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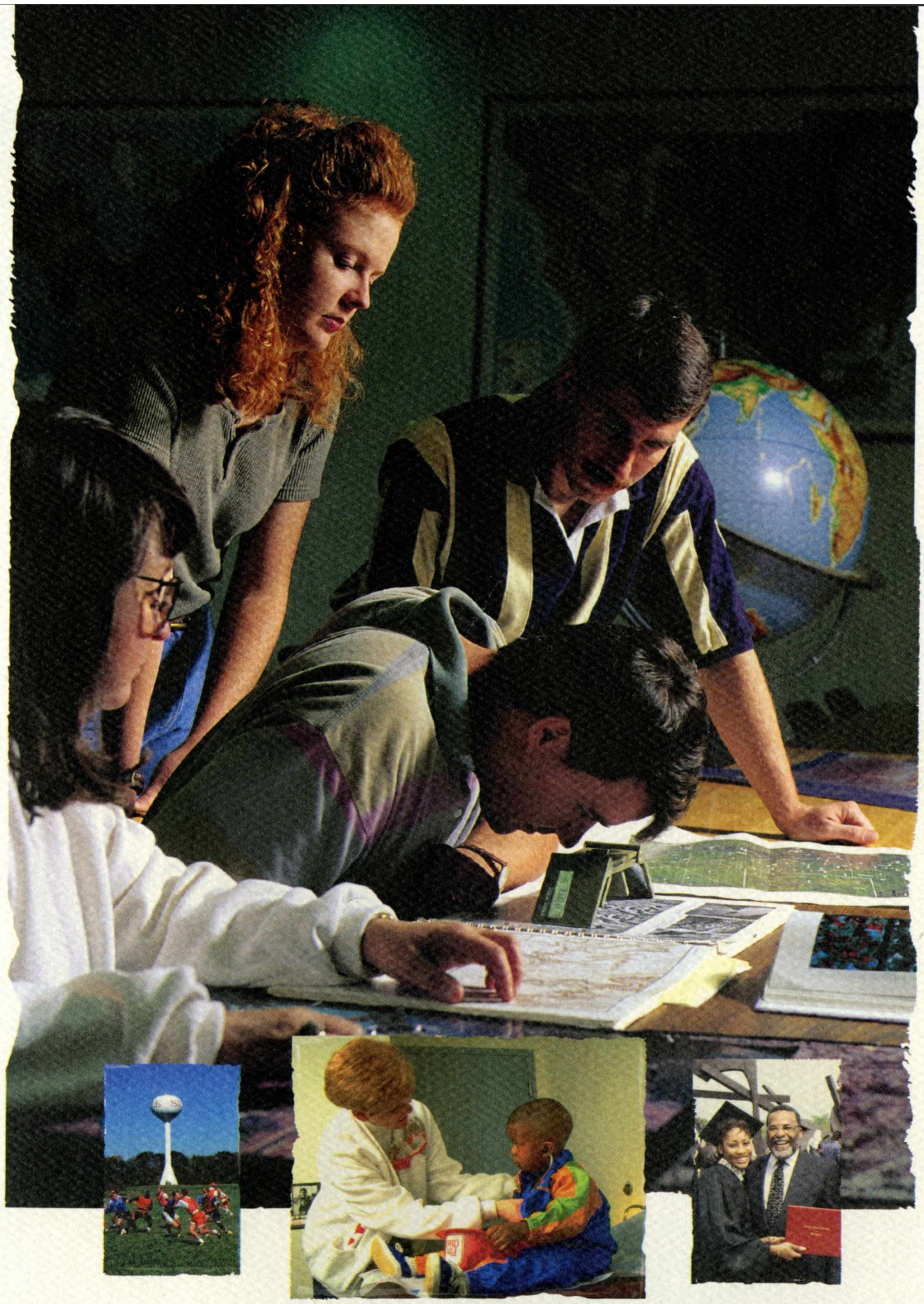

undergraduate catalog 1997-99

SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE

USPS 935-420

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE

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

ACCREDITATION

Southern Illinois University at Edwardsville is accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. Many of its departments and schools are accredited by professional agencies, including the following:

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

Front cover photos, clockwise from top: students in a geography laboratory, a happy graduate at commencement, a nursing student with a young patient, students on the athletic practice fields. Back cover photos: center, the Art and Design building; clockwise from top, students sledding near the Student Residence Hall, the Religious Center—a geodesic dome designed by R. Buckminster Fuller, an artist's rendering of the new Engineering Building.

Note: Catalogs do not conform with NCA language for publication of affiliation by the institution.

SIUE

Chancellor Nancy Belck meets with students during a reception designed to give evening students a chance to meet with the Chancellor.

WELCOME TO THE UNIVERSITY

Welcome! As this catalog is published, SIUE prepares to celebrate its 40th year of delivering affordable excellence in education, responding to regional needs, and creating exciting futures for our students. If you're entering SIUE as a freshman, you will enjoy the benefits of our past growth and development; and you may be among the first to use the new Engineering building, whose construction is about to begin.

As you page through this catalog and make decisions about your academic career, be sure to take a good look at the range of student activities available. There's much to enjoy here at SIUE—many important contacts to make, and a full range of activities to complement your studies. We hope you'll take advantage of what the University offers.

We will do everything possible to help you achieve your personal goals, as you move with us toward the next century. We're proud that you have decided to *Choose Success* by Choosing SIUE!

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VISITS AND INFORMATION

VISITS ARE WELCOME

For a guided tour, please contact the Admission Counseling Office in Peck Building 1307 or call one of the numbers below. To discuss admission to SIUE, schedule an appointment with an Admission Counselor by visiting Peck Building 1307 or calling 1-800-447-SIUE (toll free in Illinois), 314-231-SIUE (from the St. Louis area) or 618-692-3705.

CATALOGS AND CLASS SCHEDULES

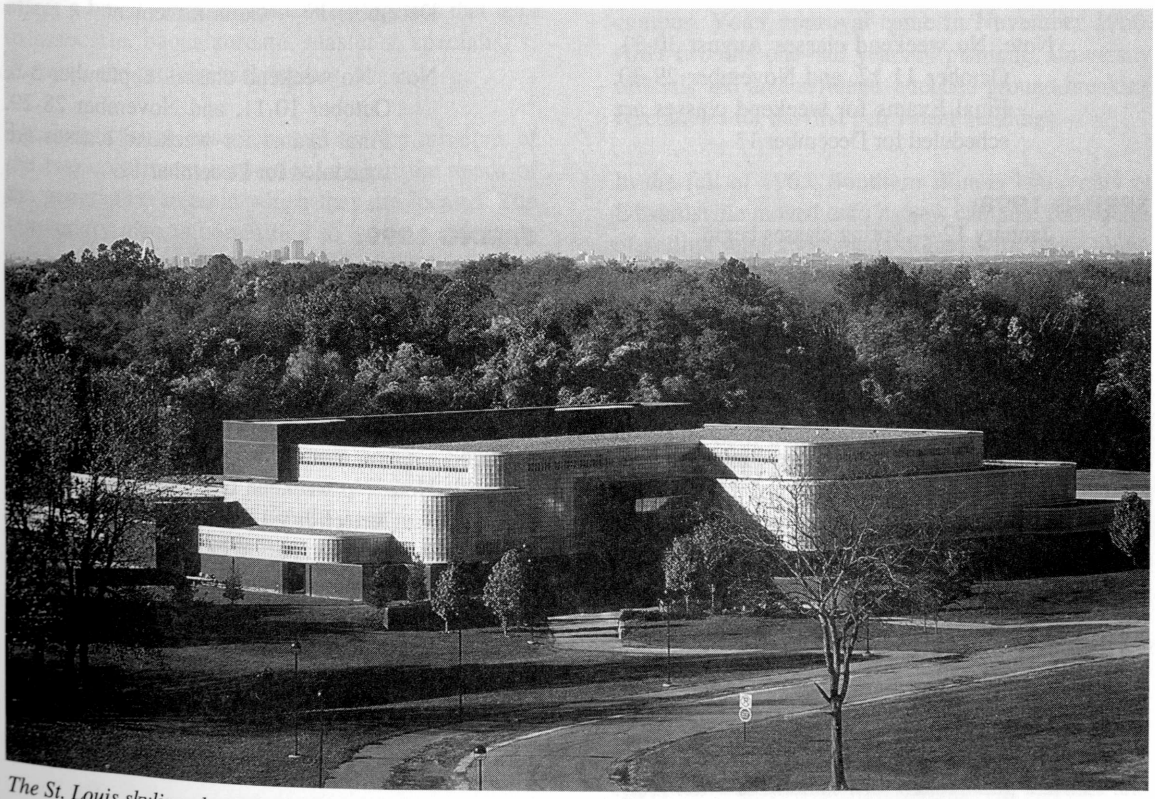
Southern Illinois University at Edwardsville publishes biennial undergraduate and graduate catalogs, an academic year class schedule and a summer session schedule. The undergraduate catalog provides information about academic programs, while class schedules provide information on courses offered each term. Information about SIUE may be requested via Internet at http://www.siue.edu

THE UNDERGRADUATE CATALOG is available for examination in high school guidance offices and libraries throughout Illinois and in some other states. Copies are free to new and prospective students and educational institutions from the Office of Admissions and Records, Southern Illinois University at Edwardsville, Edwardsville, 62026-1047.

THE GRADUATE CATALOG is available from the Graduate School.

If you lose your original copy of a catalog, you must purchase the second copy from the Bookstore for $3.00.

SCHEDULE OF CLASSES is available from Admissions and Records, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1047. (Please specify term requested.)



The St. Louis skyline above the Art and Design building on campus.

ACADEMIC CALENDAR

1997 AND 1998 ACADEMIC YEARS

SUMMER 1997:

May 26 — Memorial Day Holiday
May 27 — Summer classes begin
May 31 — Weekend classes begin
July 4 — Independence Day Holiday
August 2-8 — Final Exams
August 9 — Commencement

Note: No weekend classes July 5-6. Final Exams for weekend classes are scheduled for August 2 following the final class session.

FALL 1997:

August 25 — Fall classes begin
September 1 — Labor Day Holiday
September 6 — Weekend classes begin
November 24-30 — Thanksgiving Day Holiday
December 13-19 — Final Exams
December 20 — Commencement

Note: No weekend classes August 30-31, October 11-12, and November 29-30. Final Exams for weekend classes are scheduled for December 13.

SPRING 1998:

January 12 — Spring classes begin
January 19 — Martin Luther King Day
January 24 — Weekend classes begin
March 16-22 — Spring break
May 2-8 — Final Exams
May 9 — Commencement

Note: No weekend classes January 17-18, March 21-22, and April 11-12. Final exams for weekend classes are scheduled for May 2.

SUMMER 1998:

May 25 — Memorial Day Holiday
May 26 — Summer classes begin
May 30 — Weekend classes begin
July 3 — Independence Day Holiday
August 1-7 — Final Exams
August 8 — Commencement

Note: No weekend classes July 4-5. Final exams for weekend classes are scheduled for August 1 following the last class session.

FALL 1998:

August 24 — Fall classes begin
August 29 — Weekend classes begin
September 7 — Labor Day Holiday
October 12-13 — Mid-term break
November 25-29 — Thanksgiving Day Holiday
December 12-18 — Final Exam
December 19 — Commencement

Note: No weekend classes September 5-6, October 10-11, and November 28-29. Final exams for weekend classes are scheduled for December 12.

SPRING 1999:

January 11 — Spring classes begin
January 16 — Weekend classes begin
January 18 — Martin Luther King Day
March 8-14 — Spring break
May 1-7 — Final Exams
May 8 — Commencement

Note: No weekend classes February 13-14, March 13-14, and April 3-4. Final exams for weekend classes are scheduled for May 1.

- Subject to change -

SOUTHERN ILLINOIS UNIVERSITY

Southern Illinois University is a multicampus university comprising two institutions, Southern Illinois University at Carbondale (SIUC), with a School of Medicine at Springfield, and Southern Illinois University at Edwardsville (SIUE), with a School of Dental Medicine at Alton and a Center in East St. Louis. The University, with an annual operating budget of more than $509 million, enrolls more than 33,000 students in programs from two-year technical curricula to Ph.D. programs in 27 fields along with law, medicine, and dental medicine. SIU was chartered in 1869 as Southern Illinois Normal University, a teachers college. In 1947, the name was changed to Southern Illinois University, reflecting the institution's academic expansion. The University also expanded geographically. In 1949, SIU began offering off-campus academic courses in the metropolitan East St. Louis area, which led to the eventual development of a separate institution in Edwardsville.

A modern and comprehensive post-secondary educational institution, Southern Illinois University offers a broad range of academic programs that lead to associate, baccalaureate, master's, specialist's, doctoral, and professional degrees.

The instructional, research, and service missions of the two constituent institutions reflect the needs of the geographic areas in which they are located. The University also is committed to serving statewide needs. This commitment is reflected in educational activities located off the main campuses in communities throughout the state. It is realized also through research and training exchanges and through world-wide student exchange programs.

A nine-member Board of Trustees governs Southern Illinois University and sets policy that enables the University to carry out established missions and goals. The President of Southern Illinois University is its chief executive officer and reports to the Board of Trustees. The University Chancellors report to the President and are responsible for the internal operations of SIUE and SIUC, respectively.

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE

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

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

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

In the fall of 1965, Southern Illinois University at Edwardsville moved onto its new campus: 2660 acres of rolling land and woods dotted with lakes along bluffs flanking the Mississippi River. Much of the land still retains its natural shape. The academic center was designed by the internationally known architectural firm of Hellmuth, Obata, and Kassabaum of St. Louis. The brick, slate, and granite of the modern buildings complement the terrain and are softened by a carefully designed garden landscape that attracts visitors by its physical beauty. The campus has received several awards in recognition of the successful blend of the aesthetic and functional in a setting that enhances growth and development.

Today, SIUE is a major public university, offering a broad choice of degrees and programs ranging from career-oriented fields of study to the essential, more traditional, liberal arts. Here students have an opportunity to interact with outstanding teachers and scholars, as well as with other students from all parts of the United States and the world. They enjoy the

excellent facilities of a new and growing campus, including extensive research laboratories, specialized equipment for professional preparation, and comfortable, spacious classrooms. In addition, academic services provide tutoring, testing, academic, and career counseling, and other services designed to help students meet the demands of university life. At SIUE, students find comprehensive educational opportunities and a community in which individuals support each other in their search for knowledge and individual development.

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

At SIUE, we believe that education is more than classroom learning. Campus activities present students with an ever-changing spectrum of cultural, social, service and recreational experiences designed to complement the academic program. Theater and dance productions, musical presentations, art collections, renowned speakers and artists, and the fine swimming, biking and other recreation offered by the University's 2660 acres of rolling, wooded hills make SIUE an exciting place. In addition, the campus is situated in a rural area with access to the resources of the metropolitan St. Louis area, located just twenty minutes away.

At SIUE, more than 600 faculty members engage in instruction, research, and public service. Though each of these activities enhances students' academic opportunities, it is through instruction that students benefit most directly. Eighty-five percent of the faculty possess terminal degrees earned at universities in the United States and abroad. In 1996, the faculty received 194 grants or contracts totalling $13.5 million. The University emphasizes the instructional responsibilities of the faculty. A listing of the faculty is included in this catalog.

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

LOCATION

Southern Illinois University at Edwardsville serves the most populous region of downstate Illinois. The campus is centrally located in the eastern metropolitan St. Louis area; most SIUE students live and work in the industrial and agricultural counties of Metro-East. Interstate highways make the University convenient for those within a sixty-mile radius, an area that includes 2,700,000 people.

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

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

STUDENTS

With an enrollment of more than 11,000 students, Southern Illinois University at Edwardsville is large enough to provide for the educational needs of its students, yet sufficiently small not to seem impersonal. Fifty-nine percent of the students come from Madison and St. Clair counties in Illinois, eleven percent from Missouri. The remainder come from almost every other county in Illinois, forty-three other states, and fifty-nine foreign countries. Minority students comprise sixteen percent of the total enrollment.

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

Approximately 1,530 single students and 160 families live at SIUE's Residence Hall or Tower Lake Apartments.

The University has developed a number of programs to recognize academic excellence among students. These include the Honor Society of Phi Kappa Phi, the Deans' Scholars Honors Program, the Chancellor's Scholars Program, and special recognition of outstanding students at the annual Honors Day Convocation. For additional information, please refer to the **Academic Recognition** section of this catalog.

Over twenty percent of the SIUE enrollment consists of graduate students. The University offers master's level work in thirty-two degree programs. The School of Dental Medicine, operated by SIUE at its Alton Campus, offers the Doctor of Dental Medicine degree.

UNIVERSITY VISION

As a premier metropolitan university, SIUE is the first choice of a diverse pool of applicants. It is an integral part of Illinois and the St. Louis metropolitan area and uses its suburban location to capitalize upon urban resources. The University fosters the personal growth of its students, faculty, and staff to develop effective leaders for their professions and communities. With a sense of community, pride, and established traditions, it welcomes the opportunities and challenges of the future.

UNIVERSITY VALUES

SIUE is a publicly supported, comprehensive University. Its mission, goals, plans, and actions are based on certain shared values.

Public education is the cornerstone of a democracy.

The preparation of well-educated, sensitive, and responsible citizens is the University's principal reason for existing.

Excellence should be pursued in all that the University does.

The creation and preservation of knowledge are integral to a university.

A public university has the privilege and responsibility to serve the citizens of the state.

Equal opportunity and affirmative action are integral to the development of a healthy community.

A public university should be accessible to all who can benefit from its programs.

Academic freedom, high ethical standards, institutional integrity, collegial governance, and open communication are indispensable aspects of a community of scholars.

A humane, safe, and supportive environment is essential to the welfare, growth, and advancement of all members of a university community.

The University is accountable to those it serves and those from whom it receives support.

UNIVERSITY MISSION

Dedicated to the traditional academic pursuits of instruction, scholarship, and public service, the University assigns first priority to excellence in undergraduate education. Through general education, the University endeavors to strengthen the intellectual skills of its students and to provide them with a broad understanding of liberal learning. Through the arts and sciences and through professional programs, the University seeks to prepare its students for successful careers and satisfying lives.

The University provides graduate educational programs consistent with regional needs and institutional strengths. While such programs emphasize advanced instruction sought by those pursuing professional advancement, the University responds as well to demonstrated needs for graduate study in the arts and sciences.

Consistent with its particular commitment to southwestern Illinois and with its pursuit of academic excellence, the University strives to enhance regional access to the educational opportunities it offers. It recognizes an obligation to provide developmental opportunities for the educationally dispossessed; it pursues a commitment to meet the special needs of nontraditional students; and it makes every effort to maintain for all its students admissions standards, fees, schedules, and calendars which will encourage their access and support their progress.

SIUE, Edwardsville, IL 62026-1700. Blank forms may be obtained in Admissions and Records and University Health Service. Failure to return the completed form will result in a hold on your future registration.

For further information or additional copies of the immunization form, contact University Health Service at 618-692-2843 or visit room 0202 of the Rendleman Building.

MEET WITH AN ACADEMIC ADVISER TO PLAN YOUR COURSE OR PROGRAM SCHEDULE

After you receive notification of admission and before your first term, you will receive an invitation to attend a Pre-Entry Advisement and Registration Session. You and your parents may attend. Refer to the **Pre-Entry Advisement and Registration** section of this catalog for more information. During Pre-Entry Advisement and Registration, academic advisers will explain the General Education program and academic majors and minors. They will also inform you of placement test results and advise and register you for classes. You must receive academic advising prior to registration.

If you cannot commit to a class schedule at the time of advisement, you will receive a Course Request Form (CRF) which lists classes, including alternatives, approved by your adviser. The CRF signed by your adviser permits you to register later at the Enrollment Center.

You should meet with your adviser as soon as possible each term. Appointments are issued on a first-come, first-served basis. Because very popular classes fill early, you should complete your advisement and registration as early as possible. Visit Peck 1315 or call 618-692-3701.

REGISTER FOR CLASSES

If you have not declared a major, you may complete your registration at the time you are advised in Academic Counseling and Advising. If you have been accepted into a major program, you will be registered in your major department.

After you have been assigned to your classes, you will receive a copy of your class schedule. The University considers this document an official record of your academic course load.

PAY YOUR TUITION AND FEES

Registration is not complete and you are not considered officially enrolled unless you are financially cleared by the deadline published in the schedule of classes. Financial clearance can be obtained in several ways:

- you make the minimum payment
- financial aid to cover your charges is credited to your account
- an estimate of your financial aid eligibility exceeds your total charges and you are granted a cancellation waiver.

If you are not financially cleared by the deadline date, your registration will be cancelled and you may not attend classes.

Payment may be made in person, by mail or fax (credit card) at the Office of the Bursar, Room 1101 Rendleman Building. A brochure detailing the SIUE installment payment plan is available in the Office of the Bursar. For further information regarding the use of financial aid, please refer to the section **Paying the Semester Bill with Financial Aid.** If you decide to withdraw from any or all classes, you must contact the Enrollment Center to withdraw officially, and to have your tuition and fees adjusted, if appropriate.

After you have been financially cleared, your student identification card will be validated. The identification card permits you to use the library, recreational facilities, and attend athletic and cultural events. The student identification card is issued by the ID Card Center located in Room 1307, Rendleman Building.

OBTAIN A PARKING DECAL

If you drive on campus, you must display a valid parking decal. Red student decals may be purchased at Parking Services, Room 1113 of the Rendleman Building. Parking lots are color coded to match the decals; signs at the lot entrances indicate the color of decals which may be used on each lot. Green and blue decals are for faculty and staff.

Each term, a limited number of special decals are available to students for evening parking in the green decal lots. Apply early as the number is limited.

PICK UP TEXTBOOKS AT TEXTBOOK SERVICE

Texts for undergraduate classes are rented from Textbook Service. Students are issued texts after tuition and fees are paid. Textbooks must be returned at the end of each semester. Return deadlines are posted and are available at Textbook Service. Textbook Service is located on the lower level of Lovejoy Library. A textbook rental fee is included in your fees.

VISIT THE BOOKSTORE FOR ADDITIONAL SUPPLIES

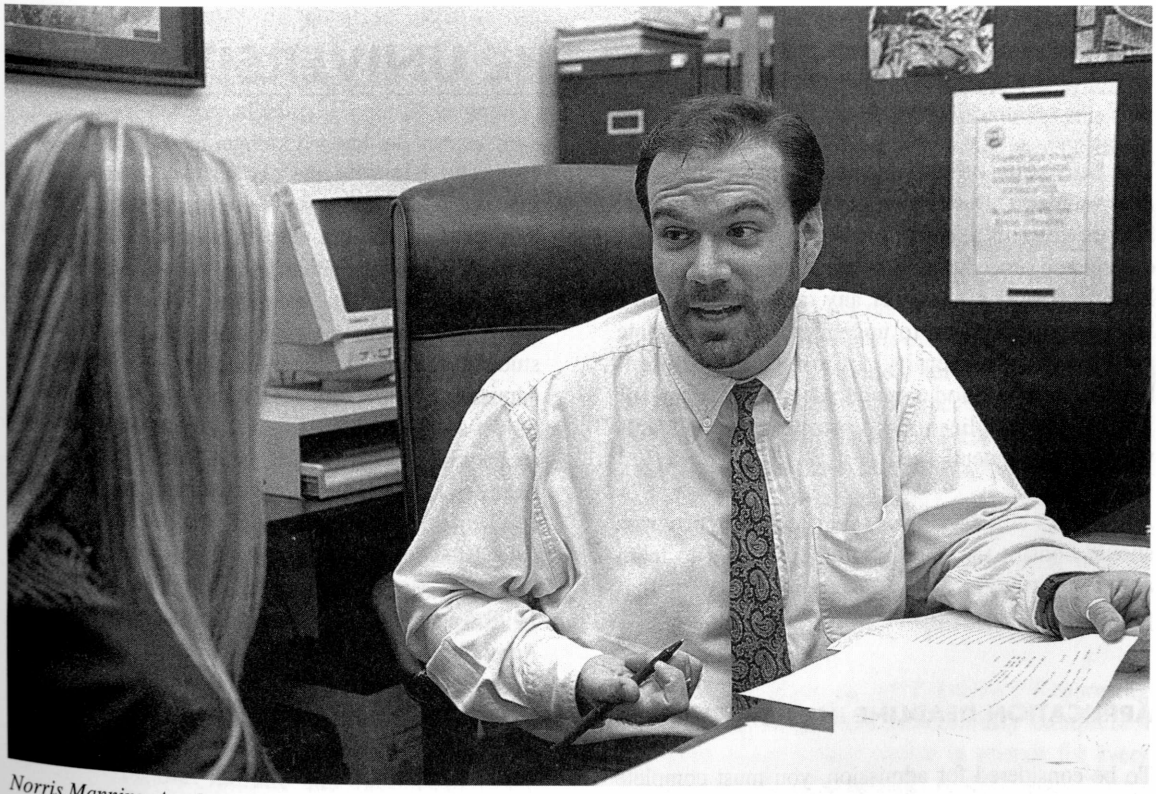
Additional materials and supplies required for certain classes may be purchased in the University Bookstore, on the main floor of the University Center. Normal store operating hours are 8:00 a.m. to 6:30 p.m. The Bookstore extends its operating hours during the first week of each semester and other periods as posted. Check University Center schedules for special hours of operation.

