, Ph.D., Instructor of Elementary Education
Rudolph G. Wilson, M.S., Assistant Professor of Secondary Education
Casimir Zielinski, Ed.D., Visiting Assistant Professor of Counselor Education

School of Fine Arts and Communications



HOLLIS L. WHITE, *Dean*

Offering degrees in:

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

School of Fine Arts and Communications

The mission of the School of Fine Arts and Communications through its many faceted programs 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 pre-professional 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 in 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 as these activities relate to our mission.
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, Architectural Arts, bands, choruses, orchestras, quartets, and recitals.

Students may be further informed about each specific program by reading the following descriptions.

ART AND DESIGN

The Department of Art and Design offers four undergraduate degrees in the various areas of Art: a Bachelor of Arts degree in Art with options in Art History or Studio; a Bachelor of Arts degree in Art and Design; a Bachelor of Fine Arts degree in Studio; and a Bachelor of Science degree with an option in Studio or, in conjunction with the School of Education, Art Education.

Undergraduate offerings in art include introductory and specialized courses providing for a concentration in: the studio areas of drawing, painting, print-making, sculpture, ceramics, fiber and fabric, photography and jewelry; in art historical studies; or professional preparation for the future teacher of art at both the elementary and secondary levels. Limited offerings are available for those with an avocational interest.

To augment the academic program the Department of Art and Design has a comprehensive program in the cultural arts which includes the Visiting Artists' Program, the Exhibitions Program and the Program in Architectural Exhibits. These programs provide an opportunity for the general student as well as the art major to be exposed to internationally known artists and art works that are brought to the campus in Edwardsville.

Individuals majoring in art find career opportunities in a wide variety of professional fields open to them. These include teaching programs in public and

private schools; recreational and cultural programs with city, state and federal government agencies; professional careers in design, advertising and commercial art as well as positions with museums, galleries and other cultural institutions. The undergraduate programs in Art also prepare students for graduate study in their field of specialization.

The Art and Design Department reserves the privilege of retaining examples of the work of each student in each class. Such works may become part of a permanent collection and be used for exhibitions as determined by the faculty.



Bachelor of Arts Degree, School of Fine Arts and Communications

Studio

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Art</i>	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, 358, 384, 386, 393	18
Art history	6
15 additional hours from one of the following studio areas: painting, drawing, printmaking, sculpture, ceramics fiber and fabric, jewelry or photography	15
Art electives	6
<i>Electives or Minor Concentration</i>	36

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Art History

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Art History</i>	75
Foreign Language	12
Art 225-9	9
54 hours from the following: GHA 310, 311, 312, 315, 316, 317, Art 424, 447-9, 448, 449, 469, 481, 483	54
<i>Electives and/or Minor Concentration (Major concentrations 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.)</i>	57

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Bachelor of Science Degree, School of Fine Arts and Communications

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Art</i>	94
Art 100-15, 202-18, 225-9	42
18 hours from at least five of the following: Art 302, 305, 310, 312, 331, 358, 384, 386, 393	18
Art history elective	3
Art education courses 289, 300a,b,c,d, 365	19
Art electives	12
<i>Electives</i>	38
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Bachelor of Fine Arts Degree, School of Fine Arts and Communications

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.

<i>General Studies Requirements</i>	32
GSK	12
GSS	8
GSM	8
GHA	4
<i>Foreign Language¹</i>	12
<i>Requirements for Major in Art</i>	116
Art 100-15, 200-21, 304-1, 331-3, 15 hours from at least five of the following: Art 305a, 310a, 302a,b,c, 358a,b,c, or d, 348a or b, 386a, 393a, 405-1, 441-3	59
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
<i>Academic Electives²</i>	32
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¹Language study in high school may not be used to meet this requirement. Students planning on continuing beyond a bachelor's degree are urged to use part or all of the elective hours to improve the mastery of at least one foreign language.

²Art History courses are not be included in these hours.

NOTE: Students desiring secondary teaching certification with this degree would be permitted to count 6 hours of education courses in the 18 hours of electives. The remaining hours of required education and art education work would be in addition to the basic 192 hour degree.

Bachelor of Science Degree, School of Education*Art Education*

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major in Art Education</i>	70
<i>Areas of Concentration</i>	
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, 358, 384, 386, 393	18

Art history	3
Art education courses 289, 300d, 365	10
Art 300a,b,c (for K-14 certification)	(9)
<i>Professional Education Courses</i>	33
See Secondary Education requirements	
<i>Electives</i>	29
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During the last quarter of the junior year or first quarter of the senior year, any student may petition the art faculty to grant him the privilege of an exhibition of his work. Such an exhibit may be comprised of the work of an individual or may be composed of the works of several seniors. Participation in an exhibition is not required for graduation from Southern Illinois University; permission to participate is extended in recognition of outstanding industry and artistic ability.

Minor Concentrations

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 300 level Art History courses or GHA courses in Art History for a total of 27 hours.

MASS COMMUNICATIONS

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 their 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 so 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 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 system as they apply to the media, to dissect communication messages of the mass media to discover their ethical and emotional appeals, to investigate the psychological 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 major concentration in Television-Radio or in Journalism. In either program a minor concentration outside of 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 concentration. 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, 245 or 345, 303a,b, 340, 410, and 415. 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.

Sample scheduling of these courses may be seen in the study guides, which follow below.

For more detailed information regarding our programs please contact Chairman, 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. But increasingly, Mass Communications majors are in demand for public relations and public information positions, and low-technology or closed circuit applications of television in business and industry.



Bachelor of Science Degree, School of Fine Arts and Communications*Television-Radio*

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major in Mass Communications</i>	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, 303, 356, 359, 390, 401, 404, 405, 406, 407, 410, 450, 466)	20
<i>Minor Concentration Outside Mass Communications</i>	29
(A double major is recommended.)	
<i>Electives</i>	50
(May include a minor concentration in journalism)	

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Minor Concentration

A minor concentration in television-radio is possible by taking the following courses: 100, 200, 201, 230, 252, 401 for a total of 25 hours.

Journalism

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major in Mass Communications</i>	54
Journalism 103, 201a,b, 210a, 245 or 345, 303a,b, 340, 410	35
Senior-level seminar in mass communications	4
Journalism, selected television-radio, and electives from other schools on campus as approved by the Department of Mass Communications	15
<i>Minor Concentration Outside Mass Communications (A double major is recommended.)</i>	28
<i>General Electives (or additional minor concentration in television-radio)</i>	50

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Minor Concentration

A minor concentration 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

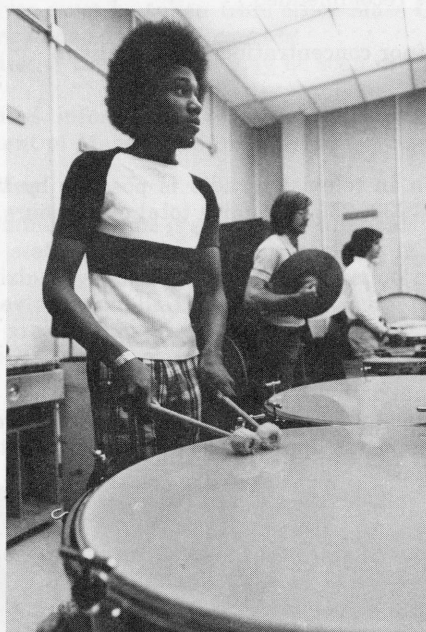
This minor concentration is intended to be useful to those students in the University who do not wish to pursue a professional minor in the media which includes familiarization with and practice in producing messages. It is suggested that this sequence might be particularly valuable to those whose major could be complemented by an understanding of the role the media have played and are playing in the evolution of our society.

Requirements are as follows: one of the following—Television-Radio 100, 159, 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

The Department of Music is a fully accredited member of the National Association of Schools of Music. The Department offers the following undergraduate degrees: Bachelor of Arts with a major in Music; Bachelor of Music with majors in Performance, Music Education, and Theory and Composition.

Performing organizations at SIUE include groups open to all students; the University Band, the University Chorus, and the Community Choral Society, and groups open to the students by audition: The Symphonic Band, the Concert Chorale, the University Symphony Orchestra, the Chamber Orchestra, the Jazz Lab Ensemble, and various instrumental chamber music ensembles.



A large number of concerts by ensembles and recitals by guest artists, faculty, and students offer a significant program of cultural events for the enjoyment of the University community and residents of the area surrounding the University.

Students may participate in various organizations, including Phi Mu Alpha, national music fraternity; Mu Phi Epsilon, international music sorority; and a chapter of the Music Educators National Conference.

Outstanding students may apply for admission to the Dean's College in order to devise a program more closely related to their specific abilities. A grade-point average of 4.5 is required for admission of college applicants, but students with outstanding high school records, and others with exceptional talent, may be admitted directly from high school. When admitted to the Dean's College, the student and his or her adviser plan a program appropriate for the student's needs and capabilities.

Admission

Students wishing to become candidates for the Bachelor of Music degree must perform an acceptable audition prior to the quarter they wish to enter. No student

is permitted to take private lessons until the audition requirement is met. To obtain audition dates, please write or call the Department of Music.

Bachelor of Arts Degree, School of Fine Arts and Communications

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.

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Music</i>	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
<i>Minor Concentration</i>	24
<i>Electives</i>	39

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Bachelor of Music Degree, School of Fine Arts and Communications

Music Performance

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Music</i>	118-126 ¹
Foreign Language	124 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
<i>Electives</i>	14-9

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¹Students 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.

²Students with a specialization in piano may substitute 9 hours in Music 413 and/or 461 in lieu of 309a, 312a, and 442a.

³Students with specialization in piano may substitute a maximum of 6 hours in 365 as partial fulfillment of this requirement.

Music Education

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Music</i>	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 ¹
Voice proficiency or class	0-3 ¹
Music: class strings, woodwinds, brass—2 hours in each area	0-6 ¹
One year of French or German is recommended for the student with a choral emphasis in music education.	

<i>Professional Education Requirements</i>	33
GSS 370	4
Foundations of Education 355	4
Music 301	9
Counselor Education 305	4
Elementary Education 351, Secondary Education 352d ..	12
<i>Electives</i>	22-8
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Before a student is approved for student teaching, he must satisfy the course of study and proficiency prerequisites as established by the Music Department.

Music Theory/Composition

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Music</i>	117
Music 105-12, 205-12, 309-9, 312-9, 326-9, 357-9, 442-9	69
Music, private applied	18 ²
Music, major ensemble	12
Music electives	18 ³
<i>Electives</i>	15
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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 Concentration

A minor concentration in music includes 105-12, 2 hours of credit per quarter for three quarters in performance concentration, 6 hours in a major ensemble, GHA 230, Music 357c (357a or b will substitute). Total: 31 hours.

¹Study on a secondary instrument and/or voice is possible if requirements for class instruction are met by proficiency.
²Private 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.

³A 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.

SPEECH COMMUNICATION

The field of Speech Communication probes the "hows" and "whys" of people relating to people in the sharing of ideas and feelings. It focuses on human communication on a one-to-one basis, in small groups, in businesses and organizations, in recurring relationships (such as families and friendships), and in public speaking situations. The study of Speech Communication is organized into the following four basic divisions: (1) Basic Speech Communication Theory and Practice, (2) Speech Communication as a Social Force, (3) Speech Communication as a Study of Human Behavior, and (4) Speech Communication in Education.

Career Opportunities Available

There are very few jobs in American society with the label "For _____ People Only" attached, and Speech Communication is no exception. But with escalating crises in government, business and industry, higher education, churches, fami-

lies, and individual lives, people are becoming increasingly aware of the need for effective communication throughout our society. As a result, there are growing job opportunities for people trained in Speech Communication. Exciting new jobs are opening up, and for this reason, our graduates have significant input in regard to what their jobs will be like, rather than having to fit into traditional, tightly defined job descriptions. Representative positions include the following: (1) teaching careers in Speech Communication (K-12), (2) communication specialists in business and industry, (3) trainers and facilitators in special human relations and development programs, (4) management positions, (5) public relations, (6) sales, and (7) communication in government and politics.

Advisement

Students who plan either major or minor concentration in Speech Communication must, at the time they declare their concentration or earlier, consult with the Speech Communication Director of Undergraduate Studies and Advisement for selection of an adviser to help develop their concentration in Speech Communication. In addition to their academic responsibilities, students are expected to integrate campus and community speech communication-related activities and experiences. The communication practicum course (Speech Communication 309) offers 1 to 8 hours of academic credit for these activities.

Speech Communication majors can form programs which prepare them for working with communication problems in business and industry, serving as trainers and teachers in special human relations and human development programs, and working with communication in government and politics. Speech Communication majors must complete 48 hours in Speech Communication courses. There are four required courses for majors: 301, 302a or 302b, 330, and 410. Majors must also take 32 hours of electives in Speech Communication courses, 12 hours in cognate fields (other than student's minor concentration, to be chosen at discretion of student and adviser), and 48 quarter hours of electives in any University courses. They must also take a minor concentration of at least 24 hours. Majors seeking certification for teaching must take the program outlined above in this paragraph, plus 461, and meet the other minimum standards for certification listed under Secondary Education and those set forth by the Illinois Office of Education.

Bachelor of Arts or Bachelor of Science Degree, School of Fine Arts and Communications

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Speech Communication</i>	48
Foreign Language	(12)
Speech Communication 301, 330, 410, either 302a or b	16
Electives in Speech Communication	32
<i>Minor Concentration</i>	24
<i>Courses in Cognate Fields (other than student's minor concentration, to be chosen at discretion of student and adviser)</i>	12
<i>Electives</i>	48

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Students seeking certification for teaching must take the program outlined above, plus Speech Communication 461, and meet the other minimum standards for certification listed under secondary education.

Bachelor of Science Degree, 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 Speech Communication 461, meet current certification requirements set forth by the Illinois Office of Education, and meet the other minimum standards for certification set by the School of Education.

Minor Concentration

A 24-hour minor concentration (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/her adviser decide best fit the student's primary academic concentration and career interests. It is highly recommended that the minor concentration include those courses listed above as requirements for major concentrations in Speech Communication. Students electing Speech Communication as a second teaching subject must include 461. At the time they declare their minor concentration or earlier, students are to consult with the Speech Communication Director of Undergraduate Studies and Advisement. General Studies courses are not applicable to the 24 hours necessary for a minor concentration.

SPEECH PATHOLOGY AND AUDIOLOGY

The professions of speech pathology and audiology are devoted to serving the more than twenty million Americans with disordered communication. The speech pathologist is devoted to the study of human communication, its normal development, and its disorders. Included in such responsibilities may be the identification, evaluation, and remediation of individuals having communicative disorders; in addition, the speech pathologist is interested in preventing disorders of speech, hearing, and language through public education, early identification of problems, and research into the causes and treatment of these problems.

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, which may involve amplification. Like the speech pathologist, the audiologist is also concerned with research on the hearing process and hearing disorders.

In order to meet the standards established by the American Speech and Hearing Association 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.

Career Opportunities

Hospitals	Public Schools
Community Clinics	Private Practice
Colleges and Universities	Industries
State and Federal Agencies	Rehabilitation Centers

Bachelor of Arts or Bachelor of Science Degree,¹ School of Fine Arts and Communications

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements in Speech Pathology and Audiology</i>	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, 453	16
Audiology courses: Speech Pathology and Audiology 360, 461, 471	12
Clinical procedures and practices: Speech Pathology and Audiology 380, 449, 469	6-12
Optional courses: Speech Pathology and Audiology 450, 462, or approved elective	4
<i>Requirements in Related Areas</i>	12
Psychology 301, 305	8
Special Education 414	4
<i>Requirements for Illinois Certificate in Speech and Language Impaired</i>	20-28
GSS 370	4
Counselor Education 305	4
Elementary Education 351	8-16
Foundations of Education 355	4
<i>Approved Electives</i>	46-32
Students are encouraged to pursue a minor concentration in a related field.	

¹Twelve hours of foreign language are required for the B.A. option.

²Must include basic psychology.

THEATER AND DANCE

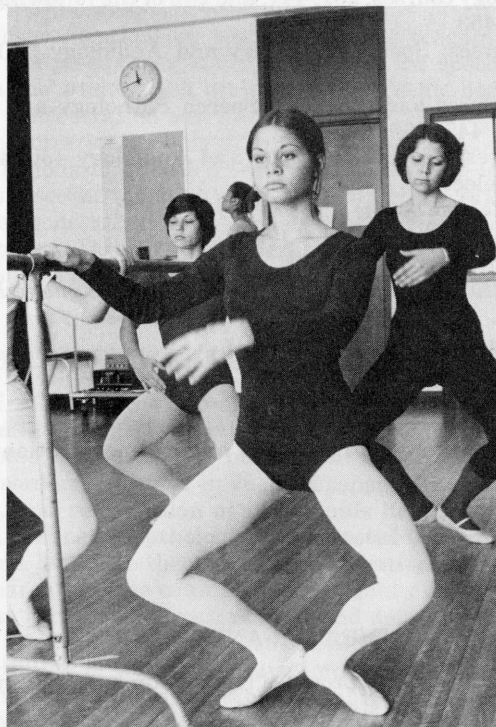
A major in theater and dance provides instruction and training in all phases of dramatic production for the stage.

Training in theater and dance at the undergraduate level provides for the inter-related presence of three fundamental considerations: a liberal arts orientation; a liberal theater education; and a meaningful, purposeful study of the art of theater and/or dance.

Students who major in theater or dance may elect any three possible programs of study: (1) theater major (performance emphasis), (2) theater major (design and technical emphasis), (3) theater major (dance emphasis). The carefully devised complex of training studios enables the student to learn the art of theater and dance through instruction and participation in an extensive series of major and minor presentations for class, campus, and community audiences through the Quonset Theater, the University Theater, and the Dance Company. Each student's background and training is appraised to determine his needs. Individual programs provide training and practice in voice training, acting, makeup, directing, improvisation, technical production (including stagecraft, costuming, lighting, sound, scene design, scene painting, costume design, lighting design), business management, and dance. Additional courses in the theater curriculum allow the student to secure a background of knowledge in theater history, children's theater, dance history, black theater history, and playwriting.

Students desiring further information about work in the Department of Theater and Dance should contact: The Chairperson, Department of Theater and Dance, Box 72c, Southern Illinois University, Edwardsville, Illinois 62026.

All students desiring to take courses in theater and dance must be advised by a member of the faculty who will issue permit to enroll forms. Advisement by departmental faculty should be completed prior to University registration.



Bachelor of Arts or Bachelor of Science Degree,¹ School of Fine Arts and Communications

Performance Emphasis

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Theater (performance emphasis)</i>	90
GHA 150	(4)
Theater 100a-4, 100d-4, 100s-4, 100u-4, 100v-4, 200a-12, 200b-2, 200c or 300c-4, 200l-4, 200m-2, 200s-4, 200v-4, 300a-8, 300b-2, 300r-4, 401-12	74
Theater 200p, 300p, 400p	12
Theater electives	4
<i>Electives</i>	42
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¹Students pursuing the Bachelor of Arts degree must complete 12 hours of foreign language.

Design and Technical Emphasis

<i>General Studies Requirements (See Chapter 3. Waive GHA-8)</i>	60
<i>Requirements for Major in Theater (design and technical emphasis)</i>	90
GHA 150	(4)
Theater 100a-4, 100d-4, 100u-4, 100v-4, 100s-4, 200b-2, 200c-4, 200d-4, 200k-2, 200l-4, 200m-2, 200s-4, 200w-2, 300b-2, 300c-6, 300d-2, 300l-6, 300r-4, 400w-4, 401-12	80
Theater electives	10
<i>Electives</i>	42
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Dance Emphasis

<i>General Studies Requirements (See Chapter 3. Waive GHA-8)</i>	60
<i>Requirements for Major in Theater (dance emphasis)</i>	90
GHA 150	(4)
Theater 100a-4, 100u-4, 100v-4, 200c-4, 200h-4, 200l-4, 200m-2, 200n-6, 200t-8, 300h-4, 300o-4, 300t-8, 300z or 400z-6, 400h-4, 400o-4, 400t-8, 400u-4, 402-4	86
Theater or dance electives	4
<i>Electives</i>	42
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Minor Concentration

A 40-hour minor concentration in theater must be planned in consultation, prior to advisement, with the Chairman of Theater and Dance.

Courses**Art**

Art Education Courses: 289, 300, 365, 408, 460, 466.

Art History Courses: 225, 424, 483, GHA 310, 311, 312, 316, 317.

Studio Courses: 100, 202, 302, 305, 310, 312, 325, 331, 358, 384, 386, 393, 401, 402, 410, 420, 441.

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.

051-3 Avocational Ceramics. An exploration of the ceramics arts for the interested non-major. Emphasis upon individual development of understanding and appreciation of pottery media through direct experience in the practice of the craft. May be repeated. Three hours credit applicable to degree except in art and design and teacher education.

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) Drawing II. Continuation of (a) with emphasis on development of ideas. (c) 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. (d) Visual Organization I. Introduction to and exploration of art concepts and form with special emphasis given to color. Work in two dimensions. (e) Visual Organization II. Continuation of (d) with special emphasis given to three dimensions.

202-24 (3,3,3,3,3,3,3) Intermediate Studio. (a) Sculpture. A study in form and design. (b) Printmaking. Introduction to fundamental printmaking techniques in relief and intaglio methods and multiple color printing. (c) Ceramics. Introduction to handbuilding with clay

and to simple techniques and technology of glazing and firing. **(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.** The techniques of looping, crochet, macrame, finger weaving, block printing, batik, tie dye, silkscreening, and bleachout. Emphasis upon individual interpretation of these techniques to simple design problems. Need not be taken in sequence. Prerequisite: sophomore standing or consent of instructor.

225-9 (3,3,3) History of World Art. A study of painting, sculpture, and architecture from prehistoric to modern times. Emphasis is placed upon 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 the Renaissance to the present.

289-3 Practicum in Art Education. An exploration of appropriate activities for art education in the elementary and secondary schools. Observation and involvement with children and youth at work. An introduction to the profession of art education. Prerequisite: 100-15.

300-12 (3,3,3,3) 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. **(a)** Exploration and experimentation of a variety of media with emphasis on interdisciplinary learning. **(b)** Study of crafts suitable to the interests and abilities of children in grades K-6. **(c)** Providing opportunity to pursue an individual interest in-depth, studio or academic. **(d)** For art concentrations only to introduce them to the elementary school child and his creative processes. A,b,c must be taken in sequence. Prerequisite: (a,b,c) junior standing; (d) 289.

302-12 (3,3,3,3) Basic Still Photography. Basic still, black and white photography as an art form; photography aesthetics; work with view cameras and hand held cameras; total dark room experience. Prerequisite: junior standing and/or consent of instructor.

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 applications, exhibiting, galleries, studio development and general problems confronting those who pursue college or university teaching careers. Prerequisite: upperclassman pursuing BFA degree or consent of instructor.

305-12 (3,3,3,3) Ceramics. Intensive study of ceramics as an art form. Must be taken in a,b,c sequence. Prerequisite: 202-9, including 202c.

310-12 (3,3,3,3) Painting. Intensive study of painting as a medium of expression. Individual rather than group problems are engaged. Prerequisite: 202-9, including 202d.

312a-4 Advertising and Graphic Design. Deals with 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. Prerequisite: 202-9, including 202f.

312b-4 Advertising and Graphic Design II. Introduction to the problems of the advertising designer, with special emphasis on typography. Includes typesetting, proof printing, engraving, and lithographic processes. Application of the principles of design to a variety of contemporary projects, with professional standards and performances exacted. Creative and technical class work is supplemented by field trips to printing firms and advertising design studios. Prerequisite: 312a.

325-3 to 12 Studio. No more than 6 hours per quarter. Prerequisites: 9 hours in medium of choice (except where courses do not exist), consent of instructor.

331-3 Advanced Drawing. Exploration of various drawing techniques and media while intensively studying the human figure in environments. Prerequisite: 9 hours of drawing or consent of instructor.

341-9 (3,3,3) Introduction to Cartooning and Illustration. An introduction to various aspects of cartooning and commercial illustration. **(a)** Photomechanical reproduction processes, lettering techniques, preparation of copyready material for line-cut processes. Emphasis upon cartooning. **(b)** Continuation of work begun in 341a with some attention to

production of the graphic story (i.e., "comic strip"). (c) Exploration of story and advertising illustration using various media suitable for reproduction in halftone and in full color processes. Must be taken in sequence. Prerequisites: 100-15, 202b, d, e 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.

365-4 Art Education in the Secondary Schools. For art education students preparing to teach at secondary level; includes studio projects designed to develop awareness of technical and aesthetic needs of high school students, reading and discussion of literature, planning of curriculum. Fall quarter only.

384-12 (3,3,3,3) Weaving and Design in Textiles. Problems of design and techniques of working in fibers of various kinds. Consideration of the craft as an art form. Prerequisite: 202-9.

386-12 (3,3,3,3) Jewelry and Design in Metals. The basic processes involved in forming and finishing art objects of metal. Prerequisite: 202-9.

393-12 (3,3,3,3) Sculpture. Problems in modeling, carving, casting, and construction. Prerequisite: 202-9, including 202a.

401-3 to 12 Research in Painting. Prerequisite: 310-12.

402-3 to 12 Research in Sculpture. Prerequisite: 393-12.

405-1 Seminar II. Continuation of Colloquium I with particular emphasis on continuing changes in the professional art world. Course activities are coordinated with the visiting artists' program. Prerequisite: 305.

408-3 to 12 Art Education for Elementary Teachers II.

410-3 to 12 Research in Prints. Prerequisite: 358-12.

418-3 Metalsmithing and Design. Forming of metal via hammer, stakes and anvils. The art of raising or shaping sheet metal into forms by use of hammers, anvils and other tools in an ancient art which employs, in this process, silver, pewter, gold, copper, brass, aluminum and iron. Prerequisite: 386a,b,c.

420-3 to 12 Research in Pottery. Prerequisite: 305-12.

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 with 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 12 Studies in Art. Advanced work in area of specialization or multi-media work under the joint supervision of the respective areas. May be repeated to maximum of 12 hours in ceramics, fibre structures and textiles, multi-media, painting, printmaking or sculpture. Prerequisite: 300- and 400-level courses.

441-3 to 12 Studio in Drawing. Prerequisite: 12 hours 300-level art, junior or senior standing.

447-9 (3,3,3) Ancient Art. An interpretation of painting, sculpture, and architecture from prehistoric times through the ancient Egyptian, Mesopotamian, Greek and Roman civilizations, presented with consideration of the general cultural settings of the peoples involved. 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.

460-3 to 12 Research in Art Education.

466-3 to 12 Studio in Art Education.

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 summation of the decline of Mexican, Central, and South American cultures after European contact; the major focus on the cultures and stylistic regions of North America. Prerequisite: 225-9 and/or consent of instructor.

481-3 Objectives of 20th Century Art. Identification of the ideas and theories manifest in 20th century art. Examination of the literature as it attempts to define the various developments in the visual and plastic arts. Prerequisite: 225-9 and/or consent of instructor.

483-6 (3,3) Research in Art History. Individual research in the painting, sculpture, architecture, and related arts of the various periods. Prerequisite: 225-9 and/or consent of instructor.

484-12 (3,3,3,3) Research in Weaving/Textiles. Independent and individual research in technical and conceptual problems in weaving and textiles. Prerequisites: 202h, 384.

498-3 to 12 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. 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

101-3 Journalism and the Day's News I. The role of the press in modern society by surveying contemporary newspapers and magazines and how they cover the day's news; interpretation of the day's events in response to information and commentary from the print media; attention to the development of the newspaper and other media in America.

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 practice in reporting and writing the news; preparation of copy for publication in local media; copy editing; introduction to typography and makeup. Two-hour laboratory session required. Prerequisite: 103.

210-6 (3,3) Introduction to Photojournalism. Experience with cameras used in journalism; darkroom techniques, including developing, enlarging, special processes; a study of the elements of good news and feature photography; weekly assignments covering news stories with camera; exercises in photo editing; legal aspects of photography. Still photography, black and white, some with color. Prerequisite: 103.

212-2 Editing of Photographs and Artwork. The assignment of illustration for newspaper and magazine stories; the evaluation of photographs and artwork; the selection, the editing, and the production of such artwork; the study of esthetics of photography combined with practical exercises in editing and displaying it. Prerequisite: 210a.

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 News Editing and Design. Advanced copy editing, makeup, typography production techniques for newspapers and magazines; stress on simulating newsroom of professional publication; the role and performance of editors; creative editing. Includes one three-hour laboratory session per week. Prerequisite: 103, 201.

310-12 (4,4,4) Color Photography in Mass Communications. (a) Color positives: how to see and use color. (b) Color printing from positive and negative films. (c) Use of creative color in processes of mass communications. Translating previous experience with black-and-white photography to color. Shooting and developing with color positive film, moving on to shooting and printing color negative film, finally applying the techniques to completing projects in using color for reportage, for persuasive communication, and for illustration in the mass media. 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. Covering the courts and the affairs of city, county, and state government; practical assignments in news coverage of governmental agencies and of court trials; a study of stories of socioeconomic nature, such as urban renewal, the poverty program; local politics. Seminar techniques are used. Prerequisite: 201 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 I, II. The nature of magazine operation as it applies to the staff member and by the free lance writer; studies of nonfiction magazine articles with submission by students of articles for publication; experience in magazine editing and production. Prerequisite: 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 are written by students for submission to these specialized publications. Prerequisites: 103, consent of instructor.

361-3 Contemporary Readings in Journalism. In a seminar, students read new books (published within the year) about journalism and discuss responses to them; written responses required; final paper required of student. May be repeated for 6 hours credit. Prerequisite: concentration in journalism.

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.

391-3 Feature Writing. How to plan and write newspaper features and special articles.

402-2 to 8 Journalism Practicum. Study, observation, and participation in publication of the campus newspaper, and/or participation in a comparable professional setting, with the number of credit hours to be determined by agreement of the instructor and the student's adviser in his concentration. Prerequisite: consent of instructor.

410-4 to 16 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. May be repeated to maximum of 16 hours credit. Prerequisites: upperclass standing in journalism, consent of director of journalism.

415-4 Senior Seminar in Journalism: Communication in the World of the Future. A study of such topics as the new journalism—fact or myth?; the underground press and its effect on society; space-age communications systems; automation and its effects on publication. Prerequisite: upperclass standing in journalism.

424-2 or 3 Workshop in High School Publications. A short course for prospective and in-service teachers to give them practical experience in reporting, writing, editing, and producing publications fitted to the high school.

426-4 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.

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. Prerequisite: upperclass standing.

480-1 to 3 Special Problems in Journalism. Students and/or faculty initiate a significant topic drawn from journalism; members of the class undertake investigation of the topic, making final reports in oral or written form. May be repeated to include 8 hours credit. Prerequisite: junior standing in mass communications or consent of instructor.

481-4 Practicum in Specialized Reporting. Specific practical experience with local media in areas of specialized reporting, such as sports, science, education, critical writing for mass media, technical writing, investigative journalism. May be repeated with consent of adviser. Prerequisite: consent of instructor.

482-3 or 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 8 hours credit. Prerequisites: 201, consent of instructor.

483-4 Critics and Philosophers of Journalism. Study and evaluation of the commentaries of Marshall McLuhan, Will Irwin, Daniel Boorstin, Harold Innis, and other individuals, past and present, who have offered criticism and theory about print media, and their successes and failures.

Music

021-1 Symphonic Band. May be repeated. Prerequisite: by audition.

022-1 University Band. May be repeated.

023-1 Jazz Lab Ensemble. May be repeated.

024-1 Wind Ensemble. May be repeated.

Prerequisites: by audition, concurrent enrollment in 021 or 022.

031-1 University Orchestra. May be repeated. Prerequisite: by audition.

041-1 Community Choral Society. May be repeated.

042-1 University Chorus. May be repeated.

043-1 Concert Chorale. May be repeated. Prerequisite: by audition.

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. **105-12 (4,4,4) Theory of Music.** Fundamentals of music through sight singing, dictation, written and keyboard harmony. Must be taken in a,b,c 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 the 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. 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 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.

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|----------------|----------------|---------------------------------------|
| a. Violin | i. Saxophone | q. Voice |
| b. Viola | j. Percussion | r. Organ |
| c. Cello | k. Piano | s. Harpsichord |
| d. String Bass | l. French Horn | t. Harp |
| e. Flute | m. Trumpet | u. Classical Guitar |
| f. Oboe | n. Trombone | v. Primitive Rhythms
in Percussion |
| g. Clarinet | o. Tuba | |
| h. Bassoon | p. Baritone | |

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.

240-2 or 4 Private Applied Music. (See 140.)

300-3 Music Education — Elementary. (For non-music concentration only.) Teaching music in the elementary grades. Prerequisite: 200 or equivalent.

301-9 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 a,b,c 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 a,b sequence.

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.

340-2 or 4 Private Applied Music. (See 140.)

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.

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.

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.

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.

440-2 or 4 Private Applied Music. (See 140.)

442-9 (3,3,3) Counterpoint. (a) Sixteenth-century counterpoint; (b) eighteenth-century counterpoint; (c) larger contrapuntal forms with emphasis on fugue. Prerequisite: 205c.

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 a,b,c 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.

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 investigations 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.

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. 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.

302-8 (4,4) Oral Confrontation of Ideas. Theory and practice in researching and debating problems of (a) fact and value; (b) policy.

303-4 Speech Communication in Business and Organizations. Exploration of the effects of organizations and businesses on the speech communication behavior of individuals. Emphasis on improving individuals as organizational communicators.

309-1 to 8 Communication Practicum. 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.

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.

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 open to graduate students. Prerequisites: 24 hours in speech, senior standing.

410-4 Concepts and Role of Speech Criticism. 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.

411-4 Explorations in American Rhetorical History. Critical treatment of various topics as important rhetorical highlights of American history. The role of statesmen, preachers, scientists, artists, and reformers in creating oral history in America. Prerequisite: 410 or consent of instructor.

412-4 Criticism of Contemporary Speaking. Practical training in the role of speech critics. Analysis and criticism of speaking on campus, in the community, and in contemporary society. Prerequisite: 410 or consent of instructor.

413-4 Analysis of Political Communication. The influence of psychological and sociological factors in determining political communication strategies. Voter behavior, image promotion, forms of decision making, lobbying behavior, public opinion formation and interpretation, as they affect the form and effectiveness of speech communication in politics.

419-4 Seminar in Special Rhetorical Problems. The impact of contemporary culture, art, media, and values in the development of communication relationships in society. Focus on pertinent contemporary problems. May be repeated for total of 8 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: e.g., structural-functionalism, conflict theory, symbolic interaction, and exchange theory.

433-4 Linguistic Aspects of Speech Communication. The role and impact of language development and evolution on man. Emphasis on communicative barriers resulting from intracultural and intercultural differences in language usage.

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. Meet for 5 hours. Prerequisite: 16 hours of speech or consent of instructor.

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 Mechanisms. Structures 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.

380-4 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. Prerequisite: consent of instructor.

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.

415-4 Neurological Linguistics. A descriptive study of input and output modalities of normal and of representative disordered forms of the English language in both children and adults. Particular attention to written forms. Basic concepts of neural integration. Open to interested students in any discipline but of particular significance to students of education, language disorders, learning disabilities, psychology and linguistics. Prerequisite: 312 or consent of instructor, English 300.

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 Disorders of Language. Basic principles of diagnosis and therapy for developmental and acquired problems. Prerequisites: 201, 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 hours credit. Graded on Pass/No Credit basis only. Prerequisite: consent of program director and clinical supervisor.

450-4 Clinical Procedures in the Schools. Orientation to speech pathology in the schools; methods, materials and organization. Prerequisite: consent of instructor.

453-4 Communicative Disorders of the Preschool Child. Specialized study of the detection and treatment of speech, hearing, and language problems of very young children. 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 of credit. 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.

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.

159-4 Development of the Motion Picture. Emphasis on those artistic, technological, economic, and sociological factors influencing the growth of film. Screening and discussion of selected feature films.

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. Each student produces no less than a thirty-minute program suitable for presentation on public television. Three lecture-critique sessions, 4-6 hours laboratory per week. Prerequisites: 252, consent of instructor.

302a-4 Radio News. The principles and philosophy 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 on assignment in the field. Prerequisites: 201, Journalism 103.

302b-4 Television News. The principles and philosophy of television news. Emphasis on writing style and format, news program structuring and editing. Examines newscast, develops skills in newscast shooting, editing, and writing. Filming and editing 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.

357-4 Motion Picture Production for Television II. Theory, procedures, and practice in sound-on-film production. Advanced problems in production, sound, editing, transfer, and mixes. Selection of topics, research, planning, and budgeting. Group preparation of filmed projects for television. Prerequisite: 356.

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 other of the "lively" and fine arts. Social, moral, 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.

405-8 (4,4) The Documentary Film. (a) 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. (b) The filmed and/or taped documentary as a basic programming concept in American television. The use of advanced editing equipment, sound and videotape recordings. Group projects for television documentary productions. Prerequisite for (a): 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.

407-4 World Broadcasting. Analysis of foreign systems of broadcasting and comparison with the American system. Broadcasting as an international force in social, economic, and political areas. Problems and developments in space communications, satellite broadcasting, international cooperation. Prerequisite: consent of instructor.

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.

410-4 to 16 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. May be repeated to maximum of 16 hours credit. Prerequisites: upperclassman 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.

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 | m. Make-up |
| b. Business Management | n. Rhythmic Structure |
| c. Costume Design-Production | o. Dance Composition |
| d. Scene Design | p. Rehearsal-Performance |
| e. Contemporary Theater Problems | q. Special Projects |
| f. Fencing | r. Directing |
| g. Musical Theater | s. Stagecraft |
| h. Ballet | t. Modern Dance Techniques |
| i. Improvisation | u. Movement |
| j. Mime | v. Voice |
| k. Sound for Theater | w. Scene Painting |
| l. Lighting | x. Dunham Technique |
| | y. Primitive Rhythms in Dance |

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.

301-4 Black Theater History. Historical development of black theater practices. Emphasis on script analysis, scene study, and the contribution of black playwrights to the theater discipline.

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 History of Dance. A survey course tracing the development of dance from its beginnings in primitive societies to its present art form.

408-8 (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: French 280 or equivalent.

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.

410-12 (4,4,4) Children's Theater. A study of the techniques and actual practice in the dramatization of children's literature for elementary school children. Recommended for elementary education and theater education concentrations. (a) Introduction to children's theater techniques. (b) Practicum in children's theater production. (c) Special projects in children's theater production. Must be taken in sequence.

415-8 (4,4) Dance Anthropology. (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 relations. (b) Research methodology as it pertains to West Africa and the psycho-pathological implications of ceremonial healing. A study of choreographology. Prerequisite: (a): consent of instructor; (b): 415a.

School of Fine Arts and Communications Faculty

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Robert O. Anderson, Ph.D., Associate Professor of Speech Communication
Peter Beiger, M.F.A., Assistant Professor of Theater and Dance
Stephen M. Brown, M.S., Assistant Professor of Fine Arts and Communications
Evelyn T. Buddemeyer, B.S., Emerita Associate Professor of Art and Design
John W. Cannon, M.F.A., Associate Professor of Art and Design
Ann L. Carey, Ph.D., Professor of Speech Pathology and Audiology
Gail D. Chermak, Ph.D., Assistant Professor of Speech Pathology and Audiology
William D. Claudson, Ph.D., Professor of Music
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Amy Conger, Associate Professor of Art and Design
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Pamela S. Decoteau, Ph.D., Assistant Professor of Art and Design
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Annette M. Graebe, M.A., Instructor of Speech Communication
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Harold H. Haines, M.A., Emeritus Associate Professor of Speech Pathology and Audiology
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Andrew J. Kochman, Ph.D., Professor of Theater and Dance
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Marion J. Lampe, D.M.A., Associate Professor of Music
Malcolm Lieblich, Ph.D., Professor of Speech Pathology and Audiology
Donald Loucks, Ph.D., Assistant Professor of Music
O. Eugene Maag, Ph.D., Professor of Speech Pathology and Audiology
W. Craven Mackie, Ph.D., Associate Professor of Theater and Dance
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Allan R. McMurray, M.M., Assistant Professor of Music
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Sarah T. Turner, M.A., Assistant Professor of Music
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Edwin B. Warren, Ph.D., Professor of Music
Joseph A. Weber, M.S., Assistant Professor of Art and Design
Hollis L. White, Ph.D., Dean of School and Professor of Speech Communication
Richard A. Wilber, M.A., Instructor of Mass Communications
Ramon N. Williamson, Ed.D., Professor of Music
Alcine J. Wiltz, III, M.F.A., Associate Professor of Theater and Dance
Kamil Winter, Associate Professor of Mass Communications
James P. Woodard, D.M., Professor of Music

School of Humanities



CAROL A. KEENE, *Dean*

Offering degrees in:

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

School of Humanities

The School of Humanities offers instruction in that portion of the liberal arts curriculum encompassed by its three departments: English Language and Literature, Foreign Languages and Literature, and Philosophical Studies. Courses in the Humanities are concerned with the good, the true, and the beautiful, as expressed in language. Students are asked to join in an examination of the values of those actions, experiences, and institutions which create or affect the human condition. They are also asked to learn to write and think effectively and to judge what is written and said for its elegance of expression and cogency of thought. While the School is not opposed to professional training, it believes the student is a human being before he or she is a doctor, lawyer, or industrial chief. It seeks, therefore, to preserve the college years as a time when the student engages in humane learning, believing that the student who does not receive such an education in his undergraduate years may not receive it at all. In addition to its contribution to the general education of all University students, the School offers specialized instruction in the methods of studying and arriving at comparative evaluations regarding the works, the men and women, and the movements that make up literary and intellectual history. These students may choose a major concentration in one of these four fields: English Language and Literature, Foreign Languages and Literature, Philosophical Studies, American Studies.

In addition, there are several programs and courses that are sponsored by the School rather than by any one of its departments: Humanities Honors Courses, The Writing Clinic, Colloquium Courses.

HUMANITIES HONORS PROGRAM, Clyde M. Nabe, 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, whatever his major or minor might be. 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 milieus, 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 but 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, Barbara J. Lawrence, 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 also 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.

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 objectives, 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 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 Coordinator's office. 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 his 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 credit in any one quarter, not to exceed 8 hours during any student's undergraduate career. 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 General Studies 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, so that students do not labor under false hopes.

AMERICAN STUDIES

American Studies is an interdisciplinary approach to a study of American culture, past and present. Its roots are in American history, literature, and philosophy, but it branches 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, he 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.

Career Opportunities

Social Scientist	Researcher
Civil Servant	Personnel Work
Overseas Work	Teacher
Creative Writing	Secondary Social Science, Literature, etc.
Reporter	Editing
Advertising	Curator
Museum work	Law
Librarian	Economics
Social Work	
Business	

Bachelor of Arts Degree, School of Humanities

<i>General Studies Requirements (See Chapter 3)</i>	60
<i>Requirements for Major in American Studies</i>	92
Foreign Language (two years of same language)	24
GHA 202	4
GSS 300, 301, 302	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
<i>Electives</i>	40
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Minor Concentration

A 28-hour multi-disciplinary minor concentration 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.

Black American Studies Minor Concentration

The Black American Studies minor is multi-disciplinary with courses in seven departments and in General Studies. Within the 27-hour minor two courses (a total of 8 hours) are required: History 309, The Negro in America; and English 340, The Black Image in Autobiography and Essay.

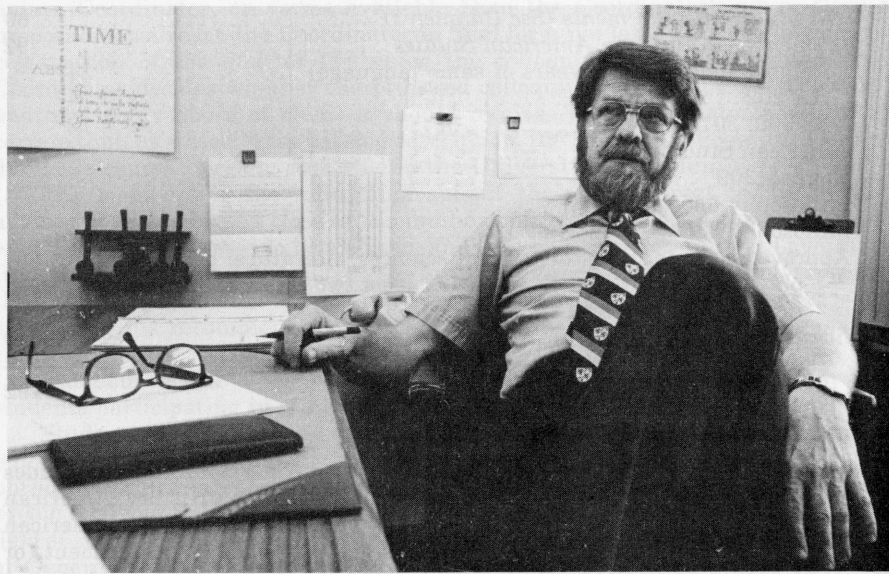
The remaining 19 elective hours, selected from the following courses, must include courses from three different departments, and at least three courses related to the black experience in America: General Studies: GHA 205, 338; Anthropology 311, 411; Art 469a; Elementary or Secondary Education 480; English 341, 342a, 342c; Government 342, 442, 444; History 316a,b,c; Sociology 320, 420, 433.

For additional information regarding this minor or any of the courses, contact Dr. Jean Kittrell, Adviser, Black American Studies, Peck Building, Room 2320. A description of the program and a schedule of courses offered each quarter are available at the office.

ENGLISH

A thorough grounding 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 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 his profession is in teaching or in a non-academic field.

Bachelor of Arts Degree, School of Humanities

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major in English</i>	72
Foreign Language (two years of same language)	24
English 300, 302a,b,c, 309a,b, either 471a or b	28
Five 400-level courses in English, excluding 485, 486, 487	20
For one of the 400-level courses the student may substitute 4 hours of Humanities Honors.	
<i>Minor Concentration</i>	24
<i>Electives</i>	36

Bachelor of Science Degree, School of Education

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>General Studies Courses for English Majors</i>	8
Student should select two courses from this list: GHA 101, 202, 203, 204, 205, 206, 207, 209, 303, 305, 306, 307	
<i>Requirements for Major in English¹</i>	52
A. Language Systems	8
300, 391b, 391c, 400, 403	
B. Expression and Analysis	8
301, 325, 392a, 392b, 418, 490 (required), 492a, 492b, 495	
C. Literature	24
D. Teacher Preparation	4
485 (required)	
E. Electives in English	8
<i>Minor Concentration, or Approved Supporting Courses²</i>	28
<i>Professional Education Courses (See Secondary Education requirements)</i> .	37
<i>Electives</i>	12

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¹At least 24 of the 52 hours must be in courses at the 400 level.²Student, 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 Concentrations**

A 24-hour minor concentration 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.

A 24-hour minor concentration in writing consists of English 392a, 392b, and 490, which are required. Courses in writing offered by other departments may be substituted with permission of the undergraduate adviser in English.

A 24-hour minor concentration in linguistics consists of any linguistics courses at the 300 and 400 level, except English 391a. In addition, GHA 207 and English 404b may be accepted toward the secondary concentration. A student who has a major concentration in English may have a minor concentration in linguistics.

FOREIGN LANGUAGES

The Department of Foreign Languages and Literature offers the Bachelor of Arts degree in Humanities with a major concentration in French, German, and Spanish languages or in French, German, and Spanish literatures. The Department also offers a minor concentration in these languages in addition to Italian and Russian.

The major concentration in a foreign literature offers the opportunity to learn to understand, speak, read, and write a foreign language to a level necessary for gaining an understanding and knowledge of the people who use the language, of their literature, and of their culture and civilization.

The major concentration in a foreign language offers the opportunity to concentrate solely on the acquisition of a high level of proficiency in the language skills (understanding, speaking, reading, and writing) as they may be applied to various professions, i.e., business, government, science, mass communications, law, arts, education, health, etc. It is recommended that students who opt for the

language major also declare an additional major or minor concentration in another discipline.

Career Opportunities

Law	Anthropology
Social Work	International Business
Diplomacy	Government Agencies
Research	Scientific Linguistics
Teaching	Journalism
Businesses concerned with travel	Transportation Companies
Hotel and Restaurant Management	Technical Translators
Technical Interpreters	Welfare Agencies
Medical Services	Library Work
Urban Studies	Criminology
Geography	Ethnic Studies

Major or minor concentration credit is allowed only for those courses in which a student receives a grade of C or better.

Bachelor of Arts Degree, School of Humanities

Foreign Language Option

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in a Foreign Language</i>	48-50
250c, 351, 352	12
Electives beyond 250c in a foreign language	36-38
<i>Secondary Concentration (minimum)</i>	28
250c, 351, 352	12
Electives beyond 250c in a foreign language	16
<i>Electives</i>	56-54
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Foreign Literature Option

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in a Foreign Literature</i>	48-50
250c, 351, 352	12
Electives beyond 250c in a foreign literature	36-38
<i>Secondary Concentration (minimum)</i>	28
250c, 351, 352	12
Electives beyond 250c in a foreign literature	16
<i>Electives</i>	56-54
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For both major and minor concentrations 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, 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 Concentration

A minor concentration consists of 24 hours (exclusive of elementary level) in a language.

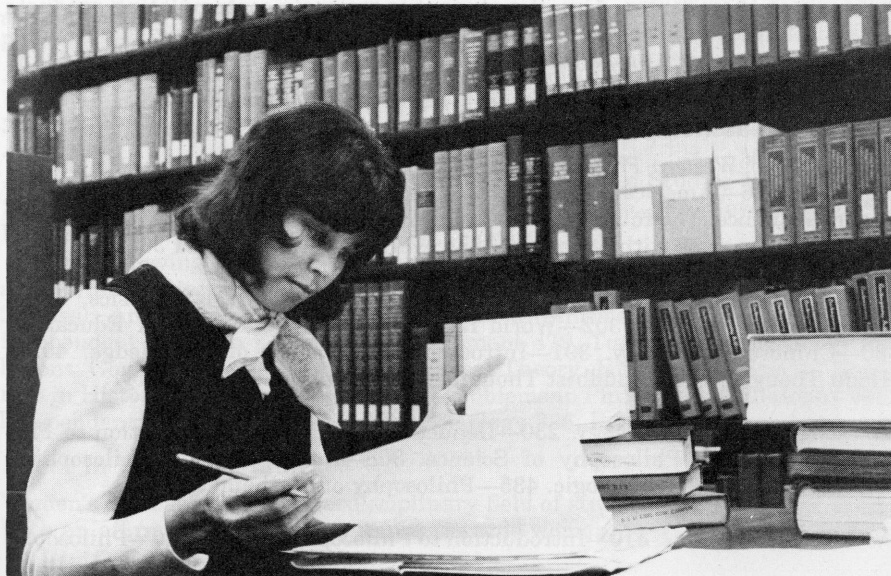
Minor Concentration in Comparative Literature

The minor concentration in Comparative Literature is 28 hours. Included are: two courses chosen from Comparative Literature 410a-e; Comparative Literature 480; one year of college level foreign language (or equivalent), not applicable toward the minor; and, four courses elected under advisement from the following: Comparative Literature 210a,b,c; English 456; English 464; Philosophy 302; Philosophy 358e, 4 hours of foreign culture and civilization (cannot be counted toward both major and minor); 4 hours of GHA 342 (must be of a different area than preceding course); GHA 240; a 4-hour course in American or English literature; and, a 4-hour upper level literature course in foreign language.

PHILOSOPHY

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. It involves inquiring into the reasons we have for believing what we do about these issues. Philosophers are thus also forced to consider the issue 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 sixteen members of the department, most of whom have doctorate degrees. Furthermore, unlike many large universities, most of the classes, even the beginning courses, are taught by regular staff members. Philosophy classes are small enough that you can get the personalized attention characteristic of small colleges from teachers who are committed to teaching and who enjoy working with students. The 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.



What is the value of philosophy? Philosophy may not help you much in the way of earning a higher income, but it will help you to 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 not primarily to your occupation as a money-maker but to your vocation of being a sensitive and enlightened person. Its aim is the development of your humanness. Consequently, though some students may not want to major in philosophy, almost every student should minor in philosophy. Philosophy is especially appropriate as a secondary concentration 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 to become writers, lawyers, artists or clergymen. Those wishing additional information or assistance concerning the Philosophy program should contact the Department Office in room 3212 of the Peck Building.

Bachelor of Arts Degree, School of Humanities

<i>General Studies Requirements (See Chapter 3. Waive GHA-8.)</i>	60
<i>Requirements for Major in Philosophy</i>	52
Foreign Language (on intermediate level)	8
Philosophy 490	4
3 courses in Area I with no historical overlap	12
(See I under next section, General Areas Within Philosophy.)	
1 course in each of the other Areas	12
4 more Philosophy electives	16
<i>Minor Concentration</i>	30-40
<i>Electives</i>	50-40

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For both major and minor concentrations in the Department of Philosophical Studies, credit is allowed for only those courses in which grades of C or higher are earned.

Recommendations: It is strongly recommended that all students elect Philosophy 200 early in their career. Also, if a student is seriously contemplating graduate work in philosophy, it is recommended that he/she satisfy the language requirement in either French or German, and that he/she take Philosophy 230, 376, and 385a and c.

General Areas Within Philosophy

I. *History of Western Philosophy.* 385a,b,c,d,e—History of Western Philosophy sequence. 386—American Philosophy. 484a,b,c—History of Western Political Theory sequence. The following courses overlap historically: 484a with 385a and 385b; 484b overlaps with 385c; and 484c overlaps with 385d and 385e.

II. *Metaphysics and Epistemology.* 300—Introduction to Metaphysics. 301—Philosophy of Religion. 302—World Religions. 355—Philosophy of Education. 380—Chinese Philosophy. 391—Introduction to Theory of Knowledge. 402—Hindu Thought. 403—Buddhist Thought. 443—Philosophy of History.

III. *Logic and Methodology.* 230—Deductive Logic. 306—Introduction to Phenomenology. 307—Philosophy of Science. 308—Introduction to Philosophical Analysis. 430—Symbolic Logic. 435—Philosophy of Mathematics.

IV. *Theory of Value.* 310—Introduction to Philosophy of Law. 320—Philosophy of

cal 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—Ethnical Systems.

Minor Concentration

A minor concentration in Philosophy consists of 24 hours in philosophy courses. One may count GHA 322 and either GSM 283 or GSS 283 toward this 24 hours, but other General Studies courses cannot be counted toward the secondary concentration requirements.

Minor in Peace Studies

The Peace Studies program is an interdisciplinary minor concentration 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 secondary concentration 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 of citizens in a democracy.

The minor concentration in Peace Studies requires 28 hours. No courses used by the student for his major concentration can be counted toward this 28 hours.

If you are planning to minor in Peace Studies, you must pay attention not only to the courses you are required to take but also to the prerequisites recommended for these courses. In order to assist you in planning your schedule, the requirements are listed below. It would also be wise to take GIS 340 (The Problem of War and Peace) in your sophomore or junior year in order to acquire a background for your 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, History 440b, and at least one of the following (others in the group may be taken as electives): GSS 352, 388, Philosophy 342, History 424c, Economics 481, Government/Philosophy 484c.

Elective Courses (8 hours): GIS 260, GSS 315, Aerospace Studies 101, 102, 103, 201, 203, Anthropology 305a,b,c, 452, Government 472b, 485, Government/Philosophy 484a,b, History 427, 437, 440a, Sociology 406.

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 409, Independent Study in Economics. Government 479, Topics in International Relations. Government 489, Topics in Political Theory. History 410, Special Readings in History. Philosophy 490, Special Problems in Philosophy. Philosophy 495, Independent Readings in Philosophy. Sociology 396, Readings in Sociology.

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 stereotypic 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. Students interested in the minor should contact the Director of Women's Studies in Room 2219 of the Peck Building.

REQUIREMENTS FOR THE MINOR

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 average of 3.50 is required in Women's Studies courses.

Courses

American Studies

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.

498-4 Seminar in American Studies. A study of American culture with a view towards crossing the boundaries of traditional disciplines. Prerequisite: senior standing.

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.

English

100-2 (1,1) Composition Lab. Individualized instruction in composition skills, using the facilities of the English Department Writing Clinic. To be taken concurrently with both GSK 101 and GSK 102. Pass/No Credit only. Not counted toward major or minor concentration in English.

300-4 Principles of English Syntax. A study of word relationships in English sentences.

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 The Black Image in Autobiography and Essay. An exploration of the major issues confronted by black American essayists and autobiographers from the eighteenth century to the present time.

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.

391-12 (4,4,4) Fundamentals of the English Language. (a) Review of Grammar and Written Composition. Refresher course, emphasizing well-formed sentences, variation in sentence structure, grammaticality, polished style. Development of expository themes. Recommended for all disciplines. May not be taken by English majors for credit. (b) Sound Patterns and Word Constructions. 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. (c) Modern Grammar and Other Disciplines. Survey of grammatical applications to dialect, child language acquisition, reading problems, composition, foreign 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. Need not be taken in sequence. Any one or all three sections may be taken for credit.

392a-4 Creative Writing: Fiction I. 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. Prerequisite: sophomore standing.

392b-4 Creative Writing: Poetry I. 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. Prerequisite: sophomore standing.

400-4 Introduction to English Linguistics. An introduction to the methods of descriptive linguistics as applied to English: the phonemics, morphemics, and syntax of English. Recommended for those preparing to teach English.

401-4 Introduction to General Linguistics. (Cross-listed with Anthropology 401.) Introduction to concepts, methods, analytical techniques of linguistics with examination of their applicability to anthropological concerns—psycholinguistics, sociolinguistics, applied linguistics, literature, and folklore. Open to interested students in any discipline. Prerequisite: junior standing.

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.

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.

407-4 (Intermediate) Readings in Old English. Intermediate level readings in Old English.

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 toward requirements for B.A. or M.A. in English. Pass/Audit only. Prerequisite: junior standing.

412-16 (4,4,4,4) 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.

414-4 Research in Psycholinguistics. In-depth research in and analysis of language acquisition by children applying a selected grammatical theory to a corpus of child speech. Each student works with a specific speech corpus and a specific theory. Prerequisites: 300, 391b, Speech Pathology and Audiology 312, Speech Pathology and Audiology 231 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.

421-16 (4,4,4,4) English Poetry. (a) Early Romantics: major emphasis on general background and on Blake, Coleridge, and Wordsworth; (b) later Romantics: emphasis on Byron, Shelley, and Keats, the minor figures; (c) Victorian poets: Tennyson, Browning, Arnold, and the Pre-Raphaelites. (d) 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.

441-4 The 18th Century Essay. The informal essay and the literary periodicals—*The Spectator*, *Tatler*, *Guardian*, *Rambler*, *Idler*, and Goldsmith's *Citizen of the World* ("Chinese Letters").

442-4 Romantic Prose. Fiction of Austen, Scott, Mary Shelley, Peacock, the Gothic novelist; 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.

456-5 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.

460-20 (4,4,4,4,4) 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; (b) Jacobean drama: the Jacobean and Caroline playwrights: Johnson, Webster, Marston, Middleton, Beaumont and Fletcher, Massinger, Ford, Shirley; (c) Restoration and 18th century drama; after 1660, representative types of plays from Dryden to Sheridan; (d) 19th century drama; (e) Modern British and Irish drama. May be taken separately. 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. Reading of *Paradise Lost*, *Paradise Regained*, *Samson Agonistes*, minor poems, major treatises.

475-4 Literature for Young People. Extensive and critical reading of literature appropriate for young people from ages 11-17. Prerequisite: junior standing.

480-8 (4,4) Introduction to Sanskrit. (Same as Foreign Languages 480.) (a) Introduction to Sanskrit grammar, alphabet, sound changes, and rules of Sandhi. (b) Completion of Sanskrit grammar; readings in Sanskrit. Readings from the Maha-bharata, Hitopadeca, Rigveda and/or other sources included in the text. Prerequisite for (b): 480a.

485-4 Problems in the Teaching of English. Aims, methods, materials, tests, programs, and other aspects of English instruction in the high school.

486-2 to 8 Workshop in Secondary School English. Intensive workshop study of the teaching of English in the secondary schools. Lectures, laboratory work and conferences on the teaching of English. Curriculum, materials, methods, aims.

488-12 (4,4,4) Teaching Standard English as a Second Language. (a) Classroom techniques. (b) Laboratory methods. (c) Applications to problems arising from regional and social variations among speakers of American English. Prerequisite: junior standing.

490-8 (4,4) Advanced Composition. Expository writing. May be repeated once for credit with permission. Prerequisite: junior standing.

492a-4 Creative Writing II: Fiction. 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. May be repeated for total of 8 hours credit. Prerequisite: junior standing.

492b-4 Creative Writing II: Poetry. 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. May be repeated for total of 8 hours credit. Prerequisite: junior standing.

495-8 (4,4) Literary Criticism. (a) History of criticism: ideas and techniques from Aristotle to the end of the 19th century, (b) modern criticism: recent critics and critical attitudes, and practice in writing criticism.

498-4 Directed Writing. Not given for graduate credit. May be repeated for total of 8 hours credit. Prerequisite: consent of department.

499-2 to 6 Readings in English. For English students only. Departmental approval required. No more than 4 hours may be taken in any one quarter.

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

115-3 Elementary Intensive Foreign Language I. Intensive training in speaking and aural understanding. Admission only by special permit. Available in French, Spanish, Italian, German, and Russian. Prerequisite: concurrent enrollment in 116.

116-6 Elementary Intensive Foreign Language II. Intensive training in reading and writing. Admission only by special permit. Available in French, Spanish, Italian, German, and Russian. Prerequisite: concurrent enrollment in 115.

117-3 Elementary Intensive Foreign Language III. Completion of intensive training in speaking and aural understanding. Practice in grammar as language usage. Admission only by special permit. Available in French, Spanish, Italian, German, and Russian. Prerequisites: 115, 116, concurrent enrollment in 200.

200-6 Intermediate Intensive Foreign Language I. Continuation of 115. Intensive training in understanding the spoken language, in the oral expression of ideas, and in reading. Special attention to the role in world civilization of the culture expressed and transmitted by the chosen language. Admission only by special permit. Available in French, Spanish, Italian, German, and Russian. Prerequisites: 115, 116, concurrent enrollment in 117.

201-6 Intermediate Intensive Foreign Language II. Extended practice in listening, speaking, reading, and writing. Rapid reading of a variety of more difficult material. Written reports on various phases of the literature and culture represented by the chosen language. Special emphasis on contemporary developments. Admission only by special

permit. Available in French, Spanish, Italian, German, and Russian. Prerequisites: 117, 200.