ATTEND ORIENTATION

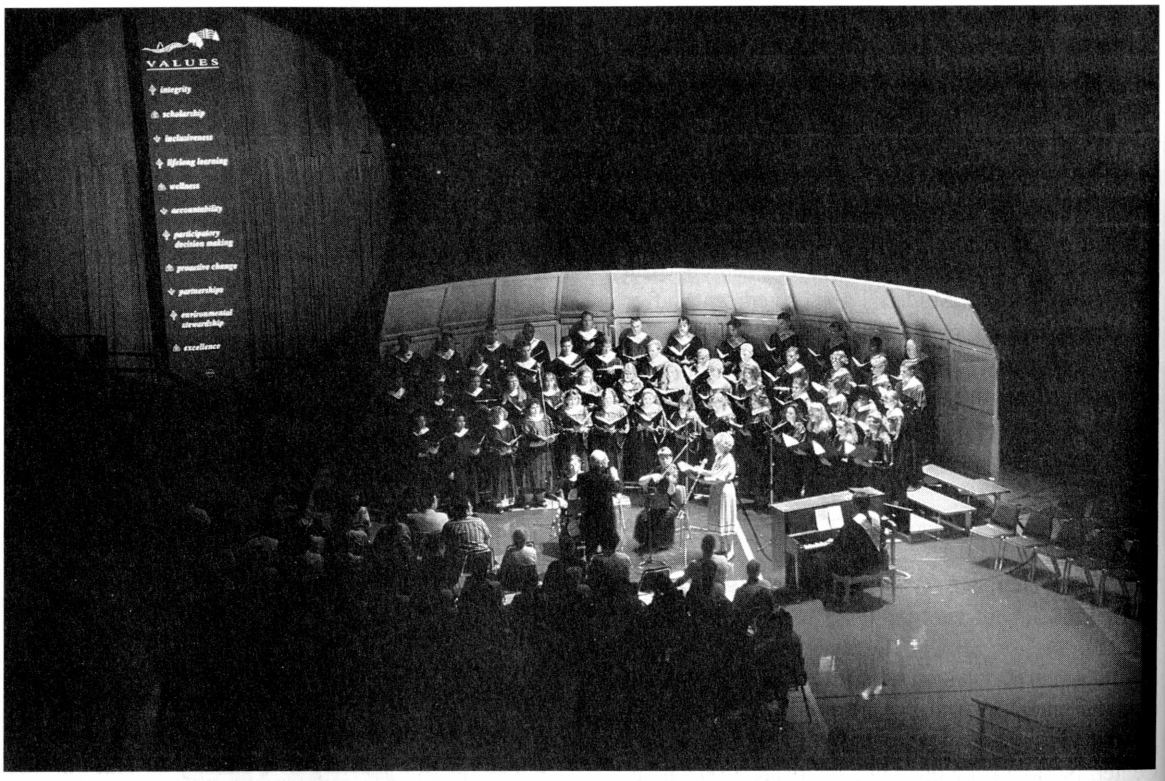
You are expected to attend orientation whenever such sessions are available. If you enter fall term, orientation will be offered immediately prior to the beginning of the term. Parents and significant others are also invited. You will receive materials in the mail during the summer.

ATTEND YOUR FIRST CLASS

It is important that you attend all classes, especially the first. Here you will learn about course requirements, including reading assignments, attendance expectations, and required papers. You will receive a syllabus, an outline of the course, and a statement of course requirements. If you do not attend the first meeting of a class, your place in that class may be assigned to someone else.



Norris Manning, Academic Adviser, talks with Becky Lane, a Nursing student.



The SIUE concert chorale performs at the annual convocation.

ADMISSION TO THE UNIVERSITY

The University offers educational opportunities to many students. Definitions of admission categories are provided in this section, along with admission criteria and procedures. Admission Counselors (1307 Peck Building) can answer any questions you may have about admission to undergraduate or graduate study at the University. International Student Services is a good source of information for international applicants and prospective applicants with foreign credentials.

Applicants considering a specific major program should consult the appropriate department to learn about additional admission requirements for that program.

APPLICATION DEADLINE INFORMATION

To be considered for admission, you must complete your admission file three weeks before the beginning of the term for which you are seeking admission (requirements differ for international students). A complete file consists of an application and all required documentation. If you do not enroll in the term you planned but wish to enroll in a subsequent term, it is important that you notify the Admissions Office by the deadline date listed for the new term in which you plan to enter the University. International students should consult the section on international admissions for deadlines. (International students who do not complete their enrollment in the term planned are required to notify the Graduate and International Admissions section in Admissions and Records, Box 1047, of their change in plans before the deadline date listed for the new term of planned entry.) The following are file completion deadlines through the 1998 Summer session. For future dates, contact Admissions and Records at 692-2720.

TERM	FILE COMPLETION DEADLINES
1997 Fall Semester	August 4, 1997
1998 Spring Semester	December 22, 1997
1998 Summer Session	May 5, 1998

ADMISSION AS AN UNDERGRADUATE STUDENT: TRADITIONAL FRESHMAN

If you are a recent high school graduate (graduated within five years of your anticipated term of admission, and have had no intervening college or university coursework, and wish to be considered for admission to SIUE as a degree seeking student), you must complete your admissions file three weeks before the beginning of the term for which you seek admission. A complete file consists of an application, all required official transcripts, certification of rank in high school graduating class, and scores achieved on a college entrance examination. ACT is the preferred college entrance exam; however, SAT scores are acceptable.

You must meet the following standards:

- The sum of the national percentile of your composite score on a college entrance examination and the percentile of your high school rank must equal 100 or greater.
- You must complete the following high school courses:

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

(b) 3 years of mathematics (1 year of introductory algebra, 1 year of geometry, 1/2 year of algebra beyond the introductory year, and 1/2 year either of more advanced mathematics or fundamentals of computer programming)

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

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

(e) 2 years of electives in foreign language, music, art, or vocational education (1 year of electives chosen from foreign language, music, the visual arts, theater, and/or dance; and 1 year of electives chosen from foreign language, music, the visual arts, theater, dance, and/or vocational education; vocational education courses should be of a type that include and encourage study skills, and appropriate courses that help you prepare for college or university learning.)

It is recommended strongly that University-bound students include in their high school programs more than the minimum requirements for admission by taking 2 years of one foreign language, an additional 1/2 year of algebra, and 1 year of music, the visual arts, theater and/or dance.

If you have earned an ACT composite score of 25 or higher AND either are in the upper quarter of your high school class OR have a grade point average of 3.00 on a 4.00 scale in your college preparatory courses, you are considered to have met the high school subject pattern requirements listed above.

Other students are required to remedy any high school course deficiencies as determined by the Office of Admissions and Records in one of the ways listed below, and they will be granted only special admission until all deficiencies have been eliminated.

English: Earn an ACT English subscore of 23, OR earn an SAT verbal score of 600, OR earn successful placement in English 101 on the basis of the University- administered English Placement Test, OR successfully complete an appropriate Academic Development (AD) writing course (that is, AD 090 or AD 092), OR successfully complete a three semester hour English course for every year (or fraction thereof) of deficiency. These courses must be selected from Introductory or Advanced General Education courses numbered 200 or below.

Mathematics: Earn an ACT Mathematics score of 22, OR earn an SAT math score of 570, OR earn successful placement into Math 120 on the basis of the University- administered mathematics placement test, OR successfully complete AD 095, OR successfully complete AD 085 for a geometry deficiency and Math 120 or appropriate AD courses for an Algebra Advanced Mathematics or Fundamental Computer deficiency. The appropriate mathematics deficiency course work will be determined by the mathematics placement test, if testing is required.

Science: Earn an ACT Science Reasoning subscore of 23, OR successfully complete a three semester hour course in science for every year (or fraction thereof) of deficiency. These courses must be selected from Introductory or Advanced General Education courses numbered

200 or below or from other courses specifically approved for correcting deficiencies.

Social Science: Earn an ACT Reading subscore of 23, OR earn a score of 500 or higher on the CLEP Social Science, History examination, OR successfully complete a three semester hour course in social science for every year (or fraction thereof) of deficiency. These courses must be selected from Introductory or Advanced General Education courses numbered 200 or below.

Electives: Earn a score of 452 or higher on the CLEP Humanities examination, OR successfully complete a three-semester-hour course in an appropriate elective area for every year (or fraction thereof) of deficiency. These courses must be selected from Introductory or Advanced General Education courses numbered 200 or below.

You may also remedy high school course deficiencies by redistributing up to three units of high school course work. No more than one unit may be deducted from each of the categories of social studies, mathematics, sciences and electives, and used to remedy a high school deficiency in any other of those categories. This option may not be used to remedy deficiency in English.

If a faculty or staff adviser believes a particular high school course deficiency should be waived, a decision will be rendered by the Director of Academic Counseling and Advising.

Applicants (other than international students) who do not meet minimum high school course requirements but who otherwise meet the freshman admission criteria will be admitted to the University as special admission students. However, they are required to address high school course deficiencies as determined by the Office of Admissions and Records and as explained in the catalog section entitled **Special Admission for First-Time Freshmen.**

If you are considering a specific major program, you should consult the appropriate department to learn about any additional admission requirements for that program and recommended high school courses.

EARLY ADMISSION

Capable high school students may enroll in University courses to be taken concurrently with their senior year of high school, subject to the following requirements: (a) completion of their junior year (b) achievement of a score of at least 22 in each of the ACT areas; (c) achievement of a class rank in the upper third of their class; and (d) recommendation by their high school principal.

In making their recommendations, high school principals should consider class rank, ACT or SAT scores, recommendations from high school teachers regarding aptitude for university work, and teacher assessment regarding ability to adjust to the university environment. Such students will also be permitted to enroll for University courses offered during the summer session between their junior and senior years of high school without being concurrently enrolled in secondary school. Enrollment for students participating in this early admission program is limited to 6 semester hours per term.

Applications may also be considered by the Director of Admissions and Registrar for exceptionally capable students who have not yet completed their junior year of high school.

Early admissions applicants must have successfully completed at least 11 of the 15 units of high school subjects required for traditional admission. The 11 units must include three years of English, two years of mathematics, two years of science, and two years of social studies.

Students admitted through the early admission program must submit a final high school transcript to Admissions and Records. The final transcript must reflect graduation and successful completion of the high school subjects required for traditional admission. (See Admission Standards for Traditional Freshmen.) To be considered for admission through the early admission program, you must complete your admissions file three weeks before the beginning of the term in which you intend to enroll. If you do not enroll in the term planned but wish to enroll in a later term, you must notify Undergraduate Admissions before the deadline date listed for the new term.

NON-TRADITIONAL FRESHMEN

Applicants wishing to be considered for admission as non-traditional freshmen must complete their admissions file three weeks before the beginning of the term in which they plan to enroll.

If you graduated from high school five or more years prior to the term of admission and have had no intervening college or university coursework, you may be admitted to the University if you graduated from an accredited high school and ranked in the upper half of your graduating class or achieved a score at least equivalent to the 50th percentile on a college entrance examination, i.e., (ACT or SAT), and met the high school course requirements (see Admission Standards for Traditional Freshmen).

Applicants without a high school diploma must have achieved a standard score average of 45 on the General Education Development Test (GED) and a score of at least 40 in each of the GED areas.

Non-Traditional freshman applicants with GED credentials who are applying five years after their high school class has graduated must complete the following requirements: 1) remedy any English, mathematics and reading deficiencies as indicated by SIUE placement tests and 2) complete at least one three-semester-hour course in each of the following areas: a) science, b) social sciences, and c) either foreign language, music, art, theater, dance, or speech. Courses must be selected from Introductory and Advanced General Education courses numbered below 300. Students must complete these courses with a passing grade or achieve a minimum grade of C on a proficiency examination. No course taken to meet this additional course requirement will carry credit toward meeting General Education or major/minor requirements. Credit will be awarded as general elective credit toward graduation, i.e., elective credits not required by the major and/or minor.

Applicants with GED credentials who are applying for admission before a five-year period after their high school class has graduated are not considered non-traditional applicants and must meet the minimum high school course requirements (see Admissions Standards for Traditional Freshmen) and achieve a standard score average of 45 on the GED Test and a score of at least 40 in each of the GED areas. They must apply for special admission as first-time freshmen.

Applicants who graduated from high school five or more years prior to application for admission and who do not meet the admission requirements above may be considered for Special Admission.

SPECIAL ADMISSION FOR FIRST-TIME FRESHMEN

Applicants who do not meet requirements for admission as traditional or non-traditional freshmen may be considered for special admission. They must complete their admissions file three weeks before the beginning of the term in which they plan to enroll.

Students who meet the minimum admission composite score of 100 (see Admission Standards for Traditional Freshmen above) but have not taken the required subjects also are considered under Special Admission criteria. They must submit high school transcripts or GED test scores as required of all degree-seeking students, together with college entry examination scores and/or class rank information.

Recent high school graduates must have an ACT composite score of at least 17 (or equivalent) and rank in the upper two-thirds of their high school graduating class; or have an ACT composite score of at least 14 and rank in the upper half of their high school graduating class.

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

Students with special admission status must remedy, in one of the ways listed below, any high school course deficiencies identified by the Office of Admissions and Records.

English: Earn an ACT English subscore of 23, OR earn an SAT verbal score of 600, OR earn successful placement in English 101 on the basis of the University-administered English Placement Test, OR successfully complete an appropriate Academic Development (AD) writing course (that is, AD 090 or AD 092), OR successfully complete a three semester hour English course for every year (or fraction thereof) of deficiency. These courses must be selected from Introductory or Advanced General Education courses numbered 200 or below.

Mathematics: Earn an ACT Mathematics score of 22, OR earn an SAT mathematics score of 570, OR earn successful placement into

Mathematics 120 on the basis of the University-administered mathematics placement test, OR successfully complete AD 095, OR successfully complete AD 085 for a geometry deficiency and Mathematics 120 or appropriate AD courses for an Algebra-Advanced Math Fundamental Computer deficiency. The appropriate mathematics deficiency course work will be determined by the mathematics placement test, if testing is required.

Science: Earn an ACT Science Reasoning subscore of 23, OR successfully complete a three semester hour course in science for every year (or fraction thereof) of deficiency. These courses must be selected from Introductory or Advanced General Education courses numbered 200 or below or from other courses specifically approved for correcting deficiencies.

Social Science: Earn an ACT Reading subscore of 23, OR earn a score of 500 or higher on the CLEP Social Science, History examination, OR successfully complete a three semester hour course in social science for every year (or fraction thereof) of deficiency. These courses must be selected from Introductory or Advanced General Education courses numbered 200 or below.

Electives: Earn a score of 452 or higher on the CLEP Humanities examination, OR successfully complete a three semester hour course in an appropriate elective area for every year (or fraction thereof) of deficiency. These courses must be selected from Introductory or Advanced General Education courses numbered 200 or below.

You may also remedy high school course deficiencies by redistributing up to three units of high school course work. No more than one unit may be deducted from each of the categories of social studies, mathematics, sciences and electives, and used to remedy a high school deficiency in any other of those categories. This option may not be used to remedy deficiency in English.

If a faculty or staff adviser believes a particular high school course deficiency should be waived, a decision will be rendered by the Director of Academic Counseling and Advising.

Students approved for special admission must begin the program of study appropriate to their test results in English, mathematics, and reading, as prescribed by the Office of Academic Counseling and Advising, in their first term of enrollment. They must make steady progress in remedying any deficiency in these areas of basic skills in each term. Students are required to complete the basic skills requirement within 32 semester hours, prior to enrollment in courses for which their program of study is prerequisite, and prior to initiation of the application for major. No courses taken to remedy high school course deficiencies will carry credit toward meeting general education requirements or major/minor requirements. Credit will be awarded as general elective credit toward graduation, i.e., elective credits not required by the major and/or minor. Courses designated AD (Academic Development) carry institutional credit, but do not carry credit toward graduation. Other courses in which students must enroll, depending upon test results, carry credit toward graduation. Specially admitted students who do not follow the program of study prescribed by the Office of Academic Counseling and Advising will not be permitted to enroll the next term. Like all other students, specially admitted students must achieve a C average to remain in good standing.

APPLICATION PROCEDURES FOR FRESHMEN

Prospective students should initiate the admission process by writing or calling Admission Counseling and requesting admission materials. The address is SIUE, Campus Box 1600, Edwardsville, Illinois 62026-1600. Phone numbers: 618-692-3705; Illinois (toll free) 1-800-447-SIUE; St. Louis (toll free) 1-314-231-SIUE.

A. If you are a high school senior or if you graduated from high school within the last five years, submit an official high school transcript and ACT or SAT score. If you are currently in high school, the transcript must show 6th, 7th, or 8th semester class rank. A final transcript reflecting all high school course work and graduation verification must also be submitted. If you have graduated from high school, your transcript must show graduation verification and 8th semester rank. ACT or SAT scores which appear on the high school transcript will be accepted for admission consideration. If you have taken the test and have requested that the

University receive a copy, you will receive confirmation of receipt of the scores after SIUE receives your application. If you have not yet taken the ACT or SAT test, you should make arrangements to do so as soon as possible. No admission decision will be made without the results of the ACT or SAT.

B. If you graduated from high school five or more years prior to applying to SIUE, you must submit an official high school transcript showing graduation verification and 8th semester class rank. ACT or SAT scores are optional. If you have taken the ACT or SAT test, you are encouraged to submit the scores. Some applicants may be required to take placement tests before an admission decision is made.

C. Applicants who have passed the GED test must request that the Regional Superintendent of Schools or appropriate state office send an official copy of their GED scores. GED applicants must also submit an official high school transcript if their high school class graduated within the previous five years.

To be considered official, all documents (high school transcripts, GED scores, ACT/SAT scores, and college/university transcripts) must be mailed directly to the Office of Admissions and Records by the office or institution which issues the document. Faxed documents are not considered official.

ADMISSION AS A TRANSFER STUDENT

If you wish to be considered for admission as a transfer student, you must complete your admissions file at least three weeks before the beginning of the term in which you plan to enroll. You are considered a transfer student when you present for consideration coursework appropriate to baccalaureate education from accredited two-year and four-year institutions, unless all those hours were earned in college courses taken while in high school.

The admission criteria for students who have completed 16 semester hours in courses appropriate to baccalaureate education at accredited institutions are:

1. Applicants are admissible in good standing, provided they have earned a minimum grade point average of 2.00 (C) in appropriate coursework at the previous accredited institution(s) attended.
2. Applicants who do not have at least a 2.00 (C) average are admissible on academic probation, subject to the following conditions:
   (a) Those who have taken college or university work during the last five years must have earned at least a 2.00 (C) grade point average in their most recently attempted 16 semester hours of coursework appropriate to baccalaureate education.
   (b) Those who have not attempted any college work in the last five years must take University-administered placement tests as part of the admissions process. Applicants' test scores, together with other academic credentials, will be the basis for determining admission.
3. Transfer students who have attempted at least 16 semester (24 quarter) hours of credit elsewhere and who have not completed two English composition courses (equivalent to Eng 101 and Eng 102) with grades of C or better must take University placement tests in reading and writing. Transfer students who have attempted at least 16 semester (24 quarter) hours of credit elsewhere and have not completed an intermediate algebra course (equivalent to AD 095) with a grade of C or better must take the University mathematics placement test. Placement test results for students will be used for diagnostic purposes to help them select appropriate coursework and for the University Assessment program.

The admission criteria for applicants who have attempted fewer than 16 semester hours in courses appropriate to baccalaureate education at accredited institutions are as follows:

1. **Good Standing** — Students are admissible in good standing, provided they have earned at least a 2.00 (C) grade point average in such coursework at the previous accredited institution(s) attended and meet the criteria of the appropriate admission category for entering freshmen.
2. **Academic Probation** — Students who do not have at least a 2.00 (C) average are admissible on academic probation, providing they meet the criteria of the appropriate admission category for entering freshmen.

For all first-time freshmen and transfer students who have attempted fewer than 16 semester (or 24 quarter) hours of credit elsewhere, placement into mathematics, English, and academic development

courses is based on a combination of factors including ACT scores, high school rank, high school coursework and/or results of placement tests.

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

For applicants with at least 16 semester hours of course work as stipulated above, a complete file consists of an application for undergraduate admission and an official transcript from each institution previously attended. For applicants with fewer than 16 semester hours, a complete file consists of an application for undergraduate admission, an official transcript from each institution previously attended, and credentials required for the appropriate admission category for entering freshmen. Admitted applicants with fewer than 16 semester hours of transferable credit, must meet high school course requirements as listed under Traditional Freshmen. (**An official transcript must be sent directly to the Office of Admissions and Records by each institution.** Faxed transcripts are not considered official. All transcripts become the official property of the University and will not be returned or issued to another institution.) Any questions about the acceptability of a specific course for admission and/or for transfer credit should be directed to the Office of School and College Relations.

SIUE is a participant in the Illinois Articulation Initiative and will begin accepting transfer coursework that meets established General Education Core Curriculum requirements from participating Illinois institutions during the 1998 summer term.

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

Students applying for admission in any of the following categories will be admitted through the Graduate and International Admissions section of Admissions and Records. Inquiries should be directed to Box 1047, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1047.

STUDENTS HOLDING OR REQUIRING F-1 (STUDENT) VISAS

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

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

All F-1 applicants must submit proof of adequate financial resources in advance of admission. A financial certificate and instructions for its completion are included in the application packet. Financial arrangements must be approved by the appropriate deadline below. Questions regarding financial matters should be directed to the Graduate and International Admissions section of Admissions and Records.

The undergraduate application materials for international students include a detailed explanation of procedures and required credentials and are available in the Admissions Office.

F-1 applicants presently in the United States must complete their admissions file three weeks before the beginning of the term for which they seek admission.

F-1 applicants applying from abroad must observe the following admission application file completion deadline dates:

TERM	FILE COMPLETION DEADLINES
Fall Semester	June 15
Spring Semester	November 10
Summer Session	March 15

APPLICANTS WITH FOREIGN ACADEMIC CREDENTIALS

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

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

Secondary and post-secondary school transcripts of applicants' academic records (including certification of graduation and the title of the diploma or certificate awarded when appropriate) must be mailed directly to Graduate and International Admissions section of the Admissions Office by the registrar or principal of each school attended. Each transcript must bear the official's signature and the school's official seal. Photocopies of educational records and documents are acceptable only if they bear an original certification of authenticity from the issuing school or examination board. The submission of notarized copies of educational records and documents and other exceptions to the above stated foreign academic credentials policy will be considered when so recommended by recognized organizations such as the American Association of College Registrars and Admissions Officers and NAFSA: Association of International Educators. (Original educational documents not issued in confidence to the University will be returned upon request.) The University reserves the right to verify the authenticity of applicants' academic records with the issuing institutions.

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

APPLICANTS WHOSE FIRST LANGUAGE IS NOT ENGLISH

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

1. Applicants may sit for either the International Testing Program or the special Center Testing Program of the Test of English as a Foreign Language (TOEFL) and have an official score report sent by the testing agency directly to Graduate and International Admissions. The minimum acceptable TOEFL score is 550 (see exception in item 7 below).
2. Applicants may sit for an institutional TOEFL examination administered on campus at SIUE. Institutional TOEFL scores will not be accepted from other institutions. The minimum acceptable score is 550 (see exception in item 7 below).
3. Applicants may submit a properly certified copy of their General Certificate of Education administered by a British Testing Agency showing a grade of A, B, or C in the subject English Language. Recognized equivalent examinations will also be considered.
4. Applicants may submit academic records certifying that they have graduated from a recognized secondary school, college, or university where English is the exclusive language of instruction and is located in an English-speaking country.

5. Applicants may submit academic records certifying that they have completed courses, totaling at least 6 semester hours, equivalent to both English 101 (English Composition I) and English 102 (English Composition II) with earned grades of C or better at a regionally accredited college or university in the United States.
6. Applicants may sit for University-administered placement tests and meet internally determined indicators of college entry level competence in English and reading.
7. Applicants with acceptable credentials and a TOEFL score of less than 550 may qualify for acceptance into SIUE's Intensive English Language Program (IEP). (For more information on this program, see the **NONCREDIT Programs and Services** section of this catalog.) Acceptance into the IEP includes conditional acceptance to the University. Successful completion of this program, i.e., achieving a score of 550 or higher on SIUE's institutional TOEFL, serves as a prerequisite for course registration in the selected program.

The undergraduate application materials for students whose first language is not English include a detailed explanation of procedures and required credentials. They are available in the Admissions Office and will be mailed upon request. F-1 applicants must complete their admission application file by the deadline stated in the section entitled **Students Holding or Requiring F-1 Visas.** Other applicants must complete their admission application file no later than three weeks before the beginning of the term for which they seek admission.

ADMISSION AS A NON-DEGREE STUDENT

If you have at least a high school diploma or equivalent and wish to take undergraduate courses for credit, but are not interested in pursuing a baccalaureate degree, you may be admitted as a non-degree student. An application for admission must be submitted to the office of Admissions and Records at least three weeks before the beginning of the term in which you plan to enroll. Once admitted, you may enroll in any undergraduate course for which you have met prerequisites. However, enrollment in graduate-level courses is not permitted. Non-degree students are not eligible for either veterans' education benefits or most other forms of financial assistance including student employment. You must maintain a C average in order to remain in good standing.

Applicants who are ineligible as degree-seeking students are not admissible as non-degree students.

Applicants still in high school may be considered for admission as non-degree students by the Director of Admissions and Registrar.

ADMISSION AS A VISITING STUDENT

Students who wish to enroll in undergraduate courses for credit and transfer these credits to another college or university to be applied to graduation requirements at that institution may be admitted as visiting students. Visiting student applicants must submit an application for admission and certify that they are academically eligible to return to their former college or university. As a visiting student, you may enroll in courses for which you have met the prerequisites.