320-12 (4,4,4) Reading in a Foreign Language. Designed primarily for those who must pass graduate foreign language reading examinations in their own field of specialization and for others whose profession requires a basic knowledge of the foreign language. Emphasis on developing reading proficiency. Available in French, German, Italian, Russian, and Spanish. Not designed to satisfy any undergraduate foreign language requirements.

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 and Italian. May be taken for one, two, or three quarters. Primarily for students with no foreign language concentration, but may be taken for credit in foreign language concentration with consent. Prerequisites: 250, consent of department chairman.

480-8 (4,4) Introduction to Sanskrit. (See English 480.)

486-8 (4,4) 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 chairman.

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.

Comparative Literature

210-12 (4,4,4) Literature and Society. A study of representative works in the literature of Western writers dealing with such recurring problems, concerns, and issues as: (a) Homosexuality in literature. (b) Social and political protest. (c) The image of woman.

410-20 (4,4,4,4,4) Comparative Literature: Genres in Translation. Readings selected from among French, German, Spanish, Italian, Russian, and Portuguese literatures. (a) Lyric and epic poetry. (b) Drama. (c) Prose. (d) Tragedy. (e) Novel.

490-4 Traditional Themes of World Literature. Prerequisites: any course in comparative literature and a course in English, foreign or comparative literature.

French

123-12 (4,4,4) Elementary French. Open to students who have had no previous work in French. Must be taken in sequence.

220-4 (2,2) Intermediate French Conversation. (a) Practice in conversation. (b) Additional practice in conversation. May be taken separately. Prerequisite: 123 or equivalent.

250-12 (4,4,4) Intermediate French. Development of comprehension of the spoken language and oral expression, reading of modern prose selections, simple composition. Must be taken in a,b,c sequence. Prerequisite: 123-12 or two years of high school French, or consent of department chairman.

301-12 (4,4,4) French Literature of the 18th and 19th Centuries. (a) Montesquieu, Voltaire, Diderot, Rousseau, and others, with reference to the social, political, and philosophic environment of the 18th century. (b) Representative writers of the romantic period: Chateaubriand, Hugo, Balzac, Stendhal, and others. (c) From realism to symbolism: Flaubert, Zola, Baudelaire, Verlaine, and others. May be taken separately. Prerequisite: 250c or consent of department chairman.

303-4 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 chairman.

305-4 Contemporary Professional Readings. Selections of publications related to the professions and concerns in contemporary France. Prerequisite: 250c or consent of department chairman.

306-12 (4,4,4) Modern French Literature. (a) Representative writers from the "fin de siècle" to World War I: Claudel, Proust, Peguy, Apollinaire, and others. (b) Selected writers from World War I to World War II with special emphasis upon the novel: Malroux, St. Exupery, Mauriac, Gide, Cocteau, Anouilh, and others. (c) The post war works of Camus, Sartre, the anti-novel, Genet, Beckett, Ionesco, and others. May be taken separately. Prerequisite: 250c or consent of department chairman.

307-4 Oral Interpretation. Contrastive analysis of English and French applied to oral interpretation. Prerequisite: 250c or consent of department chairman.

309-4 Written Interpretation. Contrastive analysis applied to written interpretation. Prerequisite: 250c or consent of department chairman.

311-4 Contemporary France. Study of significant aspects of French culture. Prerequisite: 250c or consent of department chairman.

312-2 Modern Literature of French Canada. Readings from the literature of modern French Canada with special emphasis upon the novel and poetry: Hemon, Gabrielle Roy, Lemelin, Grandbois, and others. Prerequisite: 250c or consent of department chairman.

313-2 Black French Literature. Representative writers from Africa and Les Antilles: Senghor, Césaire, Diop, Damas, Rainald, Matip Kane, Memmi, and others. A selection of works presented in several anthologies, an up-to-date review of new works in prose and poetry by the *Revue Presence Africaine* which concerns itself with the cultural aspects of the "mode noir," the black world. Prerequisite: 250c or consent of department chairman.

338-12 (4,4,4) French Literature from the Middle Ages Through the 17th Century. (a) French literature from *La Chanson De Roland* to Francois Villon with special reference to the social, political and cultural development of the Middle Ages. (b) Representative works of the Renaissance: Rebilais, Montaigne, Marot, Ronsard, and others. (c) Corneille, Racine, Moliere, Pascal and other writers of the 17th century with reference to the political and social environment of the period. May be taken separately. Prerequisite: 250c or consent of department chairman.

351-4 Oral Communication. Oral work of a practical nature for advanced students. Prerequisite: 250c or consent of department chairman.

352-4 Advanced French Composition. Practical composition for advanced students. Prerequisite: 250c or consent of department chairman.

362-2 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: 250c or consent of department chairman.

401-4 Seminar in Women Writers. An in-depth study of fiction, nonfiction, drama, and poetry works by women authors. Taught in English.

408-8 (4,4) 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: 280 or equivalent.

451-6 (2,2,2) 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.

461-4 French Stylistics. Study of writing style in French and its application to the development of skill in written expression. For those who wish to do advanced work in the principles of French grammar and composition. Prerequisite: 9 hours of 300-level courses or consent of department chairman.

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: 280, consent of department chairman.

German

126-12 (4,4,4) Elementary German. Open to students who have had no previous work in German. Must be taken in sequence.

220-4 (2,2) Intermediate German Conversation. (a) Practice in conversation. (b) Additional practice conversation. May be taken separately. Prerequisite: 126 or equivalent.

250-12 (4,4,4) Intermediate German. Development of comprehension of the spoken

language and oral expression, reading of modern prose selections, simple composition. Must be taken in a,b,c sequence. Prerequisite: 126-12 or two years high school German, or consent of department chairman.

303-4 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 chairman.

305-4 Contemporary Professional Readings. Selections of publications related to the professions and concerns in contemporary Germany. Prerequisite: 250c or consent of department chairman.

307-4 Oral Interpretation. Contrastive analysis of English and German applied to oral interpretation. Prerequisite: 250c or consent of department chairman.

309-4 Written Interpretation. Contrastive analysis applied to written interpretation. Prerequisite: 250c or consent of department chairman.

311-4 Contemporary Germany. Study of significant aspects of German culture. Prerequisite: 250c or consent of department chairman.

313-12 (4,4,4) German Literature Before Romanticism. (a) The Old High German and Middle High German periods. (b) From the Ackermann in Bohmen to Johann Christian Gunther. (c) German literature from 1700 to the death of Schiller. May be taken separately. Prerequisite: 250c or consent of department chairman.

314-8 (4,4) German Literature from World War I to Post World War II. (a) World War I to 1945: The war as motif; literature under the Weimar Republic; depression literature; new tendencies; the Nazi years. (b) Post World War II: Destruction and resurrection; later works of Mann and Hesse; exile literature; the Swiss and Austrians; Boll, Grass, Lenz, et. al.; the "other" (East) Germans. May be taken separately. Prerequisite: 250c or consent of department chairman.

315-4 Literature and History of the German Theater. A general 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 state itself in terms of public and artistic functions, techniques and influence, etc. Prerequisite: 250c or consent of department chairman.

316-12 (4,4,4) German Literature from Romanticism to Modern Times. (a) Introduction to the background, personalities and works of the period from 1798 to Heine. (b) The leading 19th century realists from Droste-Hulshoff to Fontane including the novel and drama of the period. (c) German literary masterpieces from naturalism to the present. May be taken separately. Prerequisite: 250c or consent of department chairman.

351-4 Oral Communication. Oral work of a practical nature for advanced students. Prerequisite: 250c or consent of department chairman.

352-4 Advanced German Composition. Practical composition for advanced students. Prerequisite: 250c or consent of department chairman.

362-4 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: 250c or consent of department chairman.

401-4 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: 250c or consent of department chairman.

408-4 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, "Reichs-deutsch," etc.); lectures, reports. Prerequisite: senior standing in German language.

413-3 German Linguistics. Introduction to comparative German linguistics tracing relationships among German languages on the basis of phonology, morphology, and syntax. Prerequisite: senior standing in German language.

451-6 (2,2,2) 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.

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 supervi-

sion of one or more members of the foreign language faculty. Prerequisites: 250c, consent of department chairman.

Greek

499-12 (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. Prerequisite: one year of college study of another language, or the equivalent, or consent of instructor.

Italian

144-12 (4,4,4) Elementary Italian. Open to students who have had no previous work in Italian. Must be taken in sequence.

220-4 (2,2) Intermediate Italian Conversation. (a) Practice in conversation. (b) Additional practice in conversation. May be taken separately. Prerequisite: 144 or equivalent.

250-12 (4,4,4) Intermediate Italian. Development of comprehension of the spoken language and oral expression, reading of modern prose selections, simple composition. Must be taken in a,b,c sequence. Prerequisite: 144-12 or two years of high school Italian, or consent of department chairman.

311-4 Contemporary Italy. Study of significant aspects of Italian culture. Prerequisite: 250c or consent of department chairman.

351-4 Oral Communication. Oral work on a practical nature for advanced students. Prerequisite: 250c or consent of department chairman.

352-4 Advanced Italian Composition. Practical composition for advanced students. Prerequisite: 250c or consent of department chairman.

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: 250c, consent of department chairman.

Latin

499-12 (4,4,4) Readings in Latin. Basic principles of the Latin language taught through reading selections from classical, medieval, and Renaissance Latin. For students specializing in Romance languages, English, history, or philosophy. Must be taken in sequence. Prerequisite: one year college study of another foreign language, or the equivalent, or consent of instructor.

Russian

136-12 (4,4,4) Elementary Russian. No previous knowledge of Russian required. Must be taken in sequence.

220-4 (2,2) Intermediate Russian Conversation. (a) Practice in conversation. (b) Additional practice in conversation. May be taken separately. Prerequisite: 136 or equivalent.

250-12 (4,4,4) Intermediate Russian. Development of comprehension of the spoken language and oral expression, reading of modern prose selections, simple composition. Must be taken in a,b,c sequence. Prerequisite: 136-12 or two years of high school Russian, or consent of department chairman.

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: 250c, consent of department chairman.

Spanish

140-12 (4,4,4) Elementary Spanish. Open to students who have had no previous work in Spanish. Must be taken in sequence.

220-4 (2,2) Intermediate Spanish Conversation. (a) Practice in conversation. (b) Additional practice in conversation. May be taken separately. Prerequisite: 140 or equivalent.

250-12 (4,4,4) Intermediate Spanish. Development of comprehension of the spoken language and oral expression, reading of modern prose selections, simple composition. Must be taken in a,b,c sequence. Prerequisite: 140-12 or two years of high school Spanish, or consent of department chairman.

301-12 (4,4,4) Spanish Literature from the Medieval Period Through Romanticism. (a) Spanish literature from the 12th to the 15th century; the epic, *El-Cantar Del Cid*, ballads, lyric poetry, chronicles and other prose works. (b) Representative works of the 16th and 17th centuries: Cervantes, Tirso de Molina, Lope de Vega, and others. (c) Romanticism in Spanish literature during the 18th and 19th centuries: Espronceda; Duque de Rivas, Jose Zorilla, and others. May be taken separately. Prerequisite: 250c or consent of department chairman.

303-4 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 chairman.

304-12 (4,4,4) Modern Spanish Literature. (a) Spanish literature of the 19th century as influenced by trends of European thought of the period: Galdos, Bazan, Benavente, and others. (b) Spanish literature of the 20th century with emphasis on the novel, essay, and poetry: Unamuno, Ortega y Gasset, Garcia Lorca, and others. (c) Spanish literature of the post-Civil War period, with emphasis on the novel, drama, and poetry. May be taken separately. Prerequisite: 250c or consent of department chairman.

305-4 Contemporary Professional Readings. Selections of publications related to the professions and concerns in contemporary Spain. Prerequisite: 250c or consent of department chairman.

307-4 Oral Interpretation. Contrastive analysis of English and Spanish applied to oral interpretation. Prerequisite: 250c or consent of department chairman.

309-4 Written Interpretation. Contrastive analysis applied to written interpretation. Prerequisite: 250c or consent of department chairman.

311-4 Contemporary Spain. Study of significant aspects of Spanish culture. Prerequisite: 250c or consent of department chairman.

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: 250c or consent of department chairman.

315-4 The New Narrative in Spanish America. The new Spanish-American short story and novel of the last two decades of the twentieth century. Prerequisite: 250c or consent of department chairman.

351-4 Oral Communication. Oral work of a practical nature for advanced students. Prerequisite: 250c or consent of department chairman.

352-4 Advanced Spanish Composition. Practical composition for advanced students. Prerequisite: 250c or consent of department chairman.

362-4 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: 250c or consent of department chairman.

375-8 (4,4) Spanish-American Literature. (a) Spanish-American literature from the colonial period through romanticism. (b) Spanish-American literature from modernism until the present. Prerequisite: 250c or consent of department chairman.

415-3 Spanish Phonetics. Analysis of the sounds of Spanish and their manner of production; intonation; levels of speech; oral practice. Prerequisite: 250 or graduate standing or consent of department chairman.

420-4 Don Quixote. A study of the great novel of Cervantes. Prerequisite: any 300-level Spanish course or consent of faculty chairman.

451-6 (2,2,2) Spanish 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.

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.

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: 250c, consent of department chairman.

Humanities

301-3 to 4, 302-3 to 4, 303-3 to 4 Humanities Honors. Prerequisites: sophomore standing, invitation of the Humanities Honors Program Committee.

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.

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 Introduction to 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 Introduction to Phenomenology. An introduction to the dominant movement in contemporary continental philosophy. Attention to the central works or 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 Introduction to Philosophical Analysis. 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 Introduction to 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.

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.

355-4 Philosophy of Education. Survey of theories of education and their relationships to educational policies and practices, as elucidated by the great teachers. Satisfies the education requirement, Foundations of Education 355.

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.

376-4 Ethical Systems. In depth studies of representative ethical theories with emphasis on their systematic nature.

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 Introduction to 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.

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.

435-4 The Philosophy of Mathematics. Examines aspects of problems for knowledge and existence posed by mathematics. Deals specifically with such problems as the foundation of mathematics, the nature of mathematical truth and the existence of mathematical objects. Prerequisite: 430 or a course in modern algebra.

443-4 Philosophy of History. Classical and contemporary reflections on the nature of history and historical knowledge as the basis for dealing with the humanities.

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 12 Special Problems. Seminar for qualified seniors and graduate students to pursue specific topic in depth. Varied content. Prerequisite: consent of instructor.

495-2 to 12 Independent Readings. Independent study in philosophy on a tutorial basis. Prerequisite: consent of instructor and chairman.

Women's Studies

321-4 Social Philosophies of the Women's Movement. (See Philosophy 321.)

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.

School of Humanities Faculty

John I. Ades, Ph.D., Professor of English Language and Literature
Gene D. Allsup, Ph.D., Professor of Foreign Languages and Literature
James C. Austin, Ph.D., Professor of English Language and Literature
Dale S. Bailey, Ph.D., Professor of English Language and Literature
James H. Baltzell, Ph.D., Professor of Foreign Languages and Literature
John A. Barker, Ph.D., Professor of Philosophical Studies
Robert A. Bosse, Ph.D., Associate Professor of English Language and Literature
John A. Broyer, Ph.D., Associate Professor of Philosophical Studies
David L. Butler, Ph.D., Assistant Professor of English Language and Literature
Rino Cassanelli, M.S., Instructor of Foreign Languages and Literature
Janet D. Collins, Ph.D., Assistant Professor of English Language and Literature
Charles A. Corr, Ph.D., Associate Professor of Philosophical Studies
Gladys Daniels, Emerita Assistant Professor of English Language and Literature
Glen F. Dille, Ph.D., Assistant Professor of Foreign Languages and Literature
Gertrude C. Drake, Ph.D., Professor of English Language and Literature
Herman A. Dreifke, M.S., Associate Professor of English Language and Literature
Robert W. Duncan, Ph.D., Professor of English Language and Literature
William J. Emblom, Ph.D., Associate Professor of Philosophical Studies
Claude Francis, Ph.D., Professor of Philosophical Studies
Ellen Frogner, Emerita Professor of English Language and Literature
Linda K. Funkhouser, M.A., Instructor of English Language and Literature
Paul L. Gaston, Ph.D., Associate Professor of English Language and Literature
Ronald J. Glossop, Ph.D., Professor of Philosophical Studies
William T. Going, Ed.D., Professor of English Language and Literature
Helen D. Goode, Ph.D., Associate Professor of Foreign Languages and Literature
A. Edwin Graham, Ph.D., Associate Professor of English Language and Literature
Paul F. Guenther, Ph.D., Professor of Foreign Languages and Literature
William S. Hamrick, Ph.D., Associate Professor of Philosophical Studies
Daniel F. Havens, Ph.D., Chairman and Professor of English Language and Literature
Edward W. Hudlin, Ph.D., Assistant Professor of Philosophical Studies
Nicholas T. Joost, Ph.D., Professor of English Language and Literature
Carol A. Keene, Ph.D., Dean of School and Associate Professor of Philosophical Studies
Sang-Ki Kim, Ph.D., Assistant Professor of Philosophical Studies
E. Jean Kittrell, Ph.D., Assistant Professor of English Language and Literature
Lloyd E. Kropp, M.A., Assistant Professor of English Language and Literature
Barbara J. Lawrence, Ph.D., Assistant Professor of English Language and Literature
Edwin G. Lawrence, Ph.D., Assistant Professor of Philosophical Studies
Sonja M. Lind, M.A., Assistant Professor of Foreign Languages and Literature
George W. Linden, Ph.D., Chairman and Professor of Philosophical Studies
Theresa R. Love, Ph.D., Associate Professor of English Language and Literature
Fritz Marti, Emeritus Professor of Philosophical Studies
Gertrude Marti, Emerita Associate Professor of Foreign Languages and Literature
William C. Meyer, Ed.D., Assistant Professor of English Language and Literature

Garry N. Murphy, Ph.D., Assistant Professor of English Language and Literature

Clyde M. Nabe, Ph.D., Assistant Professor of Philosophical Studies

John L. Oldani, Ph.D., Associate Professor of English Language and Literature

Betty T. Osiek, Ph.D., Associate Professor of Foreign Languages and Literature

Thomas D. Paxson, Jr., Ph.D., Associate Professor of Philosophical Studies

Alfred Pellegrino, Emeritus Professor of Foreign Languages and Literature

Jane C. Pennell, Ph.D., Assistant Professor of English Language and Literature

Galen K. Pletcher, Ph.D., Assistant Professor of Philosophical Studies

Stella P. Revard, Ph.D., Professor of English Language and Literature

Betty N. Richardson, Ph.D., Associate Professor of English Language and Literature

Fred W. Robbins, Ph.D., Assistant Professor of English Language and Literature

L. Dan Romani, M.A., Chairman and Associate Professor of Foreign Languages and Literature

Gerald J. T. Runkle, Ph.D., Professor of Philosophical Studies

Sheila Ruth, Ph.D., Assistant Professor of Philosophical Studies

Barbara Q. Schmidt, A.M., Assistant Professor of English Language and Literature

Margaret A. Simons, M.A., Instructor of Philosophical Studies

William C. Slattery, Ph.D., Professor of English Language and Literature

Raymond J. Spahn, Ph.D., Professor of Foreign Languages and Literature

Dickie A. Spurgeon, Ph.D., Associate Professor of English Language and Literature

Robert G. Stanley, M.A., Assistant Professor of English Language and Literature

Alvin D. Sullivan, Ph.D., Assistant Professor of English Language and Literature

Marion Taylor, Emerita Professor of English Language and Literature

W. Bryce Van Syoc, Ph.D., Professor of English Language and Literature

P. Eugene Violette, A.B., Instructor of English Language and Literature

Robert G. Wolf, Ph.D., Assistant Professor of Philosophical Studies

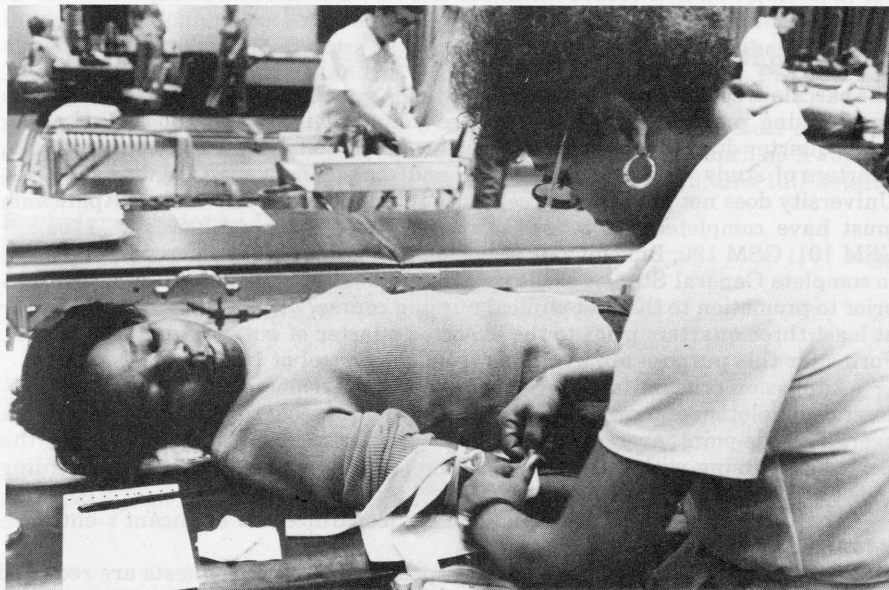
Gordon R. Wood, Ph.D., Professor of English Language and Literature

Jules Zanger, Ph.D., Professor of English Language and Literature

Veronique Zaytzeff, D.D.E.S., Assistant Professor of Foreign Languages and Literature

Robert J. Ziegler, Ph.D., Assistant Professor of English Language and Literature

School of Nursing



PATRICIA B. FORNI, *Dean*

NURSING

The School of Nursing offers a program of study leading to the Bachelor of Science degree in Nursing.

Nursing is a dynamic, therapeutic, interpersonal discipline which assists people in achieving, maintaining, and regaining optimal health throughout their life span. Professional nursing practice is actualized through the nursing process which includes assessment, planning, intervention, and evaluation of health needs. Professional nursing practice is broad in nature and meets individuals in their environment. Thus, the professional nurse functions in both traditional and non-traditional settings which may require innovative patterns of practice and/or conventional role behavior.

Admission Requirements

The baccalaureate program is an upper division program based on General Studies and nursing prerequisites. Students are admitted into the School of Nursing every quarter during the academic year, usually after completion of at least five quarters of study during the freshman and sophomore years. Admission to the University does not guarantee acceptance into the School of Nursing. Applicants must have completed the following course prerequisites: Chemistry 110a,b,c; GSM 101; GSM 130; Biology 210; and Biology 312a,b. Students are also expected to complete General Studies skills requirements as well as Nursing 270 and 285 prior to promotion to the first clinical nursing course, 310. Applicants must apply at least three quarters prior to the expected quarter of entrance into the School. Forms for this purpose are available from the School of Nursing.

Admission criteria for the School include: (1) Sophomore standing. (2) Successful completion of prerequisite courses with grades of C or above. (3) Minimum overall grade-point average of 3.50. (4) Completed application on file in the School of Nursing within the time deadline. (5) Applicants are ranked according to their cumulative grade averages.

The need to repeat a prerequisite may jeopardize the applicant's entrance into the School.

Annual physical examinations and specific diagnostic requests are required of all nursing majors.

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 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.

Nursing courses taken in any program other than baccalaureate level do not transfer. Registered Nurses may receive up to 48 hours of credit by testing out of nine courses in the nursing major. Required courses for Registered Nurses include 290, Psychosocial Concepts, and all 400-level nursing courses. Credit for General Studies may also be obtained through CLEP tests.

Program Content

The undergraduate program in Nursing is an upper division major composed of 15 courses consisting of 72 hours of credit. The baccalaureate program prepares a nurse who is a generalist; there are no areas of specialization. Students may earn a minor in any appropriate discipline through advisement from that School and completion of required coursework. Preparation for endorsement as a School Nurse may be completed simultaneously with the baccalaureate degree.

Clinical experiences are an integral part of the nursing major in all the nursing courses carrying 6 or 8 hours of credit. Health care agencies in Metro East and in St. Louis cooperate with the School in providing opportunities to practice clinical skills.

Graduates of the baccalaureate program receive a Bachelor of Science degree in Nursing and are eligible to take the State Board Examinations for licensure as a Registered Nurse.

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 clinical course will be referred to the Progressions Committee. Failure in two clinical courses or a combination of three clinical and/or didactic courses will result in dismissal from the School of Nursing. Petitions to re-enter the School are addressed to the Progressions Committee with evidence of remedial work undertaken.

All nursing majors are required to file reports of annual physical examinations. Most clinical courses have requirements for specific tests such as X-rays or nose culture. The Student Handbook for nursing students contains full details.

Bachelor of Science Degree, School of Nursing

<i>General Studies Requirements (See Chapter 3.)</i>	60
(including physics, sociology, and psychology)	
<i>Prerequisites for Nursing 310</i>	24
Biology 210-4, 312-8	12
Chemistry 110	12
<i>Nursing Major</i>	72-76
Nursing 270-4, 285-4, 290-2, 310-6, 320-4, 330-6, 340-8, 375-6, 380-6, 390-6, 400-2, 410-4, 420-4 (elective), 460, 470-6, and 480-6 and/or 490-6	
<i>Electives</i>	36-32
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Courses

Courses on the 300 level are open only to those students who are concentrating in nursing.

270-4 Growth and Development. A developmental study of the individual from conception to senescence, with emphasis on the physiologic, psychologic, and social development. Prerequisite: GSS 210 or consent of instructor.

285-2 Introduction to Health Care. A survey of professional nursing at the present time in relation to historical and other influences upon it. An introduction to nursing through concepts of health starting with community agencies. Promotion and maintenance of health and prevention of illness. Prerequisite: sophomore standing or consent of instructor.

290-4 Psycho-Social Concepts. A study of concepts related to the understanding of human behavior as a basis for providing therapeutic patient-centered nursing care. Emphasis placed on understanding the functions of the nurse as a psycho-therapeutic agent in providing this care. Introduction to nursing process and physical assessment. Prerequisite: concurrent enrollment in 310 or consent of instructor.

310-6 Introduction to Clinical Nursing. Fundamental skills basic to all clinical nursing. Through a problem-solving process, students plan and administer patient-centered nursing care in community clinical facilities. Prerequisites: 285, 290, or concurrent enrollment, Biology 210, 312b.

320-4 Pathophysiological Concepts. Disturbances in normal physiology and the way these disturbances alter structure, physio-chemical composition, and function. Prerequisites: Biology 210, 220 or concurrent enrollment in 312b.

330-6 Maternal-Newborn Nursing. Developing a concept of family-centered care for mothers and newborns. The aspects of nursing necessary to provide effective care throughout the maternity cycle-antepartum, intrapartum, puerperium, and care of the newborn. Concurrent clinical laboratory within an appropriate setting. Prerequisites: 310, 320.

340-8 Nursing of Children. Developing a concept of family-centered care for infants and children. Providing nursing care based upon the developmental needs of the child, and the problems confronting him and his family. Concurrent clinical laboratory. Prerequisites: 270, 310, 320.

375-6 Psychiatric Nursing. The interpersonal interaction and the communication which makes up the nurse-patient relationship. Focus upon increasing awareness of the self as potential tool for therapeutic effectiveness. Prerequisites: 270, 290, 310.

380-6 Medical-Surgical Nursing I. Focus upon the nursing intervention based on underlying scientific principles relevant to the care of patients with selected medical-surgical conditions and/or illness. Emphasis on care of the patient with problems of the respiratory, cardiovascular, integumentary, and endocrine-metabolic systems. Prerequisites: 310, 320.

390-6 Medical-Surgical Nursing II. Focus upon the nursing intervention based on underlying scientific principles relevant to the care of patients with selected medical-surgical conditions and/or illness. Emphasis on care of the patient with problems of the nervous and special senses, musculo-skeletal, digestive, and urinary-reproductive systems. Prerequisites: 310, 320.

400-2 Nursing Seminar. A study of selected health care issues and their implications which relate to the nursing profession. Not for graduate credit. Prerequisite: five clinical nursing courses.

410-4 Health Care Management. Beginning principles of management and administration emphasized in the application to health care settings. Problems involved in finding solutions to successful and acceptable plans to meet health care goals. Not for graduate credit. Prerequisite: consent of instructor.

420-1 to 4 Independent Study. Student projects and study in an area of nursing. Not for graduate credit. Prerequisite: consent of instructor.

460-2 Seminar in Nursing Research. An overview of the research process including analysis of the components which comprise an adequate research study. Emphasis on developing an awareness of the importance of research to the practice of nursing and the ability to critique research findings as an informed consumer. Not to be taken for graduate credit. Prerequisite: senior standing in nursing.

470-6 Community Health Nursing. Perspectives in organized community health care and health services including community health nursing components concurrent with clinical laboratory practice. Not for graduate credit. Prerequisites: 290, 310, 320.

480-6 Episodic Nursing. Nursing practice that is essentially curative and restorative, generally acute in nature, and provided in the setting of the hospital or inpatient facility. Focus upon disturbances in normal physiology and the manner in which these disturbances alter structure, physio-chemical composition and function. Not for graduate credit. Prerequisite: consent of instructor.

490-6 Distributive Nursing. Prevention of disease and maintenance of health. Largely directed toward continuous care of persons not confined to health care institutions. Not for graduate credit. Prerequisite: consent of instructor.

School of Nursing Faculty

Doris Bell, M.S., Assistant Professor of Nursing

Gloria Burgess, Ph.D., Assistant Dean and Assistant Professor of Nursing

Margaret Chang, M.S., Assistant Professor of Nursing

Anne Cowan, M.S., Assistant Professor of Nursing

Patricia Forni, Ph.D., Dean of the School and Professor of Nursing

Mary Theresa Gonzalez, M.S., Assistant Professor of Nursing

Sister Marta Goski, M.S., Assistant Dean and Assistant Professor of Nursing

Ruth Seris Gresley, M.S., Instructor of Nursing

Sharon Grider, M.S., Instructor of Nursing
Jewel Henderson, M.S., Instructor of Nursing
Susan Lieber, M.S., Assistant Professor of Nursing
Linda Lillis, M.S., Instructor of Nursing
Barbara McDonnell, M.S., Instructor of Nursing
Sharon Merritt, M.S., Assistant Professor of Nursing
Sylvia Mitchell, M.S., Assistant Professor of Nursing
Roberta Olson, M.S., Instructor of Nursing
Elizabeth Parato, M.S., Instructor of Nursing
Susan Roman, B.S.N., Assistant in Nursing
Mona Ruddy, M.S., Assistant Professor of Nursing
Janice Rumfelt, M.S., Instructor of Nursing
Lois Sellers, Ed.D., Associate Professor of Nursing
Barbara Shelton, M.S., Assistant Professor of Nursing
Roslyn Sykes, M.S., Instructor of Nursing
Betty Boyd Walker, M.S., Assistant Professor of Nursing
Martha Welch, Ph.D., Assistant Professor of Nursing
Mary Kay Wolf, M.S., Visiting Instructor of Nursing

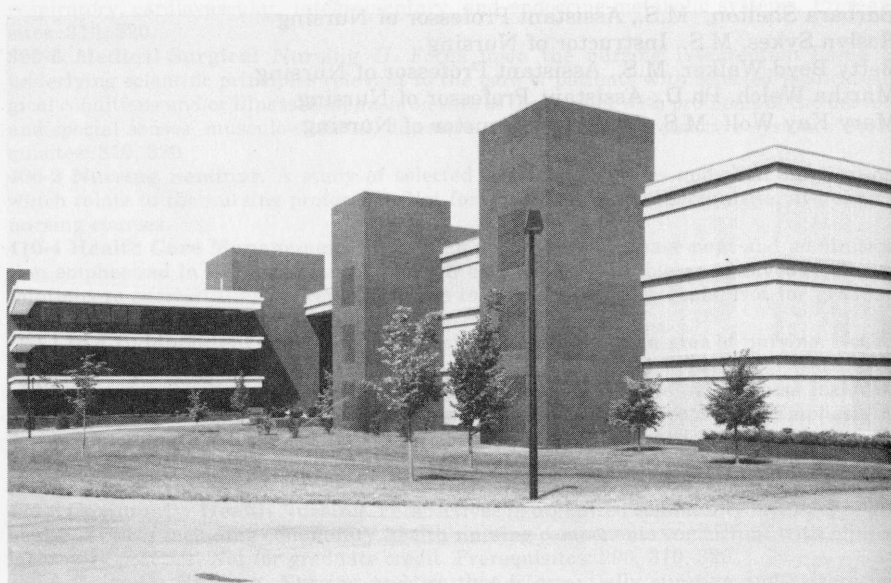
BIOLOGICAL SCIENCES

The Biological Sciences are appropriate for individuals interested in biochemistry, botany, ecology, microbiology, pre-health professional, medical technology, physiology, or zoology programs. Students planning to major in one of the degrees offered by the department should consult with an advisor at the earliest opportunity. The names of faculty who serve as advisors are listed on the departmental website.