As a visiting student, you may receive federal grants or student loans if you are enrolled for at least six hours of credit and ONLY if your home institution is willing to provide financial aid through a consortium agreement with SIUE. You may also be eligible for federal veterans' benefits, and possibly, state veterans' benefits if you are an Illinois resident.

You may work as an SIUE student employee ONLY if you receive approval from the Office of Student Financial Aid. Call 618-692-3880 if you have questions regarding financial aid or employment.

Visiting students wishing to continue beyond their initial enrollment are encouraged to file an application for change of status as promptly as possible. Those continuing for two consecutive academic terms will be asked to submit an appropriate application and supporting documents. This requires that you submit all credentials required by the appropriate admission procedure for degree-seeking students.

If you are seeking admission as a visiting student, you should complete your admission file at least three weeks before the beginning of the term in which you expect to enter SIUE.

READMISSION OF FORMER DEGREE-SEEKING STUDENTS (UNDERGRADUATE)

Former students who have not attended SIUE for three or more terms including summer (i.e., registered and paid fees) must apply for readmission.

The readmission criteria for former students are as follows:

A. Former students who have not attended another accredited college or university since their last attendance at SIUE are admissible, subject to the following conditions:
   1. Those whose academic classification is "good standing" or "academic probation" will be readmitted with the same classification and major. Students indicating a desire to change majors on the application for readmission shall be readmitted with undeclared status.
   2. Students applying for readmission following their first academic suspension will be readmitted with undeclared status on "academic probation." Such students must receive academic counseling and advising before enrolling in classes and must adhere to the agreed upon plan of action made with the adviser.

B. Students who have attended another accredited college or university since their last attendance at SIUE are admissible, subject to the following conditions:
   1. Those who have taken fewer than 16 semester hours of coursework appropriate to baccalaureate education since their last attendance at SIUE and who have earned at least a 2.00 (C) grade point average in such transfer work will be admitted as follows:
      (a) If they had an academic classification of "good standing," or "academic probation" at SIUE, they will be readmitted with the same classification and class or college major. Students indicating a desire to change majors on the application for readmission shall be readmitted with undeclared status.
      (b) Students applying for readmission following their first academic suspension will be readmitted with undeclared status on "academic probation." Such students must receive academic counseling and advising prior to enrolling in classes and must adhere to the agreed upon plan of action made with the adviser.
   2. Those who have taken at least 16 semester hours of coursework appropriate to baccalaureate education since their last attendance at SIUE and have earned at least a 2.00 (C) grade point average in such transfer work are admissible subject to the following conditions:
      (a) If students had an academic classification of "good standing" at SIUE, they will be readmitted with the same classification and major. Students indicating a desire to change majors on the application for readmission shall be readmitted with undeclared status.
      (b) If students' SIUE cumulative grade point average was below 2.00 (C), they will be admitted on "academic probation." Students applying for readmission following their first academic suspension will be readmitted with undeclared status on "academic probation." Such students must receive academic counseling before enrolling in classes and must adhere to the agreed upon plan of action made with the adviser.
   3. Those who have taken coursework appropriate to baccalaureate education since their last attendance at SIUE and have not earned at least a 2.00 (C) grade point average in such transfer work, but whose SIUE academic classification was "good standing" will have their admission files automatically referred to the Admissions Review/Appeals Committee. Their admissibility will be determined by that Committee.

Students who left the University on academic warning under the quarter calendar and are now eligible to return under the semester calendar may have special options available to them. Please contact Admissions for details.

Former students whose academic classification at SIUE was "academic suspension" and who are admissible in terms of A. 2., B. 1.b., and B. 2.b. above will be readmitted with undeclared status and be advised in order to develop a plan of action for their course of study by the Office of Academic Counseling and Advising until they apply for major status. Students who wish to apply for admission to their former major must meet the entrance requirements for that program. Students who have been academically suspended more than once will not generally be readmitted to the University. Under exceptional circumstances, however, such students may appeal to the Admission Review/Appeals Committee. Future consideration may be granted based upon evidence provided that the student is capable of undertaking additional academic

coursework (i.e., 16 additional semester transfer hours with at least a C average).

The transfer average (i.e., the cumulative grade point average in all coursework appropriate to baccalaureate education from all accredited institutions since the student's last attendance at SIUE) is used only in determining the applicant's eligibility to reenter. Once readmitted, students' SIUE records reflect the total number of acceptable transfer credit hours (hours earned in transferable course with grades of A, B, or C, Pass, Satisfactory), but the only grade point average calculated will be for work completed at SIUE.

Former students wishing to be considered for readmission must complete their admission file at least three weeks prior to the beginning of the term for which admission is sought. Those who have not attended another accredited college or university since their last attendance at SIUE need to submit only an application for admission. Those who have attended another accredited college or university since their last attendance at SIUE must submit both an application for admission and an official transcript from each accredited institution attended. (**An official transcript must be sent directly to the Office of Admissions and Records by each institution.** Faxed transcripts are not considered official. All transcripts become the official property of the University and will not be returned or issued to another institution.) Questions about the acceptability of specific courses for admission and/or transfer credit should be directed to the Office of School and College Relations.

Reentering students should be advised that no student may graduate under the General Education, major or minor requirements published in a catalog more than seven years old without the written permission of the Dean of the school in which the student's major or first major is housed. Such written permission shall be submitted to the Admissions and Records Office with the application for graduation.

ADMISSION DEADLINES

All undergraduate applicants for admission, unless otherwise specified, must complete their admission file three weeks before the beginning of the term for which admission is sought. A complete file consists of an application and all required documents for the admission category in which the individual is applying.

Deadline exceptions for non-degree applicants, readmission of former students (who have not attended another college or university since their last attendance at SIUE) and visiting students may be determined by the Director of Admissions and Registrar.

DETERMINATION OF RESIDENCY STATUS

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

DEFINITIONS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

Students may have their residency status reclassified on the basis of additional or changed information by filing a written request for review with the Office of Admissions and Records. The written request for review must be filed within 30 school days of the day on which classes begin for the term for which a residency change is requested.

A student seeking reclassification from non-resident to resident status is liable for the tuition and fees assessed but, if granted, the change of residency and any tuition change shall apply for the term in which reclassification occurs. In the case of a student classified as a resident who is reclassified as a non-resident, the change to nonresident status and adjustment of tuition shall apply for the term following the reclassification. If the University has classified a student as a resident on the basis of false or falsified documents furnished by the student, the reclassification to non-resident status shall be retroactive to the first term during which residence status was based on these incorrect documents. The student also may be subject to sanctions under the Student Conduct and Student Grievance guidelines.

APPEAL OF RESIDENCY REVIEW DECISIONS

A student who is dissatisfied with the ruling in response to a written request for review of his/her residency status may appeal the ruling to the Vice Chancellor for Student Affairs by filing a written request with that office within 20 days of the notice of the first ruling.

REGISTRATION

An undergraduate student who has been accepted as a major by an academic department and who has completed 75 or more earned hours may register for classes during the third week of a term for the subsequent term. All other students may begin registering during the fourth week of the term. Early registration is advised.

Registration is combined for Summer and Fall terms and should be completed during Spring term. This allows those students not registering for the Summer session to finalize class schedules before the summer break. Again, early registration is advised.

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

Only students who have been admitted and advised may register. Any registration may be declared invalid for academic, disciplinary, or financial reasons attested to by the Office of Admissions and Records, Vice Chancellor for Student Affairs, or the Office of the Bursar.

Physically disabled students should contact the Coordinator of Disability Support Services for additional registration information.

You are expected to complete the registration process, including financial clearance, prior to the precancellation deadline. Beginning with the first day of the term, you will be assessed a non-refundable $25.00 late registration fee.

CHANGES IN REGISTRATION

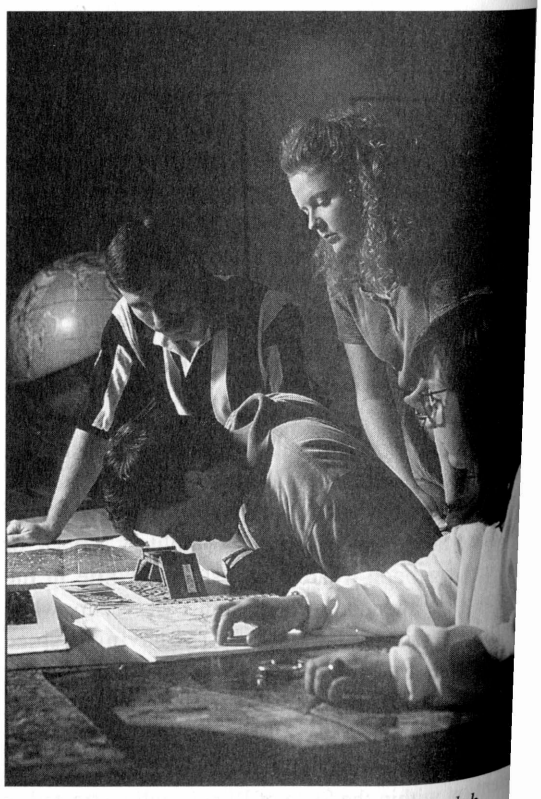
You may make changes to your class schedule in the Enrollment Center, Room 1309, Rendleman Building or in the unit where you originally registered, prior to the first day of that term. Beginning with the first day of the term, all program changes must be made in the Enrollment Center or at Evening and Weekend Student Services (Room 1207, Rendleman Building). **The change is official only when this procedure is complete.** You are officially registered for only those courses and sections appearing on your registration documents, and as modified by official changes which you have made with your adviser. You may add classes only if the additions have been approved by your adviser and appear on a signed Course Request Form (CRF) or program change form. You should request an updated copy of your schedule after making a program change.

ADDING CLASSES

Adding a class is not the same as registering for that class. Procedures for adding classes are as follows:

1. You may add any class approved by your academic adviser.
2. During the first week of the term, you may add any "open" class or any "closed" class for which you have obtained a Class Permit Card from the instructor.
3. During the second week of the term, all classes are considered "closed."
4. After the second week, you may only add classes which have not yet begun.

Exceptions to the above policy must be approved by the appropriate dean and the Director of Admissions and Registrar. This policy is applicable during all academic terms.



Geography students study maps in the geography lab.

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

1. If the tuition and fees have not been paid, a new tuition calculation is completed to reflect the increased amount.
2. If the tuition has been paid, the additional hours will generate a new tuition cost for that term, which can be paid any time after a new tuition calculation has been prepared, or upon receipt of the next billing statement.

DROPPING CLASSES

FALL AND SPRING TERMS

Weeks 1-2	You may drop a class without permission of the instructor and have no entry on your transcript.
Weeks 3-10	You may drop a class without permission of the instructor. Grade of "W" is automatically assigned.
Weeks 11-13	You may drop a class after approval by the instructor and adviser, but grade of "WP" or "WE" must be assigned by instructor; "WE" will be computed as an "E" for the GPA.
After Week 13	No class may be dropped; a grade other than "W," "WP," or "WE" must be assigned by the instructor.

SUMMER TERM

Weeks 1-2	You may drop a class without permission of the instructor and have no entry on your transcript.
Weeks 3-5	You may drop a class without permission of the instructor. Grade of "W" is automatically assigned.
Weeks 6-8	You may drop a class after approval by the instructor and adviser, but grade of "WP" or "WE" must be assigned by instructor; "WE" will be computed as an "E" for the GPA.
After Week 8	No class may be dropped; a grade other than "W," "WP," or "WE" must be assigned by the instructor.

For courses scheduled in nontraditional formats, proportional deadlines apply.

Absence from class does not constitute dropping a class or withdrawing from the University, so you must follow these instructions to avoid the assignment of failing grades. However, through the tenth week of each semester faculty may request that students who fail to meet attendance requirements be removed from class. See the **Class Attendance** section of this publication for important information.

Students who drop a class or classes may be entitled to a refund; refunds resulting from program changes or withdrawals are paid by check and are mailed to students beginning the third week of the term.

Because STUDENTS WHO DROP ALL CLASSES are considered to be withdrawing from the University for that term, that transaction must be initiated according to the procedure below.

WITHDRAWING FROM THE UNIVERSITY

If you find it necessary to withdraw from the University during any term you must report to the Enrollment Center, Rendleman Building, Room 1309, to initiate official withdrawal procedures. All withdrawals must be cleared by the Office of Student Financial Aid. (Evening and weekend students who are unable to complete the procedures through the Enrollment Center must contact Evening and Weekend Student Services, Rendleman Building, Room 1207.) All withdrawals must be completed by the end of the thirteenth week of classes during fall and spring and by the end of the eighth week for summer full-term classes. Different deadlines apply to short-term classes or workshops scheduled in non-traditional formats. Inquiries regarding withdrawal deadlines should be directed to the Enrollment Center.

A 100% refund of tuition and fees (with the exception of the late registration fee) is possible only if withdrawal and refund requests are officially completed within the first two weeks of the term. All textbooks or library materials on loan must be returned before a withdrawal becomes effective and a refund is approved.

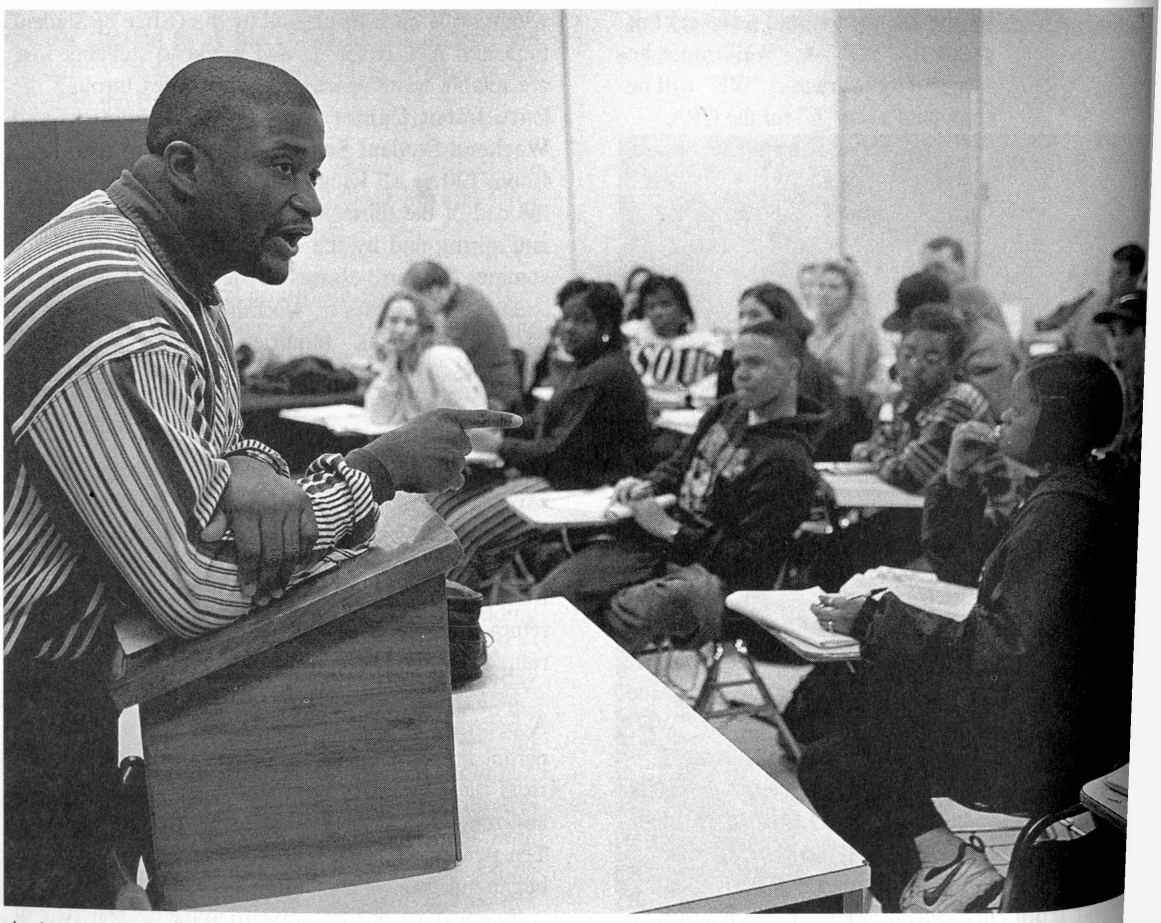
A pro-rata refund policy allows you to obtain a partial refund of tuition and fees if your withdrawal from the University is processed between the third and tenth weeks of the semester (fall and spring). The percent of your refund is calculated using the beginning date of the course and the official date of withdrawal, rounded downward to the nearest 10% of that period. An administrative fee, not to exceed the

lesser of 5% of the assessed charges or $100.00, is assessed for pro-rata refunds. The percent of pro-rata refund follows:

Week 3	80% refunded, less 5%
Week 4	70% refunded, less 5%
Week 5	60% refunded, less 5%
Week 6	60% refunded, less 5%
Week 7	50% refunded, less 5%
Week 8	50% refunded, less 5%
Week 9	40% refunded, less 5%
Week 10	30% refunded, less 5%

Please consult the registration calendar in the Schedule of Classes for deadlines concerning withdrawal and refunding of fees.

If you receive notification of academic suspension after completing registration for the next term, you will be withdrawn from the University automatically. If you have already paid tuition and fees for the next term, contact the Enrollment Center to initiate a refund.



Assistant Professor Anthony Cheeseboro leads a discussion in his Introduction to Western Civilization class.

ACADEMIC POLICIES AND REQUIREMENTS

CLASSIFICATION OF STUDENTS

Students seeking their first bachelor's degree are classified according to the number of credit hours they have earned.

CLASS	SEMESTER HOURS EARNED
Freshman	0-29
Sophomore	30-59
Junior	60-89
Senior	90 or more

One semester hour represents the work completed in a lecture course that students attend for 50 minutes each week for fifteen weeks; laboratory courses may require more than 50 minutes each week for one semester hour. One quarter hour of credit is equivalent to two-thirds of one semester hour; one semester hour equals one and one-half quarter hours.

Other classifications which are not determined by the number of credit hours are Non-Degree, Senior with Degree, and Visiting Student.

CLASS ATTENDANCE

Upon registration, students accept responsibility for attending classes and completing course work. It is your responsibility to ascertain the policies of instructors with regard to absence from class, and to make arrangements satisfactory to instructors with regard to incomplete course work. Although absence from class does not constitute dropping a class or withdrawing from the University, faculty have the authority to request the removal of students who fail to meet attendance requirements.

The Registrar, in consultation with the faculty member involved, reserves the right to withdraw a student from class administratively because of excessive absences from class, providing the number of absences causing this type of withdrawal is stipulated in the course syllabus. Such withdrawals appear on the transcript as follows:

week 1-2 - no entry
week 3-10 - WR
week 11 and beyond - UW (calculates into GPA as an E).

Summer term time frames will be different from the above, based on the length of the course.

You may appeal administrative withdrawal to the dean of the college or school offering the course within seven (7) calendar days of notification being sent by the Registrar.

It is particularly important to attend the first meeting of a class. Failure to attend the first session could result in your place being assigned to another student.

However, failure to attend the first session of a course does not necessarily mean that you have been withdrawn from it. If you wish to withdraw from a course, and possibly qualify for a reduction of tuition and fees, you must formally withdraw from the course at the Enrollment Center or at Evening and Weekend Student Services. Failure to complete a program change or withdrawal form may result in your being assigned a failing grade and remaining liable for full tuition and fees.

ACADEMIC LOAD

The normal academic load for students is 16 hours. The maximum is 19 hours. Students with a 3.25 grade point average or above for the preceding term may be permitted to take more than 19 hours with the approval of the dean or director of their academic unit. The normal load for the summer term is 12 hours; the maximum load for the term is 15.

Students on scholastic probation may not take more than 12 hours without approval of the adviser. Students employed full-time should not register for more than six hours.

Students who carry 12 or more hours per semester are considered full-time students. However, a student attending the University under scholarships, loans, or other types of financial aid requiring full-time enrollment should check to make certain this meets the requirements of the specific financial aid program. For enrollment certification purposes, University-sponsored cooperative education participation is considered equivalent to full-time enrollment. This requires formal enrollment in an approved cooperative education course through the Career Development Center.

Undergraduate students are expected to spend at least two hours in preparation for every hour in class.

APPLICATION FOR A MAJOR OR MINOR

Undeclared students who wish to apply for a major or minor should make an appointment with an adviser in Academic Counseling and Advising to complete a "Major and/or Minor Approval" form. Acceptance into the major program of study is at the discretion of the academic department. **Students who are completing courses to meet high school course deficiencies and/or to satisfy entry competencies (i.e., required academic development courses) may apply for a major or minor only after successful completion of those requirements.** Students who apply for a major will be advised by the department of their major subsequent to acceptance.

A transfer student who has an Associate of Arts or Associate of Science degree, and who has met the established prerequisites for the intended major at SIUE will be accepted to the major program of study upon admission to the University.

Students who wish to change a major or minor should go to the department of their intended new major to complete a "Major and/or Minor Approval" form.

Students who have applied for a major and wish to apply for a second major or minor should submit their request to the department of the primary major. Students may request a minor when applying for a major, or later, by submitting a request to the major department.

DOUBLE MAJORS

A student may receive a single degree with a major in more than one discipline. A double major may provide richer preparation for graduate study or for a vocation. A student with a double major will have a first major, usually the one for which he or she first applied, and a second major. A student must satisfy all requirements for both majors, although some requirements need be accomplished only once. For example, the General Education requirements, once satisfied, need not be repeated. Moreover, if both majors require a foreign language, only one foreign language need be taken. Some majors require that the student elect a minor concentration. A student with a second major would satisfy the minor requirement.

A student may apply for a double major when making the first major application. A student who has been admitted to a major and who wishes to apply for a second major should first discuss the process with the adviser for the first major.

CHANGE OF STATUS

Should a non-degree or visiting student wish to enter a baccalaureate degree program at a later date, the student must apply for reclassification of admission status. The application includes submitting all credentials required by the admission procedure for the appropriate degree-seeking student category. If the student meets the criteria of the appropriate admission category and has a cumulative grade point average of 2.00 (C) in credits earned at SIUE, the student will be reclassified as degree-seeking. If these requirements are not met, the application for reclassification may be considered only after successful completion of at least 16 semester hours of credit earned at SIUE. For first-time freshmen, successful completion is defined as having earned a C or better in English Composition (ENG 101) and having maintained a cumulative average of C or better in other courses requiring at least college entry level competence. For students who have previous college or university coursework, successful completion is defined as having maintained a cumulative average of C or better in college level courses which do not duplicate previous course work for which SIUE gives credit. Courses taken on a Pass/No Credit basis will not count toward completion of the minimum 16 semester hours, nor will courses taken on a Pass/No Credit basis count in the calculation of grade point average for purposes of admission as degree-seeking students.

Application for reclassification must be completed at least three weeks before the beginning of the term for which students are seeking reclassification. No midterm admission status changes are permitted. The decision regarding acceptance of credit earned by a non-degree or visiting student toward satisfying requirements for a major is made by the major department. Other courses normally counted toward a particular baccalaureate degree will be counted for such students.

Credit earned as a non-degree or visiting undergraduate student will not be accepted toward a graduate (master or specialist) degree at SIUE.

CREDIT EARNED BY EXAMINATION, EXTENSION, AND CORRESPONDENCE

While the University does not maintain a correspondence school or extension courses, such courses taken from institutions which are accredited by appropriate regional accreditation associations are regularly accepted, if the grade earned is C or above. A maximum of 48 semester hours may be completed through correspondence and extension courses; of this total, not more than 15 semester hours may be taken through correspondence.

PROFICIENCY EXAMINATIONS

Students may earn course credits by demonstrating their proficiency in certain subjects. Instructional Services (Peck Building 1404) maintains a list of those courses for which out-of-class proficiency examinations are regularly available and provides information regarding time and place of testing and other detailed instructions.

Proficiency examinations (including non-general education courses, as well as general education courses) are administered by Instructional Services. Students who desire to take a proficiency examination in any course should initiate the procedure with Instructional Services. In many cases, course guides and reading lists are available from academic departments. For information regarding General Education credit for proficiency examinations, please refer to the section entitled, **Proficiency Examinations for General Education Credit.** Students may take any available proficiency examinations subject to the approval of the department and the following limitations: (1) a maximum of 32 hours may be gained through proficiency examination, CLEP, and/or Advanced Placement; (2) a proficiency examination for a specific course may not be taken more than once, nor for a course for which a grade has been earned. Additional restrictions may be applied by the academic schools or the College of Arts and Sciences.

After a student has completed a proficiency examination, credits and grade points shall be granted according to the grade achieved on the test as follows: (1) If a student receives a grade of A or B on a proficiency examination, the academic record shows the name of the course, hours of credit granted, the grade earned, and a notation "out-of-class proficiency" or "in-class proficiency"; the grade earned counts in the grade point average; (2) If a student receives a grade of C on a proficiency examination, the record shows the name of the course, the hours of credit granted, "P" in the grade column with a notation "out-of-class proficiency" or "in-class proficiency"; the grade earned does not count in the student's grade point average; (3) If a student receives a grade of D or E on a proficiency examination, no credit is awarded. The academic record shows nothing regarding the proficiency examination. However, the proficiency examination grade report forms are filed in the student's file for reference.

In-class proficiency examinations are administered to interested students early in the term. A student must be enrolled in classes to receive in-class proficiency credit. The examinations are graded in sufficient time for those who pass the test to add another course. The names of the students who have passed the early examinations are carried on the class roll; such students receive credit for the course at the end of the term. Students who fail the in-class proficiency examinations continue in the course as regular students.

ADVANCED PLACEMENT PROGRAM OF THE COLLEGE BOARD

High school students who wish to seek advanced placement and college credit should apply through the Advanced Placement Program of the College Board, P.O. Box 6671, Princeton, New Jersey 08540-6671.

Advanced classes, which qualify for this purpose, are offered in many high schools in subjects such as English composition, foreign language, history, biology, chemistry, mathematics, and physics. A national examination prepared by a committee of high school and college teachers is given in each subject. Each examination is intended to measure the achievement of students and to determine at what point students should begin college study of that subject. Grades are assigned as follows: 5, high honors; 4, honors; 3, creditable; 2, pass; and 1, fail. Ordinarily, the maximum credit granted through Advanced Placement Examinations is 12 hours; this credit is not used in computing the grade point average. A maximum of 12 hours of advanced placement credit granted at another accredited college or university is transferable to this University.

Students may appeal to the appropriate academic dean if they wish to be granted more than 12 hours. The maximum credit a student may receive from CLEP, proficiency examinations, and/or advanced placement is 32 semester hours.

Courses for which credit may be earned through advanced placement are the following:

BIOLOGICAL SCIENCES:
With a score of 4 or 5 on the advanced placement test, students may earn 3 hours credit for Biology 111.

CHEMISTRY:
With a score of 4 or 5 on the advanced placement test, students may earn 8 hours credit for Chemistry 121a and b. With a score of 3 on the advanced placement test, students may earn 4 hours credit for Chemistry 121a. Students may petition the Chemistry department for laboratory credit.

ENGLISH:
With a score of 4 or 5 on the English Language and Composition section of the Advanced Placement Program test, students may receive 3 hours credit for English 101. With a score of 4 or 5 on the English Literature and Composition Advanced Placement test, students may receive 3 hours credit for ENG 111.

HISTORY:
With a score of 4 or 5 on the European history section of the Advanced Placement test, students may earn 3 hours credit for History 111a or b, or 3 hours credit for History 113 or 114. With a score of 4 or 5 on the American history section of the Advanced Placement test, students may earn 3 hours credit for History 200 or 201.

MATHEMATICS:
With a score of 4 or 5 on the Calculus AB Advanced Placement test, students may earn 5 hours of credit for Mathematics 150. Students with a score of 3 on the Calculus BC Advanced Placement test may earn 5 hours of credit for Mathematics 150 and students with a score of 4 or 5 on this test may earn 9 hours of credit for Mathematics 150 and Mathematics 152.

MUSIC:
Students may earn 3 hours of credit for Music 111 through the Advanced Placement test.

PHYSICS:
With a score of 4 or 5 on the Physics Advanced Placement test, students may earn 5 hours of credit for Physics 206a or b.

Students should send the results of advanced placement examinations to the Office of Admissions and Records. Credit earned through Advanced Placement examinations may be applied toward the 124 hours required for graduation. Advanced Placement examinations are considered proficiency examinations. See the section on **Proficiency Examinations** in this catalog.

COLLEGE LEVEL EXAMINATION PROGRAM

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

1. A maximum of 32 hours may be earned through proficiency examinations, advanced placement and/or CLEP (by means of General and/or Subject Examinations). This credit is applicable toward a baccalaureate degree. For information regarding General Education credit for CLEP examinations, please refer to the section entitled, **Proficiency Examinations for General Education Credit.**
2. The score on each General Examination must equal or exceed the 50th percentile on the national college sophomore norm, which is a scaled score of approximately 500. Separate scores are reported for each of the tests comprising the General Examinations. As determined by the appropriate department, credit will be granted for the successful completion of the General Examination.
3. Credit will be awarded for a CLEP Subject Examination when approved by the department offering a comparable course.
4. Test credit will not be allowed when students previously have received credit for comparable courses or when currently enrolled in a comparable course.
5. Regardless of the total amount of credits earned, students may take examinations for which comparable credit has not been established previously.
6. Students may take the tests prior to enrollment at the University. Final recording of credit upon the permanent record, however, is contingent upon matriculation at the University and acceptable scores.
7. When approved, credit will normally be awarded for Subject Examinations on the basis of the number of credit hours in the pertinent courses.
8. Students may receive a total of 32 hours from CLEP, advanced placement, and proficiency examinations.

9. Biological Sciences, Chemistry, Computer Science, Mathematics and Statistics, and Physics majors at SIUE will not be awarded CLEP credit after credit has been earned for more advanced work in the subject.

The tests are administered by Instructional Services. Credit earned through CLEP examinations may be applied to the 124 hours required for graduation. CLEP examinations are considered to be proficiency examinations. See the section on **Proficiency Examinations** in this catalog.

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

MILITARY EXPERIENCE CREDIT

Students who have completed military basic training may be eligible for 2 hours of credit for physical education and 2 hours of credit for health education. Students who have served six months or more of active duty may receive an additional 2 hours of credit for military studies. Applications for credit for military services experience as well as applications for credit for work done in military service schools may be made through the Office of Admissions and Records. College or university credit earned prior to or during military service takes precedence over military service school credit; therefore, military service school work cannot be assigned credit in all instances.

In evaluating credit possibilities based upon formal service school training programs, SIUE follows the recommendations of the American Council on Education as set forth in the U.S. Government bulletin, Guide to the Evaluation of Educational Experience in the Armed Forces. No credit is allowed for college-level GED tests.

GRADING SYSTEM

The following grading symbols are used by the University:

A — Excellent . . . . . 4 credit points
B — Good . . . . . 3 credit points
C — Satisfactory . . . . . 2 credit points
D — Poor . . . . . 1 credit point
E — Failure
AU — Audit. No grade or credit hours earned.
DE — Deferred. Used only for the first semester course of a two-semester Senior Assignment sequence.
I — Incomplete. All work required for the course during the term was not completed; students have the permission of the instructor to do so within a specified time period. (NOTE: For further information regarding the Incomplete grade policy, see the section entitled **Incomplete grades.**)
PR — Progress. Awarded only for skills courses. PR grades are not included in grade point average calculations. (To earn credit for a course in which a PR grade was earned, students must repeat the course and earn a passing grade.)
P — Pass. Used for courses taken under Pass/No Credit option.
NC — No Credit. Used for courses taken under Pass/No Credit option. No credit hours earned.
S — Satisfactory. Used for noncredit courses and thesis.
U — Unsatisfactory. Used for noncredit courses and thesis.
UW — Unauthorized Withdrawal. Calculated as an E in grade average.
W — Withdrawal. Authorized withdrawal. Work may not normally be completed.
WP — Withdrew Passing
WE — Withdrew Failing. WE is calculated as E in grade average.
WR — Withdrawal by the Registrar. Awarded by instructor for excessive absences as stipulated in course syllabus.

For further information regarding withdrawal grades and procedures, please refer to the sections entitled **Changes in Registration** and **Withdrawing from the University.**

GRADE POINT AVERAGE (GPA) CALCULATION

Only SIUE courses are used in calculating the cumulative grade point average (GPA). The GPA is calculated as follows:

1. A = 4 points
   B = 3 points
   C = 2 points
   D = 1 point
   E = 0 points
   AU = Audit (0 points)

DE = Deferred (0 points)
I = Incomplete (0 points)
PR = Progress (0 points)
P = Pass (0 points)
NC = No Credit (0 points)
S = Satisfactory (0 points)
U = Unsatisfactory (0 points)
UW = Unauthorized Withdrawal (0 points)
W = Withdrawal (0 points)
WP = Withdrew Passing (0 points)
WE = Withdrew Failing (0 points)
WR = Withdrawal by the Registrar (0 points)

2. Quality hours are multiplied by grade points to obtain quality points for each course. Quality hours are awarded for courses with grades of A, B, C, D, E, UW, and WE.
3. The quality hours column is totaled.
4. The quality points column is totaled.
5. Total quality points are divided by the total quality hours. Grade point averages are rounded to the third decimal.

EXAMPLE

Courses	Quality Hours		Grades		Quality Points
AD 075A	0	x	P (0)	=	0.0
AD 090A	0	x	NC (0)	=	0.0
BIOL 111	3	x	A (4)	=	12.0
SPC 103	3	x	E (0)	=	0.0
THEA 141	3	x	B (3)	=	9.0
	9				21.0

Twenty-one (21) quality points divided by 9 quality hours yields a 2.333 GPA (grade point average).

INCOMPLETE GRADES

A grade of "I" (incomplete) may be awarded when a student has completed most of the work required for a class but is prevented by a medical or similar emergency from completing a small portion of the course requirement. Unless instructors have specified a shorter period of time, incomplete grades not completed within one year will automatically be changed to an E (graduation in the meantime notwithstanding). Instructors who specify a shorter period of time must communicate that stipulation in writing, with copies to Admissions and Records, the department chair, and to students at the time the incomplete is granted. Students who feel that mitigating circumstances justify an extension of the time limit may petition the faculty member who granted the incomplete. Faculty members who agree to grant extensions must inform the student, the department chair, and Admissions and Records. Students and their advisers are notified on the official grade report of incompletes and the time period for changing an incomplete to an E.

Students completing work for courses in which they have a grade of Incomplete should not formally reenroll in those courses, but should meet with their instructors to determine requirements for completing the courses.

PASS/NO CREDIT

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

Taking courses on a Pass/No Credit basis is limited to courses outside General Education requirements and major and minor requirements. Students may enroll in no more than 9 hours of undergraduate coursework under the Pass/No Credit option. These limitations do not apply to courses which are offered only for Pass/No Credit.

A decision to take a course on a Pass/No Credit basis must be declared no later than the eighth week of the fall or spring term and the sixth week of the summer session, and must be approved by the adviser. Thereafter, no change may be made. Some graduate schools and employers consider Pass as equivalent to a C grade.

AUDITING COURSES

You may register in an Audit status for courses, but will receive neither a letter grade nor credit for audited courses. Students auditing classes pay the same tuition and fees as though registered for credit. If auditing students do not attend regularly, the instructor may determine that they should not receive "AU" grades for the courses. Undergraduate students registering for a course for credit may change to an audit status or vice versa during the first six weeks of fall or spring terms and through the first four weeks of the summer term; thereafter, changes may not be made. Veterans attending under the GI Bill do not receive benefits for audited classes. ISAC Monetary

Award and Pell (Basic) Grant recipients may not include audit classes as part of the total hours to qualify for payment.

REPEATED COURSES

You may repeat courses at SIUE under the following conditions and restrictions:

- When you first repeat a course previously taken at SIUE, only the grade earned in the more recent attempt will be used in computing your grade point average. Both grades will appear on the transcript.
- The grades for second and all subsequent repeats of the same SIUE course will appear on your transcript and will be used in computing your grade point average.
- Credits earned for any course will be applied only once toward degree requirements, no matter how often the course is repeated.
- You will not be permitted to repeat for credit a course which is a prerequisite for a course already completed successfully.

The University is not obligated to offer a course simply to provide students an opportunity to repeat a previously attempted course. Additionally, individual academic units and programs may set more stringent conditions and restrictions regarding repeated courses.

You and your adviser are responsible for notifying the unit where you registered regarding any course which will be repeated for that term. Failure to notify that unit about repeated courses could result in an inaccurate calculation of grades and academic standing.

TRANSCRIPTS

You may request copies of your SIUE academic record provided you have fulfilled all financial obligations to the University. Requests for transcripts should be sent to the Office of Admissions and Records.

Transcripts are released only with your written consent. Telephone and electronic mail requests for transcripts cannot be honored, but faxed requests bearing your signature are acceptable. The fee for an official transcript is $2.00. If more than one copy is sent to the same recipient on the same request, the charge is $2.00 for the first transcript and $1.00 for each additional transcript.

ACADEMIC PROBATION AND SUSPENSION

1. If you have a cumulative grade point average of 2.00 or above, you are considered to be in Good Academic Standing.

2. When your cumulative grade point average falls below 2.00, you will be placed on Academic Probation and will be subject to the restrictions placed on probationary students. You will receive written notification of probation and information regarding the suspension policy. Such notification will occur early in the term immediately following the assignment of probationary status. If you are placed on Academic Probation, you must receive intensive academic counseling and advising during the next term of enrollment. An adviser will help you identify solutions and develop a plan of action.

3. If you are on Academic Probation, you will not be returned to good standing until your cumulative average is 2.00.

4. If you are on Academic Probation and fail to attain a 2.00 average for the next term of attendance, you will be placed on Academic Suspension. Once suspended, you will no longer hold major status in an academic program.

5. If suspended, you will be ineligible to attend SIUE for at least one term. You may reenroll only upon favorable action of the Suspension Appeals Committee provided you agree to intensive academic advisement and counseling. You and your adviser in Academic Counseling and Advising must reach agreement upon a plan of action. The Suspension Appeals Committee is administered by Academic Counseling and Advising and, in cases where a student had been accepted to a major, the committee may include a representative from the major department. You must file an appeal before any action will be taken by the Suspension Appeals Committee.

   If you are suspended and permitted to reenroll, you will revert automatically to undeclared status. However, upon reinstatement to the University, the faculty of the major department shall be asked to indicate whether you will be readmitted as a major. Upon reinstatement to the University, you may request a major when you meet the admission criteria for a given program.

Suspended students who have been permitted to reenroll will assume probationary status. **Ordinarily, if you are suspended more than once, you will not be reinstated at SIUE.**

PLAN OF ACTION

A plan of action is a course of study designed to help you matriculate more effectively. A plan of action may include:

1. reduction in number of hours attempted
2. change in program (major)
3. enrollment in courses prescribed by the adviser, e.g., writing, reading, study skills
4. enrollment in courses in which you previously received a failing grade
5. career counseling
6. other measures recommended by the adviser.

ACADEMIC RECOGNITION

Students who demonstrate outstanding scholarship are included on the Dean's List and recognized through Honors Day and Commencement activities. To be included on the Dean's List, a student's term quality hours must be equal to or greater than 12 with a minimum grade point average of 3.50 for the term. Credit earned for out-of-class proficiency is not used in qualifying for the Dean's List. The Dean's List is published at the end of each term.

Honors Day Convocation, held each spring, recognizes students who received undergraduate degrees the previous August or December, and attained a Southern Illinois University at Edwardsville grade point average of 3.50 or higher or who are candidates for Bachelor of Arts or Sciences degrees in May and have a University grade point average of 3.50 or higher. Additionally, freshmen, sophomores, juniors, or seniors enrolled for the spring term who have a University grade point average of 3.50 or higher, are recognized. To be eligible for Honors Day recognition, students must have passed 16 hours at Southern Illinois University at Edwardsville. Courses taken on a Pass/No Credit basis will not apply. Graduating seniors who have achieved outstanding scholarship are recognized at Commencement in the graduation program; their diplomas designate summa cum laude (3.90 or higher), magna cum laude (3.75-3.89), or cum laude (3.50-3.74).

APPLICATION FOR GRADUATION

Candidates for a baccalaureate degree should file an Application for Graduation with Admissions and Records at the beginning of their senior year. Applications are mailed routinely to students when they reach 90 semester hours, but you are advised to contact Admissions and Records if you have not received an application by the time you have reached 105 semester hours. Application forms are available in that office.

Once a completed application is received by Admissions and Records, graduation evaluations are performed. Admissions and Records determines completion of General Education and University degree requirements, while the major and minor requirements are established and reviewed by the academic departments through which the degree is sought.

In addition to completing the application for graduation, students must meet all University requirements and satisfy all outstanding financial obligations to the University. Diplomas will not be issued for students with outstanding financial obligations.

Applications must be submitted no later than the first week of the term in which you plan to graduate. All deficiencies for graduation (incompletes, for example) must be completed within two weeks following the end of the intended term of graduation; otherwise, you will be graduated at the end of the academic term in which all deficiencies are completed.

Commencement ceremonies are held at the end of each term. Attendance at the exercises is voluntary; however, you will not be eligible to participate in commencement exercises unless you have applied for graduation and your major program adviser has certified that you will complete degree requirements by the end of the term in which you have applied for graduation.

A graduation fee of $35.00 is payable at the time of application. The fee does not cover the cost of the cap and gown. These items are ordered through the University Bookstore in the University Center. Questions regarding the cap and gown and invitations should be referred to the University Bookstore.

GRADUATION

Undergraduate students may elect to complete their degree under the requirements that appear in the undergraduate catalog in force at the time of their original matriculation as SIUE degree-seeking students or, subject to the approval of an academic adviser, may elect the requirements that appear in a succeeding catalog(s). This policy is subject to the following provisions and limitations.

1. No student may graduate under the General Education major or minor requirements published in a catalog more than seven years old without the written permission of the dean of the college or school in which the student's major or first major is housed. Such written permission shall be submitted to the Admissions and Records Office with the application for graduation.
2. A student may satisfy General Education requirements from one catalog and major or minor requirements from a second catalog, provided that neither catalog exceeds the seven-year limit stated in #1 above.

Bachelor's degree candidates are expected to satisfy all General Education requirements as well as all requirements for their academic major and any academic minor. Students intending to teach must meet the requirements for teacher certification. In addition, all candidates for a bachelor's degree must satisfy all other University requirements and maintain a minimum grade point average of 2.00 for work completed at SIUE. Academic program requirements may exceed University requirements.

Candidates for the degree must complete a minimum of 124 hours of credit in approved courses. Students transferring from an accredited two-year institution must earn at this institution, or at any other accredited four-year institution, at least 60 of the semester hours required for the degree. All candidates for the degree must complete a minimum of 30 semester hours in residence at SIUE and meet all degree program requirements. Students must submit written requests for exceptions to the Graduation Appeals Committee through the Office of Admissions and Records.

Students are responsible for meeting all degree requirements and financial obligations.

BACHELOR OF ARTS FOREIGN LANGUAGE REQUIREMENT

In addition to the University's general requirements for a bachelor's degree, students working toward a Bachelor of Arts degree must demonstrate, either by examination or by university courses, proficiency in a foreign language equivalent to a year of university-level work. Some academic units may require more than one year of study in a foreign language for their degrees. Waiver of the foreign language requirement of Skills Option B of the General Education Program for students who transferred to SIUE with an Associate of Arts or Associate of Science degree from an accredited two-year institution in Illinois does not constitute a waiver of the Bachelor of Arts degree foreign language requirement.

CONSTITUTION AND SENIOR ASSIGNMENT REQUIREMENTS

Please refer to the sections entitled **General Education** and **Assessment Plan** for a complete explanation of the constitution and senior assignment requirements.

SECOND BACCALAUREATE DEGREE

Students seeking a second baccalaureate degree must complete a minimum of 30 semester hours beyond completion of the first degree and must satisfy the requirements of the major of the second degree. At least 15 of these hours must be in residence at SIUE.

GRADUATION APPEALS COMMITTEE

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

FINANCIAL INFORMATION

PLANNING FOR UNIVERSITY COSTS

When you are planning for University costs, it is important to research several factors:

- available financial aid programs and eligibility requirements
- steps to apply
- application deadlines
- cost of tuition and fees and other expenses
- date payments are due versus date financial aid will be disbursed
- student responsibilities related to receiving financial aid.

ELIGIBILITY FOR FINANCIAL ASSISTANCE

To be eligible for *federal and State of Illinois* financial aid programs, an undergraduate must:

- have a social security number
- be a U.S. citizen or eligible noncitizen
- be registered with Selective Service (if required)
- be working toward a degree or ERTC/teacher certification
- be enrolled for at least six hours each semester
- be able to demonstrate financial need
- maintain satisfactory academic progress
- not owe a refund on a federal grant or be in default on a federal student loan.

NOTE: Most international students do not meet citizenship requirements for financial aid programs administered by Student Financial Aid. International students should contact the Foreign Student Advisor for information about financial assistance.

APPLYING FOR FINANCIAL ASSISTANCE

If you are applying for need-based financial aid, you should submit the Free Application for Federal Student Aid (FAFSA) by March 1 each year to be considered for all programs. If you apply later than March 1, you will find that funds in some programs are no longer available.

If you have not submitted an application for federal student aid previously, you will submit the regular FAFSA. If you are a previous applicant, you will probably receive a renewal application from the United States Department of Education in December of each year to use in applying for financial aid in the following year. Either the renewal application or the regular FAFSA can be used by continuing students.

All undergraduates applying with a FAFSA will automatically receive consideration for the Pell Grant, the primary undergraduate grant program. Illinois residents should also apply for the state's Monetary Award Program (MAP) by indicating SIUE (code 001759), or another Illinois college/university, as the first preference to receive the processed application information. Applications are available through high schools, public libraries, Educational Opportunity Centers, and the Office of Student Financial Aid.

DEFINITION OF INDEPENDENT STUDENT

For federal and State of Illinois programs, you are considered independent if you meet one of the following:

- born before January 1, 1974, or
- are married as of the date of filing, or
- are a veteran of the U.S. Armed Forces, or
- are enrolled in a graduate or professional program, or
- are an orphan or ward of the court (or was a ward of the court until age 18), or
- have legal dependents other than a spouse.

DETERMINING THE FINANCIAL AID PACKAGE

The Office of Student Financial Aid assesses your financial need and determines the programs for which you are eligible. An offer of financial aid or financial aid package, which includes awards from the programs for which you are eligible, is then mailed to you for your signature and return. Your financial need and awards are determined as described below.

- A budget is assigned that reflects such factors as place of residence and the academic program. The budget includes tuition, fees, board, books, and living and personal expenses.
- After receiving the FAFSA analysis, Student Financial Aid determines an estimated family contribution which reflects family income and assets as well as other resources (private scholarships, Social Security educational benefits, or veterans benefits).
- The family contribution is subtracted from the school year budget assigned to you. The remaining amount is your financial need and is the maximum amount you can receive from all financial aid programs, except the Federal Direct Unsubsidized Loan and the PLUS Loan.
- Once financial need is determined, you are considered initially for grant eligibility, then for work-study, and finally for a loan. Students who submit the FAFSA by March 1, will be considered for all programs.
- To award University-administered grants, on-time applicants are ranked in order of greatest need and awards are made on the basis of the size of financial need. If funds are still available after these students are awarded assistance, additional students receive aid.

If you have significant changes in your family financial situation after filing your forms (death, disability, divorce, or other extreme circumstances) you may request a review of your application. Additional assistance may be awarded on the basis of available funds.

PAYING THE SEMESTER BILL WITH FINANCIAL AID

To use financial aid as credit for paying the semester bill, you must follow these steps:

- Apply for financial aid at least six weeks prior to the term for which you wish financial aid to cover the bill;
- Register for at least six hours each semester;
- Receive notice of your award from the Office of Student Financial Aid;
- Confirm acceptance of your awards by completing and signing the award letter (and promissory note for a student loan) as directed in the information provided with the award letter;
- Return the award letter and promissory note to Financial Aid prior to the opening of the term;
- Have adequate financial aid to cover the new charges for the term and no balance due from a prior term;
- Have no "holds" on your records in Student Financial Aid or Office of the Bursar (e.g. satisfactory progress termination, bad check hold).

In most cases, students who apply for financial aid early (e.g. by the preferred filing date of March 1), accept their financial aid awards by mid-June, and register for classes prior to mid-June will receive credit for their grants, scholarships, and waivers on the fall semester bill. Students with no past due charges are considered financially cleared or "waived for cancellation" for the next term in two ways:

1) the total of the grants, scholarships, and waivers equals or exceeds the total charges and reduces the balance to zero; or

2) the total of #1 above, plus an anticipated student loan, exceeds total charges, and a message on the bill indicates the student is officially enrolled for the next term.

Being financially cleared or having a "cancellation waiver" allows students to pick up books from Textbook Rental, have their IDs validated, and protects their class schedules from cancellation due to non-payment.

WITHDRAWAL WITH FINANCIAL ASSISTANCE

Students who are registered and find it necessary to withdraw from classes for the term must initiate the

withdrawal process in the Enrollment Center. One step in the withdrawal process is clearance from the Office of Student Financial Aid.

Withdrawal during the refund period (the first two weeks of the term) cancels your obligation to pay tuition and fees for the term. Any financial aid that has been credited to your account will be canceled and returned to the appropriate account or agency that made the payment, including Federal Direct Loans. This will reduce the outstanding principal balance owed on such loans. If you have a Direct, PLUS, Perkins, or Foundation Loan, you should notify the Office of the Bursar and complete an exit interview with that office as part of the withdrawal process.

If you withdraw but have already received a check for financial aid in excess of your charges, you may be designated in overpayment status and need to return to the University all or a portion of the funds you received. The Office of the Bursar will bill you for the excess funds in most cases; however, it will be important to check with Student Financial Aid to be sure you have returned the appropriate amount.

When financial aid funds are credited to your account or refunded to you but you do not earn credit for your courses due to withdrawal, you will initially lose your financial aid eligibility. To regain your eligibility, submit an appeal to the Financial Aid Appeals Committee (appeal forms are available in Student Financial Aid) prior to your next term of attendance. An important factor in considering your appeal will be whether you are still in overpayment status.

GRANTS

Grants are normally awarded to students with significant financial need in combination with work and loans as part of the financial aid package. The Federal Pell and Supplemental Educational Opportunity Grants, as well as the Student to Student Grant, are awarded on the basis of information provided on the FAFSA.

FEDERAL PELL GRANT

This federally-sponsored program aids eligible undergraduate students in meeting educational expenses when parental or student resources are insufficient. The Pell Grant Program is used as the base in determining the total financial assistance "package" of an undergraduate student.