General Biology

The study of biology includes the whole domain of organisms and the molecular level of organization. The study of biology includes the whole domain of organisms and the molecular level of organization. The study of biology includes the whole domain of organisms and the molecular level of organization.

School of Science and Technology



LIONEL K. WALFORD, *Acting Dean*

Offering degrees in:
Biological Sciences
Chemistry
Engineering
Mathematical Studies
Physics

The School of Science and Technology

The School of Science and Technology provides quality education in the natural sciences, mathematics and engineering at the bachelor's degree level and at the master's degree level in the natural sciences and mathematics. 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.

Graduation Requirements

Candidates for the Bachelor of Arts or the Bachelor of Science degree with majors in any of the disciplines in the School of Science and Technology must meet the following requirements:

1. At least 48 hours of credit in one area of concentration with a minimum grade-point average of 3.00.
2. A minimum grade-point average of 3.00 for all courses in the major concentration numbered above 299.
3. At least 9 hours of credit in the area of concentration in courses numbered above 299 must be earned at Southern Illinois University within two years preceding the completion of requirements for the degree being sought.
4. Upon completion of 64 hours of credit, each student in the unit must file a tentative curriculum outline with the department adviser.

Candidates for the Bachelor of Science degree in education who select a major within the School of Science and Technology must have at least 48 hours (or 36, if two 27-hour concentrations are completed in other areas of study) in that area with a minimum grade-point average of 3.00 overall and for all courses numbered above 299.

A minor concentration within the School of Science and Technology must include at least 27 hours of credit with a minimum grade-point average of 3.00. Specific requirements, if any, are listed in this catalog under the heading Minor Concentration for the particular discipline.

To qualify for honors in an area of Science and Technology, one must complete at least 48 hours of credit, or the equivalent, in that area including successful completion of 9 hours of the corresponding honors program.

BIOLOGICAL SCIENCES

The Biological Sciences are appropriate for individuals interested in biochemistry, botany, ecology, microbiology, pre-health professional, medical technology, physiology, or zoology programs. Students planning to major in one of the degree emphases of the department should consult with an adviser at the earliest opportunity. The names of faculty who serve as advisers may be obtained from the departmental office, Science Laboratory Building, 3231.

General Biology

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 func-

tion 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 processes, the universality of adaptation, and the interdependence of the biosphere. As these threads are examined and interwoven, the human relationship to (relevance of) the whole world of life becomes apparent. Like the other 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 basically curious about how living things are put together, how they function, or how they are inter-related with their environment may want to study biology. Some background in the basic physical sciences is most helpful.

Career Opportunities

Environmentally related occupations	Health related occupations	
Laboratory technicians	Research assistants	
Teaching (Biology, General Science)		
Specialized careers in*		
Bacteriology	Biochemistry	Fisheries Biology
Botany	Physiology	Wildlife management
Ecology	Zoology	Naturalist or park ranger
Genetics	Microbiology	
General Biology	Consumer safety	
Plant Physiology		

*Certain of these careers may require more specialized training.

Bachelor of Arts Degree, School of Science and Technology

Major Concentration in Biological Sciences with an Option in Biology

<i>General Studies Requirements (See Chapter 3. Waive GSM-8 and substitute 8 hours of courses included in the requirements below.)</i>	52
<i>Foreign Language Requirement</i>	12
<i>Biology Requirements</i>	52
Biology 200, 301a, 302a, 302c, 303a	22
Electives (courses above 299 except 312a,b)	30
To include one course from each of three of the four areas below:	
Cell and Physiology: 301b, 301e, 302d, 315a,b, 401, 406a, 441, 442, 443, 444, 445a, 447	
Organism: 302c, 411, 416, 421, 454, 455, 458, 470, 480, 483, 485, 486, 487, 488	
Population: 303b, 303c, 410, 420, 422, 423, 431, 436, 479	
Microbiology: 304a, 304b, 404a, 424, 430, 471, 465a	
A minimum of three courses at the 400-level is required. 491, 493, and 494 may be used as electives but will not fulfill specific course requirements.	
<i>Chemistry Requirements</i>	26
Chemistry 125a,b,c	15
Chemistry 305a,b,c (or 341a,b,c) and 345a	11
<i>Physics and Mathematics Requirements</i>	16-20
GSM 244	4

Either Mathematics 150a-4, b-4 and GSM 101-4 or Physics 206a,b,c (or 211a,b,c) and 312a,b	12-16
<i>Electives</i>	34-30

Medical Technology

This degree option is designed for those students who wish to become certified Medical Technologists—MT (ASCP). Medical technologists are educated to understand the theory behind diagnostic tests which they perform on human fluids and tissues in the clinical laboratory. In addition, they troubleshoot and maintain complex electronic equipment as well as teach and supervise the work of other laboratory personnel. 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, med techs contribute to the development of new methods and laboratory instrumentation which aid the physician in the prevention and cure of disease. Most med techs 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 of Medical Technologists collaborate in determining minimum standards for educational programs for Medical Technologists. Three years of academic training take place on the SIUE campus during which time fundamental knowledge and skills in biology, chemistry, physics, and mathematics are to be mastered. College level writing, social science, humanities and fine arts requirements are also met during this time. The fourth calendar year of training (internship) takes place in a clinical laboratory setting at any one of our affiliated hospital Schools of Medical Technology. Internships are awarded on a competitive basis and are not guaranteed to any student in the program. SIUE does not charge tuition during the internship. SIUE awards the Bachelor of Science in Biology/Medical Technology upon completion of all four years of this program. Also at this time the student is eligible to take an examination administered by the Board of Registry of the American Society of Clinical Pathologists and, if successful, is certified as an MT (ASCP).

Bachelor of Science Degree, School of Science and Technology

<i>Major Concentration in Biological Sciences with Option in Medical Technology</i>	
<i>General Studies Requirements (excluding those in mathematics/science) ..</i>	52
<i>Mathematics/Physics Requirements</i>	13
GSM 101, 144, 244	
<i>Biology Requirements</i>	42
200, 301a, 303a, 304a,b,c, 312a,b, (302a and 302d may be substituted for 312a,b)	
Electives: 8 to 10	
<i>Chemistry Requirements</i>	28
125a,b,c, 305a,b,c, 345a,b, (135 may substitute for 125c.)	
<i>General Electives</i>	3
A course in fundamental biochemistry is strongly recommended.	
<i>Clinical Internship at Hospital School of Medical Technology</i>	55
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Medical Sciences

The pre-health professions curricula will provide the necessary preparation to qualify an individual for entry into Medical, Dental, Veterinary, Optometry, Osteopathy and Podiatry schools as well as into many other allied health programs.

A student considering a health-related profession should demonstrate well 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 pre-dental student should also have or develop good manual skills and an ability to make acute judgments on space and shapes.

Many pre-health profession students elect to major in the biological sciences. However, other majors are also selected in the School of Science and Technology, e.g., Chemistry. 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 dental or veterinary school.

The Pre-Professional Committee of the School of Science and Technology is responsible for advisement of pre-professional students and maintains a centralized recommendation service to aid the student during the application process. The chairperson of this committee is available in the Biology Department to advise students enrolled in medical science 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 these programs should seek advisement on a regular basis to insure satisfactory progress.

Career Opportunities

Dental Medicine	Osteopathic Medicine
Medicine	Podiatry
Optometry	Veterinary Medicine

Such a basic program is also appropriate for innumerable careers in allied health sciences including nutrition, pharmacy, occupational and physical therapy, etc.

Bachelor of Science Degree, School of Science and Technology

Major Concentration in Biological Sciences with an Option in Medical Sciences

<i>General Studies Requirements (See Chapter 3. Waive GSM-8.)</i>	60
<i>Biology Requirements</i>	52
200, 301a, 302a, 302d, 303a, 304a, 315a,b	32
Electives to include three 400-level courses and a course in either the organism or population area ¹	20
<i>Chemistry Requirements</i>	29-32
125, 305 (or 341), 345a, and biochemistry (Biology 301e or Chemistry 451)	
<i>Physics Requirements</i>	
206 (or 211 and 312)	(8) + 7-8
<i>Mathematics Requirement</i>	
150	8
<i>Electives</i>	36-32

¹Area distributions are shown on page 172.

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 50 hours of the requirements in biochemistry, biology electives and 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.

Students planning to apply for admission to a dental or veterinary school at the end of the junior year should complete Physics during the sophomore year. The student may elect either to take Physics 206 during the second year, or to begin calculus no later than the spring quarter of the first year and take Physics 211 and 312 during the second year. The latter particularly will require good math background at the high school level and careful schedule planning during those first two years.

Bachelor of Science Degree, School of Education

For this degree the requirements for a primary concentration 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 course: 200, 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. See secondary education requirements.

Minor Concentration

A minor concentration in the biological sciences consists of 27 hours of biology courses. An appropriate prerequisite course in introductory biology and at least one quarter of 302 (a—Animal Life, c—Plant Life, d—Physiology) are required. The remaining 18 hours of electives may be completed with any courses of the biological sciences except 491 and 493 and/or the following: General Studies courses: GSM 231, 232, 233, 234. No more than four hours may be counted from Biology 200, GSM 130, 131, 230.

Course Performance Requirements

All students pursuing a major concentration in the biological sciences must adhere to the following academic standards:

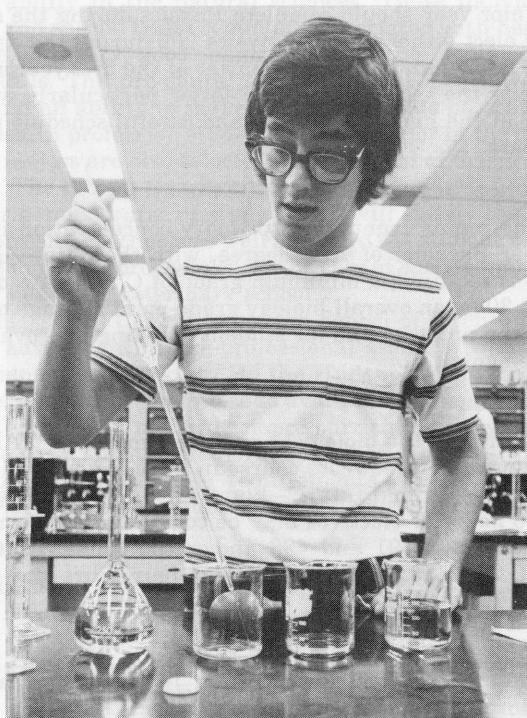
1. A grade of C or better is required in Biology 200 or the equivalent course before a student can proceed into any of the courses numbered above 299.
2. No more than two biology courses may be repeated for major credit and these may be repeated only once.
3. No more than 5 hours of D may be counted in the 52 hours that are required for a major concentration in the Biological Sciences.

CHEMISTRY

Chemistry is the science which is concerned with substances—their properties, composition and reactions. Four principal areas may be defined: analytical, inorganic, organic and physical chemistry. Chemists are employed in such diverse industries as rubber, leather, dye, explosives, drugs, plastics, adhesives, paint, metals, glass, cement, insecticides, textiles, petroleum, soap, paper, semiconductors and cosmetics. Synthesis of new organic and inorganic chemicals is of basic importance to all chemistry.

Sales of most drug and plastics companies, for example, are concentrated in substances unknown ten years ago. The development of adequate methods for analysis of these new materials requires constant research on instrumental and

chemical methods of analysis. An understanding of the rates and equilibria of chemical reactions, thermodynamics and molecular structure is essential for the development of new fuels and new industrial processes as well as for the understanding of many phenomena in nature. Every educated person should have some knowledge of chemistry, and many interesting and profitable careers require varying amounts of training in this field.



Courses of study, leading to the Bachelor of Arts degree in the School of Science and Technology, are available in the following areas: (a) certification by the American Chemical Society (ACS) as a professional chemist; (b) a "liberal arts" chemistry degree (non-ACS); (c) preparation for professional medical science programs; (d) State certification for teaching high school chemistry. Incoming students who are considering a major in chemistry should contact the Chemistry Department Office before registering for any courses.

Career Opportunities

A concentration in chemistry provides an excellent preparation for graduate studies in Chemistry or Biochemistry and professional training in medicine, dentistry, veterinary medicine and pharmacy. A baccalaureate degree in chemistry likewise would provide a background for career opportunities in the following areas. (a) Allied Health and Environmental: such as Clinical chemistry, industrial hygiene, toxicology, forensic chemistry. (b) Corporate and Governmental: such as Industrial food and agricultural chemistry, technical sales and management and governmental positions. (c) Educational: such as Secondary, junior colleges, and University instruction.

The degree requirements which follow are in addition to the general requirements of the School of Science and Technology previously listed.

Bachelor of Arts Degree, School of Science and Technology

(a) American Chemical Society (ACS) Certification

<i>General Studies Requirements (See Chapter 3. Waive GSM-8.)</i>	60
<i>Requirements for Concentration in Chemistry</i>	100
Foreign Language (reading knowledge of a scientific language)	12
Chemistry 125, 235, 261, 341, 345, 361, 365, 411-4, 432a or b	(3)+57
Mathematics 150, 260a	12
Physics 211, 212	(5)+10
Chemistry electives—at least three at 400 level (one may be mathematics or physics)	9
<i>Approved Supporting Courses</i>	5-21
<i>Electives</i>	32-16
	<hr/> 197

(b) Non-ACS Concentration

<i>General Studies Requirements (See Chapter 3. Waive GSM-8.)</i>	60
<i>Requirements for Concentration in Chemistry</i>	83-87
Foreign Language	12
Chemistry 125, 235, 261, 341, 345, 361, 365	(3)+49
Chemistry 311-3, or 411-4	3-4
Mathematics 150-8, 260a-4	12
Physics 211-12 or 206-15	(5)+7-10
<i>Approved Supporting Courses</i>	11-27
<i>Electives</i>	43-23
	<hr/> 197

(c) Medical Science

The following program, which also leads to a Bachelor of Arts degree in chemistry, has been designed for those students desiring to meet the requirements for admission to professional medical and dental schools.

<i>General Studies Requirements (See Chapter 3. Waive GSM-8.)</i>	60
<i>Requirements for Concentration in Chemistry</i>	87-93
Foreign Language	12
Chemistry 125, 235, 261, 341, 345, 361, 365	(3)+49
Chemistry 311 or 411	3-4
Mathematics 150, 260a	12
Physics 211, 212, or 206	(5)+10
Chemistry electives	6
<i>Supporting Courses</i>	13
Biology 200, 301a, 301b, 301d	(8)+5
Biology electives	8
<i>Electives</i>	32-31
	<hr/> 192-197

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 concentration in Chemistry.

A minor is not required for chemistry students; instead, they must satisfy one of two alternatives. They may take a minor and satisfy the requirements established by the department offering that minor and by the School of Science and Technology, or they may take a group of courses from more than one department which will support their major educational and career objectives. This alternative must include at least three courses totaling at least 12 hours of credit in addition to the requirements in mathematics and physics (i.e. one year each of calculus and physics), and must be approved by the Department of Chemistry undergraduate adviser. Guidelines are available from the adviser.

(d) *Secondary School Teaching Certification*

<i>General Studies Requirements (See Chapter 3. Waive GSM-8.)</i>	60
<i>Requirements for Concentration in Chemistry</i>	83-87
Foreign Language	12
Chemistry 125, 235, 261, 341, 345, 361, 365	(3)+49
Chemistry 311 or 411	3-4
Mathematics 150, 260a	12
Physics 211 or 206	(5)+7-10
<i>Professional Education Courses</i>	37
(See Secondary Education requirements)	
<i>Approved Supporting Courses (in lieu of second teaching field)</i>	10-9
<i>Electives</i>	7-4

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Scheduling for the third and fourth years involves coordination between the Chemistry and Secondary Education programs. Please see the Chemistry undergraduate adviser for specific program details.

Minor Concentration

A minor concentration in Chemistry normally includes 125 and additional electives at the 200 level or higher to total at least 27 hours. It is important that the student contact the Chemistry Department's undergraduate adviser to establish his program at the earliest possible date for a program not including 125. (105 is not acceptable for minor concentration.)

ENGINEERING

Engineering is the professional art of applying mathematics and science to the optimum utilization of natural resources for the benefit of man. It is a creative activity in that its products are original; it is a scientific activity in that its approach is based upon the fundamentals of natural laws.

The Department of Engineering offers programs leading to the Bachelor of Science in Engineering degree with major concentrations in: electronic engineering, engineering science, industrial engineering, and urban and environmental (civil) engineering.

The Electronic Engineering Program and the Urban and Environmental Engineering Program are accredited by the Engineers Council for Professional Development (ECPD), 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 Sanitation Technology. This program provides an in-depth academic experience in the areas of environmental quality monitoring and processes management.

Engineering and technology graduates have a wide variety of career opportunities available. The following list is indicative of the types of companies which employ either engineers or technologists:

Manufacturing Companies	Universities
Public Utilities	Construction Companies
Oil Companies	Transportation Companies
Railroads	Municipalities
Processing Plants	State Agencies
Biological Laboratories	Federal Agencies
Aircraft and Missile Industries	Consulting Engineers

The following curricula are designed to develop engineers capable of breaking new paths as well as improving old ones, to develop flexibility, to emphasize synthesis as well as analysis.

All students interested in engineering should seek advisement from the Department of Engineering immediately upon enrolling in the University.

ELECTRONIC ENGINEERING

Electronic engineering deals with electricity, man's most versatile servant. It is concerned with electrons, magnetic fields and electric fields—all invisible phenomena. That's what makes it so intriguing.

Electronic 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.

Some examples of present uses of electricity are: electric power systems spanning the continent; world-wide 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/or electrical controls to serve society better than would be possible without it. There is almost nothing that does not depend on electrons, electric and magnetic fields. That's what electronic engineering is all about. It is a fascinating and challenging profession in which to earn a living.

Bachelor of Science in Engineering Degree, School of Science and Technology

Major in Electronic Engineering

<i>General Studies Requirements (See Chapter 3)</i>	60
<i>Chemistry 125a</i>	5
<i>Economics 201, 341</i>	(4)+4
<i>Engineering 110, 200a,b,c, 201, 210, 260a,b, 270, 300, 301, 325, 326, 327, 330a,b, 341, 351, 352, 353, 401, 402, 444, 445, plus 13 hours of engineering electives</i>	91
<i>Mathematics 150a,b, 260a,b,c, 305</i>	(4)+20
<i>Physics 211a,b,c, 302a</i>	(4)+12

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ENGINEERING SCIENCE

The Engineering Science program is designed to meet the need for engineers to be qualified in interdisciplinary areas of activity. For this reason, more Chemistry,

Mathematics, Physics, and Biology is required for undergraduates than may usually be required in traditional disciplines. The student is encouraged to complete double major and minor concentrations in the Physics, Chemistry, Biology and Mathematics Departments. It is especially designed for students who wish to enter graduate school and desire broad training in applied science before selecting a specialty for graduate research.

During the third and fourth years, the student can select one of several specialty areas in which to concentrate the elective courses. Examples are the digital machines and chemical areas. The purpose of the specialty areas is to arrange course combinations that strengthen the interest of individual students in areas of activity, such as simulation, operations analysis, micro-processor systems engineering, instrumentation and minicomputer applications to control equipment used in other fields, as well as in Engineering.

Bachelor of Science Degree in Engineering, School of Science and Technology

Major in Engineering Science

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Chemistry 125a,b,c</i>	15
<i>Economics 201, 341</i>	(4)+4
<i>Engineering 110, 210, 220, 221, 260a,b, 270, 300, 320, 321, 370, 419, 420, 421, 443, plus 34 hours of Engineering or Science electives*</i>	78
<i>Mathematics 150a,b, 260a,b,c, 305, 461, 480a</i>	(4) + 27
<i>Physics 211a,b,c</i>	(4)+8

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*The 34 hours of technical electives must include 12 hours of Engineering courses. The 34 hours may be any group of courses from biology, chemistry, engineering, mathematics, and/or physics courses chosen to meet a particular student's objectives and approved by the Department of Engineering and Technology.

INDUSTRIAL ENGINEERING

Industrial Engineering is a very special kind of profession. There is a uniqueness about the field yet there is an extraordinary breadth of application. The basic objectives of the field relate to productivity—that is, what is the most effective use of each dollar spent for materials, equipment, manpower, etc. The United States is facing a crisis in productivity today and it is expected to extend into the future for many years. During the last decade, an ever-increasing number of products commonly used by the American consumer have been manufactured in other countries. For instance, a large percentage of the total number of electric blankets, radios and watches bought by Americans are now imported due to the fact that these products can be made at a lower cost in other countries.

The uniqueness of the educational curriculum and the extraordinary breadth of the application of the Industrial Engineer's knowledge creates 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 things are exceedingly important because a productivity problem almost invariably is made up by a number of things from the physical world. They can be dealt with effectively and properly only if one has a sound knowledge of the physical world.

The future of this field is related to productivity but not necessarily productivity in the traditional sense. There are extremely important roles for the Industrial Engineer to play in problems related to the environment, pollution, job safety under the new and far reaching federal occupational safety act, mass

transit, health and health systems, law enforcement, city management, banking and a host of other current, critical problem areas.

The industrial engineer generally has a great deal to do with people. The profession is, in fact, more human relations oriented than any other field of engineering. It must be remembered that one of the resource inputs, and usually the most important, into nearly every organization is manpower.

Bachelor of Science in Engineering Degree, School of Science and Technology

Major in Industrial Engineering

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Chemistry 125a</i>	5
<i>Economics 201, 341</i>	(4)+4
<i>Engineering 101a, 110, 210, 220, 221, 260a,b, 270, 320, 321, 332, 333, 360, 410, 452, 471, 472, 473, 487, plus 17 engineering elective hours</i> . . .	81
<i>General Business Administration 341</i>	4
<i>Mathematics 150a,b, 260a,b,c, 305, 480a,b, 486a</i>	(4)+30
<i>Physics 211a,b,c</i>	(4)+8

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URBAN AND ENVIRONMENTAL (CIVIL) ENGINEERING

Urban and environmental, or civil engineering, is 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 environment, in providing facilities for community living, industry and transportation, and in providing structures for the use of mankind.* The following specialties are available to students majoring in Urban and Environmental Engineering.

STRUCTURAL ENGINEERING

When most people think of civil engineering they usually think of the handiwork of the structural engineer. Not that structural engineers actually build—but rather, they are responsible for designing the great bridges and skyscrapers and factories and power-plant buildings one sees all over the world. Whatever the outward appearance of a structure, no matter how fragile and “light” it looks, one can be certain that a great deal of creativity and technical expertise was required on the part of the structural engineer to design a suitably strong skeleton.

ENVIRONMENTAL ENGINEERING

Environmental engineers strive to improve the community’s well-being. They plan and design municipal water facilities such as filtration plants and sewage-treatment plants, massive 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.

*Official description of Civil Engineering adopted by the American Society of Civil Engineers in 1961.

TRANSPORTATION ENGINEERING

The transportation engineer is involved in planning, designing, and constructing the nation’s transportation systems. He assists in the local and regional trans-

portation planning processes and is assuming an ever increasing role in the continued operation and maintenance of these systems. Diverse factors such as structural design of pavements, vehicle operation characteristics, geometric design, traffic control and site selection are major concerns to the transportation engineer. He 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, School of Science and Technology

Major in Urban and Environmental Engineering

<i>General Studies Requirements (See Chapter 3)</i>	60
<i>Chemistry 125a,b</i>	10
<i>Economics 201, 341</i>	(4)+4
<i>Engineering 101a, 110, 210, 220, 221, 230, 260a,b, 263, 270, 300, 314, 316, 320, 321, 340a, 370, 376, 380a, 419, 421, and 443; plus one of the following options:</i>	90
Structural Option: 340b, 440, 442 and 9 hours engineering electives	
Environmental Option: 380b,c, 480a and 9 hours engineering electives	
Transportation Option: 363, 463, 475, and 10 hours engineering electives	
<i>Mathematics 150a,b, 260a,b,c, 305</i>	(4)+20
<i>Physics 211a,b,c</i>	(4)+8

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SANITATION TECHNOLOGY

Sanitation technology deals with environmental quality monitoring and processes management.

The analytical methods for quality assessment of water and air are studied and practiced. Management principles of water purification, wastewater reclamation, and air pollution control devices are examined. Solid wastes handling methods are studied. The fundamentals involved in monitoring systems and projects are explored.

Coupled with an appropriate minor concentration such as business, chemistry, engineering science, or others, the student should find a ready market with municipalities and industries which operate pollution control equipment and monitoring systems and with regulatory agencies which oversee these activities.

Bachelor of Science in Engineering Degree, School of Science and Technology

Major in Sanitation Technology

<i>General Studies Requirements (See Chapter 3)</i>	60
<i>Biology 200, 215</i>	8
<i>Chemistry 110a,b</i>	8
<i>Engineering 101a, 205, 263</i>	10
<i>General Business Administration 342</i>	4

<i>Mathematics 150a,b</i>	(4)+4
<i>Natural Science and Mathematics: GSM 144 and 221</i>	9
<i>Physics 206a,b,c</i>	(4)+11
<i>Sanitation Technology 101, 201a,b, 202, 203, 204, 320, 330, 390, 420, 430, 440, 450, 490</i>	52
<i>Electives</i>	26

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Minor Concentration in Engineering

A minor concentration in Engineering consists of 27 hours which have been chosen with the consent of the Chairperson of the Department.

MATHEMATICAL STUDIES

The offerings of the Department of Mathematical Studies are designed to enable students to pursue any of a variety of programs in preparation for careers in mathematics and computer science. Typical career opportunities are

Professional mathematician	Application systems analyst and programmer
Industrial applied mathematician	Statistician
Scientific programmer	Actuary
Computer systems analyst	Teacher—Primary, Secondary, Community College or University

Several programs are described below. All programs must include the mathematics core—150, 260, and 321—as well as Physics 211a and one of 211b and 211c. Generally, the mathematics core courses should be completed by the end of the second year.

Upon choosing a major in mathematical studies, a student should consult with the undergraduate adviser of the Department to plan and place on record a program of study. To insure proper placement, transfer students should consult the undergraduate adviser prior to registering for classes for the first time.

Prospective teachers may meet certification requirements in a program that leads to a Bachelor of Science degree from the School of Education or in other programs described below.

All students for whom mathematics is a major or minor concentration should be aware of the regulations of the School of Science and Technology.

Any student who receives a grade of "D" in a prerequisite course for another mathematics course should retake that prerequisite course before proceeding.

Bachelor of Arts Degree, School of Science and Technology

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Mathematics Core Requirements</i>	40
Foreign Language	12
Physics 211a,b, or a,c	(4)+4
Mathematics core courses: 150, 260, 321	24
<i>Additional Requirements</i>	45-51
One of the following options:	
OPTION 1	45
Mathematics 421, 450	18
One of the following: 451a,b, 465a,b, 480a,b, 486a,b ..	6
One of the following: 420, 430, 435a,b or a two-quarter sequence approved by B.A. adviser	6

Mathematics 499	3	
Approved supporting courses	12	
OPTION 2 (Requires minor concentration)		51
Mathematics 421a,b, either 450a,b or 451a,b	12	
One of the following: 451a,b, 465a,b, 480a,b, 486a,b .	6	
Mathematics electives from courses numbered 400 or above	6	
Minor concentration	27	
<i>Electives</i>		47-41

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Bachelor of Science Degree, School of Science and Technology

<i>General Studies Requirements (See Chapter 3.)</i>		60
<i>Mathematics Core Requirements</i>		28
Physics 211a,b or a,c	(4)+4	
Mathematics core courses: 150, 260, 321	24	
<i>Additional Requirements</i>		45-56
One of the following options:		
OPTION 1		45
Mathematics 225, 305, 451a,b, 465a,b, 480a,b	26	
Mathematics electives (recommended: 451c, 461, 462, 465c, 480c, 486)	7	
Approved supporting courses	12	
OPTION 2 (requires minor concentration)		51-53
Mathematics 225, 305	8	
Two of three: Mathematics 451a,b, 465a,b, 480a,b ...	12	
Mathematics electives (recommended: 451c, 461, 462, 465c, 480c, 486)	4-6	
Minor concentration	27	
OPTION 3 (statistics)		56
Mathematics 225, 305, 480, 481	20	
Mathematics electives from: 482, 484, 485, 487	9	
Minor concentration	27	
OPTION 4 (computer science)		
Student should check with a computer science adviser to plan program of study.		
<i>Electives</i>		59-48

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Bachelor of Science Degree, School of Education

<i>General Studies Requirements (See Chapter 3.)</i>		60
<i>Mathematics Core Requirements</i>		28
Physics 211a,b or a,c	(4)+4	
Mathematics core courses: 150, 260, 321	24	
<i>Additional Requirements</i>		51
Mathematics 311, 420, 435a,b	16	
Mathematics electives (recommended 225, 305, 425, 430, 450, 480)	8	
Minor concentration	27	
<i>Professional Education Requirements (See Secondary Education.)</i>		32
<i>Electives</i>		21

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Minor Concentration

A minor concentration in mathematics consists of at least 27 hours approved by a mathematics adviser, including 150a,b, and 19 hours selected from courses numbered 200 or above. At least 6 of these 19 hours must be numbered 300 or above.

A minor concentration in mathematics with emphasis in computer science must satisfy all of the requirements in the preceding paragraph, and must include 272, 273, 372a, and 373.

The minimum acceptable grade-point average for a secondary concentration in mathematics is 3.00.

PHYSICS

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 degree in education with a concentration 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 might provide. Many problems in energy resource development and conservation are clearly dependent on basic and applied physics concepts.