Awards range up to $2,470 per academic year. Most students utilize their full Pell Grant entitlement during the academic year. However, those students who do not attend on a full-time basis during each term may have remaining eligibility for a summer Pell Grant.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT

The purpose of the Federal Supplemental Educational Opportunity Grant (FSEOG) program is to assist students with exceptional financial need (i.e., eligible for Pell Grant) who would be unable to enter or remain in school without this grant.

STUDENT TO STUDENT GRANT

The Student-to-Student (STS) Program is funded through a student fee assessed each term and through matching state dollars. Grants of varying amounts are made to students based on financial need.

ILLINOIS MONETARY AWARD PROGRAM

The Monetary Award Program (MAP) provides for full or partial payment of tuition and fees to students enrolled at least half-time during the fall and spring semesters on the basis of significant financial need. To be considered, students must apply on the FAFSA prior to the MAP deadline and list SIUE as their first choice institution. Awards are available for a maximum of 10 full time semesters.

ILLINOIS NATIONAL GUARD PROGRAM

Members of the Illinois National Guard are eligible to receive a grant for payment of tuition and some fees for undergraduate or graduate study after one full year of service in the Illinois National Guard as an enlisted person or company grade officer up to the rank of captain. Recipients must maintain good academic standing during the period of the award. Candidates should apply by October 1 of the academic year for which assistance is being requested. Awards are available for a maximum of 8 full time semesters and there is no minimum enrollment required.

ILLINOIS VETERANS GRANT

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

Any veteran who was an Illinois resident or a student at a State-controlled college, university, or community college at the time of entering the service, and who returned to Illinois within six months of separation may be eligible.

OTHER ILLINOIS GRANTS

Grants may also available to the spouse and children of Illinois police or fire personnel killed in the line of duty and to spouse and children of State of Illinois Department of Corrections officers killed or 90 percent disabled in the line of duty. Recipients must be enrolled at least half-time or 6 hours each semester. The awards cover tuition and some fees and are available for up to 10 semesters (8 for police/fire; 10 for corrections).

LOANS

Loans are available to SIUE students through federal, state, and institutional programs to assist with educational costs. Some loans require financial need, but others are available to students with no financial need.

DIRECT LOAN

The University began participation in the new W. D. Ford Federal Direct Loan Program for the 1995-96 academic year. The Direct Loan provides the equivalent of the current Federal Stafford and PLUS loan programs. The difference is that the United States Department of Education (USDE) is the source of funds and the loan funds are administered by the University.

Students seeking Federal Direct Loans apply on the FAFSA; parents seeking PLUS Loans should also file a FAFSA to receive consideration for all aid programs. In addition, parents should request a PLUS information/application packet from Student Financial Aid. Neither students nor parents will have to find a lender under this program. The University will obtain funds for these loans from USDE. Students or parents who borrowed from "non-direct" loan programs previously can arrange to have repayment of the direct loans consolidated with their other loans. The Direct Loan Program offers several flexible repayment options.

FEDERAL DIRECT LOAN — SUBSIDIZED

The subsidized Federal Direct Loans are low-interest loans made to students attending at least half-time. Students qualify for a subsidized Direct Loan on the basis of financial need. Repayment begins six months after a student graduates, leaves school, or drops below half-time. Students who have not borrowed under this program prior to July 1, 1994 will repay their loans at a variable interest rate which will not exceed 8.25 percent. Interest rates are set each June. Students receiving loans prior to July 1, 1994 should check with the organizations holding their loans to obtain the interest rate that applies to them. Interest on subsidized loans does not accrue until six months after graduation, termination of studies, or a drop below half-time enrollment.

Undergraduates may borrow $2,625/year as a freshman, $3,500/year as a sophomore, and $5,500/year as a junior or senior. For periods of undergraduate study that are less than a year, the amount a student can borrow may be less than noted above. Students enrolled for only one semester in an academic year should see a financial aid adviser to determine how much they can borrow. Independent undergraduates may borrow an additional $4-$5,000/year of unsubsidized Direct Loan (see below). Most students are limited to borrowing their annual maximum across three terms (fall, spring, summer).

FEDERAL DIRECT LOAN — UNSUBSIDIZED

The unsubsidized Federal Direct Loan Program is similar to the subsidized Direct Loan Program (described above); however, students are not required to have financial need for these loans. Unsubsidized Direct Loans are appropriate for students with no financial need or very moderate need. For students whose financial need (or eligibility for a subsidized loan) is less than the maximum for their class standing, it is possible to receive a Federal Direct

Loan that is partly based on financial need (subsidized) and partly not on financial need (unsubsidized). The difference between these two loans is in the repayment terms. Repayment for unsubsidized Direct Loans can be deferred until after graduation but the interest begins to accrue while the borrower is in school or once the loan funds are disbursed.

Unsubsidized Direct Loans are offered as part of the financial aid package to students who do not have financial need. Students with financial need are not normally offered unsubsidized loans in their aid packages, but may request consideration for unsubsidized loans in addition to other financial aid awards.

FEDERAL DIRECT PLUS LOAN

Federal PLUS Loans enable parents with good credit histories to borrow for each son or daughter who is enrolled at least half-time and is a dependent student. These loans, like Federal Direct Loans, are made through the University. An eligible parent may borrow the cost of education (as defined by the University) minus any estimated financial aid the son or daughter may be receiving. The interest rate is variable but not higher than 9 percent. From July 1, 1996 through June 30, 1997, the interest rate was 8.72 percent. Variable interest rates are set each June. Parents begin repaying these loans 60 days after the final loan disbursement. Under certain conditions, a deferment or postponement of repayment can be granted. Parents should contact the Direct Loan Servicing Center to request a deferment form.

FEDERAL PERKINS LOAN

A Federal Perkins Loan is awarded on the basis of financial need and is normally repaid after graduation at low interest (5 percent). At the University, first preference is given to dental medicine students. Repayment begins nine months from the date the borrower ceases to attend school on at least a half-time basis. Repayment may be granted for up to ten years. Cancellation of these loans may occur for serving as an enlisted person in certain specialties of the U.S. Army, Army Reserves, Army National Guard, or the Air National Guard or as a teacher in selected school districts.

Students eligible for the Federal Perkins Loan may borrow up to $3,000 a year for each year of undergraduate study; the total loan debt for an undergraduate cannot exceed $15,000. Graduate students may borrow up to $5,000 each year of graduate or professional study but cannot exceed $30,000 of loan debt for undergraduate and graduate study combined.

SIUE FOUNDATION LOAN

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

VA EDUCATIONAL BENEFITS

Southern Illinois University at Edwardsville is approved by the State Approving Agency for Veterans Education. Veterans who qualify for the Illinois Veterans Grant may use this award concurrently with their VA benefits. Veterans do not normally receive VA educational benefits for the grades of W, WP, WE, No Credit (NC), Audit (AU), and Progress (PR). However, under certain mitigating circumstances, the VA may authorize payment of VA benefits for these grades. Non-degree-seeking students are not eligible for VA benefits. Veterans must meet specific academic progress requirements to remain eligible for VA benefits.

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

VA benefits are determined by the Veteran's length of active duty in service, number of dependents, enrollment status, the "kickers" awarded by the branch of military service in which the Veteran served, and other factors.

Benefits for non-traditional courses may vary. Students attending courses which meet in non-traditional formats should contact the Veterans Certification Section, Office of Admissions and Records, Room 1207, Rendleman Building.

After registration each term, students receiving VA benefits should report their registration to the Veterans Certification Section of Admissions and Records by completing a Veteran Benefits Information form. Any change in enrollment after registration should be reported to the Veterans Certification Section as soon as possible.

A student receiving VA benefits who finds it necessary either to drop a class or to withdraw from the University must indicate on the program or withdrawal form the last date of attendance.

A student who withdraws or leaves the University should refer to the Registration section of this catalog entitled, **Withdrawing from the University.**

EMPLOYMENT

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

STUDENT EMPLOYMENT

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

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

Students apply in person and are referred for interviews to employing units on campus by the student employment area of Student Financial Aid.

FEDERAL WORK STUDY PROGRAM

The Federal Work Study Program is designed to assist students with financial need to secure employment and help defray costs. Students who qualify are awarded federal funds which pay 65 percent of their wages, with the unit in which they work paying the remainder. Federal Work Study eligibility is awarded as part of a package of scholarships, grants or loans.

JOB LOCATOR AND DEVELOPMENT PROGRAM

The Job Locator and Development Program assists students seeking part-time jobs with employers in the communities surrounding SIUE. Designed to place SIUE students in part-time jobs related to their career and academic interest, the Job Locator Program provides financial assistance and job experience to students. Enrolled students may participate in the Job Locator Program. Employment opportunities are listed on the Job Board located on the second floor of the Rendleman Building.

UNIVERSITY SCHOLARSHIPS

University funds provide scholarships which are awarded to students with good academic records, and sometimes, financial need. There are separate application and selection processes, as well as unique deadlines, for many of these awards; consequently, it is important to contact the area of the University that administers the scholarship you are interested in. Scholarships, like grants, do not have to be repaid.

CHANCELLOR'S SCHOLARS PROGRAM

Each year the University awards 20 Chancellor's Scholarships to entering freshmen with outstanding academic credentials. Each scholarship covers tuition and fees for up to four years of undergraduate study at SIUE. Chancellor's Scholars enjoy special academic opportunities and are automatically admitted to the Deans' Scholars Honors Program.

This allows them to develop individualized programs of study with the help of faculty mentors. The application deadline for new students entering the University fall, 1997, is February 1, 1997; for fall, 1998, and after the deadline may be January 1. Candidates should contact Student Financial Aid early for applications and deadlines.

JOHNETTA HALEY SCHOLARS PROGRAM

The Johnetta Haley Scholars program helps minority students pursue their education. The scholarships encourage students to enter academic disciplines of engineering, physical and biological sciences, nursing, teacher education, and computer science. Scholarships are distributed on the basis of academic merit and/or financial need. Applications are available in the Office of Student Financial Aid, but selection is made by a University committee. The application deadline is March 1 for new students. For information, write Johnetta Haley Scholars Academy, Box 1021, SIUE, Edwardsville, Illinois, 62026-1021.

HARBERT MEMORIAL SCHOLARSHIP

Students who are graduates of Centralia High School in Illinois are encouraged to apply for the Harbert Scholarship. These awards include undergraduate and graduate tuition waivers as well as other types of support. For more information, contact the Assistant Vice Chancellor for Enrollment Management, Box 1610, SIUE, Edwardsville, Illinois, 62026.

FOUNDATION SCHOLARSHIPS/GRANTS

Gifts to the SIUE Foundation have established scholarships/grants for students with financial need and good academic records. The Foundation Scholarship/Grant Application is available from the Office of Student Financial Aid by December 1 each year for awards in the following year. The recommended date for submission of the application is March 1, but applications are accepted until May 1. First preference in awarding is given to early applicants who meet the criteria for these scholarships/grants as described below:

- **Dennis Wade Smith Memorial Scholarship** — Awarded to full-time juniors or seniors at SIUE who graduated from public high schools in St.Clair County, Illinois. Preference is given to students in education, humanities, nursing, social sciences, or sciences. Applicants must have at least a 3.000 cumulative grade point average on a 4.000 scale throughout high school and college and demonstrate significant financial need.

- **Leo and Hilda Kolb Memorial Scholarship** — Awarded to worthy students with financial need who are residents of Madison County, Illinois, with preference given to applicants from Marine Township.

- **James M. and Aune P. Nelson Minority Student Grant** — Awarded to minority graduates of Alton secondary schools who have at least a 2.000 cumulative grade point average on a 4.000 scale in high school and a 2.500 in college.

- **Joseph (Cobby) Rodriguez Memorial Scholarship** — Awarded to a needy student who is a police officer or the child or spouse of a police officer residing in St. Clair County, Illinois.

- **Maurice and Catherine Sessel Alton Student Grant** — Awarded to graduates of Alton secondary schools who have at least a 2.500 cumulative grade point average on a 4.000 scale in high school and college.

In addition to the scholarship/grant application, a candidate for these awards should submit the FAFSA by March 1, be pursuing a degree program, and enroll full-time each term. The awards are equivalent to tuition and fees for the two semesters of one academic year.

ATHLETIC SCHOLARSHIPS

SIUE offers scholarships to talented athletes in accord with National Collegiate Athletic Association rules and procedures. For information, contact the Director of Intercollegiate Athletics, Box 1129, SIUE, Edwardsville, Illinois 62026-1129.

ROTC SCHOLARSHIPS

Both the Air Force and Army ROTC Programs at SIUE offer scholarships to qualified students. The scholarships pay up to full tuition/fees and books and some provide monthly subsistence allowances.

Students should contact the appropriate unit for complete information:

Air Force ROTC Program
Building III, Room 3337
SIUE
Edwardsville, Illinois 62026
(618) 692-3180

Army ROTC Program
Building II, Room 3106
SIUE
Edwardsville, Illinois 62026
(618) 692-2500

STATE OF ILLINOIS SCHOLARSHIPS

Illinois resident students may be eligible for scholarships provided by state dollars. These programs are administered by the Illinois Student Assistance Commission (ISAC). Applications and information on these programs are available from ISAC, 500 West Monroe, Springfield, Illinois 62704, or from SIUE's Financial Aid Office.

DAVID A. DEBOLT TEACHER SHORTAGE SCHOLARSHIP

The David A. Debolt Teacher Shortage Scholarship Program replaces several separate scholarships for various teacher shortage areas, including women and minorities in educational administration. It encourages academically talented students to pursue careers as public preschool, elementary and secondary school teachers in disciplines that have been designated as Teacher Shortage Disciplines in the State of Illinois. Priority is also given to minority students. The deadline to apply for the Debolt Scholarships is May 1. Applicants must also apply for federal student financial aid to determine their expected family contribution, which is part of the selection criteria for the scholarship. Recipients of the scholarship will sign an agreement to teach one year for each year of scholarship received in the Teacher Shortage Discipline for which the recipient applied. The teaching requirement must be fulfilled within five years following completion of certification in the shortage field.

MERIT RECOGNITION SCHOLARSHIP

The Merit Recognition Program provides a one-time, $1000 award to qualified Illinois high school students who ranked in the top 5 percent of their class at the end of the seventh semester. This scholarship can be used for payment of tuition, fees, and other educational expenses at approved Illinois institutions. Eligible students should contact their high school guidance office or ISAC for complete information.

MINORITY TEACHERS OF ILLINOIS SCHOLARSHIP

The Minority Teachers Scholarship Program provides scholarships of up to $5,000 per year to assist individuals of African American, Hispanic, Asian American, or Native American origin who plan to become teachers at the preschool, elementary, or high school level. Students receiving this scholarship must fulfill a teaching commitment by teaching full-time one year for each year of assistance received. The teaching agreement must be fulfilled at a school in which no less than 30 percent of those enrolled are minority students. If the teaching commitment is not fulfilled, the scholarship converts to a loan. The deadline to apply for these scholarships is August 1.

ILLINOIS GENERAL ASSEMBLY SCHOLARSHIPS

These tuition scholarships are awarded by members of the General Assembly to residents of their legislative districts. Awards may be for varying lengths of time. Students should contact their General Assembly Representative directly for complete information.

ILLINOIS INCENTIVE FOR ACCESS PROGRAM

Illinois Incentive for Access Program provides a one-time grant of up to $500 for freshman students who have a zero expected family contribution. Applicants must be enrolled at least half time at a MAP-approved school, be a U.S. citizen or an eligible noncitizen as defined in the FAFSA, have a valid Student Aid Report with a zero expected family contribution, be a resident of Illinois, not have already received a baccalaureate degree, meet the satisfactory academic progress standards at the

school, not be in default on any Federal Perkins Loan(s) or any federally-guaranteed or direct student loan(s), and not owe a refund for any federal or state grant(s), and meet MAP eligibility requirements.

ILLINOIS ROTC SCHOLARSHIPS

The University awards scholarships to qualified full-time students on the basis of leadership ability and performance in the corps of cadets. These scholarships cover tuition and the activity fee. The awards are renewable for up to four years for recipients who are in good academic standing and remain enrolled in ROTC. Ten new awards are made annually and a maximum of forty awards, including renewals, can be in effect at one time. Contact the Air Force ROTC unit in Aerospace Studies (618) 692-3180 for further information.

OTHER SCHOLARSHIPS

In addition to the scholarships listed, students may wish to contact their major department or school/college at SIUE to determine if there are funds available. Also, students should check the World Wide Web for scholarship information, consult the student newspaper for notices on scholarships provided by campus organizations, check with their employers or their parents' employers for scholarship opportunities, and go to their city libraries for information. SIUE's Lovejoy Library has a bibliography of financial assistance information in the reserve section. For prospective students, the high school guidance office or library should be a source of information on private scholarships.

SATISFACTORY ACADEMIC PROGRESS POLICY FOR FINANCIAL AID RECIPIENTS

The following is an excerpt from the Satisfactory Academic Progress policy. Eligibility to receive financial aid from federal Title IV aid programs requires that students maintain satisfactory academic progress. In response to requirements within the law for these programs, the University has developed this policy in addition to existing academic policies, and designated that it also extends to selected state and institutional programs of assistance.

PURPOSE

The intent of this policy is to 1) ensure that students using financial aid programs are demonstrating responsible use of public funds in pursuit of their educational goals; 2) set standards for monitoring all financial aid recipients' course completion rates each term (or each year for dental medicine students), warning individual students when progress is so slow that financial aid eligibility may run out before completion of the degree program; and (3) give students whose progress does not meet the standards of this policy at least one term of financial aid on a probationary basis in which to improve their academic progress (exception: a student who earns no credit during a term).

DEFINITIONS

1) **Attempted course** - A course which remains on the student's record after the first two weeks of the term.
2) **Completed course/earned credit** - A course in which a grade of A, B, C, D, or P was received. Withdrawals (WP, WE, W and UW), progress grades (PR), no credits, blank grades, incomplete grades (I), audits (AU), and failures (E) are not considered "earned credit' for meeting progress requirements.
3) **Developmental course** - A course with the prefix of "AD" or numbered "OXX" (not 100 level skills courses).
4) **Financial aid** - Federal Title IV programs, plus the state and institutional programs listed below.
   - Federal Pell Grant
   - Federal Perkins Loan
   - Federal Supplemental Educational Opportunity Grant
   - Federal Work Study
   - William D. Ford Federal Direct Loan (subsidized and unsubsidized)
   - William D. Ford Federal Direct PLUS Loan
   - Illinois Monetary Award Program
   - Illinois Merit Recognition Scholarship
   - Illinois Paul Douglas Teacher Scholarship
   - SIUE Foundation Grant
   - SIUE Foundation Loan
   - SIUE Regular Student Employment
   - SIUE Scholarships
   - SIUE Student-to-Student Grant
   - SIUE Tuition Waiver (except graduate and employee waivers).

5) **Financial aid probation** - A term in which a student who has been identified as not meeting one or more standards in this policy continues to receive financial aid. At the end of the term of financial aid probation, a student is expected to have improved his or her progress in order to continue receiving financial aid.
6) **Financial aid termination** - A student is no longer eligible to receive financial aid as defined in this policy; normally, this is following an unsuccessful term of probation.
7) **Incomplete** - A grade of "I" received for an attempted course; no credit until the course is completed.
8) **Maximum timeframe** - Time limit set for receipt of financial aid that is specific to a student's program of study. For undergraduate programs, federal law defines this limit as 150% of normal program length. This University policy sets specific timeframes for various programs of undergraduate and graduate study.
9) **Satisfactory Academic Progress/satisfactory progress** - Completion of courses at a rate which meets the standards defined in this policy.
10) **Transfer credit** - Course accepted for credit at SIUE from another institution.

AUTHORITY

The Higher Education Act of 1965 as amended and final regulations set by the United States Department of Education (34CFR668.16) require that institutions of higher education establish reasonable standards of satisfactory academic progress as a condition of continuing eligibility for federal aid programs. Nothing in this policy shall be construed as an exemption from the requirements of any other federal assistance the student receives, nor does this policy limit the authority of the Director of Financial Aid when taking responsible action to eliminate fraud or abuse in these programs.

SATISFACTORY PROGRESS STANDARDS

To remain eligible for financial assistance, students must:

- Complete courses at an overall rate which will ensure graduation within the maximum timeframe;
- Earn credit for a reasonable number of credit hours toward a degree or certificate each term;
- Complete their developmental and incomplete courses in a timely manner;
- Graduate prior to the maximum timeframe specific to their degree programs;
- Maintain academic standing, usually a specific term and cumulative grade point average, consistent with SIUE academic policy.

1) **Maximum timeframe** - To retain financial aid eligibility, a student must complete his or her degree program within a specified time limit, defined in cumulative attempted hours for undergraduate/graduate students and years for dental medicine students. Attempted hours for this purpose includes regular and developmental course hours, as well as accepted transfer credit. Once a student reaches the maximum timeframe, he or she is ineligible for financial aid unless additional time to complete the degree is approved through appeal. Maximum time to degree is defined as follows:
   - First baccalaureate degree
     - 160 attempted hours
   - Second baccalaureate degree
     - 48 attempted hours
   - ERTC certificate
     - Six semesters
   - Master's degree (30 hour program)
     - 42 attempted hours
   - Master's degree (31-38 hour program)
     - 48 attempted hours
   - Master's degree (>38 hour program)
     - Maximum set individually
   - Specialist in Education
     - 42 attempted hours beyond Master's degree
   - Doctorate degree (not including DMD)
     - 87 attempted hours beyond Master's degree
   - Doctor of Dental Medicine
     - Four years, plus up to two years additional if approved by the School and Student Financial Aid.

A student who is unable to complete his or her degree program within these timelines may appeal for an additional term (or year for dental medicine students) of financial aid eligibility in order to complete the

degree program. Special consideration will be given to a student whose attempted hours include developmental courses. Undergraduate appeals for an additional term of financial aid eligibility cannot be granted in excess of 150% of program length (1.5 times 124) or 186 hours.

2) **Overall completion rate** - Completion rates reflect the rate at which students earn credit for courses attempted (e.g. a student earning credit for nine of twelve attempted hours would have a 75% completion rate). A student must meet an increasing standard of completion as he or she moves through the degree program in order to graduate within the maximum timeframe. The tenth day class listing is used to determine a student's attempted hours. Satisfactory completion rates for this standard are as follows:

   0 - 36 cumulative attempted hours
   - 60% completion

   36.1 - 60 cumulative attempted hours
   - 65% completion

   60.1 - 84 cumulative attempted hours
   - 70% completion

   84.1 or more cumulative attempted hours
   - 75% completion

   Second baccalaureate cum. attempted hours
   - 75% completion

   Graduate degree cumulative attempted hours
   -75% completion

   Dental Medicine
   - As defined by School academic policy.

3) **Minimum completion within a term** - A financial aid recipient is to earn credit for at least one course per term. A student who receives financial aid but does not earn credit for any courses within a term is not eligible to receive financial aid in subsequent terms. If mitigating circumstances were responsible for zero course completion within a term, a student may appeal and be granted a term of financial aid probation if adequate documentation is provided (e.g. a doctor's statement).

4) **Incomplete grades** - Students receiving excessive incomplete or "I" grades in their courses are not progressing satisfactorily. Consequently, a student who has six or more hours of incomplete in any term or at any time will be placed on financial aid probation for the next term of attendance and expected to complete the courses with "I" grades by the end of that term. A reduced courseload may be recommended during the term of financial aid probation to ensure that both the courses with incomplete grades and new attempted courses can be satisfactorily completed by the close of that term.

5) **Developmental course completion** - Students taking developmental courses are eligible to receive financial aid for their first twenty hours of developmental classes attempted. Developmental courses must be completed at the same rate as other courses (see overall completion rate above). A student who must attempt developmental courses beyond twenty hours may appeal to continue receiving financial aid on probation during a term in which the additional developmental courses are attempted. As part of the appeal, the student should provide a letter of support from the Director of Instructional Services.

6) **Grade point average/suspension** - Students must meet the University's policy on scholastic standing, grades, and grade point average as defined in the appropriate catalog. A student who is on scholastic suspension has not maintained acceptable academic progress. Student Financial Aid initially will block that student from receiving financial aid in any subsequent term. If readmitted or reinstated, the student may appeal to receive financial aid during a term of financial aid probation.

NOTIFICATION OF FINANCIAL AID PROBATION OR TERMINATION

The Office of Student Financial Aid will send warning letter to any student who is put on financi aid probation or a termination letter to any stude who is no longer eligible for financial aid. The lett will be sent to the student's local address during a term of enrollment and to the permanent residen during term breaks. It is the responsibility of t student to maintain current addresses wi Admissions and Records.

REINSTATEMENT

1) **Undergraduate student with more than 160 attempted hours and no degree** - The student must appeal on the appropriate form and provide a graduation plan signed by his or her academic adviser. If the plan is considered reasonable, the student will receive financial aid on probation for one or more terms until the degree is completed.

2) **Student on financial aid probation** - The student may regain eligibility in one of two ways after a term of financial aid probation: a) by meeting the completion standard which applies to the student after financial aid probation under this policy (e.g. at 36 attempted hours must have completed 60% of all courses attempted); or b) by earning in one term 12 hours credit (or fewer if approved) and a 2.000 term average.

3) **Student with grade changes** - The student can regain financial aid eligibility by notifying Student Financial Aid of the grade change, including grades posted for incomplete courses.

4) **Student previously suspended** - A student loses financial aid eligibility at the time of suspension from the University and must appeal on the appropriate form to receive approval for a term of financial aid probation if reinstated or readmitted.

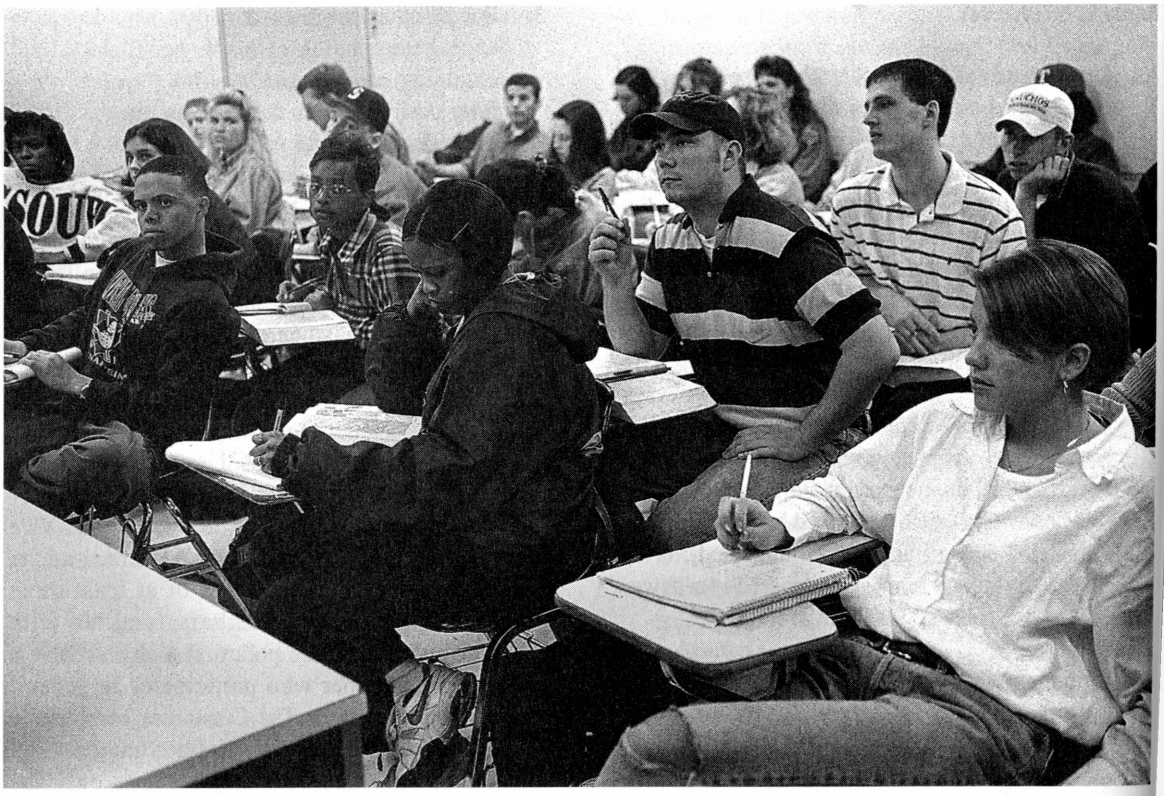
5) **Student terminated under prior policies or for zero completion** - The student must complete at least 12 hours with a 2.000 average at his or her own expense and then may appeal to receive financial aid on a probationary basis.

APPEALS

1) A student who does not meet the undergraduate, graduate, or ERTC overall completion rates specified in this policy will be put on probation for one term following identification of unsatisfactory progress.

2) A dental medicine student who does not complete the degree program within four years will be reviewed by Student Financial Aid and the School's Student Progress Committee to determine if the student can continue on financial aid probation for the fifth or sixth year.

3) For all other purposes, a student who desires to appeal termination of his or her financial aid eligibility *must appeal in writing, usually on a form designated for that purpose,* to the Office of Student Financial Aid by the date indicated in the termination letter. The Director of Student Financial Aid may take action on the appeal or may forward it to the Financial Aid Appeals Committee for review. The Committee's decisions may be appealed to the Director; the Director's decisions may be appealed to the Assistant Vice Chancellor for Enrollment Management; and the Assistant Vice Chancellor's decisions may be appealed to the Provost. The Financial Aid Appeals Committee is a subcommittee of the Financial Aid Advisory Committee, appointed by the Provost and Vice Chancellor for Academic Affairs, and its membership is constituted of at least three faculty and staff members familiar with University academic policy. It may also have a student member who participates in general committee matters. The Committee considers in a timely manner appeals that are referred to it. The Committee normally reviews only the written record and does not conduct a hearing unless unusual circumstances warrant it. A student is encouraged to submit third party written documentation to support his or her appeal.



Students listen intently in class.

ADDITIONAL FINANCIAL INFORMATION

INSTALLMENT PAYMENT PLAN

SIUE has an installment plan for payment of tuition, fees and housing charges. All students registered for credit courses are automatically included in this plan, unless they elect to pay the full amount of tuition and fees in advance. For additional information about the plan, call 618-692-3122. The number of installments students make depends on their registration date. The earlier students register, the more installments and the smaller their payments.

IN-STATE OFF-CAMPUS TUITION AND FEES

Off-campus students pay the applicable per hour or block tuition plus a $72.00 fee per class. Students registering only for off-campus classes pay no other student fees. For specific tuition and fee information for off-campus classes, contact the Coordinator of Credit Activities in the Office of Continuing Education at 618-692-3210.

AUDITED COURSES

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

DEGREES AND PROGRAMS

College of Arts and Sciences

Anthropology . . . . . B.A.,B.S.
Art . . . . . B.A.,B.S.,M.F.A.
Undergraduate Specializations:
- Art Education
- Art History
- Studio

Art and Design . . . . . B.F.A.
Art Therapy . . . . . M.A.
Biological Sciences . . . . . B.A.,B.S.,M.A.,M.S.
Undergraduate Specializations:
- Ecology, Evolution, Environment
- Genetic Engineering
- Medical Technology
- Medical Science

Chemistry . . . . . B.A.,B.S.,M.S.
Economics . . . . . B.A.,B.S.
English . . . . . B.A.,B.S.,M.A.
Environmental Studies . . . . . M.S.
Foreign Languages and Literature . . . B.A.,B.S.
Undergraduate Specializations:
- French
- German
- Spanish

Geographical Studies . . . . . M.A.,M.S.
Geography . . . . . B.A.,B.S.
History . . . . . B.A.,B.S.,M.A.
Liberal Studies . . . . . B.L.S.
Mass Communications . . . . . B.A.,B.S.,M.S.
Mathematical Studies . . . . . B.A.,B.S.
Undergraduate Specializations:
- Actuarial Science
- Applied Mathematics
- Mathematical Studies
- Statistics

Mathematics . . . . . M.S.
Music . . . . . B.A.,B.M.,M.M.
Undergraduate Specializations:
- Jazz Performance
- Music Education
- Music History/Literature
- Music Merchandising
- Music Performance
- Musical Theater
- Music Theory and Composition

Philosophy . . . . . B.A.
Physics . . . . . B.A.,B.S.,M.S.
Political Science . . . . . B.A.,B.S.
Public Administration . . . . . M.P.A.
Social Work . . . . . B.A.,B.S.,M.S.W.
Sociology . . . . . B.A.,B.S.,M.A.
Speech (Speech Communication Specialization) . . . . . M.A.
Speech Communication . . . . . B.A.,B.S.
Theater . . . . . B.A.,B.S.
Undergraduate Specializations:
- Dance
- Design/Technical
- Performance

School of Business

Accountancy . . . . . B.S.A.,M.S.A.
Business Administration . . B.S.,M.B.A.,M.S.A.
Undergraduate Specializations:
- Economics
- Entrepreneurship
- Finance
- General Business Administration
- Human Resource Management
- International Business
- Management Information Systems
- Marketing
- Production and Operations Management

Business Economics . . . . . B.S.
Computing and Information Systems . . . . M.S.
Economics . . . . . M.A.,M.S.
Management Information Systems . . . . . B.S.
Marketing Research . . . . . M.M.R.

School of Dental Medicine

Dentistry . . . . . D.M.D.
Advanced Education in General Dentistry . . . . . Cert.

School of Education

Early Childhood Education . . . . . B.S.
Educational Administration and Supervision . . . . . M.S. in Ed.,S.D.
Elementary Education . . . . . B.S.,M.S. in Ed.
General Science Education . . . . . B.S.
Health Education . . . . . B.S.

Instructional Technology . . . . . M.S. in Ed.
Physical Education . . . . . B.S.,M.S. in Ed.
Psychology . . . . . B.A.,B.S.,M.A.,M.S.
School Psychology . . . . . S.D.
Secondary Education . . . . . M.S. in Ed.
Special Education . . . . . B.S.,M.S. in Ed.
Speech Pathology and Audiology . . . B.A.,B.S.
Speech (Speech Pathology
Specialization) . . . . . M.S.

School of Engineering

Civil Engineering . . . . . B.S.,M.S.
Computer Science. . . . . B.A.,B.S.
Construction . . . . . B.S.
Electrical Engineering . . . . . B.S.,M.S.
Undergraduate Specialization:
Computer Engineering
Industrial Engineering. . . . . B.S.
Mechanical Engineering . . . . . B.S.

School of Nursing

Nursing. . . . . B.S.,M.S.
Nurse Practitioner. . . . . M.S.

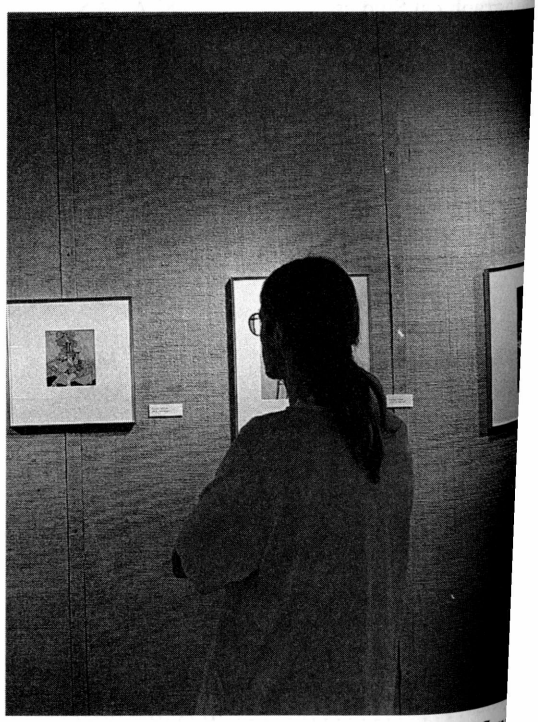
MINORS AVAILABLE AT SIUE

Aerospace Studies
Anthropology
Art
- Art History
- Studio Art

Biological Sciences
Black American Studies
Business Administration
Chemistry
Classical Studies
Coaching
Computer Science
Construction
Creative Writing
Economics
Engineering
- Electrical
- Industrial
- Mechanical

English
French
Geography
German
Health Education
History
Instructional Technology
Journalism
Linguistics
Mass Communication in a Democratic Society
Mathematics
Mathematics Education
Music
Peace Studies
Philosophy
Physical Education
Physics
Political Science
Psychology
Russian Area Studies
Sociology
Spanish
Special Education
- Education of the Mentally Handicapped
- Emotionally Disturbed
- Learning Disabled

Speech Communication
Statistics
Television/Radio
Theater and Dance
Women's Studies



A student takes a moment to enjoy the University Cen Art Gallery.

OBJECTIVES FOR GENERAL EDUCATION AND THE BACCALAUREATE DEGREE

The purpose of baccalaureate education at Southern Illinois University at Edwardsville is to provide students with a solid foundation for intellectual development and an ability and desire to make contributions to society. As a public institution, SIUE strives to develop students who are well-informed, effective citizens; who actively participate in civic and community affairs; who cultivate self-awareness; who appreciate the arts; and who will pursue life-long learning. SIUE also provides opportunities to students to develop leadership skills and artistic abilities.

The undergraduate curriculum encourages students to set the events of the world in broad perspective and to bring a reasoned approach to the challenges they may face.

To achieve these purposes, the University seeks to impart the following abilities and knowledge to its students.

ANALYTIC, PROBLEM-SOLVING, AND DECISION-MAKING SKILLS

Such skills include the ability to understand and interpret written and oral texts, and to recognize, develop, evaluate, and defend or attack hypotheses and arguments. These skills are to be developed throughout all undergraduate programs in all courses.

ORAL AND WRITTEN COMMUNICATION SKILLS

Skills in expository, argumentative, and creative writing, and in effective speaking and listening are to be developed through extensive and regular writing assignments, oral presentations, and participation in discussions.

FOUNDATION IN LIBERAL ARTS AND SCIENCES

All students will acquire a solid base of knowledge in liberal arts and sciences and of the contributions of these fields to civilization and to the quality of life. All undergraduate degree programs at SIUE, including professional programs, are rooted in the liberal arts and sciences through the integration of each major program with the general education program.

APPRECIATION OF CULTURES

All students will gain an understanding of the traditions which influence American culture and of the traditions of other cultures in order to develop a respect for and a sensitivity to ethnic and cultural diversity. Students will become aware of increasing global interdependence.

SCIENTIFIC LITERACY

All students will have experience in the methods of scientific inquiry and laboratory investigation and gain knowledge of scientific and technological developments and their influence on society.

A SENSE OF ETHICS

All students will understand the nature of value judgments, will have an ability to make reasoned and informed value judgments, and will appreciate the diversity among cultures with respect to mores and traditional standards of conduct.

PREPARATION IN AN ACADEMIC OR PROFESSIONAL DISCIPLINE

Students completing the baccalaureate degree will have attained a level of achievement within an academic or professional discipline which will enable them either to begin a career in the discipline or to pursue graduate work in that or an appropriately related discipline.

GENERAL EDUCATION

PURPOSE AND GOALS

The purpose of General Education at Southern Illinois University at Edwardsville is to provide students with a solid foundation for intellectual development and an ability and belief in the value of contributing to society. Through General Education, the University strives to encourage students to become well-informed, effective citizens who actively participate in civic and community affairs, who cultivate self-awareness, who appreciate the arts, and who will pursue life-long learning.

To achieve these purposes, the University seeks to impart to students analytic, problem-solving, and decision-making skills, oral and written communication skills, a foundation in the Liberal Arts and Sciences, an appreciation of cultures, scientific literacy, an understanding of ethical principles, and preparation in an academic or professional discipline. General Education provides the foundation upon which students develop these skills and knowledge; it provides the academic background necessary for the completion of the requirements for a degree.

The specific objectives of the general Education program are:

- To develop fully skills in logic, computation, and written and oral communication.
- To introduce students to the principles, substance, and methodology of disciplines in addition to their majors. These courses are distributed across three General Education Areas: Fine Arts & Humanities, Natural Sciences and Mathematics, and Social Sciences.
- To require study beyond a basic introduction to the disciplines in all three General Education Areas.
- To foster awareness of the interrelationships among fields of human knowledge by requiring interdisciplinary study.

REQUIREMENTS

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

Skills courses develop proficiency in basic competencies necessary for success in University study as well as for success in employment and in personal living. All students must complete six credit hours (two courses) in Written Expression. The remainder of the Skills requirements may be fulfilled through one of two options. Under Option A, students complete courses in Oral Communication, Critical Thinking, and either Statistics or Computer Programming, for a total of nine credit hours. Under Option B, students complete a two-term sequence of a Foreign Language, as well as a course in Critical Thinking, Statistics or Computer Programming, for a total of 11 credit hours. All Skills courses, and only Skills courses, are numbered between 100 and 110.

Introductory courses provide beginning study in at least five different disciplines outside students' major fields. These courses focus in the elementary theory, principles, and methods of the disciplines that are traditionally central to the liberal arts and sciences. All Introductory courses bear the number 111, except for those introductory-level courses that may be selected as substitutions in the General Education Area Natural Sciences and Mathematics. Students may wish to review the substitutions in the Natural Sciences and Mathematics area listed in the General Education outline which is included in this section of the catalog. The Introductory course in a student's major field does not count toward fulfillment of the General Education Introductory course requirement. However, a student with a double major may use the Introductory course in one major field to fulfill General Education Introductory course requirements. A student majoring in a foreign language may count one course in the FL 111 sequence as an Introductory course in Fine Arts and Humanities if it is in a language other than the language chosen for the major.

Advanced courses, as developed in this General Education program, are selected courses in each

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

Both Introductory and Advanced courses are distributed among three General Education (GE) Areas: Fine Arts and Humanities, Natural Sciences and Mathematics, and Social Sciences. Students select at least two Introductory courses from two of the areas and at least one Introductory course from the third area. Students must take at least two Advanced Courses in two of the Areas and at least one Advanced course in the remaining area. Students must take two Advanced courses in the Area in which they took only one Introductory course.

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

OTHER REQUIREMENTS

CONSTITUTION REQUIREMENT

The University requires that students demonstrate their knowledge of the principles of representative government by passing one of the following courses: Political Science 112, History 200, 201 or 431. Students seeking teacher certification are required to complete a course in American History and a course in American Government. Students may also fulfill the requirement by completing a proficiency examination for one of the courses listed above. Any of the courses taken to fulfill the constitution requirement may also be used to fulfill an Advanced course requirement in the GE Area Social Sciences.

INTERGROUP RELATIONS AND INTERNATIONAL ISSUES OR INTERNATIONAL CULTURE REQUIREMENTS

The State of Illinois requires that public institutions of higher education include, "in the general education requirements for obtaining a degree, coursework on improving human relations to include race, ethnicity, gender and other issues related to improving human relations to address racism and sexual harassment on their campuses." (Section 9.21 of the Board of Higher Education Act.) The University requires that students complete one course which examines intergroup relations in order to meet the State requirement. In addition to an intergroup relations course, students are required to take a second course which examines either international issues or international culture.

Courses that may be taken to satisfy these requirements are listed at the end of this section of this catalog. In the course description section of the catalog, courses satisfying the requirements are identified in the course description. Intergroup Relations courses are indicated by [IGR], International Issues courses are indicated by [II], and International Culture courses are indicated by [IC].

Courses meeting the Intergroup Relations, International Issues and International Culture requirements may also be used to fulfill major, minor, elective or General Education requirements.

ENTRY COMPETENCIES FOR GENERAL EDUCATION COURSES

Students enrolling in General Education courses are required to have competencies necessary for successful completion of those courses. The following policies apply to newly entering freshmen.

1. Students who have been identified as needing developmental instruction in English composition must successfully complete Basic Writing (Academic Development [AD] 090, or 092) prior to enrolling in Introductory General Education courses and in other General Education courses requiring writing skills.

2. Students who have been identified as needing developmental instruction in reading must have completed College Reading I (Academic Development [AD] 080) or have concurrent enrollment in or completion of College Reading

II (Academic Development [AD] 082) when enrolling in General Education courses.

3. Students who have been identified as needing developmental instruction in mathematics must successfully complete the equivalent of Intermediate Algebra (Academic Development [AD] 075, or 095) prior to enrolling in Introductory General Education courses in the General Education Area Natural Sciences and Mathematics.

PROFICIENCY EXAMINATIONS FOR GENERAL EDUCATION COURSES

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

Proficiency examinations are available for all Skills and Introductory courses in the General Education curriculum. Some of the examinations are administered through Instructional Services. Students who want to take proficiency examinations should consult the Instructional Services Testing Office in Peck Building, Room 1404 (692-2295) for information and instructions. Credit hours earned from the successful completion of a proficiency examination in a Skills course will be applied toward the fulfillment of the General Education requirement for that skill. Credit hours earned from the proficiency examination in an Introductory course will count toward the 124 hours required for graduation, but may not be used to fulfill General Education requirements. Students who have passed proficiency examinations for Introductory courses may fulfill the General Education Introductory course requirements in that Area by substituting any approved Introductory or Advanced course in that same Area outside the major field. Proficiency examinations are available for some Advanced courses. Students interested in obtaining information regarding proficiency examinations for Advanced courses should consult the appropriate departments or the Instructional Services Testing Office. Proficiency examinations are not available for Interdisciplinary Studies courses.

A maximum of 32 hours may be gained through any combination of proficiency, CLEP, and Advanced Placement examinations.

REENTERING STUDENTS

Former students who have not attended SIUE for three or more terms, including summer, must apply for readmission. Reentering students, who have not attended in seven years, are advised that they may not graduate under the General Education, major or minor requirements published in a catalog more than seven years old without the written permission of the Dean of the school in which the student's major or first major is housed. Such written permission shall be submitted to the Admissions and Records Office with the application for graduation. Academic work for those students who reenter the University after a seven-year period will be reevaluated according to the current catalog. Once students have been readmitted to the University, they will be instructed to make an appointment with an adviser in order to determine the most efficient means of completing degree requirements.

TRANSFERRING STUDENTS

Students who hold Associate of Arts or Associate of Science Degrees from an accredited two-year institution in Illinois and who have completed a program which conforms to the Illinois Community College Board Associate of Arts and Associate of Science Degree Models will be considered to have fulfilled all course requirements of the General Education program at SIUE except for the Interdisciplinary course requirement. Similar consideration may be granted to students with an Associate of Arts or Associate of Science degree from a community college outside of Illinois or from a four-year institution regardless of location provided that the program from which the degree was earned is substantially consistent with the requirements of the Illinois Community College Board Degree Models. The General Education requirements at SIUE will be considered as having been fulfilled regardless of the number of hours completed in each of the General Education categories with the following exceptions:

1. The Interdisciplinary course requirement must be met at SIUE or at the upper division level at an accredited four-year institution.

2. All transfer students with an Associate of Arts or Associate of Science degree who have not already had equivalent coursework must satisfy

the two-course Written Expression Skill requirement with a grade of C or higher.

3. A student with an Associate of Arts or Associate of Science Degree will not be considered to have met the SIUE General Education requirements if academic records indicate that work from an unaccredited institution was applied toward the degree. Appropriately qualified personnel at the University will perform a course-by-course evaluation of such students' academic work to determine completion of the General Education requirements of the University. Credit will not be accepted for any course work completed at unaccredited institutions.

4. No credit will be accepted for remedial or developmental courses.

5. Waiver of the Skills Option B foreign language requirement does not waive the foreign language requirement for students seeking a Bachelor of Arts degree.

TRANSFER STUDENTS WITHOUT A DEGREE

Transfer students without a degree from an accredited institution must satisfy the requirements for the number of credit hours in each category of the General Education program at the University. Credits accepted for transfer will be accepted for completion of Advanced level General Education requirements only if the courses are comparable to Advanced General Education courses offered at SIUE. Transcript evaluations will be conducted in accord with general guidelines provided by faculty from the appropriate General Education area to determine the extent to which such courses may be used in fulfilling advanced General Education requirements. The provisions in this paragraph also apply to SIUE students who wish to transfer credits to SIUE for courses taken at another institution.

Transfer credit for courses in the same academic discipline may be used to satisfy the Introductory course requirements in a General Education area. If the Introductory level requirement for a General Education Area is satisfied through transfer of credits for courses in the same academic discipline, then at least one of the advanced courses in that General Education Area must be taken in a second discipline.

TRANSCRIPT EVALUATIONS

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

COURSE NUMBERING SYSTEM

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

Courses numbered 100-110 fulfill General Education Skills requirements.

Courses numbered 111 fulfill Introductory course requirements in General Education.

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

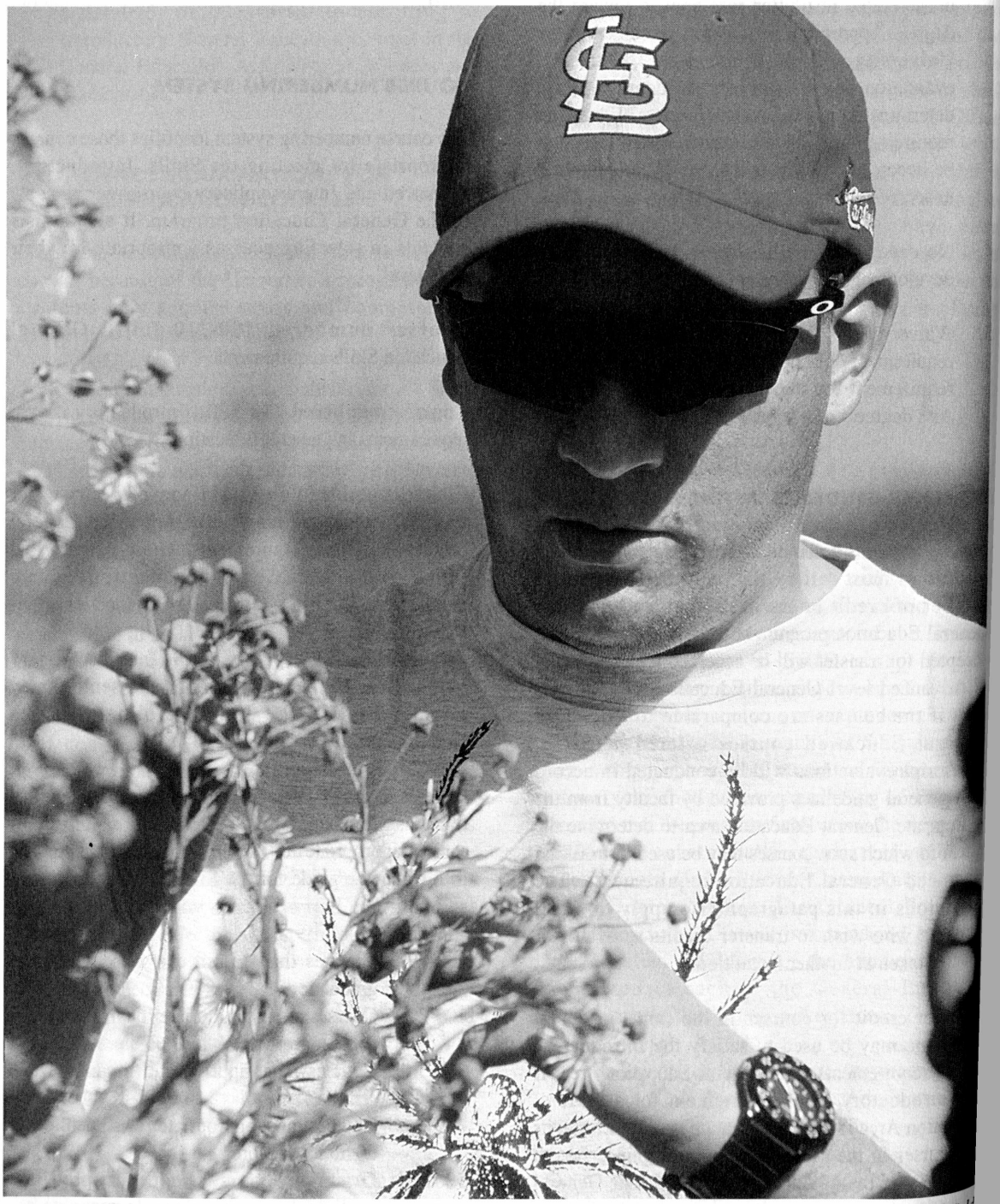
Courses bearing a prefix of IS (Interdisciplinary Studies) are courses that juniors and seniors may select to fulfill the Interdisciplinary course requirements in General Education.