Bachelor of Arts Degree, School of Science and Technology

<i>General Studies Requirements (See Chapter 3. Waive GSM-8.)</i>	60
<i>Requirements for Major in Physics</i>	74
Foreign Languages (equivalent of one year)	(12)
Chemistry 125a,b	10
Mathematics 150a,b, 260a,b	16
Physics 211a,b,c, 302a,b, 308a,b, 312a,b, 405a,b, plus 2 hours of lab above 400 and 6 hours electives above 302	48
<i>Minor Concentration</i>	3-27
<i>Electives</i>	55-31
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Bachelor of Science Degree, School of Science and Technology

<i>General Studies Requirements (See Chapter 3. Waive GSM-8.)</i>	60
<i>Requirements for Major in Physics</i>	82
Chemistry 125a,b	10
Mathematics 150a,b, 260a,b,c, 305	24
Physics 211a,b,c, 302a,b, 308a,b, 312a,b, 405a,b, 415a, 418 plus 2 hours electives	48
<i>Minor Concentration</i>	3-23
<i>Electives</i>	47-27
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Bachelor of Science Degree, 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.

<i>General Studies Requirements (See Chapter 3. Waive GSM-8.)</i>	60
<i>Requirements for Major in Physical Science</i>	75
GSM 102, 110, 111, 306 and two courses (8 hours) from GSM 283, 300, 301, 302, or 305	24
Chemistry 125a,b,c	15
Physics 206a,b,c	15
Science and Technology 402, 403, 415	13
Mathematics 150-8	8
<i>Professional Education Courses (See Secondary Education.)</i>	37
<i>Electives</i>	20

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Minor Concentration

A minor concentration in physics includes 211, 302, 312a and 5 elective hours above 302 (excluding 306) to total 27 hours.

Courses

Biological Sciences

200-4 Introduction to Biological Sciences. An introduction to the major unifying concepts among the biological sciences, metabolism, physiology, organization, genetics, evolution, and ecology. Three hours lecture, three hours laboratory per week. Prerequisite: Chemistry 125a or concurrent enrollment.

210-4 Bacteriology. A treatment of cytology; theories and techniques of staining; physiology and classification of microorganisms; and their medical relationships. Two lecture and four laboratory hours 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 lecture hours, two two-hour 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 lecture and three laboratory hours per week. Prerequisites: 200, Chemistry 305a or 341a.

301b-3 Cell Biology. A continuation of 301a. The structure, function, and biogenesis of various cell parts; the biosynthesis of macromolecules; the mechanisms through which the cell regulates such processes as growth, metabolism, and gene expression. Research papers in the above areas are emphasized. Three lectures per week. Prerequisite: 301a.

301d-2 Cell Biology Laboratory. Experiments designed to study the functional properties of cellular components, the regulation of cellular activities, and the response of the cell to changes in the chemical and physical environment. Various techniques used in the study of cells are introduced. Six hours laboratory per week. Prerequisite: concurrent enrollment in 301b.

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 lecture hours per week. Prerequisite: Chemistry 305c or 341c.

302a-5 Animal Life. A survey of animal groups from protozoans through mammals. Emphasis on functional systems as they relate to phylogeny. Two lecture and six laboratory hours per week. Prerequisite: 200.

- 302c-5 Plant Life.** Structure, nutrition, growth, differentiation and reproduction in the plant kingdom. Three lecture and four laboratory hours per week. Prerequisite: 200.
- 302d-5 Physiology.** Function and regulation in animals. Four lecture and three laboratory hours per week. Prerequisites: 302a, Chemistry 125a,b.
- 303a-3 Genetics.** Mechanisms of inheritance, gene action, and the origin of genetic diversity. Three lecture hours per week. Prerequisite: 200.
- 303b-3 Evolution.** Evolutionary change including population genetics, ecological factors, selection, and speciation. Three lecture hours per week. Prerequisite: 200.
- 303c-4 Ecology.** Life and environment; energy relationships and succession. Saturday field trips required. Three lecture and three laboratory hours per week. Prerequisite: 200.
- 303d-1 Genetics Laboratory.** Prerequisite: 303a or concurrent enrollment.
- 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 lectures and two three-hour laboratories per week. Prerequisite: 200.
- 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 lectures per week. Prerequisite: 304a.
- 304c-3 Medical Microbiology Laboratory.** Methods for isolating pathogenic bacteria and determining their significant properties and immunological features. Six laboratory hours per week. Prerequisite: 304b or concurrent enrollment.
- 312-8 (4,4) Human Anatomy and Physiology.** (a) The structure and function of the human body. Tissues, skeletal, muscular, and nervous systems. Three lecture and two laboratory hours per week. Prerequisite: college chemistry. (b) Continuation of a. Endocrine, circulatory, respiratory, digestive, and urinary systems. Three lecture and three laboratory hours per week. Prerequisite: 312a.
- 315a-3 Embryology.** Morphogenesis and differentiation in animals with emphasis on vertebrates. Three lecture hours per week. Prerequisite: 302a.
- 315b-2 Embryology Laboratory.** Emphasis on embryology of vertebrate forms. Two laboratory hours per week. Prerequisite: concurrent enrollment in 315a.
- 390-0 to 1 (.3, .3, .4) Undergraduate Biology Seminar.** Presentations by faculty, visiting investigators, and students. May be repeated. Prerequisite: junior or senior standing.
- 401-2 Experimental Biochemistry.** (Cross-listed with Chemistry 455.) A laboratory course in biochemistry designed to teach biochemical techniques relating to carbohydrates, lipids, proteins, and nucleic acids. Prerequisite: 301e or Chemistry 451a.
- 404a-3 Microbial Physiology.** Bacterial growth, biochemical and genetic regulation of metabolism, effects of the physical and chemical environment. Three lecture hours per week. Prerequisites: 304a, Chemistry 305b.
- 404b-1 Microbial Physiology Laboratory.** Metabolic patterns of bacterial growth as a function of nutrition, environment, and genetic control. Three laboratory hours per week. Prerequisite: 404a or concurrent enrollment.
- 406a-3 Cell Organelles and Inclusions.** The function, structure, and formation of selected organelles and inclusions of eucaryotic cells. Current literature is covered in some detail and discussion sessions are held. Three hours lecture per week. Prerequisite: 301a, 301b, or biochemistry.
- 406c-1 Laboratory in Cell Organelles and Inclusions.** Experiments studying cell organelles and inclusions. Three hours laboratory per week. Prerequisites: consent of instructor, concurrent enrollment in 406a.
- 407-5 (3,2) Electron Microscopy.** (a) Theory, demonstration, exercises and review; two lecture hours and one demonstration hour per week. (b) Laboratory; six laboratory hours per week. Enrollment limited to number of lab spaces available. Prerequisite for a: consent of instructor; for b: concurrent or recent enrollment in 407a, consent of instructor.
- 408-4 Applications of Physical and Chemical Methods in the Study of Biological Molecules.** (Same as Chemistry 408 and Physics 408.) In-depth discussions of biologically significant macromolecules and physical and chemical methods used to study them. The analytical development of the methods and their application to macromolecular structure, function and evolution are emphasized. Methods for discussion may include: enzyme kinetics, transport processes, protein crystallography, nuclear magnetic resonance and electron spin resonance, optical rotary dispersion and circular dichroism, thermodynamic analysis. Prerequisites: 301e or Chemistry 451a; Mathematics 140 (minimum) or 150a (preferred); Physics 206c or 211c; Chemistry 305b or 341b or consent of instructor.

409-3 Scanning Electron Microscopy. Principles, techniques and applications of electron microscopy with major emphasis on scanning electron microscopy. (a) Two lectures per week. (b) Three hours laboratory per week. Enrollment limited to ten students. Prerequisite: consent of instructor.

410-4 Advanced Genetics. A study of quantitative inheritance, chromosomal evolution and organization, the regulation of gene action, and radiation genetics. Three lectures and one laboratory per week. 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 lecture hours per week. Prerequisite: 303a.

416-3 Abnormal Embryonic Development. A survey of abnormal development in the human embryo, its nature, genetic and environmental causes, and prognosis. Three lecture hours per week. Prerequisite: 315a or equivalent.

420-4 Plant Synecology. The structure, development, causative factors in the distribution of plant communities. Field techniques for quantitative measurements and interpretations of successful dynamics. Three lectures, one laboratory per week. Saturday field trips required. Prerequisite: 303c.

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.

422-4 Systems Ecology. A survey of theoretical models and quantitative methods in population and ecosystem ecology. Three lectures and one laboratory per week. Prerequisites: 303c, statistics.

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 lectures, two laboratories per week. Prerequisite: 302a.

424-3 Comparative Metabolism of Parasitic Protozoa. Intermediary metabolism, nucleic acid metabolism, transport of molecules and mode of action of chemotherapeutic agents on parasitic protozoa. Prerequisite: 423.

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 lectures and one laboratory per week. Prerequisite: 302b.

431-4 Limnology. Ecological principles of aquatic habitats as exemplified by the lakes and streams of southern Illinois. Cost of field trips may be \$10-\$25 per student. Two lectures and two laboratories per week. Prerequisites: 302a, 302c, 303c.

435-4 Ethology. A survey of animal interactions and the response of animals to environmental stimuli. Three lectures and one laboratory per week. Prerequisite: 302a.

436-3 Ecology and Man. A study of advanced topics in ecology which are relevant to man's interaction with his biological environment, including modified nutrient cycles, water pollution, food resources, diversity, and population dynamics. Prerequisite: 303c.

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 lecture hours per week. Prerequisites: organic chemistry and 302d or 312.

442-1 Mammalian Physiology Laboratory. Selected experiments with mammals including man. One three-hour laboratory per week. Prerequisite: concurrent enrollment in 441.

443-4 Environmental Physiology. Physiological ecology of vertebrates with emphasis on physiological effects of environmental stress e.g., oxygen deprivation, temperature, salinity, and industrial pollution. Three lectures, one laboratory per week. Prerequisites: 302d, 441 or consent of instructor.

444-4 Integrative Physiology. Mechanisms of response and integration with emphasis on the role of the nervous systems. Three lectures and one laboratory per week. Prerequisites: 301a, 302a.

445-4 (3,1) 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. (a) Lecture, (b) Laboratory. Prerequisites: (a) 301a or consent of instructor; (b) concurrent enrollment in a, consent of instructor.

446-2 Biochemical Aspects of Hormone Regulation of Metabolism. Designed to build upon the foundation laid in a basic course in biochemistry. Hormone regulation mechanisms at the molecular level. Prerequisites: 301e, Chemistry 451.

447-4 Topics in Plant Physiology. Photosynthesis, mineral nutrition of plants, water regime, growth and movement of plants. Two lectures and two laboratories per week. Prerequisite: 302c, Chemistry 125b.

454-4 Reproduction and Dispersal of Vascular Plants. The morphology and biology of reproduction and dispersal. Discussion and student reports include implications for species survival, ecology, biogeography, and plant-animal coevolution. Three lectures, one laboratory per week. Prerequisite: 302c.

455-4 Plant Anatomy. Cell types, tissues, and organography of seed plants with emphasis on phylogeny and trends of specialization. Laboratory on microscopical observations of plant tissues. Two lectures, 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.

458-5 Functional Morphology of Vertebrates. The phylogenetic approach to comparative form, function, and development of vertebrate organisms. Two lectures and three laboratories per week. Prerequisite: 302a.

465a-3 Immunology. An exposition of basic concepts in immunology including: nature of the immune reaction, inflammation, humoral and cellular immunity, antigen-antibody reactions, transplantation and tumor immunology. Prerequisites: 304b, a course in biochemistry.

465b-2 Immunology Laboratory. Selected experiments using modern immunological procedures applied to mammalian systems. Two 2-hour laboratory sessions per week. Prerequisite: 465a or concurrent enrollment.

470-4 Field Botany. Taxonomy, natural history, and distribution of local plants. Two lectures and two laboratories per week. Field trips cost \$10-\$25 per student. Prerequisite: 302c.

471-4 Phycology. Morphology, reproduction, ecology, and physiology of algae. Laboratory includes field work, identification, culturing, and experimentation. Two lectures, two laboratories per week. Prerequisite: 302c or consent of instructor.

479-1 to 16 Tropical Studies. Courses taken in the tropics under the auspices of Associated Universities for International Education. May be repeated. Prerequisite: consent of department chairman.

480-4 Field Zoology. Taxonomy, natural history, and distribution of local animals. Two lectures and two laboratories per week. Field trips cost \$10-\$25 per student. Prerequisite: 302a.

483-5 Principles of Entomology. A study of the principles of insect morphology, physiology, development, systematics, ecology, and pathology. Three one-hour lectures, two three-hour laboratories per week. Prerequisite: 302a.

485-4 Ichthyology. Relationships, ecology, behavior, physiology, and anatomy of fishes. Field study of local fauna is stressed. Two lectures and two laboratories per week. Saturday 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 lectures and two laboratories per week. Saturday field trips required. Prerequisite: 302a, c or consent of instructor.

487-4 Ornithology. Natural history, relationships, behavioral ecology, and evolution of birds. Saturday field trips required. Prerequisite: 302a.

488-4 Mammalogy. Taxonomy, natural history, and evolution of mammals. Two lectures and two laboratories per week. Prerequisite: 302a.

491-1 to 4 Readings in Biology.

493-2 to 8 Research in Biology. Research on biological problems. No credit toward a secondary concentration in biology. Prerequisites: senior standing, consent of faculty.

494-2 to 4 Internship in Biology Teaching. Individually supervised experience in teaching, including planning laboratories, preparation and presentation of lectures, teaching laboratories, and designing handouts and exams. May be repeated for credit; credit toward concentration limited to 4 hours. Prerequisites: junior or senior standing, 3.5 average in biology, consent of instructor.

Chemistry

105-3 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 of high school chemistry. Grades are Pass or No Credit. May not be applied to a primary or a secondary concentration in chemistry. Two lecture, three problem session hours 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 students other than chemistry majors. (a) General and Organic Chemistry. (b) Organic Chemistry. (c) Biological Chemistry. Three lectures and one laboratory per week. Must be taken in sequence. Prerequisite for (a): GSM 144 or concurrent enrollment.

125-15 (5,5,5) Chemical Structure and Dynamics. University-level treatment of modern chemistry—atomic structure, molecular bonding, and structure. Basic principles governing chemical change and equilibrium. (a) four lecture hours, one three-hour laboratory per week. (b,c) three lecture hours, two three-hour laboratories per week. Aspects of quantitative analysis are covered in both lecture and laboratory. Must be taken in sequence. Prerequisite: high school chemistry.

235-5 Analytical Chemistry. Theories and methods of volumetric, gravimetric and spectrophotometric analysis. Three lectures and two laboratory periods per week. Prerequisite: 125c.

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.

305-9 (3,3,3) Organic Chemistry, Preprofessional. For secondary concentration in chemistry and preprofessional students. Three lecture hours per week. Prerequisite: 125c.

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: 125c.

341-9 (3,3,3) 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 a,b,c sequence. Prerequisite: 125c.

345-7 (2,2,3) Organic Qualitative Analysis. (a,b) Introduction to organic synthesis and the techniques for determining physical and chemical properties of organic systems. Six laboratory hours per week. (c) A systematic study of the chemical, physical and spectroscopic properties of organic compounds and a logical use of the study for determining organic chemical structure. Prerequisites: (a) 305a or 341a, (b) 345a and either 305a or 341a, (c) 341, 345a,b, 305.

361-9 (3,3,3) 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 a,b,c sequence. Section a meets jointly with Physics 304 for three lecture periods a week. Prerequisites: (a) 261, 12 hours physics, 1 year calculus; (b) 361a; and (c) 361b.

365-4 (2,2) Physical Chemistry Laboratory. One lecture hour and four laboratory hours per week. Prerequisites: (a) 345a, 361a; (b) 361b.

375-0 to 3 Chemistry Seminar. One lecture hour per week. Prerequisite: senior standing.

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 chairman.

408-4 Applications of Physical and Chemical Methods in the Study of Biological Molecules. (See Biology 408 and Physics 408.)

411-4 Physical Inorganic Chemistry. Modern inorganic chemistry including symmetry, atomic structure, 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. Two lecture and six laboratory hours per week. Prerequisite: 361b or c or concurrent enrollment.

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. Lecture. Prerequisites: 341c 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: 341c.

449-2 to 6 Special Topics in Organic Chemistry. The topic to be covered is announced by the faculty. Prerequisite: consent of instructor.

451-6 (3,3) Biochemistry. A study of life processes at the molecular level with emphasis on the relationships between the structure and function of biological molecules. Three lecture hours per week. Prerequisite: (a) 305c or 341c; (b) 451a.

455-2 Experimental Methods in Biochemistry. (Cross-listed with Biology 401-2.) Biochemical preparations, syntheses, separation techniques, and methods of identification. Six laboratory hours per week. Prerequisites: 345b, concurrent enrollment in 451a.

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. Prerequisites: 125c, 305c or 341c, one year of physics, consent of instructor.

464-3 Intermediate Physical Chemistry. Intermediate between the first year of undergraduate physical chemistry and advanced physical chemistry. Three lecture hours per week. Prerequisite: 361 b or c.

469-2 to 6 Special Topics in Physical Chemistry. The topic to be covered is announced by the faculty. Prerequisite: consent of instructor.

486-15 Argonne Quarter. Intensive course work and original research under the direction of Argonne National Laboratory staff to be taken in residence at the Laboratory. Prerequisites: senior standing, 4.0 average, consent of department chairman, prior approval of application by Argonne National Laboratory.

490-2 Chemical Literature. A study description of the various sources of chemical information and the techniques for carrying out literature searches. Two lecture hours per week. Prerequisites: 125c, 305c or 341c, reading knowledge of German or consent of instructor.

496-2 to 6 Chemical Problems. Investigation of chemical problems under the direction of a staff member. Prerequisites: senior standing, concentration in chemistry with 4.0 average, consent of department chairman.

Engineering and Technology

101-9 (3,3,3) Engineering Graphics. (a) Principles of graphic communications. Sketching for shape description, pictorial projection, multiviews, various types of sectional views, auxiliary views, geometric construction. (b) Shop processes, dimensioning, axonometric drawing, tolerances, fasteners, and the complete detail and assembly drawing of a jig or fixture for an assigned problem. (c) Geometry of lines, planes, points solids, and irregular figures. Development of surfaces, solids, and intersections of planes and solids, transition pieces. Finding intersections and development by primary and secondary auxiliary drawings, use of cutting planes, and rotation of elements and planes.

110-1 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 lectures from industry and other departments. Pass-No Credit grading only.

200-9 (3,3,3) Circuit Analysis. Required core curriculum course for electronic engineering concentrations. Integrated study of lumped element electric circuits in DC, sinusoidal steady state, and transient modes. Emphasis on analysis techniques including those suitable for digital computer implementation. Graphical, linear incremental modeling, convolution, and state space approaches as well as classical and transform methods for linear time-invariant circuits. Singularity functions, network theorems, and two part analysis. Must be taken in a,b,c sequence. Prerequisite: concurrent enrollment in Mathematics 260a.

201-2 Circuit Analysis Laboratory. Laboratory experiments exemplify the material covered in 200. Laboratory procedures, techniques of measurement, and report writing are stressed. Prerequisites: 200a, concurrent enrollment in 200c.

205-4 Applied Electricity-Electronics. Fundamental principles and practice of AC/DC circuits, and equipment and control devices. Introduction to electronic instrumentation and control: special selected projects to illustrate application. Not for engineering concentrations or secondary concentrations; primarily a service course for sanitation technology program.

210-4 Engineering Problem Solving Technique. Engineering computation techniques including introduction to mechanical aids such as slide rule, desk calculators, minicomputers, time-sharing, and computer center services. Complex number manipulations, logarithms, functional notation, graphs, roots of equations, simultaneous equations, and computer routines associated with all the presented topics. Prerequisite: concurrent enrollment in Mathematics 150a.

220-3 Electrical Circuits. DC and AC electrical circuits, including network models, Kirchhoff's laws, mesh current equations, superposition theorem, phasors, rms values, AC power, and the Fourier Series. Not for electronic engineering concentrations. Prerequisites: Mathematics 150b, concurrent enrollment in 221.

221-1 Electrical Circuits Laboratory. Laboratory study of DC and AC circuits, illustrating principles discussed in 220. Prerequisite: concurrent enrollment in 220.

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.

260-8 (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. Vector algebra used throughout. (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, Mathematics 150b or concurrent enrollment; for b: 260a.

263-3 Surveying I. Fundamentals of plane surveying, use of surveying instruments, basic field operations, and computations. Laboratory included. Prerequisite: Mathematics 140 or equivalent.

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. Prerequisites: 260a, Mathematics 250.

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 305, Physics 211b.

301-3 (1,1,1) Junior Electronic 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: 200c, 201.

313-4 Survey of Environmental Engineering. A survey of environmental problems, their causes and effects, and methods of solution. Emphasis on pollution control, air quality, water quality, and solid waste disposal. Environmental engineering principles and meth-

odology. Not for urban and environmental engineering concentrations. Prerequisite: junior standing or consent of instructor.

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.

315-4 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 bearing capacity, settlement and slope stability values. Prerequisite: 314.

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: 260.

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: 220.

321-1 Electronic Circuits Laboratory. Laboratory study of active networks illustrating principles discussed in 320. Prerequisites: 220, concurrent enrollment in 320.

325-4 Physical Electronics. Solid-state physics as applied to band theory of semiconductor devices; electron emission; diffusion and mobility of electrons and holes; selected topics in charged particle dynamics and statistical mechanics; analysis of some new semiconductor devices. Prerequisites: 200, Mathematics 305, Physics 300.

326-4 Linear Electronic Circuits. Linear electronic circuits using transistors, FET's, and vacuum tubes. Load lines and biasing of active devices. Feedback and its effects on circuits. Small signal amplifiers. Integrated circuits. Frequency response. Prerequisite: 325.

327-4 Pulse and Digital Circuits. Pulse and digital electronic circuits. Pulse transformers. Switching characteristics of active devices. Transistor switches. Comparators, clippers, and clippers. Logic circuits. Registers. Multivibrators. Prerequisite: 326.

330-8 (4,4) Engineering Electromagnetics.h(a) Static electric and magnetic fields theory including field distributions 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 transient response of lossy lines. Must be taken in a,b sequence. Prerequisites: Mathematics 350b, Physics 211c.

332-4 Manufacturing Techniques and Systems. Focus upon industrial manufacturing methods and procedures and the relationships among components in the manufacturing process. Emphasis on the integration of components in the design of a production facility.

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 and use of automated structural analysis programs. Must be taken in sequence. Prerequisites: 270, Mathematics 305.

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.

351-3 Linear Systems Analysis I. Introduction to the analytical tools available for study of the input-output relations of linear systems. Classification of systems, time and frequency domain techniques for both continuous and discrete systems, and signal flow graphs. Prerequisites: 200, Mathematics 260.

352-3 Stochastic Processes. Introduction to probability, stochastic processes, and methods of representing stochastic signals. Processing of stochastic signals, noise, and introduction to detection theory. 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.

360-4 Human Factors. A study of human factors and their impact upon the design of industrial processes. Emphasis on designing production systems to meet the physiological and psychological needs of those involved in the production process.

363-3 Surveying II. Errors and calibration concepts, route surveying, triangulation, building construction surveying and introduction to photogrammetry. Laboratory included. Prerequisite: 263.

370-4 Engineering Materials. Quantative and qualitative behavior of materials as related to the physical and chemical structure of solids. Laboratory determination of mechanical properties of materials. Prerequisite: 270.

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.

380-12 (4,4,4) Environmental Engineering I, II, III. (a) Environmental Unit Operations. Selected topics from analytical and physical chemistry as applied to examination and treatment of water and waste water. Adsorption, extraction, coagulation, basic principles of chemical reactors. **(b) Water Supply and Treatment.** Planning and design of water supplies, distribution systems, and treatment systems. **(c) Waste Water and Solid Wastes.** Primary, secondary, and tertiary treatment of waste water. Solid waste disposal by incineration sanitary landfills, wet combustion. Waste water treatment plant design, construction, and finance. Laboratory included. Must be taken in sequence, or have consent of instructor. Prerequisites: (a) Chemistry 125b, Mathematics 150a; (b,c) 316.

395-2 to 8 Readings in Engineering. Supervised reading in selected subjects. Prerequisites: junior or senior standing, concentration in engineering, consent of department chairman.

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. Must be taken in a,b 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. 300.

404-4 Modern Filter Theory—Synthesis and Design. The synthesis and design of passive and active filters. The approximation of frequency domain and time domain specifications by realizable transfer functions. The use of the operational amplifier in linear, active filters. Prerequisites: 353, 327 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. Prerequisite: Mathematics 480b.

419-3 Mechanics of Fluids. Fundamental properties of fluids; fluid statics and dynamics; continuity, momentum and energy equations; selected problems in laminar, compressible and turbulent flow, closed conduit and open channel flow. Prerequisites: 270, 300.

420-4 Mass and Energy Transport. Principles and mechanisms of energy, mass, and momentum transport. Molecular motion, laminar flow of a continuum, and transport in solids. Turbulent flow, inter-phase transport radiative transfer, and macroscopic balances of mass, energy, and momentum. Scheduled laboratory projects. Prerequisite: 419.

421-1 Fluid Dynamics Laboratory. Laboratory experiments and projects to study the flow of fluids in free flow, conduits, and porous media. Dynamic similitude and basic concepts of laminar flow, boundary layers, turbulence, and energy dissipation. Prerequisite: concurrent enrollment in 419.

423-3 Hybrid Computation. The simultaneous use of the analog and the digital computer for the solution of engineering problems. Scaling of problems. Block diagrams and logic are stressed. Linear and nonlinear differential equations. Simulation as well as iterative analog computation are covered. Prerequisite: Mathematics 225.

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.

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. 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. 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. Prerequisite: senior standing or consent of chairman.

444-3 Electrical Engineering Design. Elements of design in electrical engineering. Completion of several "paper designs" selected from the various areas of electrical engineering. Final examination consists of design of a project selected by student with approval of engineering faculty, this design to be used as the basis of the project in 445. Prerequisite: senior standing.

445-2 Electrical Engineering Design Laboratory. The design generated for final examination in 444 is constructed and tested. Student works in consultation with one of members of engineering faculty. For certain projects, computer simulation may be used to supplement or even replace construction and testing of the design. 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.

452-4 Design of Integrated Production Systems. Emphasis on integrating available resources to achieve an efficient production system. Problems in plant layout and materials handling are stressed. Prerequisite: 472.

463-4 Transportation Site Selection. Engineering techniques in transportation facilities site selection. An introduction to the use of air photos to identify and evaluate engineering controls and constraints in site selection. Laboratory included. Prerequisites: 363, 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 material are assigned. Prerequisite: upperclass standing.

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.

473-4 Advanced Production Management. (Same as Production 463.) 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. Prerequisites: 471, 472.

475-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.

477-3 Construction Engineering. Application of engineering principles to modern methods of construction; office and field procedures; construction materials; construction planning including elements of critical path scheduling. Linear programming, and computer methods for civil engineering, design, and simulation. Prerequisite: 314.

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 equivalents.

480-8 (4,4) Industrial Waste Treatment I, II. (a) Liquid and Solid Wastes. Problems arising from industrial water pollution and solid wastes, sources and characteristics of industrial wastes, effects on streams and other public waterways. Methods of treatment with specific applications to various industries, (b) Air Pollution. Basic principles of air pollution; causes, monitoring, and control. Monitoring equipment and networks. Control methods and equipment. Air pollution problems and technology as applied to various industries. Prerequisite: 380 or consent of instructor.

481-4 Functional Analysis of Digital Equipment. Logic circuits including standard gates, function realization and minimization, and logic 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 Introduction to Digital Equipment Design. Circuit realizations of logic and sequential functions. Relationship of operational specifications to circuit performance. Memories and associated circuitry. Diagnostic testing and trouble shooting. Design for easy maintenance. Case studies in hardware design. Prerequisite: 481.

483-4 Digital Processor Programming. Software requirements for general purpose, 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. Prerequisite: 481.

485-4 Communication Theory I. Elements of communication systems, spectral representation of signals and noise, filters and filtering, signal-to-noise ratios, analog (linear and exponential) modulation, sampling theory, pulse modulation and multiplexing. Prerequisites: 327, 353.

486-4 Statistical Communication Theory. Optimum receiver principles including both the correlation receiver and the matched filter receiver, block-orthogonal signaling, channel capacity, convolutional codes, sequential decoding, channel models. Prerequisites: 352 and 485 or consent of instructor.

487-4 Management Systems Simulation. (Same as Management Science 382.) A presentation of theoretical and practical aspects of simulation techniques in the design, evaluation, and control of management and physical systems. Construction and validation of computer simulation models to evaluate the effectiveness of system models. Prerequisite: Mathematics 480b.

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. Prerequisites: 270, 340b or equivalent.

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. Prerequisites: 330b, 353.

491-4 Microwave Electronic Devices. The study of microwave electronic devices and some of their applications. Microwave tubes including the traveling wave tube, the klystron, the magnetron, and the backward wave oscillator. Microwave solid state diodes

including the tunnel diode amplifier and the parametric amplifier. PIN diodes. Microwave transistors. The cavity maser amplifier and the traveling wave maser amplifier. Prerequisite: 490 or consent of instructor.

Mathematics

101-4 Fundamental Mathematics. Basic notions of sets; number systems and their algebraic properties and some computational aspects; ordering of real numbers, inequalities, and absolute value; intuitive geometry; relations, variables, and functions. Individual instruction given as needed until completion of intermediate algebra. Ten lecture and laboratory hours per week. May not carry credit toward some degrees. Graded on pass-fail basis only.

105-4 Basic Mathematics. Numbers and the number line, rational expressions, operations with complex numbers, elements of plane geometry, first degree equations and inequalities with absolute values, exponential and logarithmic equations, applications of algebra to different disciplines, elements of probability and statistics. Prerequisite: 101 or equivalent.

140-4 Precalculus Mathematics. A study of elementary properties and applications of polynomial, exponential, trigonometric, and certain other functions. Some topics from analytic geometry are included. Prerequisite: 125.

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 a,b sequence. Prerequisite for (a): 125.

191-6 (3,3) An Honors Course in Mathematics. For Qualified students who wish to study mathematics in depth. Admission by examination only. Prerequisite: consent of instructor.

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: 250.

310-4 The Teaching of Elementary Mathematics. (For elementary education concentrations only.) A professional treatment of the subject matter of arithmetic methods and a study of trends and current literature on the teaching of arithmetic. Prerequisite: one year college preparatory mathematics or equivalent, or consent of instructor.

311-4 The Teaching of Secondary Mathematics. A study of the nature and objectives of the secondary mathematics curriculum. Stress on the means of introducing new ideas into the high school program. For students preparing to be certified teachers of secondary mathematics. Does not count toward a mathematics concentration for Bachelor of Arts degree students. Prerequisites: 321, Secondary Education 315.

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.

326-9 (3,3,3) Applied Logic, Algorithms, and Discrete Structures. Sets, relations, and mappings; Boolean algebra; the propositional calculus; algorithms and computing machines; the first order predicate calculus; formal languages; introduction to combinatorial mathematics; graphs, trees, networks; introduction to data structures. Prerequisite: 225 or 226.

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/1; string-manipulation and list-processing languages; comparisons with Algol and Fortran; dynamic allocation and programmer-defined interrupts. Computer applications emphasized. Prerequisite: 272.

372-6 (3,3) Programming and Design Techniques. (a) History of programming, structured programming, team programming, program testing and verification, decision tables, coroutines, recursive programming. (b) Systems development process, tools and guidelines for structured design, using structured design, related subjects. Prerequisites: 226, 272.

373-4 Assembly Language Programming. Job control language; machine language; assembly language; assemblers. Prerequisite: 273.

400-3 History of Mathematics. A historical introduction to the development of selected mathematical concepts. Prerequisite: 350 or consent of instructor.