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

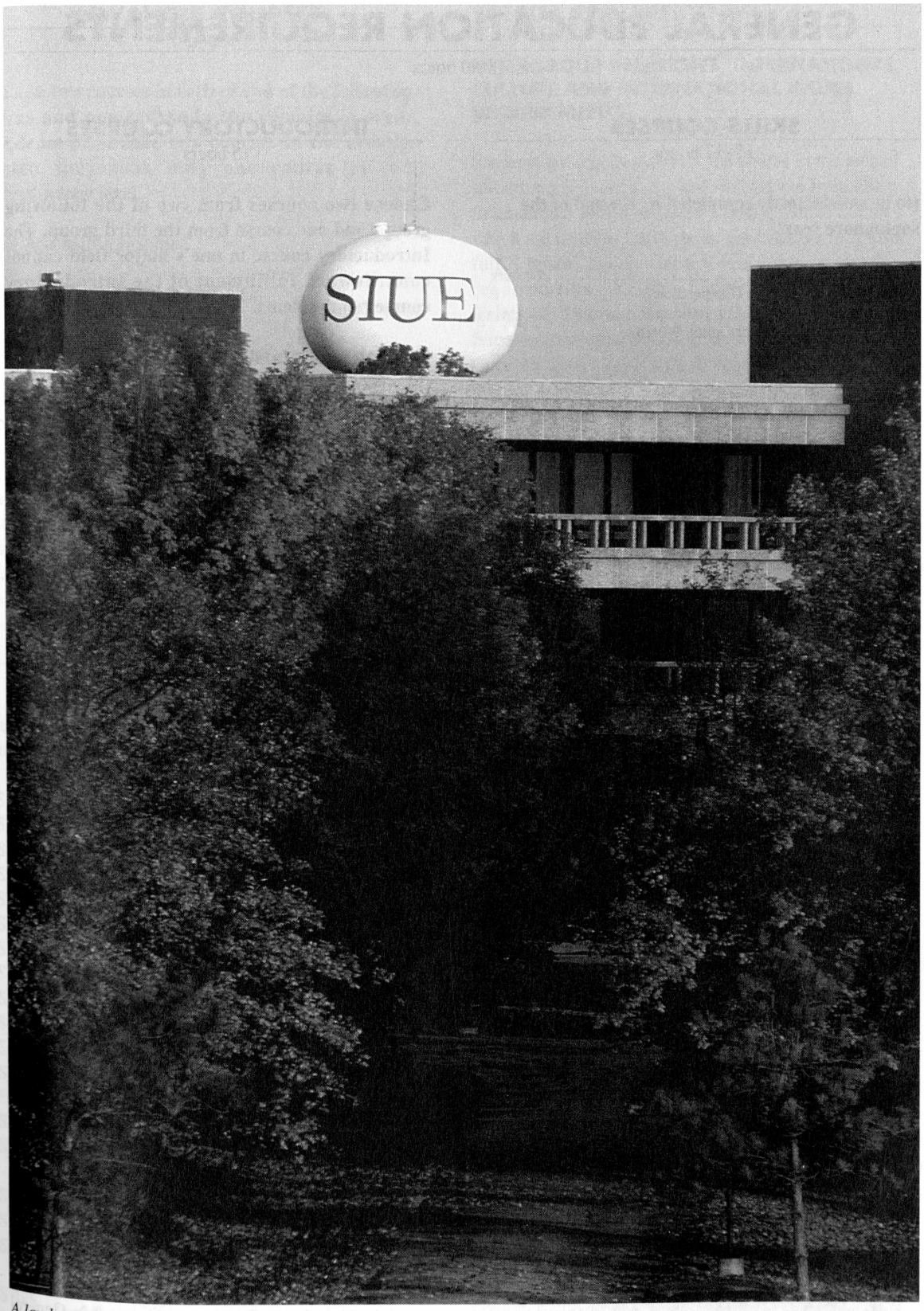
000-099	Courses that do not carry credit toward graduation
100-200	Courses most appropriate for freshmen and sophomores
300	Courses most appropriate for juniors and seniors
400	Courses most appropriate for students with 60 hours or more
500	Graduate courses not accepted for application to a bachelor's degree.

SUMMARY OF REQUIREMENTS AND COURSES

The total number of General Education credit hours required of students selecting Skills Option A is 48. Students selecting Skills Option B are required to complete 50 credit hours in General Education. A summary of these requirements is provided on the following pages. Descriptions of the Skills, Introductory, Advanced, and Interdisciplinary courses appear in the course description section of the catalog.



Scott Moss, a biology student, examines Boltonia Decurtens plants under the direction of professor Marian Smith during field work.



A landmark in our area, the SIUE water tower is visible above the John Mason Peck building.

GENERAL EDUCATION REQUIREMENTS

48-50 hours

SKILLS COURSES

15 -17 hours

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

Written Expression. . . . . 6 hours
English 101- English Composition I
English 102- English Composition II
and either Option A or Option B below.

OPTION A:

Choose One . . . . . 3 hours
Speech Communication 103- Interpersonal Communication Skills
Speech Communication 104- Oral Argumentation Skills
Speech Communication 105- Public Speaking

Choose One . . . . . 3 hours
Mathematics 106- Reasoning and Problem Solving
Philosophy 106- Critical Thinking

Choose One . . . . . 3 hours
Computer Science 108- Applied Computer Concepts (or one of CS 140, 141 or 150)
Management Information Systems 108- Computer Concepts and Applications
Statistics 107- Concepts of Statistics (or one of STAT 244, 380 or 480)

OR

OPTION B:

Choose One. . . . . Two Semesters
French 101 and 102- Elementary French (or FR 104-8)
German 101 and 102- Elementary German (or GER 104-8)
Greek 101 and 102- Introduction to Greek
Latin 101 and 102- Introduction to Latin
Russian 101 and 102- Elementary Russian (or RUS 104-8)
Spanish 101 and 102- Elementary Spanish (or SPAN 104-8)

Choose One . . . . . 3 hours
Mathematics 106- Reasoning and Problem Solving
Philosophy 106- Critical Thinking
Statistics 107- Concepts of Statistics (or one of STAT 244, 380 or 480)
Computer Science 108- Applied Computer Concepts (or one of CS 140, 141 or 150)
Management Information Systems 108- Computer Concepts and Applications

INTRODUCTORY COURSES

15 hours

Choose two courses from two of the following groups and one course from the third group. The Introductory course in one's major field cannot count toward fulfillment of the Introductory course requirements.

FINE ARTS AND HUMANITIES

Art 111- Introduction to Art
English 111- Introduction to Literature
Foreign Language 111*- Introduction to Foreign Studies (a) French (b) German (c) Spanish
Music 111- Introduction to Music History/Literature
Philosophy 111- Introduction to Philosophy
Speech Communication 111- Introduction to Speech Communication
Theater 111- The Dramatic Experience: Theater, Script, Performance

NATURAL SCIENCES AND MATHEMATICS

Biology 111- Contemporary Biology (or one of BIOL 120, 121 or 240a)
Chemistry 111- Contemporary Chemistry (or one of CHEM 120a or 121a)
Earth Science 111- Introduction to Physical Geology and Geography
Mathematics 111- The Nature of Mathematics I (or one of MATH 120, 125, 130 or 150)
Physics 111- Concepts of Physics (or one of PHYS 206a or 211a)

SOCIAL SCIENCES

Anthropology 111- Introduction to Anthropology
Economics 111- Principles of Economics
Geography 111- Introduction to Human Geography
History 111**- Introduction to the History of Western Civilization (a) Renaissance to the Age of Napoleon (b) Age of Napoleon to the Present
Political Science 111- Introduction to Political Science
Psychology 111- Foundations of Psychology
Sociology 111- Introduction to Sociology

* Only one Foreign Language 111 course may be used toward Introductory course requirements. Foreign Language majors may count one Foreign Language 111 course in a language other than the major.

** Either course taken in the History 111 a,b sequence may fulfill either an Introductory or an Advanced Social Science requirement in General Education. No single course in the sequence can fulfill both Introductory and Advanced course requirements.

ADVANCED COURSES

15 hours

Choose two courses in each of two of the following areas and one course in the remaining area. Students must take two courses in the area in which they took only one course at the Introductory level.

Fine Arts and Humanities

Natural Sciences and Mathematics

Social Sciences

Advanced courses may be chosen from among approved courses in the student's major.

A list of approved Advanced courses may be found in the following section. Courses approved for Advanced General Education credit are also indicated as such in the course description section of this catalog.

INTERDISCIPLINARY STUDIES

3 hours

Junior or senior standing is required for enrollment in Interdisciplinary Studies courses.

IS 322 - Ethics, Biology and Society
IS 324 - Eastern Peoples and Cultures
IS 326 - Modern Latin America
IS 328 - History and Science
IS 334 - Natural Resources
IS 335 - Early Illinois
IS 336 - Global Problems and Human Survival
IS 340 - The Problem of War and Peace
IS 341 - The Immigrant in America
IS 342 - Death and Dying
IS 350 - Women and Social Institutions
IS 360 - Survival of the Fittest
IS 361 - Music: Art and Science
IS 363 - Living Ecologically
IS 364 - The Atomic Era: European Refugees, American Science and the Bomb
IS 377 - The Arts and the French Revolution
IS 380 - Song and Poetry
IS 386 - Cyberarts: Exploring Fine Arts and Computer Technology
IS 388 - Art and Politics in 19th Century France
IS 400 - History, Culture, and Language of China
GBA 300 - Foundations of Business Knowledge

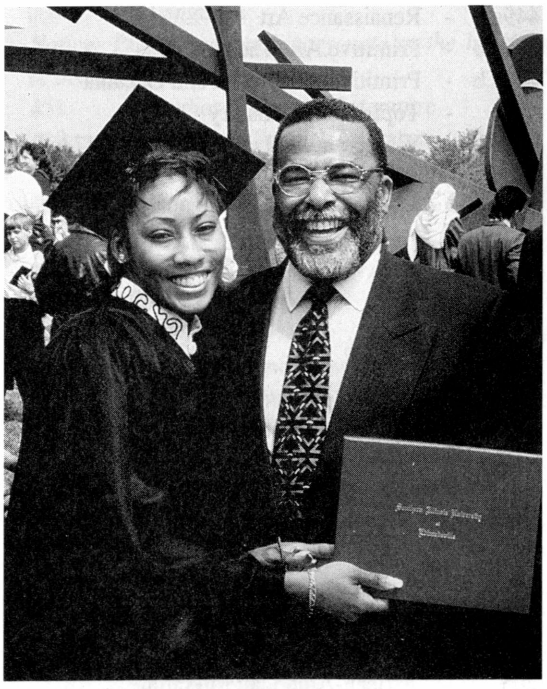
SPECIAL REQUIREMENTS

INTERGROUP RELATIONS, INTERNATIONAL CULTURE AND INTERNATIONAL ISSUES REQUIREMENTS

Students are required to take one course in the area of Intergroup Relations and a second course from either International Issues or International Culture. Courses which are taken to fulfill these requirements may also fulfill major, minor, General Education or elective requirements. A list of approved Intergroup Relations, International Culture and International Issues courses may be found in the following section. Courses approved for these requirements are also indicated as such in the course description section of this catalog.

CONSTITUTION REQUIREMENT

The University requires that you demonstrate knowledge of the Illinois and United States Constitutions. You must complete one of the following courses: HIST 200, 201, 431 or POLS 112. You may also fulfill the requirement by passing a proficiency examination for one of the courses listed above. Any of the courses taken to fulfill the Constitution Requirement may also be used to fulfill an Advanced Course requirement in the Social Sciences area of General Education.



A happy graduate is congratulated by her father.

ADVANCED COURSES

Listed below are courses that have been designated as Advanced General Education courses at SIUE. These courses are considered "advanced" in the sense that they contain applications of the discipline's basic principles to selected areas of study. In some cases there may be prerequisites for these courses.

Students may choose among the following courses to satisfy the Advanced General Education requirements, provided they have met the prerequisites for the courses they select. A special word of caution applies to the 400-level courses. Since such courses are typically oriented towards majors and minors (including graduate students) who have already had extensive work in the discipline, only well-prepared students should select them.

GE AREA: FINE ARTS AND HUMANITIES

ART

225a,b - History of World Art
Notice: Please see cautionary note at the beginning of the Advanced course listing
424a,b - Baroque and Rococo Art
447a,b - Ancient Art
448a,b - Early Christian and Medieval Art
449a,b - Renaissance Art
468a,b - Primitive Art: The Americas
469a,b - Primitive Art: Africa and Oceania
470 - Topics in Art History
473a,b - Women in Art (same as WMST 473a,b)
480a,b - American Art
481a,b - Modern Art

DANCE

Notice: Please see cautionary note at the beginning of the Advanced course listing
440 - History of Dance

ENGLISH

202 - Studies in Drama
203 - Studies in Poetry
204 - Studies in Fiction
205 - African-American Literature
207 - Language Awareness
208 - Survey of British Literature: Beginnings to 1789
209 - Survey of British Literature: 1789 to present
211 - Survey of American Literature from Colonial Times to the Civil War
212 - Survey of American Literature from the Civil War to Modern Times
301 - Basic Literacy Criticism and Scholarship
303 - Literacy Masterpieces: Ancient and Medieval
304 - Literacy Masterpieces: Renaissance Through Modern
306 - Introduction to the Bible
307 - Introduction to Shakespeare
308 - Detective Fiction
309 - Popular Literature
310 - Classical Mythology and Its Influence
340 - Literature of the Third World
341 - The African-American Woman in American Literature (same as WMST 341)
342 - African-American Fiction
370 - Fundamentals of the English Language: Sound Patterns and Word Construction
392 - Fiction Writing
393 - Poetry Writing
Notice: Please see cautionary note at the beginning of the Advanced course listing
400 - Principles of Linguistics (same as Anthropology 401)
402 - Linguistics and Literature
403 - History of the English Language
404 - Chaucer: Canterbury Tales
406 - Old English Language
408 - Phonological Analysis
409 - Syntactic Analysis
413 - Spenser
418 - Discourse Analysis
421 - Poetry and Prose of the Medieval Period
422 - Poetry and Prose of the Renaissance
423 - Poetry and Prose of the 17th Century
424 - Poetry and Prose of the Augustan Age
425 - Poetry and Prose of the Age of Johnson
426 - Poetry and Prose of the Romantic Period
427 - Poetry and Prose of the Victorian Era
428 - British Poetry and Prose of the Modern Era
431 - Major American Writers of the 19th century
432 - Major American Writers of the 20th century
434 - American Poetry to 1900

435 - American Poetry Since 1900
437 - Modern American Drama
439 - American Novel to Early 20th Century
440 - American Novels from Early 20th Century to Present
454 - 18th Century Novel
455 - Victorian Novel
456 - 20th Century British Novel
460 - Elizabethan and Jacobean Drama
461 - Restoration and 18th Century Drama
462 - Modern British and Continental Drama
471a,b - Shakespeare
473 - Milton
495 - History of Critical Theory

FOREIGN LANGUAGES

FRENCH

201 - Intermediate French
202 - Intermediate French
311 - Contemporary France
351 - Survey of French Literature (Middle Ages through Classicism)
352 - Survey of French Literature (Enlightenment to the Present)
353 - Survey of the French Novel

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

451 - Studies in French Literature: Middle Ages to Renaissance
452 - Studies in French Literature: Classicism to Enlightenment
453 - Studies in French Literature: Romanticism to the Present

GERMAN

201 - Intermediate German
202 - Intermediate German
311 - German Culture
351 - Survey of German Literature (Middle Ages through Romanticism)
352 - Survey of German Literature (Realism to the Present)
353A - Survey of German Poetry

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

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

GREEK

201 - Intermediate Greek
202 - Intermediate Greek

LATIN

201 - Intermediate Latin
202 - Intermediate Latin

RUSSIAN

201 - Intermediate Russian
202 - Intermediate Russian

SPANISH

201 - Intermediate Spanish
202 - Intermediate Spanish
311 - Contemporary Spain
312 - Contemporary Spanish America
351 - Survey of Spanish Literature (Peninsular)
352 - Survey of Spanish-American Literature (Colonial Period Until the Present)
353 - Survey of Drama in the Spanish Language

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

451 - Studies in Spanish Literature
452 - Studies in Spanish Literature
453 - Survey of Hispanic Literature
457 - Don Quixote

MASS COMMUNICATIONS (TELEVISION/RADIO)

150 - Process and Effects of Mass Media
335 - Evolution of Entertainment Television

MUSIC

338 - Jazz
357a,b - History of Western Music

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

411a,b,c,d,e - Music Literature

PHILOSOPHY

213 - Introduction to Deductive Logic
233 - Philosophies and Diverse Cultures
300 - Ancient Greek and Roman Philosophy
301 - Medieval Western Philosophy
302 - Classical Modern Western Philosophy
303 - Nineteenth Century Western Philosophy
304 - Twentieth Century Western Philosophy
306 - American Philosophy
307 - Pragmatism
308 - Twentieth Century European Philosophy
309 - Twentieth Century Analytic Philosophy
310 - Theories of Knowledge
314 - Philosophies of Science
320 - Ethics
321 - Ethics in the Medical Community
323 - Engineering, Ethics, and Professionalism
325 - Philosophy of Art
326 - The Aesthetics of Film
330 - Metaphysics
333 - Philosophy of Religion
334 - World Religions
335 - Chinese Philosophy
340 - Social and Political Philosophy
343 - Philosophy of Law
344 - Socialism and Social Democracy
345 - Philosophical Conceptions of Women (same as WMST 345)
346 - Social Philosophies of the Women's Movement (same as WMST 346)
347 - Philosophical Foundations of Racism

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

411 - Symbolic Logic
440 - Classical Political Theory (same as POLS 484)
441 - Modern Political Theory (same as POLS 485)

SPEECH COMMUNICATION

201 - Small Group Communication
210 - Interracial Communication
223 - Interpersonal Communication Theory and Applications
261 - Oral Interpretation of Literature
330 - Theories of Communication

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

410 - Rhetorical Theory and Criticism
433 - Language and Speech Communication
434 - Nonverbal Communication
435 - Animal Communication Behavior

THEATER

141 - Film Analysis
241 - Film History

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

401a,b - History of Theater

WOMEN'S STUDIES

200 - Issues in Feminism
341 - The African-American Woman in American Literature (same as ENG 341)
345 - Philosophical Conceptions of Women (same as PHIL 345)
346 - Social Philosophies of the Women's Movement (same as PHIL 346)

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

473a,b - Women in Art (Crosslisted with ART 473a,b)

GE AREA: NATURAL SCIENCES AND MATHEMATICS

ANTHROPOLOGY

365 - Human Origins
407 - Primatology

BIOLOGICAL SCIENCES

203 - Human Sexuality and Reproduction
205 - Human Diseases
240b - Human Anatomy and Physiology

CHEMISTRY

120b - General, Organic and Biological Chemistry
121a,b - General Chemistry
124b - General Organic, and Biological Chemistry Laboratory
125a,b - General Chemistry Laboratory

GEOGRAPHY

210 - Physical Geography
211 - Meteorology
310 - Physical Geology
314 - Climatology

MATHEMATICS

150 - Calculus I
152 - Calculus II
223 - Logic and Mathematical Reasoning
305 - Differential Equations I
321 - Linear Algebra I

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

423 - Combinatorics and Graph Theory

PHYSICS

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

SCIENCE

341 - Foundations of Science

GE AREA: SOCIAL SCIENCES

ANTHROPOLOGY

305 - People and Cultures of North America
306 - People and Cultures of Asia
307 - People and Cultures of Latin America and the Caribbean
310 - People and Cultures of Africa
311 - Culture of Black Americans
312 - Contemporary American Indians
313 - Women in Cross-Cultural Perspective (same as WMST 313)
331 - World Prehistory
332 - Origins of Old World Civilization
350 - Anthropology in Contemporary Life

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

400 - Cultural Anthropology
411 - Urban Anthropology
426 - Family and Kinship in Cross-Cultural Perspective (same as WMST 426)
432a - The Preceptor of Illinois
432b - Southwestern Archaeology
452 - Political Anthropology

ECONOMICS

112 - Principles of Microeconomics
221 - Economics History of the United States
241 - Contemporary Economics Issues
301 - Intermediate Microeconomic Theory
302 - Intermediate Macroeconomic Theory
327 - Social Economics: Issues in Income, Employment and Social Policy
331 - Labor Economics
343 - Money and Banking
345 - Economics of the Public Sector: National
361 - Introduction to International Economics

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

423 - History of Economic Thought
425 - Economics Systems
431 - Labor and Public Policy
435 - Economics
437 - Health Economics
445 - Economics of the Public Sector: State and Local
461 - International Trade Theory and Policy
462 - International Monetary Economics
463 - Introduction to Economic Development and Growth

GEOGRAPHY

200 - Economic Geography
201 - Cultural Geography
230 - Regional Geography of North America
330 - Geography of Europe
331 - Geography of Commonwealth of Independent States
332 - Geography of Africa
333 - Geography of Asia
334 - Geography of Latin America

HISTORY

111a,b - History of Western Civilization
112a,b - World History
113 - Survey of Ancient History
114 - Survey of Medieval History
130 - History of Black America
200 - United States History and Constitution: to 1877

201 - United States History and Constitution: 1877 - Present
300 - Special Topics
301 - Historical Methods
303 - History of the Ancient Near East
304 - History of Greece
306a,b - History of Rome
308a,b - Medieval History
313 - Witchcraft, Magic and the Occult
315 - History of Religion in Europe
318a,b - History of Russia
321 - Reformation Europe, 1500-1648
322 - History of Italy
330 - History of Illinois
334a,b - The Westward Movement in American History
338 - The Civil War and Reconstruction
340 - Black Freedom Movement, 1955-75
342 - History of Religion in America
344a,b - History of American Diplomacy
345a,b - History of American Business
352a,b - History of Africa
354a,b - History of the Arab World
356a,b - History of China
358- History of Japan
360a,b - History of Latin America
Notice: Please see cautionary note at the beginning of the Advanced course listing
400 - Topics in History
404a,b - Social and Intellectual History of the Middle Ages
406 - Age of Absolutism and Enlightenment
408a,b - History of England: 1509 to Present
412 - The French Revolution
413 - History of Modern France
415 - Modern German History
416 - World War I and Its Aftermath: 1914-1921
418 - World War II
420a,b - European Social, Cultural and Intellectual History
422a,b,c- Late Modern Europe
424 - Topics in East European History
426 - Topics in Russian and Soviet History
428 - Topics in European Women's History (same as WMST 428)
430 - American Colonial History
431 - American Revolution and Constitution
432 - Early American Republic, 1789-1845
434a,b - Twentieth Century American History
436 - History of the South
438a,b - Intellectual History of the United States
440 - Women in American Social History (same as WMST 440)
442 - The Black Urban Experience
446a,b - United States Military History
454 - History of the Arab-Israeli Conflict
460 - History of Mexico
461 - Central America and the Caribbean in the 20th Century

POLITICAL SCIENCE

112 - American National Government and Politics
320 - Introduction to Public Administration
340 - The Presidency
341 - Congress and the Legislative Process
342 - Issues in American Public Policy
343 - American State Governments
345 - Parties and Interest Groups
346 - Public Opinions
350 - Political Systems of Western Europe
351 - Eastern European Political Systems in Transition
355 - Political Systems of Latin America
356 - Political Systems of Asia
370 - Introduction to International Relations
385 - Introduction to Political Theory
386 - American Political Ideas and Their Origins
390 - The Judicial System
Notice: Please see cautionary note at the beginning of the Advanced course listing
424 - Administrative Law
445 - Voting and Elections
472 - International Organizations
473 - United States Foreign Policy
484 - Classical Political Theory (same as PHI 440)
485 - Modern Political Theory (same as PHI 441)
489 - Topics in Political Theory
495 - Constitutional Law I
496 - Constitutional Law II

PSYCHOLOGY

201 - Child Psychology
203 - Adolescent Psychology
204 - Adult Development and Aging
205 - Psychology of Personal Adjustment
206 - Social Psychology
212 - Methods of Psychological Inquiry
308 - Social Psychology of Nonverbal Behavior

311 - Experimental Psychology: Learning
312 - Experimental Psychology: Perception
313 - Motivation
314 - Physiological Psychology
320 - Introduction to Industrial Organization Psychology
374 - Organizational Psychology

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

404 - Contemporary Theories of Learning, Perception and Motivation
405 - Psychology of Women (same as WMST 405)
409 - History and Systems
414 - Altered States of Consciousness
420 - Behavior Modification
430 - Applied Behavioral Analysis
431 - Psychopathology
440 - Theories of Personality
461 - Advanced Social Psychology
462 - Psychology of Criminal Behavior
465 - Group Dynamics and Individual Behavior
468 - Psychology of Human Sexuality
473 - Personnel Psychology
487 - Psychology of Aging

SOCIOLOGY

200 - Cooperation and Conflict
300 - Social Problems
304 - Race and Ethnic Relations
308 - Women, Gender and Society (same as WMST 308)
312 - Social Research Methods
335 - Urban Sociology
338 - Industry and Society
372 - Crime and Justice
373 - Juvenile Delinquency
390 - Sociological Perspectives
391 - Marriage and the Family

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

420 - Leadership
421 - Individual and Society
431 - Employment and Workplace Change
441 - Health, Illness and Society
447 - Underground Economy
451 - Survey of Theory
470 - Sociology of Deviance
474 - Victims and Society
481 - Population Dynamics
490 - Special Topics in Sociology

SOCIAL WORK

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

486 - Perspectives on Human Diversity
489 - Alternative Visions of Social Development

WOMEN'S STUDIES

200 - Issues in Feminism
308 - Women, Gender, and Society (same as SOC 308)
313 - Women in Cross-Cultural Perspective (same as ANTH 313)

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

405 - Psychology of Women (same as PSYC 405)
426 - Family and Kinship in Cross-Cultural Perspective (same as ANTH 426)
428 - Topics in European Women's History (same as HIST 428)
440 - Women in American Social History (same as HIST 440)

INTERGROUP RELATIONS, INTERNATIONAL ISSUES, INTERNATIONAL CULTURE REQUIREMENT

Students are required to take one course in the area of Intergroup Relations and a second course covering either International Issues or International Culture. Courses which are taken to fulfill these requirements may also fulfill major, minor, General Education, or elective requirements. Courses fulfilling the three requirements are listed below.