406-4 Introduction to Computer Organization and Programming. Number systems, computer arithmetic, character codes, computer hardware and software, job control languages, machine language, assembly language, assemblers. Not acceptable toward a master's degree in mathematical studies. Prerequisite: knowledge of at least one programming language.

407-4 PL/1 Programming and Data Structure. Basic features of PL1 plus string manipulation, on-conditions, block structure and dynamic allocation, and list-processing features. Data structures include stacks, queues, and general linear lists, orthogonal lists, trees and graphs; sequential and linked allocation schemes and various algorithms for accessing them. The PL/1 programming assignments involve applications of various data structures. Prerequisite: consent of instructor.

410-12 (4,4,4) 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 non-parametric statistics; (c) design of experiments. 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.

411-4 Sample Surveys. Basic concepts of sampling: stratified, multistage systematic and cluster sampling; design of surveys, sampling from imperfect frames. May not be taken for graduate credit by mathematics students. Prerequisite: 410a.

414-2 to 12 Special Topics for Teachers of Elementary Mathematics. (a) Numbers and Number Systems. (b) Algebra. (c) Geometry. (d) Number Theory. (e) History of Elementary Mathematics. (f) Probability and Statistics. (g) Computer Science. (h) Logic and Foundations. May not be taken for credit towards a concentration in mathematics. Prerequisite: consent of instructor.

416-2 to 12 Special Topics for Teachers of Secondary Mathematics. (a) Analysis. (b) Algebra. (c) Number Theory. (d) Probability and Statistics. (e) Computer Science. (f) Geometry. (g) History of Mathematics. (h) Applied Mathematics. (i) Logic and Foundations. May not be taken for credit towards a concentration in mathematics. Prerequisite: consent of instructor.

420-6 (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.

426-4 Modeling for the Environmental Sciences. The study of mathematical modeling with applications in the environmental sciences. Model construction; linear optimization; graphs; growth processes; simulation models. Prerequisite: 40 hours of natural science, engineering or mathematics, including Mathematics 150b.

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: 350 or consent of instructor.

435-9 (3,3,3) Fundamental Concepts of Geometry I. 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.

436-9 (3,3,3) Fundamental Concepts of Geometry II. An axiomatic study of n-dimensional Euclidean geometry, affine geometry, and projective geometry by means of groups of transformations. The crystallographic groups and the affine and projective classification of quadrics. Must be taken in sequence. Prerequisite: 435 or consent of instructor.

437-3 Differential Geometry. Curves and surfaces in Euclidean n-space. Intrinsic properties. Prerequisite: 350 or consent of instructor.

450-9 (3,3,3) Fundamental Concepts of Analysis. The real number system, topology of \mathbb{R}^n , continuity and differentiability of functions from \mathbb{R}^m into \mathbb{R}^n , the Riemann integral, elementary analysis in normed linear spaces. Must be taken in sequence. Prerequisite: 321, 350; or consent of instructor.

462-4 Transforms for Applications. Fourier transforms, fast Fourier transforms, convolution and superposition integrals, applications to initial and boundary value problems, introduction to generalized functions. Prerequisites: 305, 350a.

463-9 (3,3,3) Advanced Calculus for Applications. (a) 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: 260, 305.

465-9 (3,3,3) 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: 225, 305, 321.

470-9 (3,3,3) Data Structures, Programming Languages, and Compiling Techniques. (a) Data structures-lists, trees, multilinked structures; formal specifications and algorithms. Dynamic allocation. (b) Characteristics of programming languages. Structure of simple statements; algorithmic languages, list processing and string manipulation languages. (c) Compiler construction; compiler organization. Must be taken in sequence. Prerequisites: 229, 326; or consent of instructor.

473-8 (4,4) Computer Organization and Operating Systems. Review of job control language and 370 basic assembly language, reentrant programming, I/O programming, multiprogramming and spooling, loaders, memory protection, memory management, processor management, device management, information management, microprogramming and teleprocessing. Prerequisites: 229b, 372a.

474-6 (3,3) Switching Theory and Sequential Machines. Finite automata and sequential machines. Equivalence of states and machines; congruence, generalized and incomplete machines. Must be taken in sequence. Prerequisite: 326 or consent of instructor.

475-6 (3,3) Application Systems Programming. (a) Case Study. Examination of systems programs with attention to I/O specifications, hardware configurations, systems flowcharts, documentation, utility programs, data transformations, modularization, impact of systems alternatives. (b) Team project. Given an information base and a project's goals, each team designs an implementing software system. Prerequisites: 372, knowledge of COBOL.

480-9 (3,3,3) 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 for a,b: 350; for c: 321.

481-3 Applications of Statistical Methods. Applications of the fundamental concepts of statistics presented in 480. Selecting appropriate mathematical models, finding solutions to practical problems, and reporting the results; computer simulation to test procedures, and packaged programs to handle large amounts of data. Prerequisite: 480c or concurrent enrollment.

482-6 (3,3) Linear Statistical Models for Applications. Aspects of multivariate analysis, regression, analysis of variance, and design of experiments. Prerequisite: 480.

484-3 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: 480b 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.

486-9 (3,3,3) Operations Research. An introduction to topics of operations research: linear programming, transportation and network models, PERT, dynamic programming, queueing and inventory models, digital simulation, Markov chains. Emphasis on mathematical modeling and related methodology. Must be taken in sequence. Prerequisites: 225, 480a; or consent of instructor.

487-3 Nonparametric Statistics. Statistical inference using distribution free methods. Randomization, the sign test, Wilcoxon and Mann-Whitney tests, signed-rank tests, goodness-of-fit tests, independence, correlation, and regression. Prerequisite: 480b or consent of instructor.

495-1 to 6 Independent Study. Research and reading in a specified area of interest. (a) Algebra. (b) Geometry. (c) Analysis. (d) Probability and Statistics. (e) Mathematics Education. (g) Logic and Foundations. (g) Topology. (h) Computer Science. (i) Operations Research. Prerequisite: consent of adviser.

499-3 (1,1,1) Senior Seminar. A problem seminar for senior mathematics concentrations. Prerequisite: consent of instructor.

Physics

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 a,b,c 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, thermodynamics. (c) Electric and magnetic fields, potential, circuits, reduction. Prerequisite: (a) Mathematics 150b or concurrent enrollment; (b,c) 211a.

302-8 (4,4) Modern Physics. (a) Electromagnetic waves, geometrical and physical optics, special relativity, Planck's radiation theory, photoelectric effect. (b) Bohr atomic theory, Compton effect, uncertainty principle, wave-particle duality, wave mechanics, the atom, the nucleus, solid state physics. Prerequisite: (a) 211; (b) 302a.

304-4 Thermodynamics and Kinetic Theory. A macroscopic study of the thermal properties of matter and the laws of thermodynamics. Kinetic theory and the distribution of molecular velocities. Transport phenomena. Three hours of 304 are identical to Chemistry 361a. Prerequisites: 211b, Mathematics 250.

306-4 Elementary Health Physics. An introductory health physics course for students in biology, nursing, pre-dentistry, pre-medicine, and other health related fields. What radiation is, how it interacts with matter, and how it is measured. Some of the harmful effects and beneficial uses of radiation. Ionizing and non-ionizing radiation. Prerequisite: 206 or GSM 101 or 102.

308-8 (4,4) Introduction to Classical Mechanics. Statics of a particle, of a rigid body, and of a flexible string; the principle 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; non-inertial reference frames; generalized coordinates, Lagrange's and Hamilton's equations of motion; vibrating systems, normal coordinates, and wave motion. Prerequisites: (a) 211a,b, Mathematics 250; (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 anisotropic media; birefringence, optic axis, crystal optics, optical activity; theory of normal and anomalous dispersion, scattering of light by particles; quantum optics, lasers. Prerequisites: 211, Mathematics 250.

311-1 Optics Laboratory. Advanced experiments in geometrical and physical optics. Two laboratory hours per week. Prerequisite: 310 or concurrent enrollment.

312-4 (2,2) Intermediate Physics Laboratory. Experiments in mechanics, heat, wave motion, light, electricity, magnetism, atomic, nuclear and solid state physics. Prerequisite: (a) 211a or concurrent enrollment; (b) 312a.

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. Four lecture hours per week. Prerequisites: 211, Mathematics 250.

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 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: 305a.

399-3 Dynamical Meteorology. Experimental course. Thermodynamics of atmosphere, water vapor, radiation, transport equation, circulation, turbulence, storm systems, and weather modification. Prerequisite: 301.

404-3 Introduction to Statistical Mechanics. A brief treatment of the kinetic theory of gases; introduction of phase spaces and ensemble theory. Shows the connection between mechanical and thermodynamic concepts and obtains a statistical interpretation of thermodynamic processes. Prerequisite: 301, 304, or consent of instructor.

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, Mathematics 250; (b) 405a.

408-4 Applications of Physical and Chemical Methods in the Study of Biological Molecules. (See Biology 408 and Chemistry 408.)

415a-4 Wave Mechanics. Cites the evidence for a need of new "quantum theory." Considers the Schrodinger 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: 300a, Mathematics 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.

418-1 to 4 Modern Physics Laboratory. An advanced laboratory course including work with pulsed and continuous lasers and optical detectors, nuclear magnetic resonance, nuclear spectroscopy, vacuum techniques, mass and beta spectroscopy, semiconductor physics. May be repeated. Prerequisite: 300 or consent of instructor.

419-8 (4,4) 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. (b) Treatment of inhomogeneous equations and the comparison of the eigenvalue problem in a matrix representation with that in the function space representations. Prerequisites: 300a, Mathematics 305a.

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: 301, 305.

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: 301, 305.

435-3 Plasma Physics. Basic equations and conservation laws; first order orbit theory with applications to static and dynamic problems; small amplitude plasma waves; hydromagnetic shocks; collision effects; diffusion across a magnetic field; stability; coupling of plasmas and radiation. Prerequisite: 305a,b.

445-4 Solid State Methods. Simple lattice theory, elementary theory of phonons, x-ray and neutron diffraction, x-ray fluorescence analysis, neutron activation analysis, electron paramagnetic resonance, ferro, antiferro and ferrimagnetism, ferroelectrics, piezoelectricity, cyclotron resonance, Mossbauer Effect, electron microscopes, nuclear magnetic resonance. Prerequisite: 300.

450-4 Introduction to Solid-State Physics. A study of the fundamentals of solid-state physics including classification of solids, interatomic and intermolecular forces, lattice energies, specific heats, lattice dynamics, free electron theory of metals, lattice defects, color centers, luminescence, magnetic materials, radiation damage, transport in ionic crystals. Fermi-Dirac statistics, Fermi distribution, and semiconductors. Prerequisites: 300a, 305.

480-2 to 4 Selected Topics in Physics. Topics of special interest. May be repeated to total of 6 hours. Lecture format. Prerequisite: consent of instructor.

Sanitation Technology

101-3 Introduction to Sanitation Technology. An introduction to the problems identified with the technical, legal, economical, and regulatory aspects of water and air quality, water pollution and treatment. Three lectures per week.

201-10 (5,5) Water Quality I. A systematic study of laboratory procedures in water purification analysis and waste water treatment as related to plant control. Introduction to theory and laboratory techniques. Lecture and laboratory. Prerequisite: Chemistry 110a,b.

202-5 Water Quality II. Theory and application of instrumental water analytical including electro analytical, spectrophotometric, and chromatographic methods. Prerequisite: 201.

203-3 Wastewater Treatment. A study of the elementary engineering aspects of design, maintenance, and operation of wastewater treatment plants. Prerequisites: 101, Engineering 101a,b, Chemistry 202.

204-3 Water Purification. A study of the elementary aspects of the design, operations, and maintenance of water purification plants. Prerequisites: 101, Chemistry 201.

320-5 Basic Hydraulics. An understanding of practical design as it applies to the collection, treatment, and distribution of water and the collection and treatment of domestic and industrial wastewater. Prerequisites: 311, Physics 206a.

330-3 Air Pollution Principles. An introduction to the broad field of air pollution. Characteristic emissions from stationary and mobile sources, atmospheric dispersion and meteorological models, health and ecological effects, and methods of assessment.

390-3 to 6 Supervised Work Experience. Supervised work experience with industries, municipalities, or some other water related organization. A range of experience related to course work. Prerequisites: 203, 204.

420-4 Water Pollution. An investigation of the causes and effects of stream pollution, the mechanisms of stream self-purification, and nature's ecological balance in rivers and streams. Prerequisites: 203, 204, Chemistry 202.

430-3 Air Pollution Principles. An understanding in the measurement and control of air pollution. Air quality standards, methods for evaluation of emissions from transportation vehicles, municipal incinerators and specific industries, and the legal and enforcement aspects of air pollution control. Prerequisite: 330.

440-4 Advanced Treatment of Wastewater. A review of hydraulics, hydrologic cycles, sewage systems, characteristics of sewage, sludge characteristics, digestion, chemical treatment of wastewater, and principles of biological treatment. Prerequisites: 203, 320, Chemistry 201, 202.

450-3 Special Topics. Advanced topics in water and wastewater processing. Prerequisite: consent of instructor.

460-3 Industrial Waste. A study of specific processes, operational characteristics and associated problems encountered in industrial waste treatment facilities, treatment of combined municipal and industrial water, and by-products recovery. Prerequisites: 203, 420, Chemistry 202.

490-3 to 6 Supervised Work Experience. Supervised work experience with industries, municipalities, or some other water related organization. A range of experience related to course work. Prerequisite: 203, 204.

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.

402-3 to 6 Modern Physics. The development of physics in this century. For teachers of the physical sciences. Emphasis on the phenomena which led to the formulation of quantum theory in the twenties. A qualitative discussion of atomic and nuclear physics. May be repeated to maximum of 10 hours. Prerequisites: 401, Physics 206.

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 maximum of 10 hours.

412-3 to 6 Physical Science Curriculum (Elementary Level). A study of the elementary school physical science curriculum and instructional methods including SCIS, ESS, SAPA, etc. Evaluation of curricular materials and specialized materials. May be repeated to maximum of 10 hours. Prerequisite: 401 or Physics 206.

415-3 to 6 Physical Science Curriculum (Secondary Level). A study of the secondary school physical science curriculum and instructional methods including IIS-IPS, PSII, ISCS, Project Physics, etc. May be repeated to 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 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.

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 maximum of 10 hours. Prerequisite: consent of department chairman.

School of Science and Technology Faculty

Hadi H. Aly, Ph.D., Professor of Physics

Patrick Argos, Ph.D., Associate Professor of Physics

George Arnold, D.Sc., Associate Professor of Engineering and Technology

Ralph W. Axtell, Ph.D., Professor of Biological Sciences

Annette Baich, Ph.D., Professor of Biological Sciences

Ralph L. Bain, Ph.D., Chairman and Professor of Chemistry

Thomas O. Baldwin, Ph.D., Professor of Physics

Marinus P. Bardolph, Ph.D., Associate Professor of Chemistry

John D. Bauer, M.D., Adjunct Professor of Medical Technology

Harlan H. Bengtson, Ph.D., Assistant Professor of Engineering and Technology

William C. Bennewitz, Ph.D., Professor of Mathematical Studies

Myron Bishop, M.S., Emeritus Associate Professor of Engineering and Technology

Stan J. Bobowski, M.D., Adjunct Professor of Medical Technology

Richard R. Boedeker, Ph.D., Professor of Physics

Raghupathy Bollini, Ph.D., Assistant Professor of Engineering and Technology

Thomas D. Bouman, Ph.D., Associate Professor of Chemistry

Arthur J. Braundmeier, Ph.D., Associate Professor of Physics

Harold E. Broadbooks, Ph.D., Professor of Biological Sciences

Julius Brown, D.Sc., Professor of Engineering and Technology

Ronald C. Bruno, Ph.D., Assistant Professor of Physics

Norma Buckles, M.T. (ASCP), Adjunct Instructor in Medical Technology
Kermit G. Clemans, Ph.D., Professor of Mathematical Studies
Myra D. Coggeshall, M.T. (ASCP), Adjunct Instructor of Medical Technology
Daniel N. Cote, M.S., Associate Professor of Engineering and Technology
Norman S. Davis, Ph.D., Associate Professor of Biological Sciences
Beverly Douglas, M.S., Lecturer of Mathematical Studies
Henry D. Drew, Ph.D., Associate Professor of Chemistry
Garret DuBois, Ph.D., Visiting Assistant Professor of Chemistry
Harry J. Duffey, D.Sc., Professor of Engineering and Technology
Douglas Eder, Ph.D., Assistant Professor of Biological Sciences
Florence A. Fanning, M.A., Emerita Associate Professor of Mathematical Studies
F. Henry Firsching, Ph.D., Professor of Chemistry
Clifford Fore, B.S., Assistant Professor of Engineering and Technology
Gopal Gaonkar, D.Sc., Research Professor of Mathematical Studies
Arthur O. Garder, Ph.D., Professor of Mathematical Studies
Mary L. Gavin, B.S., Adjunct Instructor of Medical Technology
Arjun Godhwani, Ph.D., Assistant Professor of Engineering and Technology
Paul E. Goldenbaum, Ph.D., Assistant Professor of Biological Sciences
Ray C. Gwillim, M.S., Emeritus Associate Professor of Mathematical Studies
M. A. Hakeem, Ph.D., Professor of Physics
Dennis Hall, Ph.D., Visiting Assistant Professor of Physics
Stephen K. Hall, Ph.D., Associate Professor of Chemistry
Steven J. Hanna, Ph.D., Associate Professor of Engineering and Technology
Jimmie R. Hattermer, Ph.D., Associate Professor of Mathematical Studies
Marilyn D. Hauschild, M.S., Instructor of Mathematical Studies
Welland A. Hause, M.D., Adjunct Professor of Medical Technology
George A. Henderson, Ph.D., Associate Professor of Physics
Roger C. Hill, Ph.D., Associate Professor of Physics
Chung-wu Ho, Ph.D., Associate Professor of Mathematical Studies
William P. Hoffman, B.S., Adjunct Instructor of Medical Technology
Lyman S. Holden, Ph.D., Associate Professor of Mathematical Studies
William E. Hord, Ph.D., Chairman and Professor of Engineering and Technology
Joel D. Isaacson, Ph.D., Professor of Mathematical Studies
Emil F. Jason, Ph.D., Professor of Chemistry
Leonard C. Jones, Ph.D., Professor of Engineering and Technology
Ik-Ju Kang, Ph.D., Professor of Physics
Richard C. Keating, Ph.D., Professor of Biological Sciences
Irving J. Kessler, Ph.D., Associate Professor of Mathematical Studies
Panos Kokoropoulos, Ph.D., Associate Professor of Engineering and Technology
Alfred Korn, D.Sc., Professor of Engineering and Technology
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Marion L. Kumler, Ph.D., Associate Professor of Biological Sciences
Rudolf Kurth, Ph.D., Professor of Mathematical Studies
Michael S. Landis, Ph.D., Assistant Professor of Chemistry
Victor Lary, M.D., Adjunct Professor of Medical Technology
Mary Patricia Laughlin, B.S., Adjunct Instructor of Medical Technology
Earl E. Lazerson, M.A., Professor of Mathematical Studies
Charlotte O. Lee, Ph.D., Associate Professor of Chemistry
Michael R. Levy, Ph.D., Professor of Biological Sciences
Andrew O. Lindstrum, Ph.D., Professor of Mathematical Studies
Frank S. Little, Ph.D., Associate Professor of Mathematical Studies

Marilynn Livingston, Ph.D., Associate Professor of Mathematical Studies
John H. Matlock, Ph.D., Adjunct Assistant Professor of Physics
Michael S. Matta, Ph.D., Associate Professor of Chemistry
Laurence R. McAneny, Ph.D., Acting Chairman and Professor of Physics
John S. Meyer, M.D., Adjunct Professor of Medical Technology
Donal G. Myer, Ph.D., Chairman and Professor of Biological Sciences
P. S. Nair, Ph.D., Associate Professor of Biological Sciences
Mary E. Olvey, M.S., Adjunct Instructor of Medical Technology
Martin Osborne, Ph.D., Assistant Professor of Mathematical Studies
Clellie C. Oursler, Ph.D., Professor of Mathematical Studies
Alexander Pal, Ph.D., Associate Professor of Mathematical Studies
Rao Palamand, Ph.D., Adjunct Professor of Chemistry
Judith Anne Palermo, M.Ed., Adjunct Instructor of Medical Technology
Nancy R. Parker, Ph.D., Associate Professor of Biological Sciences
Richard B. Parker, Ph.D., Associate Professor of Biological Sciences
Irwin H. Parrill, Ph.D., Emeritus Professor of Chemistry
Timothy B. Patrick, Ph.D., Professor of Chemistry
Robert N. Pendergrass, Ph.D., Professor of Mathematical Studies
Roy P. Peterson, Ph.D., Associate Professor of Biological Sciences
Paul H. Phillips, Ph.D., Associate Professor of Mathematical Studies
Kenneth Polakoski, Ph.D., Adjunct Assistant Professor of Biological Sciences
David G. Rands, Ph.D., Professor of Chemistry
Kermit O. Ratzlaff, Ph.D., Associate Professor of Biological Sciences
Thomas Ruh, Ph.D., Adjunct Assistant Professor of Biological Sciences
Robert B. Rutledge, Ph.D., Professor of Mathematical Studies
Steven G. Sanders, Ph.D., Professor of Physics
George Schroeder, Ph.D., Associate Professor of Engineering and Technology
William C. Shaw, Ph.D., Emeritus Professor of Physics
Peter John Soto, M.S., Adjunct Professor of Medical Technology
John A. Spencer, Ph.D., Assistant Professor of Chemistry
David I. Steinberg, D.Sc., Associate Professor of Mathematical Studies
G. Gregory Stephen, Ph.D., Associate Professor of Mathematical Studies
Eric A. Sturley, Ed.D., Professor of Mathematical Studies
P. N. Swamy, Ph.D., Associate Professor of Physics
Frederick Sweet, Ph.D., Adjunct Assistant Professor of Biological Sciences
Jamie E. Thomerson, Ph.D., Professor of Biological Sciences
Joyce A. Torrey, M.Ed., Adjunct Assistant Professor of Medical Technology
Nadine L. Verderber, Ph.D., Assistant Professor of Mathematical Studies
Lionel K. Walford, Ph.D., Acting Dean of School and Professor of Physics
Norval D. Wallace, Ph.D., Professor of Mathematical Studies
Walter Weist, Ph.D., Adjunct Professor of Biological Sciences
J. Edmund White, Ph.D., Professor of Chemistry
Antony C. Wilbraham, Res. Dipl. Associate Professor of Chemistry
Howell K. Wilson, Ph.D., Chairman and Professor of Mathematical Studies
Gertraude C. Wittig, Dr. Rer. Nat., Professor of Biological Sciences
Arthur C. Zahalsky, Ph.D., Professor of Biological Sciences
Frederick W. Zurheide, M.S., Associate Professor of Physics

School of Social Sciences



ALLAN J. McCURRY, *Dean*

Offering degrees in:
Anthropology
Economics
Geography
Government
History
Sociology
Social Work

School of Social Sciences

The School of Social Sciences offers undergraduate and graduate courses and programs designed to enable students to achieve an understanding and appreciation of civilization viewed in the historical perspective, and to gain, through the various social sciences, an awareness of the society of which they are a part and of their role in it. These studies provide insights and understandings which enable students to live more constructively with others in the family, community, state, and nation and provide a better understanding of social organizations, technologies, the environment, and the nature and variety of human beliefs and attitudes.

The major thrust of the School of Social Sciences is instructional, complemented by research and service to the community as necessary corollaries of effective teaching. More specifically, the School of Social Sciences is dedicated to quality education in liberal and applied arts disciplines and to provide supportive courses, research efforts, and service for general education and professional programs such as general studies, teacher education, and business programs. Through its liberal arts and applied social work and regional planning programs the School has a direct impact on the region's social, economic and cultural growth. Resources are allocated to provide an effective balance among instruction, research, and service to the community so that program quality will be enhanced.

ANTHROPOLOGY

Anthropology is a subject generally unfamiliar to high school graduates. As a natural, humanistic, and social science it emerged as a discipline in the latter part of the 19th century and has been expanding rapidly since then. Anthropology 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 a clear 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 comparison of humans with other life forms, especially non-human primates; anthropological linguistics—the structure, historical nature, variety, and importance of verbal communication and the significance of non-verbal communication; archaeology—the study of the past through excavation of human and cultural remains; social anthropology—human groups and institutions, their diversity and organization; and ethnology—the variety and range of human customs beliefs, and other aspects of life ways or cultures. Additionally, students receive training in the history and theory of the discipline, the collection and analysis of data, and the application of anthropology to contemporary world issues.

Career Opportunities

Teaching	Museums
Research	Archaeological Salvage
Government Agencies	Foreign Service
Industry	

Bachelor of Arts Degree, School of Social Sciences

The Bachelor of Arts degree is designed primarily to prepare students for advanced study in anthropology and includes a foreign language requirement.

Chapter 4	209
General Studies Requirements (See Chapter 3. Waive GSS-8.)	60
Foreign Language Requirement	12
Requirements for Major in Anthropology	42
One course in each of six divisions of Anthropology	22-30
Electives to complete 42 hours in Anthropology chosen in consultation with the faculty	20-12
Minor Concentration	27
Electives	51
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Bachelor of Science Degree, School of Social Sciences

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 Anthropology 375 and/or Anthropology 475, or the presentation of acceptable evidence of previous field-work experience, in lieu of the 12 hours of foreign language required in the Bachelor of Arts Program.

Minor Concentration

A minor concentration in anthropology consists of 27 hours. GSM 365 and GSS 210, 313, 315, and 319 may be counted as part of the minor. The remaining hours consist of anthropology electives selected in consultation with the undergraduate anthropology adviser.

ECONOMICS

The Department of Economics offers two degrees under the auspices of the School of Social Sciences: A Bachelor of Arts degree with a major concentration in economics and a Bachelor of Science degree with a major in economics. Candidates for either of these degrees must complete 46 hours in the economics major and complete a minor concentration in any other social science, business area, mathematics, or other field. Students in the Bachelor of Arts degree program must complete 12 hours in a foreign language. Students in the Bachelor of Science degree program are *not* required to take any foreign language courses. Students completing either of these degrees should be prepared to continue with advanced work in economics, enter professional schools in such areas as business, law, public administration, or urban planning, or begin careers with public service agencies. Those students planning to enter Ph.D. programs in economics are strongly advised to take their minor concentration 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.

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 with the advice of an undergraduate economics adviser.

Bachelor of Arts Degree, School of Social Sciences

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major in Economics¹</i>	46
GSS 351	4
GSM 144, 244	(9)
Economics 200, 201, 440, 441	16
Economics Electives	26
<i>Minor Concentration</i>	27
The minor concentration must be approved by the student's adviser.	
<i>Foreign Language</i>	12
<i>Electives</i>	47
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Bachelor of Science Degree, School of Social Sciences

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major in Economics</i>	46
GSS 351	4
GSM 144, 244	(9)
Economics 200, 201, 440, 441	16
Economics Electives	26
<i>Minor Concentration</i>	27
The minor concentration must be approved by the student's adviser.	
<i>Electives</i>	59
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¹GSS 150 does not count towards completion of the requirements of a major in economics.

Bachelor of Science Degree, School of Education

The Department of Economics also offers a Bachelor of Science degree under the auspices of the School of Education. Candidates for this degree must complete either a 36- or 48-hour major in economics and the School of Education's requirements for certification in secondary education. Students completing this degree will be able to pursue advanced work in economics or teach economics at the secondary school level. Students should develop their programs in consultation with an economics adviser.

The following courses constitute a 48 hour major in economics: GSS 150, 351, GSM 244, Economics 200, 201, 300, 440, 441, and 16 hours of economics electives.

The following courses constitute a 36 hour major in economics: GSS 150, 351, GSM 244, Economics 200, 201, 300, 440, 441, and 4 hours of economics electives.

For the requirements for certification, see secondary education.

Minor Concentration

A minor concentration in economics shall consist of 24 hours and must include 200, 201, 440, and 441. The remaining 8 hours shall consist of electives in economics chosen in consultation with an adviser from the Department of Economics.

Bachelor of Science Degree, School of Business

See School of Business section of this chapter.

GEOGRAPHY

The Earth Sciences and Planning Department offers the Bachelor of Arts degree and the Bachelor of Science degree in the School of Social Sciences. Teaching field concentrations in geography and earth sciences lead to the Bachelor of Science degree offered in the School of Education.

The degree programs offered by the Earth Sciences and Planning Department provide a thorough knowledge of geography in preparation for civil service appointments or for positions in other public or private organizations requiring the services of geographers, meteorologists, cartographers or planners. The earth sciences concentration is designed to give students a broad scientific background which prepares one for professional positions with environmental agencies or in work related to natural resources or conservation. This concentration serves as a partial foundation for graduate study in such fields as geology, hydrology, meteorology, environmental studies, and urban-regional planning. The pre-planning area of emphasis provides background courses for students who wish to pursue a professional degree in planning at the graduate level.

The program leading to a Bachelor of Science in Education degree provides preparation to teach geography or earth sciences in the junior high or secondary schools. With additional graduate work one could also teach in the junior or community college. Departmental courses also aid in preparation for the broader teaching fields of physical science and social science.

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 or earth science should consider work 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 and planning students are strongly urged to take work in qualitative methods. A minimum of high school algebra is also recommended. Students working toward a major concentration are allowed credit only for those departmental courses in which they receive a grade of C or better. Eight hours of departmental General Studies may be counted as elective courses in the undergraduate major concentration, and, with permission of the undergraduate adviser, 12 General Studies hours may be used in the minor concentration.

Career Opportunities

Law	Diplomacy
Teaching	Business
Governmental Administration	Planning
Politics	

Bachelor of Arts Degree, School of Social Sciences

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major in Geography</i>	48
Required courses: (for all areas of emphasis except earth science—see below) 302, 303, 304, 306, 308, 310a, 404a, 410a, and a non Anglo-American regional course	36
Area of emphasis (courses to be approved by undergraduate ad- viser)	12

Physical geography, economic geography, cultural geography or regional geography	12
Cartography	12
Area development	12
Pre-planning	12
Earth science required: 215, 303, 308, 400, 401, 410a, and approved electives to total 50 hours.	
<i>Foreign Language</i>	12
<i>Minor Concentration (recommended but not required)</i>	28
Minor concentration in mathematics recommended if the area of emphasis is cartography.	
<i>Electives</i>	44
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Bachelor of Science Degree, School of Social Sciences

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.

Bachelor of Science Degree, School of Education

For this degree, students must complete all General Studies and School of Education requirements in addition to the departmental requirements listed above in the Bachelor of Arts degree; for this degree a minor is required. A 36-hour major concentration also is possible with the completion of two minor concentrations.

For this degree, the earth sciences concentration requires Geography 444, Teaching of Earth Science. Students are urged to take a minor concentration in such fields as biology, chemistry, physics, mathematics, or environmental studies. For the geography teaching concentration either 443 or 480 is recommended.

Minor Concentration

Students working for a 28-hour minor concentration in geography or taking the social studies concentration in education must take 304, 306, and 308.

A minor in earth science consists of 30 hours selected from those courses required for a major.

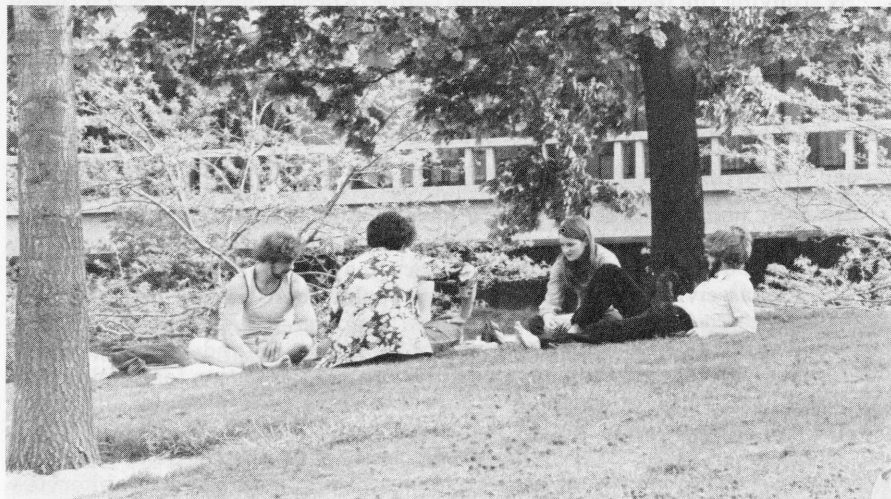
GOVERNMENT

Government and politics are subjects about which most people have some knowledge and opinions. But most also find them confusing, at least some of the time; Political scientists are concerned with knowing and explaining political phenomena: elections, wars, court decisions, pressure group activity, and revolutions. Students may select from a wide variety of courses, covering domestic and/or international affairs; administrative, judicial, legislative and/or executive politics; the theory and/or practice of governments; and, governmental and/or non-governmental political agents and processes. From them they will become familiar with the fundamental elements of contemporary political affairs.

Bachelor of Arts Degree, School of Social Sciences

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Foreign Language</i>	12

<i>Requirements for Major in Government</i>	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.	
<i>Minor Concentration</i>	28
<i>Electives</i>	44
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Bachelor of Science Degree, School of Social Sciences

Requirements for the Bachelor of Science degree are the same as for the Bachelor of Arts degree except that the student need not offer a foreign language proficiency.

Bachelor of Science Degree, School of Education

For this degree, the requirements for a major in government total 48 or 36 hours in government, including 200 and 203, depending on whether the student has one minor concentration or two. At least 3 hours (but no more than 20 hours) should be taken in four of the six areas of specialization listed above. See Secondary Education requirements.

Minor Concentration

A minor concentration is 28 hours and must include 200 and 203 and at least one course in three of the six areas of specialization.

Career Opportunities

Government Service
Industry

Legal Practice
Teaching

HISTORY

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 better to 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.

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 as civil servants. 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 traditionally found employment in journalism, editing and research.

Students who intend to study for the Bachelor of Arts or Bachelor of Science degree with a teaching concentration 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 concentration 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.

Bachelor of Arts Degree, School of Social Sciences

<i>General Studies Requirements (See Chapter 3.)</i>	60
<i>Requirements for Major in History</i>	52
Four courses (at least one in U.S. History) from GSS 101, 102, 105, 300, 301, 302, History 100, 102, 107	16
History 452	4
Eight courses elected by the student at the junior-senior level (303-499)	32
<i>Foreign Language Requirement</i>	12
<i>Minor Concentration</i>	27
<i>Electives</i>	41
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Bachelor of Arts Degree (Honors Program), School of Social Sciences

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.

Bachelor of Science Degree, School of Social Sciences

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.

Bachelor of Science Degree, School of Education

The major requirements in history are the same for the Bachelor of Science degree offered by the School of Education as for the Bachelor of Science degree offered by the School of Social Sciences. (See Secondary Education.)

Minor Concentration

The minor concentration requires that students select three courses from GSS 101, 102, 105, 300, 301, 302, History 100, 102, 107. At least one of these courses should be in U.S. History. In addition, five courses numbered between 303-499 should be completed.

Minor Concentration in Latin American Studies

The minor concentration 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

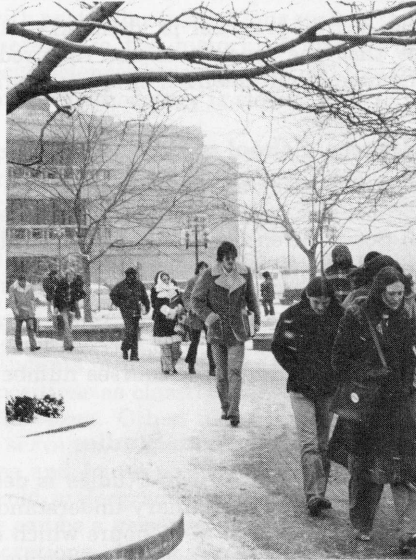
Sociology is the scientific study of groups, organizations, institutions, and societies. Sociologists are also interested in the values and beliefs that underlie human relationships. Where other social sciences specialize in particular aspects of personality development or in particular social institutions, sociology is concerned with the general overall relationships among social institutions and between group membership and personality. Through sociology students come to understand themselves, their relations to other people, and the nature of our society.

An area of concern to sociologists is social problems including race relations, social deviance, social inequality, urban problems, crime, marriage, and family relationships. Through sociology a person can come to understand how personal troubles relate to interpersonal, regional, national, and world issues. While many perspectives are essential to identifying the causes of social problems and the alternative solutions to them, sociology offers a broad, integrating overview.

The methods used by sociologists are scientific. Whatever a sociologist claims about a social institution or social problem must be substantiated with factual evidence or a sociologist must make clear how such evidence might be obtained. It

is attention to gathering data that distinguishes sociology from some other approaches to dealing with social problems.

Because sociology is a general social science, students majoring in other fields should find courses in sociology helpful. This is especially true for such courses as medical sociology, the sociology of education, contemporary social problems, marriage and the family, industrial sociology, social psychology, and others.



Career Opportunities

Persons with an undergraduate degree in sociology find a variety of jobs accessible to them. A number of government agencies and some business firms are interested in obtaining the services of well educated young 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 or local level are interested in persons with undergraduate degrees in sociology. Sociology majors obtain positions in social case work, in probation and parole services, in police departments, in city or regional planning agencies, and in employment and welfare agencies. A major in education with a concentration in sociology prepares one to teach in the growing number of secondary schools that offer sociology courses. Finally, there are reasonably good job opportunities in research, administration, and college teaching for persons who continue their sociology training in graduate school.

The Bachelor of Science degree in sociology requires 48 hours of course work including GSS 130, Sociology 301, 312, 321 and 451. 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. Students in the School of Education are required to complete 48 or 36 hours in sociology, depending on whether the student has one or two minor concentrations.

Bachelor of Arts or Bachelor of Science Degree, School of Social Sciences

<i>General Studies Requirements (See Chapter 3. Waive GSS-8.)</i>	60
<i>Requirements for Major in Sociology</i>	48 or 60
Foreign Language (required for B.A. only)	(12)
GSS 130	4
Sociology 301, 312, 321, 451	16
Sociology electives. (410a is recommended for students planning to pursue graduate work in sociology)	28
<i>Minor Concentration</i>	28
<i>Electives</i>	56 or 44

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Bachelor of Science Degree, School of Education

The requirements for this degree with a major in sociology include GSS 130, Sociology 301, 312, 321, and 451 and sociology electives to complete 48 or 36 hours, depending on whether the student has one or two minor concentrations. (See Secondary Education requirements.)

Minor Concentration

A minor concentration in sociology consists of 28 hours of course work in sociology and may include GSS 130.

SOCIAL WORK

Social Work is the professional activity of helping individuals, groups, or communities enhance or restore their capacity for social functioning and creating societal conditions favorable to this goal. Social work practice consists of the professional application of social work values, principles, and techniques to one or more of the following ends: helping people obtain tangible services; counseling and psycho-therapy with individuals, families, and groups; helping communities or groups provide or improve social and health services; and participating in relevant legislative processes. The practice of social work requires knowledge of human development and behavior; of social, economic, and cultural institutions; and of the interaction of all these factors.*

*Excerpted from Policy Statement #4, Standards for Social Service Manpower, National Association of Social Workers, Washington, D.C., 1973.

Career Opportunities

With the growing acceptance of levels of professional social work practice, the baccalaureate degree qualifies for professional entry. Expanding career opportunities for social workers are found in many settings and capacities; the following listing is far from exhaustive: medical social work, children and family services geriatric settings, social security, vocational rehabilitation, youth and adult corrections, school social work, child protection and advocacy, public aid, mental health settings, crisis intervention, neighborhood centers, drug and alcohol abuse programs, family planning, adoption and child placement, military service, YMCA, YWCA, Boy Scouts, Girl Scouts, Veterans' Administration.

The undergraduate Social Work program of study is professional in nature. By focusing on the knowledge, values, and skills common to the social work profession, the program prepares the graduate for beginning practice or for entry into a graduate school of social work. The program prepares the student for

responsible and skilled work with individuals, families, groups, and communities. In the tradition of the profession, the student is oriented both to direct services and to institutional and social change. Even though the program emphasis is generic, the opportunity to explore specific interests is available in the selection of elective courses and the practicum setting.

Students who plan to secure the Bachelor of Science degree in Social Work should arrange to meet with a 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.

Bachelor of Science Degree, School of Social Sciences

<i>General Studies Requirements</i>	60
<i>Professional Requirements</i>	48
Social Welfare 200, 375, 381, 383, 480, 481, 482, 490	40
Nursing 270	4
Sociology 312	4
<i>Supporting Requirements</i>	32
Eight credit hours each in Government, Economics, Sociology, and Psychology. (General Studies courses in these areas are credited to this requirement.)	
<i>Minor Concentration</i>	28
(Courses taken in minor concentration area as fulfillment of General Studies and supporting electives requirements are also credited to this requirement.)	
<i>Electives</i>	24

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In addition to classroom courses, the student spends 300 actual hours in a practice setting. This course is Social Work 482 and gives 12 credit hours. It may be taken as a block, 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 the skills necessary for the professional social work practitioner. Field settings are arranged to meet the student's individual needs and interests, in settings suitable for practicum learning.

Courses

Anthropology

305-9 (3,3,3) Peoples and Cultures of the World I. The biological and cultural history of man in (a) North America, (b) Asia, and (c) Oceania from early times to the present.

307-3 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.

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.

367-3 Growth of New World Civilization. Beginnings and rise of culture-centers in the New World, with special attention on Mexico, Yucatan, and Andean developments; ecol-

gical and cultural factors conditioning the rise of regional and inter-regional cultural manifestations.

375-4 to 12 Archaeological Field Methods. An introduction to archaeological field techniques including site survey and evaluation techniques, excavation and data recording, laboratory methods and interpretation. Emphasis on new techniques for the recovery of information. Prerequisite: GSS 210 or consent of instructor.

400-4 Cultural Anthropology. The nature of culture and cultural process. Relationships of culture and man as an individual and as a group. Emphasis on the anthropological point of view.

401-4 Anthropological Linguistics. (Cross-listed with English 401.) Introduction to concepts, methods, analytical techniques of linguistics with examination of their applicability to more general anthropological concerns; linguistic approaches to the anthropological concerns; linguistic approaches to the anthropological study of meaning; applied anthropological linguistics.

404-4 Primitive Art and Technology. The development of man as a tool-using and art-loving being. Artistic and technological traditions of non-Western peoples, past and present.

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.

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.

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 man, government official, and other specialists dealing with man 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 the study of ethnic communities and the effects of industrialization and social complexity on modern man and his culture. Prerequisite: GSS 210 or 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.

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 Perspective. 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: 330 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. Systematic consideration of man-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.

475-4 to 12 Field School in Ethnology. Anthropological experience in cross-cultural setting to train students in ethnological field techniques and methods of research through the medium of controlled field experience. Field sites vary according to the instructor, but include American Indian reservations and rural communities and urban settings both within and outside of the United States. Students receive regular, personalized staff supervision while engaging in independent and/or group research projects. Prerequisite: GSS 210.

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 Chairman before enrolling.

Geography

215-5 Mineralogy and Petrology. Occurrence, properties, classification, origin, description, and identification of common minerals and rocks. One weekend field trip required.

302-4 Introduction to Physical Geography. A study of the earth's physical surface, world distribution patterns of the physical elements, their relationship to each other, and their importance to man. Field trip and laboratory work.

303-4 Meteorology. An introduction to weather elements, condensation process, air masses, cyclonic activity, and weather movements.

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 occupancy of the earth. Aspects of population, settlement, and political geography, and a generalized survey of major world culture areas.

307-4 Climate. A study of the major climates of the world with special emphasis on the climates of the United States.

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.

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: 215.

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.

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.

402-12 (4,4,4) Physical Geography. (a) Soils, (b) climate, (c) water.

403a-4 Principles of Geomorphology. Processes and structures influencing the shape of the land surface.

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 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 consent of instructor.

404-12 (4,4,4) Urban Geography and Ecology. (a) Urban Geography and Ecology. (b) Industrial Location. (c) Resource Base. Prerequisite: 304.

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.

410-8 (4,4) Quantitative Methods in Geography. Statistical and computer research techniques for geographers.

412-1 to Illinois Conservation Problems. Such problems as water, land use, air, mineral use, recreation, and waste disposal.

416-8 (4,4) Cartography. Instruction and practice in (a) thematic mapping, (b) planimetric mapping. 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 and vertebrates 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.

443-4 Teaching of Geography. (Same as Secondary Education 443.) Presentation and evaluation of methods of teaching geography. Emphasis on geographic literature, illustrative materials, and teaching devices suitable to particular age levels.

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 readings on areas visited.

461-8 (4,4) Geography of Anglo-America. (a) Topical. Physical, cultural, and economic coverage. (b) Regional. Treatment of specific areas.

462-8 (4,4) Geography of Europe. (a) Topical. Physical, cultural, and economic coverage. (b) Regional. Treatment of specific areas.

463-7 (4,3) Regional Geography of Mediterranean Lands and Southwestern Asia. (See 462.)

464-7 (4,3) Regional Geography of Soviet World. (See 462.)

465-7 (4,3) Regional Geography of Africa. (See 462.)

466-7 (4,3) Regional Geography of Asia. (See 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. (a) Regional planning. (b) Location of urban and regional economic activity.

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 primary concentrations only. Prerequisite: senior or graduate standing.

475-4 to 8 Field Study of Environmental Problems. Field investigation of physical features of the environment and problems relating to man's use of the natural environment and resources. Prerequisite: advanced standing.

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. Prerequisite: 8 hours of geography or a teacher 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 requirement.

308-4 Data Analysis and Elementary Statistics. (Same as Sociology 308.) Elementary data analysis including coding of data, data processing, table construction, and simple multivariate analyses. Introductory statistical concepts such as measures of central tendency, measures of dispersion, probability and tests of significance.

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.

330-3 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 examination 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.

350-12 (4,4,4) The Political Systems of Major European States. (a) A comparative study of the British and German political systems. (b) An analysis of the French and Italian political systems. (c) An examination of the organization and operation of the Soviet political system. Prerequisite: 200.

355-12 (4,4,4) Political Systems of Major Non-European States. (a) Latin America. An examination of the political systems of five representative states: Mexico, Brazil, Ecuador, Cuba, and Uruguay. (b) Asia. An analysis of four major political systems: China, Japan, India, and Indonesia. (c) Africa. A survey of African political systems. 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, De Tocqueville, as well as Supreme Court decisions and political speeches.

387-4 American Political Ideas in the Twentieth Century. Examination of twentieth century American political ideas as they affect modern American political life. Pragmatism, Wilsonian liberalism, progressivism, the New Deal, and contemporary American political ideologies.

410-8 (4,4) Quantitative Methods in Government. Statistical and computer research techniques for political scientists. (Same as Sociology 410.) Prerequisite: (a) 308 or consent of instructor or Psychology 211b; (b) 410a.

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. Prerequisite: 320.

423-4 Comparative Public Administration. An introduction to the administrative organization and practice of selected Western and non-Western nation states. Prerequisite: 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 chairman 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 psychological, 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.

447-4 Interest Groups in American Politics. An examination of interest groups in the American political process. Emphasis given both to the major theoretical arguments concerning interest groups and to the role which particular interest groups play in politics. 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 the area. May be repeated for total of 8 hours credit when content differs and consent of department chairman 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 chairman is received. Prerequisite: 350 or 355.

472-8 (4,4) International Organizations. (a) General International Organizations. 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. (b) Regional International Organizations. Examination and comparative analysis of the foundations, nature, and functioning of contemporary regional organizations, their relationship to the United Nations System, and their role in world politics. Attention is focused on such bodies as NATO, The Warsaw Pact, the OAS, SEATO, the Commonwealth, the Arab League, the Organization for African Unity, the European Communities, Comecon, and Lafta. Prerequisite: 200.

473-16 (4,4,4,4) 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. (d) United States and Latin American Relations. Analysis of the foreign policy of the United States towards the Latin American nations with emphasis on the historical development of Pan-Americanism and its effect on the foreign policies of the member nations. Prerequisite: 370.

474-4 International Law of Peace, An Introduction. An introduction to the role of international law in contemporary world affairs. The origins of international law, legal aspects of interstate behavior, the settlement of disputes, and the use of force.

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 chairman 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.

485-4 Contemporary Political Philosophy. Analysis of recent works in normative political theory. Such thinkers as Arendt, Strauss, Voegelin, Juvenal, Oakeshott, as well as the political ideas associated with existentialism, the Freudian left, and postwar European communism, socialism, liberalism, Christian democracy, etc.

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 chairman 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, right of persons accused of crime. Prerequisite: 203.

496-4 American Judicial Behavior. Introduction to the methods, goals, and limitations of behavioral research on American courts and judges. Attention given to the impact of technology on the judicial process. Prerequisite: 340c.

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. 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 fulltime 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 professional development, while also making a positive contribution to the office to which he 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.

102-4 Survey of Asian Civilization. An introduction to the history of East Asia from the earliest times to the twentieth century. Emphasis on China and Japan.

107-4 The World in Modern Times: 1919 to the Present. An introduction to the major economic, political, and cultural developments in the world since 1919.

306-12 (4,4,4) History of Rome. (a) The Republic. (b) The Western Empire. (c) The Eastern Empire. Prerequisite: 100 or equivalent.

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. Prerequisite: sophomore standing.

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.

322-12 (4,4,4) History of the Near East. (a) The formation of Islamic civilization. (b) Islamic civilization in the period of the Crusades and the Ottoman Empire. (c) Nationalism and modernization in the Near East.

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. Prerequisite: sophomore standing.

- 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) Pre-modern China to 1800; (b) modern China to the present; (c) Chinese intellectual history.
- 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. Prerequisite: 100 or equivalent.
- 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) French period to Dominion status (1867). (b) Modern Canada since 1867. The origins, and political, economic, and social development of the modern Canadian state.
- 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.
- 355-8 (4,4) History of Italy.** Political, intellectual, and social history of Italy (a) from 1494 to 1870; (b) from 1870 to the present.
- 360-4 History of Spain.** The political, social, and cultural history of Spain from prehistory to the present time.
- 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.
- 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. Prerequisite: GSS 301 or consent of instructor.
- 406-4 Post Civil War America: 1865-1896.** Prerequisite: GSS 301.
- 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. Prerequisite: 100 or equivalent.
- 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 4.0 average in history, consent of chairman.
- 412-8 (4,4) Intellectual History of the United States.** (a) To 1865. (b) Since 1865. Prerequisite: a course in U.S. history.
- 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 Absolutism and Enlightenment. Prerequisite: GSS 101 or consent of instructor.
- 417-16 (4,4,4,4) Advanced English History.** (a) Constitutional and Legal History. (b) Tudor England, 1485-1603. (c) Stuart England, 1603-1714. (b) The Empire-Commonwealth. Prerequisite: GSS 101, 102, or consent of instructor.
- 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. Prerequisite: GSS 102 or consent of instructor.
- 421-12 (4,4,4) Great Britain Since 1760.** (a) 1760-1850; (b) 1850-1914; (c) since 1914.
- 424-12 (4,4,4) Intellectual History of Modern Europe.** A study of the principal intellectual currents in European history from the Age of Louis XIV to the present. (a) 17th and 18th centuries; (b) 1815-1870; (c) 1870-1950. Prerequisites: GSS 101, 102.

425-4 American Colonial History. Founding of the American colonies and the development of their institutions to 1763. Prerequisite: GSS 300.

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. Prerequisite: GSS 300.

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 considered in detail. Prerequisite: GSS 301.

429-4 Problems in Contemporary East Asia. A study of problems which the East Asian nations (China, Japan, Korea, and Vietnam) have encountered in their efforts to modernize their states and societies. Emphasis on reforms, revolutions, and diplomatic relations. Prerequisite: a course in Asian history.

430-12 (4,4,4) Late Modern Europe. (a) Age of Revolution, 1815-1880. (b) 1880-1918. (c) Since 1918. Age of Dictatorships.

431-4 Problems in the Religious History of the Modern West. A study of critical issues of theological adaptation, institutional accommodation, and church-state relationship which characterize the religious history of Europe and America since the seventeenth century. Attention to factors contributing to crises in modern religious thought and institutions, to the various responses of religious, social, and political institutions, and to the implications of these responses for Western societies.

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) Advanced 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. Prerequisite: a course in U.S. history.

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. Prerequisite: GSS 101 or equivalent.

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.

451-8 (4,4) A Survey of Historical Writing. (a) Classical and European historiography. (b) American historiography. Prerequisite for a: GSS 101, 102; for b: a course in U.S. history.

452-4 Historical Research. The rules of historical research studied and applied to a selected topic. Required of all students with a primary concentration 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. Prerequisite: a course in U.S. history.

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 centuries.

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. Prerequisite: GSS 102 or consent of instructor.

458-8 (4,4) Science and Civilization. (a) To 1500. (b) 1500 to 1900. Prerequisites: GSS 101, 102.

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. Prerequisite: a course in Chinese history or consent of instructor.

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) American Economic History. Aspects of American economic history from (a) the colonial period to 1860 and (b) from the Civil War to 1929, with special attention to recent econometric studies of the American growth. Prerequisite: a course in U.S. History.

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. Prerequisite: GSS 102 or consent of department chairman.

Social Welfare

200-4 Introduction to Social Work. A pre-professional introductory course designed to acquaint the student with the major aspects of the profession of social work and to provide him with the opportunity to evaluate his interest in continuing training for the profession.

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 pre-professional 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 Welfare 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.

389-2 to 5 Readings in Social Welfare.

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. Prerequisite: 375, 381, 383.

481-4 Social Work Theory and Methods 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.

485-2 Principles and Practice of Child Welfare. Social work processes in a child welfare setting and related issues of policy and practice. Intended for the advanced social work student. Prerequisite: 375, 381 or consent of instructor.

490-4 Senior Social Welfare 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

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.

306-4 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.

308-4 Data Analysis and Elementary Statistics. (See Government 308.)

312-4 Research Methodology and Data Analysis. Principles of research design; methods of data collection and data analysis.

320-4 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.

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.

322-4 Propaganda and Public Opinion. Techniques and characteristics of propaganda; methods of measuring public opinion.

332-4 Social Organization. An examination of the determinants of social organization; intensive analysis of institutional configuration, social stratification, and systems of social control; review of significant writing.

333-4 Community Organization. Factor involved in community organization; types, aims, and objectives; community analysis; individual case study of specific community.

335-4 Urban Sociology. The rise, development, structure, culture, planning, and problems in early and modern cities.

336-4 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.

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.

351-4 Sociology of Religion. Functions of religious institutions in society and their relationship to other major social institutions, role in social control and group solidarity.

366-4 The Sociology of Youth. Youth, youth culture, and intergenerational conflict examined in cross-cultural perspective with focus on familial and educational institutions.

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.

374-4 Sociology of Education. Methods, principles, and data of sociology applied to the school situation; relation of the school to other institutions and groups.

396-1 to 5 Readings in Sociology. Supervised reading in selected subjects. Prerequisite: consent of chairman.

405-4 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.

406-4 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.

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.

410-8 (4,4) Quantitative Methods in Sociology. Statistical and Computer research techniques for sociologists. (Same as Government 410.) Prerequisite: (a) 308 or consent of instructor; (b) 410a or consent of instructor.

414-4 Complex Organizations. Analysis of formal and informal organizations. 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.

420-4 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.

424-4 Collective Behavior. The behavior of people in large groups; collective interstimulation and emotions; crowds, audiences, and publics; mass stimuli and mass response.

426-4 Social Psychology of Interpersonal Relations. The study of how group situations and interpersonal relations affect beliefs, behavior, and personality; the development of concepts, attitudes, and values; theories of motivation, perception, and cognition as related to social processes.

427-4 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.

429-4 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.

433-4 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.

434-4 The Urban Family. The family is studied as (1) an institution and (2) the origination of personal values and attitudes. Special attention to social reform in relationship to problems of families in the city.

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.

436-4 The Social Structure of the United States. An examination of the social structure of the United States with special attention to the structures of government, the military, and the economy.

437-4 Social Structure of Latin America. Analysis of social structures and processes including the major social institutions, demographic characteristics, agrarian reform, racial and ethnic groups, stratification, and the urbanization. Special attention to sociocultural change in contemporary societies and to Brazil as a case study.

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 the specific professions examined are medicine, dentistry and the allied health professions, teaching, law, the military, social work, and others.

439-4 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 Social Thought: The Sociological Movement. The rise and development of sociological reasoning as a response to the Industrial Revolution.

453-3 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.

455-4 The Sociology of Sociology. Examines several issues raised within the sociological discipline about the practice of sociology: the nature of the responsibility of the researcher to his subjects, the possible dysfunctional effects of academic practices for producing and disseminating knowledge, and the adequacy of currently employed methodological tools.

460-4 Sociology of Punishment. Theoretical and methodological aspects of the study of punitive behavior in everyday life encounters and situations. Analysis of interpersonal relations in a given social area with reference to unsanctioned punishment of human beings.

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 movements.

474-4 Crime and the Legal Process. An analysis of the administration of criminal law in America. The emergence of legal norms, law enforcement, prosecution, trial and sentencing, with consideration of the impact of legal sanctions on deviant behavior.

484-4 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.

485-6 Community Programs for the Prevention of Juvenile Delinquency. Analysis of delinquency prevention in community programs administered by various agencies. A critique of existing programs and 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.

School of Social Sciences Faculty

Jane A. Altes, M.A., Associate Professor of Sociology

Joyce C. Aschenbrenner, Ph.D., Associate Professor of Anthropology

Robert E. Ashpole, Ph.D., Assistant Professor of Sociology

Michael C. Astour, Ph.D., Professor of Historical Studies

William B. Baker, Ph.D., Professor of Earth Sciences and Planning

Hugh D. Barlow, Ph.D., Assistant Professor of Sociology

Earl S. Beard, Ph.D., Professor of Historical Studies

Robert R. Blain, Ph.D., Professor of Sociology

Nedra R. Branz, M.A., Assistant Professor of Historical Studies

James G. Bridwell, M.A., Chairman and Assistant Professor of Earth Sciences and Planning

Robert B. Campbell, Ph.D., Professor of Sociology

Paul J. Campisi, Ph.D., Professor of Sociology

Ching-chih Chen, Ph.D., Assistant Professor of Historical Studies

Judith Cingolani, M.S.W., Assistant Professor of Sociology

Donald W. Clements, Ph.D., Assistant Professor of Earth Sciences and Planning

Leland R. Cohen, M.A., Instructor in Sociology

James E. Collier, Ph.D., Professor of Earth Sciences and Planning

Betty I. Crowther, Ph.D., Professor of Sociology

Sidney G. Denny, Ph.D., Chairman and Associate Professor of Anthropology

John W. Ellsworth, Ph.D., Professor of Government and Public Affairs

Robert F. Erickson, Ph.D., Professor of Historical Studies
William L. Farrar, M.A., Adjunct Assistant Professor of Historical Studies
John V. Farrell, Ph.D., Visiting Assistant Professor of Government and Public Affairs
William R. Feeney, Ph.D., Associate Professor of Government and Public Affairs
Charlotte J. Frisbie, Ph.D., Associate Professor of Anthropology
Theodore R. Frisbie, Ph.D., Associate Professor of Anthropology
John G. Gallaher, Ph.D., Professor of Historical Studies
Kurt Glaser, Ph.D., Professor of Government and Public Affairs
William Goodman, Ph.D., Professor of Government and Public Affairs
Dorothy J. Gore, Ph.D., Associate Professor of Earth Sciences
Samuel B. Grant, Ph.D., Assistant Professor of Historical Studies
Richard E. Guffy, M.A., Assistant Professor of Earth Sciences
James M. Haas, Ph.D., Professor of Historical Studies
Warren H. Handel, Ph.D., Chairman and Assistant Professor of Sociology
James M. Henslin, Ph.D., Professor of Sociology
Charles F. Hess, Ph.D., Professor of Earth Sciences and Planning
Dennis W. Hostetler, Ph.D., Assistant Professor of Government and Public Affairs
Gene T. Hsiao, L.L.M., Professor of Government and Public Affairs
Deryl G. Hunt, Ph.D., Associate Professor of Sociology
Wesley D. Hurt, B.A., Lecturer in Government and Public Affairs
Edmund E. Jacobitti, Ph.D., Assistant Professor of Historical Studies
Suzanne D. Jacobitti, Ph.D., Associate Professor of Government and Public Affairs
Norman C. Johnsen, M.A., Assistant Professor of Earth Sciences and Planning
Alfred J. Junz, M.A., Adjunct Assistant Professor of Government and Public Affairs
Alfred Kahn, M.S., Professor of Earth Sciences and Planning
Melvin E. Kazeck, Ph.D., Emeritus Professor of Earth Sciences and Planning
James R. Kerr, Ph.D., Chairman and Professor of Government and Public Affairs
Stanley B. Kimball, Ph.D., Professor of Historical Studies
Harry B. Kircher, Ph.D., Professor of Earth Sciences and Planning
Robert L. Koepke, Ph.D., Professor of Earth Sciences and Planning
Fred A. Lampe, Ph.D., Associate Professor of Earth Sciences and Planning
Robert H. Lauer, Ph.D., Professor of Sociology
Carl S. Lossau, Ph.D., Professor of Earth Sciences and Planning
S. D. Lovell, Ph.D., Professor of Government and Public Affairs
Thomas J. Maloney, Ph.D., Associate Professor of Anthropology
Loran D. Marlow, Ph.D., Assistant Professor of Earth Sciences and Planning
Wilbur C. McAfee, M.A., Associate Professor of Historical Studies
Don F. McCabe, Ph.D., Assistant Professor of Government and Public Affairs
Allan J. McCurry, Ph.D., Dean of School and Professor of Historical Studies
Daniel S. McHargue, Ph.D., Professor of Government and Public Affairs
Robert E. Mendelson, M.U.P., Assistant Professor of Earth Sciences and Planning
Halsey W. Miller, Ph.D., Professor of Earth Sciences and Planning
Richard L. Millett, Ph.D., Professor of Historical Studies
Norman E. Nordhauser, Ph.D., Associate Professor of Historical Studies
Samuel C. Pearson, Ph.D., Chairman and Professor of Historical Studies
Michael A. Quinn, Ph.D., Assistant Professor of Government and Public Affairs
Patrick W. Riddleberger, Ph.D., Professor of Historical Studies
Lawrence E. Riley, Ph.D., Associate Professor of Sociology

Herbert H. Rosenthal, Ph.D., Professor of Historical Studies
Wayne D. Santoni, Ph.D., Assistant Professor of Historical Studies
Ernest L. Schusky, Ph.D., Professor of Anthropology
David F. Schwartz, Ph.D., Assistant Professor of Government and Public Affairs
Phillip Simon, M.R.C.P., Associate Professor of Earth Sciences and Planning
Arthur A. Stahnke, Ph.D., Professor of Government and Public Affairs
Ronald A. Steckling, Ph.D., Assistant Professor of Historical Studies
Donald K. Strohmeier, M.R.P., Associate Professor of Earth Sciences and Planning
Richard L. Swaine, Ph.D., Assistant Professor of Sociology
Donald L. Taylor, Ph.D., Professor of Sociology
John A. Taylor, Ph.D., Associate Professor of Historical Studies
Noble R. Thompson, Ph.D., Assistant Professor of Earth Sciences and Planning
Charles A. Thornton, Ph.D., Associate Professor of Earth Sciences and Planning
Carl D. Tubbesing, Ph.D., Assistant Professor of Government and Public Affairs
Fred W. Voget, Ph.D., Professor of Anthropology
James J. Weingartner, Ph.D., Associate Professor of Historical Studies
Stuart L. Weiss, Ph.D., Associate Professor of Historical Studies
Louis P. Westfield, Ph.D., Assistant Professor of Government and Public Affairs
Dorris W. Wilton, M.A., Adjunct Assistant Professor of Historical Studies
Ronald A. Yarbrough, Ph.D., Assistant Professor of Earth Sciences and Planning

Other Academic Programs



Aerospace Studies

Center for Urban and Environmental Research
and Services

Dean's College

Delinquency Study and Youth Development Center

Experiment in Higher Education

Off-Campus Programs

Performing Arts Training Center

Supplemental Instructional Program

Upward Bound

AEROSPACE STUDIES

The objective of the Air Force Reserve Officers Training Corps program is to qualify students for appointment as Second Lieutenants in the United States Air Force. The Air Force ROTC unit at Southern Illinois University at Edwardsville was established in September 1965. It is administered by commissioned officers of the USAF who have been assigned by the Department of the Air Force with approval of the University.

The Department of Aerospace Studies at Edwardsville 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 Courses (POC), covering the junior and senior years. The GMC curriculum covers two main themes: The Air Force Today and The Development of Air Powers. The courses of the POC emphasize the professional development of the future Air Force Officer. The curriculum covers American Defense Policy and Air Force management and leadership. Field trips to Air Force bases supplement classroom instruction by familiarizing the cadet with Air Force operations and organization.

Qualified senior Air Force ROTC cadets interested in becoming Air Force pilots participate in the Flight Instruction Program (FIP). Each FIP student receives twenty-five hours of free flight instruction at the Parks Aeronautical College flying school.



The academic hours of the General Military Course and the Professional Officer Course are allowable toward a bachelor's degree. Non-credit hours of Leadership Laboratory (one hour per week each quarter) are taken concurrently with the GMC and the POC. These courses provide leadership training experiences which will improve a cadet's ability to perform later as a USAF officer.

Air Force ROTC textbooks are loaned to all ROTC students without charge.

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 in Southern Illinois University and be in good academic standing. (d) A flying applicant must be scheduled for commissioning prior to reaching 26½; a non-flying applicant must be scheduled for commissioning prior to reaching age 30. (e) The successful completion of an appropriate four- or six-week Summer Field Training Session.

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. The uniform remains in the possession of the cadet during his two-year enrollment and becomes his property upon the successful completion of the Air Force ROTC program. (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.

Air Force ROTC Awards

Awards are presented to outstanding cadets during each academic year. Details concerning such awards are announced at appropriate times.

Air Force ROTC Scholarships

The Air Force presently offers four, three, and two year scholarships, effective in the freshman (for high school seniors), sophomore and junior years respectively, to qualified cadets. This scholarship pays all tuition, fees and books. All scholarship holders receive the \$100 per month subsistence allowance.

Illinois State ROTC Scholarship

SIUE presently provides ten state ROTC scholarships per year to qualified students. The scholarship waives tuition and activity fee for as long as the student remains enrolled in AFROTC. The basic requirements are that the applicant must be an Illinois resident, have demonstrated leadership ability and qualify on a competitive examination.

Minor Concentration

The aerospace studies program is a minor concentration provided for the primary purpose of educating the student in the leadership and managerial responsibilities associated with the administration of aerospace operations. In addition, the past, present, and future of aerospace technology is examined.

The program has a requirement of 27 hours and includes 18 hours in aerospace studies. The requirements are 301, 302, 303, 351, 352, and 353. The remaining 9 hours to complete the minor concentration consist of electives chosen from several closely related areas in consultation with the student's adviser.

Courses

100-0 Leadership Laboratory. Supervised training laboratory. Conducted as an organized cadet corps. Designed to develop each student's leadership potential. Prerequisite: concurrent enrollment in 101, 102, 103.

101-1 The Air Force Today. General Military course. Lecture discussion. Introduction to factors of national powers; nature of war; military institutions of the great powers; legislation, organization, and function of the Department of Defense.

102-1 The Air Force Today. Lecture discussion. Introduction to history, missions, and organization of the U.S. Air Force. Surveys the history and development of U.S. strategic offensive and defensive forces including their missions, functions, organization, and conventional nuclear weaponry. Prerequisite: 101 or consent of PAS.

103-1 The Air Force Today. Lecture discussion. Surveys civil defense, aircraft and missile defense, concepts of present and projections of future strategic defense requirements. Prerequisite: 101, 102 or consent of PAS.

200-0 Leadership Laboratory. Supervised training laboratory. Conducted as an organized cadet corps. Designed to develop each student's leadership potential. Prerequisite: concurrent enrollment in 201, 202, 203.

201-1 Development of Air Power. Study of U.S. general purpose forces and how they support the U.S. commitment to allied nations. Includes army, navy, and marine forces with emphasis on American air power. Prerequisite: 101, 102, 103 or consent of PAS.

202-1 Development of Air Power. Study of America's aerospace support forces, including airlift, research and development, logistics, education and training, and related supporting agencies. Prerequisite: 101, 102, 103, 201, 202 or consent of PAS.

203-1 Development of Air Power. Discussion of the conflict between totalitarian and democratic ideologies, including a historical analysis of Soviet and Red Chinese communism and the continuing struggle for peace through treaty organizations and international cooperation. Prerequisite: 101, 102, 103, 201, 202 or consent of PAS.

300-3 Leadership Laboratory. Provides a supervised training laboratory in support of and mandatory when enrolled in 301, 302, and 303. Instruction is conducted within the framework of a cadet corps, organized and operated by cadets in 300 and 340, with a progression of experience designed to develop each student's leadership potential at the junior level. Emphasis is placed on 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.

301-3, 302-3, 303-3 National Security Forces in Contemporary American Society. A study of the growth and development of aerospace power, the United States Air Force, astronautics and space operations, and the projected development of aerospace power. Involves specific exercise of each student's written and oral communication skill. Prerequisite: satisfactory completion of the GMC or the six-week field training course.

340-0 Leadership Laboratory. Provides a supervised training laboratory in support of and mandatory when enrolled in 351, 352, and 353. Instruction is conducted within the framework of a cadet corps, organized and operated by cadets in 300 and 340, with a progression of experience designed to develop each student's leadership potential at the senior level. Emphasis is placed on 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.

350-2 Flight Regulation and Navigation. A study of flight regulations, weather, and navigation. Four hours lecture, demonstration-performance. Prerequisite: enrollment in the Air Force ROTC Flight Instruction Program or consent of the PAS.

351, 352, 353-3 Air Force Management and Leadership. A study of military leadership, professionalism as it relates to the Air Force, the military justice system, and the theory and practice of management principles and functions with special reference to the Air Force and the junior officer. Participation in problem-situation, and oral and written student assignments. Prerequisites: 301, 302, 303, or consent of PAS.

Aerospace Studies Faculty

David M. Cvetan, Staff Sergeant, Adjunct Instructor of Aerospace Studies

James E. Gilliland, Staff Sergeant, Adjunct Instructor of Aerospace Studies

John N. Jasper, Captain, M.Ed., Adjunct Assistant Professor of Aerospace Studies

Terry M. Keen, Staff Sergeant, B.A., Adjunct Instructor of Aerospace Studies

Samuel R. Ross, Lieutenant Colonel, M.A., Adjunct Professor of Aerospace Studies

William J. Weiland, Major, M.B.A., Adjunct Assistant Professor of Aerospace Studies

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, though 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, education, population, and community action. 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. However, its personnel teach in and plan for standard, as well as innovative and interdisciplinary, degree programs directed toward training in urban and environmental subjects.

The Center has a staff of ten permanent 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.

THE DEAN'S COLLEGE

The Dean's College has been created to help outstanding students develop an academic program that is relevant to their needs and to assist them along the road to academic and professional competence. It was established to serve talented, creative and academically capable students from all of the disciplines as well as from secondary schools and transfer students from other institutions of higher education. The academically able student who has a real and legitimate need or reason to plan an individualized curriculum to suit his unique self, his vocational and professional needs, and his desires, is able to do so irrespective of many of the usual University requirements. The Dean's College provides a means for the selected student to study more intensively and to go more deeply into his major field of learning than would ordinarily be possible within the regular university framework.

The better academic student frequently has wide, diverse, and sometimes dissimilar interests. Through the Dean's College this type of student has the opportunity to explore more than one concentration or major and, in fact, often changes from one major concentration to another as a result of encountering exhilarating courses and professors. The Dean's College permits and encourages flexibility in academic program planning.

For advisement purposes the student being admitted to the Dean's College program is placed with a professor in the student's major field of study. It is thought that such early advisement enables the student to have early reference to a professor-specialist in his major field, and provides for important student-faculty interchange in developing the student's academic program. Thus, a Dean's College student assigned to a faculty adviser whose field of interest reflects that of the student develops with the adviser a program of studies based upon student needs and capabilities. With the adviser's cooperation, a student may take up to 4 hours of individual study (Honors Hours) during each quarter of full-time enrollment.

In general, a 4.5 grade-point average is required for admission to the Dean's College. All applicants are required to present letters of recommendation. Stu-

dents selected for the Dean's College must complete the usual 192 hours for the bachelor's degree.

Students with outstanding high school records, and others highly recommended by reason of talent by a teacher, counselor, or principal, may be admitted directly from high school. Thus high ranking high school seniors are permitted and encouraged upon graduation to apply for admission to the Dean's College. Older, mature persons and others with special talents, abilities, and needs are encouraged to inquire into the possibility of applying for admission to the Dean's College as a means of continuing their interrupted educational programs and persevering to graduation.

Overall, the Dean's College program is directed at assisting a relatively small number of well selected students to achieve their academic, their creative, and their talent potential in the University.

The Dean's College is located in Room 1337 of the John S. Rendleman Building. Correspondence may be addressed to: Coordinator, The Dean's College; Box 78; Southern Illinois University at Edwardsville; Edwardsville, Illinois 62026.

Courses

Honors Hours

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.).

DELINQUENCY STUDY AND YOUTH DEVELOPMENT CENTER

The Delinquency Study and Youth Development Center has a long history of involvement with human services problems. Although specific objectives have tended to focus on the alleviation of delinquency and promotion of youth development, the Center's scope in training, research, and program planning has included a broad range of human services problems.

Hence, preschool education, new careers training, the amelioration of poverty, and the reeducation of personnel associated with the administration of criminal justice are examples of past and current involvements. Presently the Center offers a Bachelor of Arts or Bachelor of Science degree in Human Services, a variety of programs for Vietnam-era veterans, and provides local, state, and national consultation to public and private agencies.

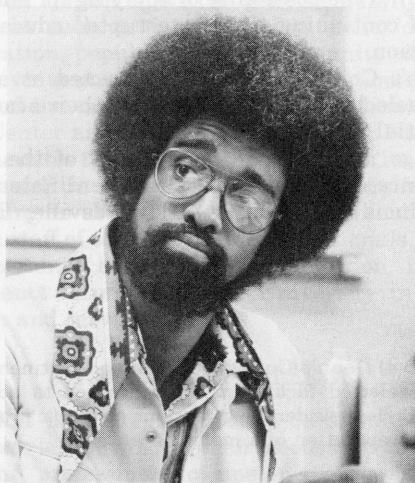
The staff of the Center consists of an eight-member interdisciplinary team of social scientists working with these problems. Psychology, sociology, education, law, counseling, theology, political science, and human development comprise the current expertise of Center professionals.

Demonstrative programming for youth, in-service training of professionals and paraprofessionals, regional and national conferences, and action research are current and typical activities. In the program, the Center offers graduate assistantships to students working toward a degree in a related discipline.

Human Services

The Human Services major is an interdisciplinary four-year program designed to prepare students to enter and function constructively in the helping professions. The helping professions are defined as the services and programs offered in the related areas of crime, delinquency, corrections, law enforcement, employment, health, and welfare.

The emphasis of the 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. Thus, a general human services education is buttressed by the specialty interests of each student.



The Human Services curriculum totals 48 quarter hours. The courses reflect the intent of the staff to provide an inter-disciplinary and relevant academic program that will prepare students to acquire the skills, concepts, and attitudes necessary for effective work in the evolving field of Human Services.

Bachelor of Arts Degree, Delinquency Study and Youth Development Center

<i>General Studies Requirements (See Chapter 3. Waive GSS-8.)</i>	60
<i>Requirements for Major in Human Services</i>	60
Foreign Language	12
Human Services 101a, 201c, 301a, 401a	16
Human Services elective hours	32
<i>Secondary Concentration</i>	25-40
<i>Electives</i>	47-32
	192

Bachelor of Science Degree, Delinquency Study and Youth Development Center

For the Bachelor of Science degree the requirements for a concentration in human services are the same as listed above with the following exception: the foreign language requirement is eliminated and the elective hours are increased by 12.

Courses

Human Services

101-12 (4,4,4) Orientation to Human Services. A seminar on human problems in American society, focusing on the interrelated topics of poverty, education, employment,

delinquency, crime, health, and welfare. Occupations pertinent to the alleviation of these problems are explored. Field trips to social agencies and institutions. Prerequisite: consent of instructor.

201-12 (4,4,4) Field Study in Human Services. Prerequisite: 101.

301-12 (4,4,4) Research in Human Services. Emphasis on applied research in such fields as demography, ecology, education, economic development, criminal behavior, and social planning. Acquisition of skills in the areas of problem formulation, questionnaire construction, interviewing, observation, data analysis, and program evaluation. Prerequisite: consent of instructor.

401-12 (4,4,4) Practicum in Human Service. A year-long concentrated practicum experience with extensive supervision and weekly seminars. Each quarter focuses upon a broad topical area. (a) Descriptive objectives of the human service system. (b) Services and operations that are dispensed. (c) A systems approach to planning for change. Each quarter includes a project designed to capitalize upon the experience by applying practically the entire human service degree program. Not for graduate credit. Prerequisite: consent of instructor.

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. Prerequisites: senior standing, consent of 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 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 indepth 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 instructor.

408-4 Treatment Modalities in Corrections. A survey of the treatment modalities currently being applied in the human services. Prerequisite: consent of instructor.

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 instructor.

490-1 to 12 Independent Projects in the Human Services. Independent projects in human services. Prerequisite: consent of instructor and chairman.

491-1 to 8 Directed Readings in the Human Services. Directed readings in human services. Prerequisite: consent of instructor and chairman.

Delinquency Study and Youth Development Center Faculty

W. Duane Bridenbaugh, Ph.D., Assistant Professor

Robert S. Gilland, M.S.Ed., Assistant Professor

Thomas R. Hughes, Ph.D., Associate Professor

James A. Jacobson, Ph.D., Associate Professor

Benjamin F. Quillian, Jr., M.S., Instructor

James J. Reidelberger, Lecturer

Nicholas A. Reuterman, Ph.D., Associate Professor

James R. Stein, Ph.D., Assistant Professor

Charles E. Stikes, Ph.D., Associate Professor

EXPERIMENT IN HIGHER EDUCATION

The Experiment in Higher Education (EHE) curriculum represents the direct equivalent of the University's general studies program on the freshman and sophomore levels. Course content focuses on knowledge and information which helps the student understand his environment. The program is designed to consciously take into account the uniqueness of urban students, who, by the very nature of the communities in which many reside, bring to SIUE, some problem solving expertise and skills which, when developed, will ultimately enhance the resourcefulness of the total institution.

Thus, through a program housed and administered at the East St. Louis Center, the University seeks to: (1) offer a long term training program by way of a flexible academic curriculum format providing students with a *knowledge* base, a *skills* component and on-the-job training experience through practica of private, public and third sector community activities; (2) equip students with the necessary technical skills to render an immediate and/or short term direct service to the community in such areas as management training, research and technical assistance; (3) provide students and the community with the necessary community organization skills to inform citizens with data on the resources of the university, city government, state and federal programs, and private industry.

EHE's aim is to present curriculum content vital to the young urban American in terms of a truly contemporary perspective. The curriculum, which is set up by faculty, staff and students offers the following: non-traditional studies, tailor-made instruction, small classes, classes without walls, guest speakers, student forums and tutoring services.

After completion of the EHE curriculum it is hoped that EHE students will be able to: (1) complete the last two years toward a bachelor's degree at SIUE or any other university; (2) compete academically with other students at any university; (3) devise new approaches to survival; (4) affirm his/her identity and sustain a positive self-concept; (5) better understand the relationship between himself/herself and the larger society; (6) think, read, write effectively; (7) critically analyze and solve problems created by society; (8) understand the basic social institutions; (9) appreciate the cultural arts; (10) maximize his/her creative potential.

The Experiment in Higher Education's work-study program is a conscientious effort to (1) provide students with practical work experiences which are supportive of the academic experiences received at the University, (2) provide financial assistance for a student population unable to support itself by drawing on family financial resources, and (3) give immediate confirmation to the fact that education is applicable to everyday living. The work-study program therefore includes work situations designed to bring about academic and social skills in addition to defraying incidental educational expenses. At present we have students working as education research aides, tutors in various programs, instructor aides and various other rewarding positions.

To provide an effective programmatic bond, the Experiment in Higher Education has individual counseling, academic advisement, and personal contact with instructors. The EHE student is asked to avail himself/herself of these services to better complete his/her academic training.

Courses

101a,b,c,d-1 to 18 per quarter, 201a,b,c,d-1 to 18 per quarter University Studies. General education course series for the E.H.E. designed to provide General Studies equivalence credits. Prerequisite for 201: 101a,b,c,d.

Experiment in Higher Education Faculty

Anala, Philip, M.A., Instructor
Barbee, Wilbert, B.S., Instructor
Campbell, Henry, Ph.D., Assistant Professor
Cofield, Amos, Ph.D., Assistant Professor
Fernando, Rex, M.S., Instructor
Handling, Jeanette, M.A., Instructor
Harrison, Joseph, B.S., Lecturer
Haynie, Edward, M.S., Instructor
Haynie, Janice, B.A., Lecturer
Herman, Jerry, B.A., Instructor
Hickman, Betty, B.A., Instructor
Hunt, Deryl, Ph.D., Associate Professor
Hurt, Wesley, M.P.I.A., Acting Director
Iqbal, Ahmad, Ph.D., Assistant Professor
Long, Leonard, M.S., Instructor
Parran, John, M.A., Adjunct Instructor
Pulliam, Alvin, M.A., Instructor
Ross, Nolen, M.S., Instructor
Schneider, Sandra, M.A., Instructor
Trimmer, Ron, M.S., Lecturer
Wesley, Shirley, M.S.W., Lecturer

OFFICE OF OFF-CAMPUS PROGRAMS

The University offers, as part of its continuing education program, several non-traditional methods for earning college credit. Resident centers, home study, television, radio, extension courses, and regular courses offered in the evening and on the weekend are the delivery systems used to make the University available to a wider clientele.

Resident Centers

Three resident centers have been established, one each at Scott Air Force Base, Greenville College, and Litchfield Junior High School. Courses and degree programs identical to on-campus programs in academic content and degree requirements are offered at these locations.

Open University Project

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 towards 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.

Extension Courses

The University offers a wide range of extension courses where it is apparent there is a need for this method of instruction. Inquiries or requests for extension courses should be directed to this office.

Conferences and Institutes

In addition to the credit activities, non-credit courses, workshops, conferences, and institutes are offered under the auspices of this office. This office will make the necessary arrangements for hosting and administering these non-credit activities.

Courses

Open University

204, 205, 206-8 The Humanities: A Foundation Course (Social Sciences). For those students who want to understand society better by approaching it systematically. Five different views of man are considered—the economic, sociological, psychological, political, and geographic—in an integrated study of how and why people live in societies, and the kinds of problems they have to face.

221, 222, 223-8 Science: A Foundation Course I. Presents and explains some of the important concepts and principles in modern science, showing how science, technology, and society are integrated within the relationship of these basic concepts. Topics from the general areas of physics, chemistry, and biology are designed to show how these disciplines depend upon each other, what they have in common—in method, technique, and philosophy—and what is specific to each.

301-8 Science and the Rise of Technology. An interdisciplinary course designed for all second-level students. The Industrial Revolution from the point, around the year 1800, at which technology and science merge together to form a common entity. Reference to organization of science in society, nationalistic trends in science and to social implications of science and technology.

303-8 Science and Belief: From Copernicus to Darwin. 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.

321, 322, 323-8 The City and the World. Analyses 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.

330, 331, 332-8 The Age of Revolutions. Some of the main developments in European life and thought in the age of the French, American, and Industrial Revolutions, 1760-1848. Includes an extended study of the social, political and economic changes, and the applicability of the term "revolution." A series of case studies: Jefferson, Rousseau and Goethe, Wordsworth, Kant and the revolution in philosophy, Sir Humphrey Davy and the developments in the physical sciences, Blake, "high art," Beethoven, and art and politics and France.

345-8 The Early Roman Empire and the Rise of Christianity. The developments in the Roman Empire from the death of Augustus to the principates of Trajan and Hadrian. Of particular historical and cultural interest, this period looks at the philosophical schools of the Epicureans and the Stoics; in literature, the historical work of Tacitus and Juvenal; the architecture of Pompeii as well as the incursion of Mithraism into western Europe and the rise of Christianity.

401-8 Historical Data and the Social Sciences. 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 social scientists seeking to test their findings on other than contemporary materials, and to historians eager to learn more of the tools of social science and the ways in which it can extend their understanding of the past. Cannot be taken for graduate credit.

PERFORMING ARTS TRAINING CENTER

The Performing Arts Training Center is a unique effort to motivate and stimulate the unchallenged young people of the East St. Louis area through the use of an alternative value system and point of view provided through the arts. During its

seven years in the City of East St. Louis this effort has proved to be an innovative approach to integral, interdisciplinary education and cultural awakening.

The overall objective is to employ a creative and flexible educational methodology in pursuit of the fullest possible humanization and socialization of the individual and the community, through a program which emphasizes the performing and cultural arts as its principal implement.

It has been evidenced that the Performing Arts Training Center has in this way produced in its participants an eagerness for continued learning, teaching, performing, research, and community service as well as a pride in personal growth.



Approach

To achieve these objectives, the approach of the Performing Arts Training Center is multi-faceted:

THE PERFORMING ARTS TRAINING PROGRAM

The Center maintains a rigorous schedule of both credit and noncredit classes in the field of Performing Arts and in subject areas such as Social Sciences, Anthropology, Comparative Political Systems, Comparative Cultures, Languages, Arts and Crafts, Martial Arts, Contemporary Theatre, Theatre Management, Costume Design, Make-up Design, Music and Photography. Thus, courses range from the most elemental arts, crafts, and humanistic studies to the highest levels of artistic and intellectual achievement. The design is to lead the student by experiences of success towards the fullest utilization of his native gifts.

The Performing Arts Training Center enrollment stems from two sources. First, a small yet significant and ever increasing number of degree-seeking students take classes for formal University credit. Secondly, adults, senior citizens, high school and grade school youth and students enroll in the Experiment in Higher Education as well as in the Performing Arts Training Center.

The Performing Arts Training Center and the School of Fine Arts are continually seeking to establish further academic affiliation in an effort to broaden resources and opportunities for the total SIUE community. Certain courses taught at the Center presently receive full credit through the School of Fine Arts.

THE PERFORMING COMPANY

The Performing Company is a semi-professional group, composed of staff and students, embodying the achievement of the training in dance particularly.

THE KUTANA PLAYERS

Originally with Southern Illinois University at Carbondale, the theatrical group presently forms the nucleus of a developing dramatic capacity within the overall training program and provides diverse performance experiences for participants in theatre.

The Center considers the normal fruit of training in both Arts and Humanities to be growth in the capacity to perform well, and recognition of a performance well done. The Performing Companies are thus simultaneously means of cultural enrichment for their audience, stimuli for self-esteem and achievement on the part of students, and symbols of the connection between preparation (education) and performance (life).

THE DYNAMIC MUSEUM

Called "Dynamic" because it reverses the priorities of ordinary museums, the Museum places educational use before matters of acquisition or preservation of treasures. It is the repository of many notable achievements in a people's past, serving the present as a primary source of community pride and individual aspiration to excel. The Performing Arts Training Center Museum is devoted chiefly to objects pertaining to Black Culture, for the most part associated with Black African Visual Design and the memorabilia of a performing company which has toured for 30 years in 57 countries of the world. It is intended to serve eventually as both a cultural center for the community and a school for training in museum management for the student.

THE COMMUNITY SERVICES PROGRAM

Performance is not the ultimate goal of humanistic education; rather, that goal is service to the community. Through a wide variety of services, involving both students and staff of the Performing Arts Training Center, this goal is simultaneously symbolized and achieved. The role played by the Center as an agent for redirecting dangerous community tensions during 1967, 1968, and 1969 is an extraordinary example of community service. In a more normal example, the staff and students of the Center respond to many requests to bring instruction in the performing arts to elementary and high schools, universities, and community groups in the Greater St. Louis area. The Center serves in other consultant and advisory capacities to the city, state, and local organizations.

SUPPLEMENTAL INSTRUCTIONAL PROGRAM

The Supplemental Instructional Program, a state-funded program, began in 1969 and was designed to increase the number of culturally different and minority students (in particular, from the Metro-East area); further, its design called for the provision of high quality support systems that operate in tandem with the education processes and that are geared toward heightening success potential to

this population. Program assistance is also available to those members of the general student body who encounter difficulty in academic work or who are on academic probation. The underlying philosophy of SIP is that the highly motivated, disadvantaged, low income student can succeed in a baccalaureate program if he is provided an alternative educational mechanism backed by cognitive and affective support systems. To this end, SIP was found to: (1) provide minority, disadvantaged, and probationary students with an entry vehicle buttressed by tailored systems (counseling, tutoring, curriculum, etc.) to enable them to be successful; (2) provide the University with a greater capacity for assisting students who have certain academic difficulties; (3) reduce the attrition rate for all students in the University; and (4) continue to make the University responsive to the needs of the surrounding community by employing its resources and expertise.

To accomplish these objectives, SIP now has six component programs in operation manned by fifteen professionals from varied disciplines (Mathematics, English, Counseling, etc.) and experiential backgrounds. The components are: (1) a recruitment program based on a modified selection process; (2) counseling and advisement facilities; (3) an academic tutoring program; (4) financial and job counseling services; (5) tailored curricula in skills areas; (6) a placement service.

SIP is involved in other cooperative ventures where germane to the realization of program objectives. The Accelerated Program in Science and Technology and the Intensive Studies Program for high school students are joint ventures with the School of Science and Technology and East St. Louis School District 189.

Eligibility

SIP is open to any student who wishes to apply and who feels that he/she may be able to benefit from the available services. He/she need not meet all of the SIUE admissions requirements but must have earned a high school diploma (GED recipients and transfer students are also encouraged to apply). Additionally, the prospective student must have on file an admissions application and transcript of high school, junior college, or other university work. Each applicant who does not meet SIUE's admissions requirements will be scheduled for a personal interview with a member of the SIP Selection Committee. Students are selected on the basis of their potential for success given the earlier-mentioned, programmatic support units.

Financial Assistance

A limited amount of financial assistance in the form of tuition remissions is available for participants who show need as determined by their application for financial assistance. Illinois residents are encouraged to apply for the Illinois State Scholarship Commission's aid awards. Out-of-state students who have demonstrated high academic ability are eligible for receipt of tuition remissions *only* if they evidence need that is not being met by other aid sources and/or plan to major in a Science or Mathematics discipline. Detailed information on financial assistance may be found in Chapter 1.

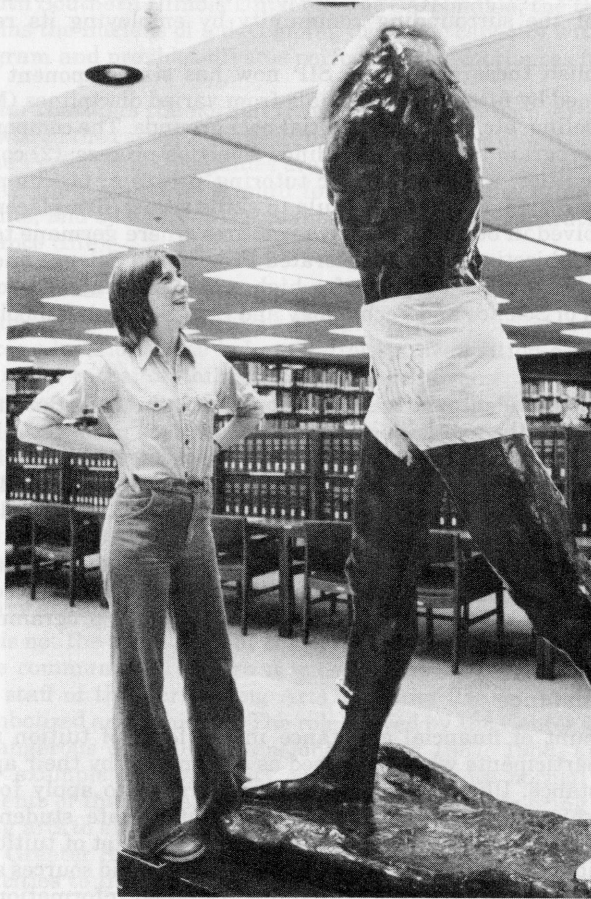
UPWARD BOUND

Upward Bound has been a part of Southern Illinois University at Edwardsville for eight years. The mission of this program is to help students in the eleventh and twelfth grades of high school realize the development of their college potential. Upward Bound is federally funded by the Department of Health,

Education and Welfare. Our target population attends secondary schools in the East St. Louis metropolitan region.

Students participating in Upward Bound are required to attend classes five days a week during all four quarters of the university year. Our curriculum emphasizes mathematics, English, reading, and the sciences and is wholly college preparatory in scope.

Any student wishing to enter the program may contact our office and ask to be included on the prospective student list. All students in this group will be referred to a recruiting counselor. Program entry dates are June and January.



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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 and other proscribed categories, including Title VI (1964 Civil Rights Act) and Title IX (Higher Education Act), Title IV (General Education Provisions Act), and the Illinois Student School Records Act. Inquiries regarding affirmative action in admissions, administration, and employment should be directed to the Affirmative Action Office. Inquiries regarding the Family Educational Rights and Privacy Act of 1974 or the Illinois Student School Records Act should be directed to the Office of the General Counsel.

Under the Family Educational Rights and Privacy Acts, all students have the right to inspect and review official University records in accord with provisions of the aforementioned Act and within guidelines of the University implementing that Act.

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

In cases where students have filed timely written notice that they object to the release of any or all items of "directory information", the specified items will not be released to any person. The notification must be in the form of a letter to the Director of Admissions and Records and must list the items the student wishes to have withheld. Such objection must be filed as directed by the notice published in the *Alester* at the beginning of the academic term in which it is to be effective and, once effective, it remains so until the deadline date for notice of objection in the Fall Term of the next academic year.