INTERGROUP RELATIONS

ANTHROPOLOGY

305 - People and Culture of North America
311 - Culture of African-Americans
312 - Contemporary American Indians
313 - Women in Cross-Cultural Perspectives (same as WMST 313)

BIOLOGY

450 - Science, Gender and Race (same as WMST 450)

ECONOMICS

327 - Social Economics: Issues in Income Distribution, Employment, and Social Policy

ENGLISH

205 - African-American Literature
341 - The African-American Woman in American Literature (same as WMST 341)
342 - African-American Fiction
478 - Studies in Women, Language, and Literature (same as WMST 478)

FOUNDATIONS OF EDUCATION

451 - Gender and Education (same as WMST 451)

HISTORY

130 - History of Black America
440 - Women in American Social History (same as WMST 440)
442 - The Black Urban Experience

INTERDISCIPLINARY STUDIES

350 - Women in Social Institutions: A Comparative Approach (same as WMST 350)

MASS COMMUNICATIONS

351 - Women in Mass Communications (same as WMST 351)

PHILOSOPHY

346 - Social Philosophies of the Women's Movement (same as WMST 346)
347 - Philosophical Foundations of Racism

PSYCHOLOGY

405 - Psychology of Gender (same as WMST 405)

SOCIAL WORK

387 - Sexual Diversity: Issues for Social Work
486 - Literary Perspectives on Human Diversity

SOCIOLOGY

304 - Race and Ethnic Relations
308 - Women, Gender and Society (same as WMST 308)
335 - Urban Sociology

SPEECH COMMUNICATION

103 - Interpersonal Communication Skills
210 - Interracial Communication
331 - Gender and Communication (same as WMST 331)

WOMEN'S STUDIES

200 - Issues in Feminism
351 - Women in Mass Communications
451 - Gender in Education

INTERNATIONAL ISSUES

ANTHROPOLOGY

350 - Anthropology in Contemporary Life
411 - Urban Anthropology
452 - Political Anthropology

BIOLOGY

365 - Ecology

ECONOMICS

361 - Introduction to International Economics
461 - International Trade Theory and Policy
462 - International Monetary Economics
463 - Introduction to Economic Development and Growth

FINANCE

450 - International Finance

GEOGRAPHY

200 - Economic Geography
300 - Geography of World Population

HISTORY

111b - History of Western Civilization
112b - World History
318b - History of Russia
352b - History of Africa
354b - History of the Arab World
356b - History of China
358 - History of Japan
360b - History of Latin America
408c - History of England
413 - History of Modern France
415 - History of Modern Germany
420b - European Social, Cultural, and Intellectual History
422c - Late Modern Europe
424 - Topics of European History
426 - Topics in Russian and Soviet History
428 - Topics in European Women's History (same as WMST 428)
454 - History of Arab-Israeli Conflict
460 - History of Mexico
461 - Central America and Caribbean in 20th Century

HUMANITIES

310a - Esperanto
310b - Esperanto

INTERDISCIPLINARY STUDIES

326 - Modern Latin America
336 - Global Problems and Human Survival
340 - The Problems of War and Peace

MANAGEMENT

461 - Managing in the Global Economy/International Management

MARKETING

476 - International Marketing

MASS COMMUNICATIONS

453 - Transnational Media

PHILOSOPHY

344 - Socialism and Social Democracy

POLITICAL SCIENCE

111 - Introduction to Political Science
350 - Political Systems of Western Europe
351 - Eastern European Political Systems in Transition
355 - Political Systems in Latin America
356 - Political Systems in Asia
370 - Introduction to International Relations
459 - Topics in Comparative Politics
472 - International Organizations
473 - United States Foreign Policy
479 - Topics in International Relations

SOCIOLOGY

481 - Population Dynamics

WOMEN'S STUDIES

428 - Topics in European Women's History

INTERNATIONAL CULTURE

ANTHROPOLOGY

111 - Introduction to Anthropology
301 - Language and Culture
306 - People and Culture of Asia
307 - People and Culture of Latin America and the Caribbean
310 - People and Culture of Africa
331 - World Pre-History
332 - Origins of Old World Civilization
400 - Cultural Anthropology
404 - Anthropology and the Arts
410 - Anthropology of Religion
426 - Family and Kinship in Cross-Cultural Perspective (same as WMST 426)

ART

225a,b - History of World Art
424a,b - Baroque and Rococo Art
447a,b - Ancient Art
448a,b - Early Christian and Medieval Art
449a,b - Renaissance Art
468a - Pre-Columbian Art
468b - North American Indian Art
469a,b - Primitive Art: African and Oceania
473a,b - Women in Art (same as WMST 473a,b)

ENGLISH

304 - Literary Masterpieces
340 - Literature of the Third World
462 - Modern British and Continental Drama

FOREIGN LANGUAGE

111a - Introduction to Foreign Studies: French
111b - Introduction to Foreign Studies: German
111c - Introduction to Foreign Studies: Spanish
345 - Literature in Translation
491 - Cultural and Language Workshop

FRENCH

102 - Elementary French
104 - Elementary French
311 - Contemporary French
351 - Survey of French Literature
352 - Survey of French Literature
353 - Survey of the French Novel
451 - Studies in French Literature
452 - Studies in French Literature
453 - Studies in French Literature
456 - Seminar on Women Writers (same as WMST 456)
457 - African and Caribbean Literature of French Expression

GEOGRAPHY

111 - Introduction to Human Geography
201 - Cultural Geography
330 - Geography of Europe
331 - Geography of the Commonwealth of Independent States
332 - Geography of Africa
333 - Geography of Asia
334 - Geography of Latin America

GERMAN

102 - Elementary German
104 - Elementary German
311 - German Culture
351 - Survey of German Literature
352 - Survey of German Literature
353 - Survey of German Literature
411 - German Civilization
452 - Faust
453 - Seminar in German Literature

GREEK

102 - Introduction to Greek

HISTORY

111a - Introduction to the History of Weste Civilization
112a - World History
113 - Survey of Ancient History
114 - Survey of Medieval History
303 - History of Ancient Near East
304 - History of Greece
306a,b - History of Rome
308a,b - Medieval History
315 - History of Religion in Europe
318a - History of Russia
322 - History of Italy

352a - History of Africa
354a - History of the Arab World
356a - History of China
360a - History of Latin America
404a,b - Social and Intellectual History of the Middle Ages
406 - Age of Absolutism and Enlightenment
412 - The French Revolution
420a - European Social, Cultural, and Intellectual History
422a,b - Late Modern Europe

INTERDISCIPLINARY STUDIES

324 - People and Culture of the East
377 - The Arts and the French Revolution
400 - History, Culture and Language of China

LATIN

102 - Introduction to Latin

PHILOSOPHY

233 - Philosophies and Diverse Cultures
300 - Ancient Greek and Roman Philosophy
301 - Medieval Western Philosophy
302 - Classical Modern Western Philosophy
303 - Nineteenth Century Western Philosophy
304 - Twentieth Century Western Philosophy
308 - Twentieth Century European Philosophy
334 - World Religions
335 - Chinese Philosophy
440 - Classical Philosophy Theory (same as POLS 484)
441 - Modern Political Theory (same as POLS 485)

POLITICAL SCIENCE

484 - Classical Political Theory (same as PHIL 440)
485 - Modern Political Theory (same as PHIL 441)

RUSSIAN

102 - Elementary Russian
104 - Elementary Russian

SPANISH

102 - Elementary Spanish
104 - Elementary Spanish
311 - Contemporary Spain
312 - Contemporary Spanish America
351 - Survey of Spanish Literature
352 - Survey of Spanish American Literature
451 - Studies in Spanish Literature
452 - Studies in Literature in the Spanish Language
453 - Seminar in Hispanic Literature
457 - Don Quixote
471 - Spanish-American Literature

THEATER

310 - Performance Studio II: International and Experimental Styles

Assistant Professor Peter Cocuzzo works with student performers wearing masks they made in a theater class.

ASSESSMENT AND THE SENIOR ASSIGNMENT

The purpose of assessment of undergraduate education is to help the University determine the extent to which it is fulfilling its mission of educating undergraduate students. Assessment allows the University to make improvements in program structure, course content, and pedagogy. It also assists in advisement and placement and provides students with indicators of their performance. Finally, assessment monitors the competence of graduating students, not just in terms of disciplinary expertise but also with respect to the attainment of a general education. Much of assessment is embedded within the teaching function of the University and, ideally, occurs alongside each student's regular academic effort. The three main components of SIUE's undergraduate assessment are placement testing, midpoint assessment, and the Senior Assignment.

PLACEMENT TESTS

Some entering undergraduate students must take standardized tests to help the University better understand their academic abilities and needs. The tests serve two purposes. First, they assess each student's skill level in mathematics, writing, and reading in order to identify coursework that would be appropriate. Second, by identifying the educational skills of those entering its classes, the University can subsequently assess the quality of education it provides for its students.

For first-time freshmen and for transfer students who have attempted fewer than 16 semester hours of credit elsewhere, placement into all mathematics, English, and academic development courses is based on a combination of factors including, but not limited to, ACT scores, high school grades and class rank, high school coursework, and/or placement tests. For transfer students who have attempted at least 16 semester hours of credit elsewhere, placement into these courses is based on satisfactory performance (grades of C or better) in mathematics and English courses completed elsewhere, or placement tests where evidence of satisfactory performance is absent.

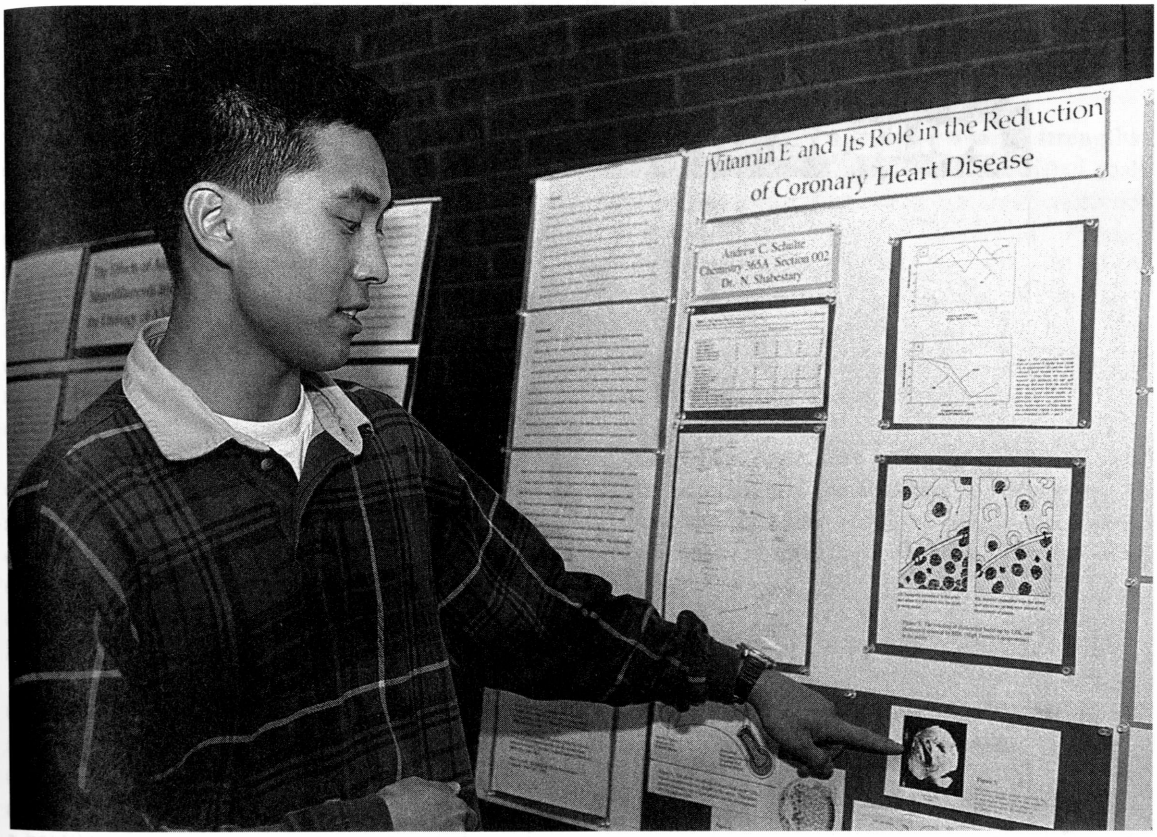
Students whose test scores in writing, reading, and/or mathematics are below internally established indicators of entry level competence must begin the process of development or redevelopment during the first semester of enrollment and must demonstrate steady progress in each succeeding semester. Successful completion of such academic development must be concluded within 28 semester hours and prior to enrolling in any courses for which the corresponding skill courses are prerequisite. Most SIUE courses designated AD (Academic Development) and all courses numbered below 100 carry institutional credit only; that is, they do not count toward graduation.

MIDPOINT ASSESSMENT

All students, whether they begin their careers at SIUE or enter as transfer students, are expected to participate in midpoint assessment. Student participation may occur as part of ordinary coursework for the baccalaureate degree so that the assessment process itself adds no extra work other than to require an additional copy of the product to be assessed. Many different assessment devices are used and include, but are not limited to, portfolios, reflective essays, course papers, standardized exams, and interviews. Regardless of the assessment measure used, students who participate in midpoint assessment receive feedback and notice of the result of their contributions.

THE SENIOR ASSIGNMENT

The Senior Assignment represents the culmination of the entire undergraduate experience at SIUE and should integrate the best aspects of each student's baccalaureate education. All seniors are required to complete a Senior Assignment that demonstrates breadth commensurate with SIUE's general education expectations and proficiency in the academic major. This requirement arises from the University's belief that the ability to integrate a general education perspective into one's academic discipline is an essential mark of a University educated person. The Senior Assignment fosters



Andrew Schulte explains his research and findings during poster presentations in a chemistry class taught by Dr. Nahid Shabestary.

creativity and self reliance by encouraging each student to gain control over his or her own educational experience, to become more than a skilled classroom stenographer. As such, the Senior Assignment represents a major commitment by the SIUE faculty to undergraduate learning. Each academic major has its own Senior Assignment and, therefore, an individual assignment may involve, for example, library inquiry, laboratory experiments, field inquiry, or artistic creativity. Therefore, a given Senior Assignment may culminate in an artistic performance, public speech, written thesis, gallery presentation, or a combination of these with other forms of expression. Individual Senior Assignments differ but they share in common a challenge to each SIUE student to achieve individual academic excellence. This is what distinguishes baccalaureate education at SIUE.

COLLEGE OF ARTS AND SCIENCES

dean sharon k. hahs

COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences is committed to the traditional academic pursuits of instruction, scholarship, and public service as a means of realizing, in close cooperation with other units, the mission and goals of Southern Illinois University at Edwardsville. Consistent with the mission of the University, the College assigns first priority to excellence in undergraduate education. To this end the College fosters the development of the following characteristics and capabilities of its graduates:

Communication: Organize and express ideas clearly and appropriately; master standard use of written and oral communication; appreciate alternative forms of expression, including art, dance, music and literature; distinguish between the medium and the message; listen, observe, interpret, and understand others.

Critical Thinking: Employ independent, objective, and rigorous reasoning; identify and integrate the elements of a task or problem; seek, organize, assimilate, synthesize, and use information; maintain a healthy skepticism; recognize the value of creativity, the limits of reason and legitimacy of intuition.

Problem Framing and Solving: Appreciate the complexity of problems; go beyond conventional assumptions; understand parts of systems as well as the whole; recognize patterns and generalize; search and test solutions using analytical and intuitive skills; evaluate and monitor outcomes; work effectively and creatively in diverse groups.

Knowledge: Master basic facts, concepts, and literature of the arts and sciences; acquire knowledge of diverse ethical traditions and contemporary issues; develop competence in the use of technology, instrumentation, and research methods; develop expertise in a major; understand the evolution and trends of that major; acquire knowledge of career opportunities.

Integration and Application of Knowledge: Recognize and value the interconnectedness of knowledge; learn creatively from practice and experience; apply knowledge in innovative ways; appreciate, use, and promote multidisciplinary and culturally diverse perspectives; foster connections wherein knowledge serves as a bridge to new levels of understanding and insight.

Self Development: Assess personal strengths, weaknesses, and potential; develop individual goals and persevere to achieve them; build self confidence and motivation; identify and respect diverse backgrounds and viewpoints; deal effectively with change; recognize and tolerate ambiguity; develop a well-considered personal ethic that includes responsibility for actions; assume responsibility for decisions and their results.

Citizenship: Participate in the local, national, and global community; be sensitive to the welfare of others; appreciate democratic values; acquire a sense of personal and collective responsibility for the social and natural environment.

Life-Long Learning: Maintain a sense of curiosity; appreciate and master the process of learning; recognize that learning is a means of fulfillment and success in one's personal and professional life.

The College of Arts and Sciences includes the departments of Anthropology, Art and Design, Biological Sciences, Chemistry, English Language and Literature, Foreign Languages and Literature, Geography, Historical Studies, Mass Communications, Mathematics and Statistics, Music, Philosophical Studies, Physics, Political Science, Public Administration and Policy Analysis, Social Work, Sociology, Speech Communication, and Theater and Dance. The College also offers degrees in economics and liberal studies. Each department provides one or more programs of specialization which are described in detail in the following pages. Undergraduate programs are designed to provide a strong basic foundation in the chosen field and to serve as a preparation for many different careers and professional activities, as well as for graduate studies. Departments within the College offer a variety of master's degree programs. The College is responsible for a significant majority of the General Education program; undergraduate courses in the College provide a general liberal arts education appropriate to all University students. The faculty of the College are active in basic and applied research and in professional service to the University and to the community.

ANTHROPOLOGY

PROFESSORS:
Denny, S.G.(Chair); Frisbie, C.J.; Frisbie, T.R.

ASSOCIATE PROFESSOR:
Browne, D.L.

ASSISTANT PROFESSOR:
Lutz, N.M.

Anthropologists study humans and their physical and cultural development through time and space. Anthropology develops a respect for the various ways of life followed by others and knowledge of the reasons for these practices. Students in anthropology acquire familiarity with physical anthropology, anthropological linguistics, archaeology, and social anthropology. Particular strengths of the Department of Anthropology lie in the faculty's expertise in contemporary American Indians, urban anthropology, Asia, and the archaeology of North America. Distinctive features of the program include opportunities for supervised archaeological and ethnographic fieldwork, for training in museum work in conjunction with the Anthropology Teaching Museum, for field trips and involvement in urban community projects, and for participation by qualified majors in the Alpha Chapter of Illinois of Lambda Alpha, the National Collegiate Honors Society for Anthropology. In addition, the faculty participates in interdisciplinary programs such as Women's Studies.

Students in good standing wishing to apply for a major or minor may enter the program by filing a formal application for a major or minor through the office of Academic Counseling and Advising and then consulting with one of the department undergraduate advisers. Preregistration advisement is mandatory for all declared majors and minors. All majors and minors must maintain a 2.0 cumulative grade point average in anthropology courses.

CAREER OPPORTUNITIES

Anthropology majors may pursue graduate degrees at both the master's and doctoral level; such degrees lead to careers in university teaching, research, or museum work. Undergraduate anthropology majors find employment in secondary education, industry, cultural resource management, environmental studies, museums, human services, contract archaeology, and government services. Because of the breadth of the subject matter in anthropology, students frequently combine anthropology with other disciplines such as history, sociology, geology, earth science, biology, psychology, medicine, law, and the arts. Such combinations enable students to understand complex community problems and many issues of contemporary life and to expand their opportunities for interesting and rewarding careers.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS
ANTHROPOLOGY

The Bachelor of Arts Degree, designed primarily to prepare students for advanced studies in Anthropology, includes a Foreign Language requirement.

General Education Requirement 50
(Some general education requirements may be satisfied while completing this major concentration.)
(Students must choose skill option B including 8 hours of Foreign Language.)

Requirements for Major in Anthropology 33
111, 301, 325,365, 400, 490, 491 18
One course from each of the following three areas 9

Area 1 (prehistory and evolution)
331, 332, 333, 407, 432 a,b;

Area 2 (cultural anthropology)
305, 306, 307, 308, 310, 311, 401
404, 408, 410, 426;

Area 3 (contemporary issues)
312, 313, 350, 411, 452, 488

Anthropology electives chosen in consultation with adviser 6

Minor* .....

Electives** .....

Total .....

* Students seeking a Bachelor of Arts or Bachelor of Science degree in Anthropology are required to select a minor in consultation with their adviser.

** Students must complete the constitution requirement. A course fulfilling this requirement may be included in the general education or elective requirements

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE ANTHROPOLOGY

The Bachelor of Science Degree is designed for students desiring to pursue anthropology in preparation for government service, industry, contract archaeology, museology, or Foreign Service, where advanced graduate degrees may not be required. The Bachelor of Science degree requirements include 9 hours in field methods courses: Anthropology 373 (3-6), 375 (3-6), 473 (3), and/or 475 (3), or the presentation of acceptable evidence of previous field work experience.

MINOR REQUIREMENTS

A minor in anthropology consists of 18 hours. Twelve of these hours must be in junior or senior level courses. Students are required to take an introductory anthropology course, one physical anthropology course, and one cultural anthropology course. The remaining hours consist of anthropology electives selected in consultation with an undergraduate anthropology adviser.

EXIT REQUIREMENTS

Graduates are expected to be knowledgeable about physical and cultural development of humans and the diversity of humankind. As seniors, students must successfully complete Anthropology 490 and 491.

ART AND DESIGN

PROFESSORS:
Anderson, D.J.; Davis, D.F.; Decoteau, P.H.; Dresang, P.A.; Gipe, T.D.; Malone, R.R.; Ringering, D.L.; Weber, J.A.

ASSOCIATE PROFESSORS:
Brown, R.W.(Chair); Changar, J.B.; Ehrlich, M.J.; Myers, P.K.

ASSISTANT PROFESSORS:
Barrow, J.A.; Klorer, P.K.; Schroeder, I.A.; Strand, L.

CAREER OPPORTUNITIES

Students majoring in art find career opportunities in a wide variety of professional fields, including teaching in public and private schools; recreational, cultural, and craft programs in city, state and federal government agencies; design, advertising, and commercial art agencies; museums, galleries and other cultural institutions. The undergraduate programs in art also prepare students for graduate study in their fields of specialization; graduates have been able to compete very successfully for career and graduate education opportunities.

PROGRAM DESCRIPTION

The Department of Art and Design offers three undergraduate degrees: a Bachelor of Arts degree in Art with options in Art History or Studio Art; A Bachelor of Fine Arts degree in Art and Design; and a Bachelor of Science degree (Art Education certification option K-12 and 6-12).

Undergraduate offerings in art include introductory and specialized courses in drawing, painting, printmaking, sculpture, ceramics, fiber/fabric, glassworking, graphic design, photography, jewelry, museology, art historical studies, and professional preparation for the future teacher of art at the elementary or secondary level.

To augment the academic program, the Department of Art and Design has a comprehensive program in the visual arts which includes a Visiting Artist Program and an Exhibition Program. These programs provide an opportunity for both art majors and non-majors to become acquainted with well known artists and artworks brought to the University.

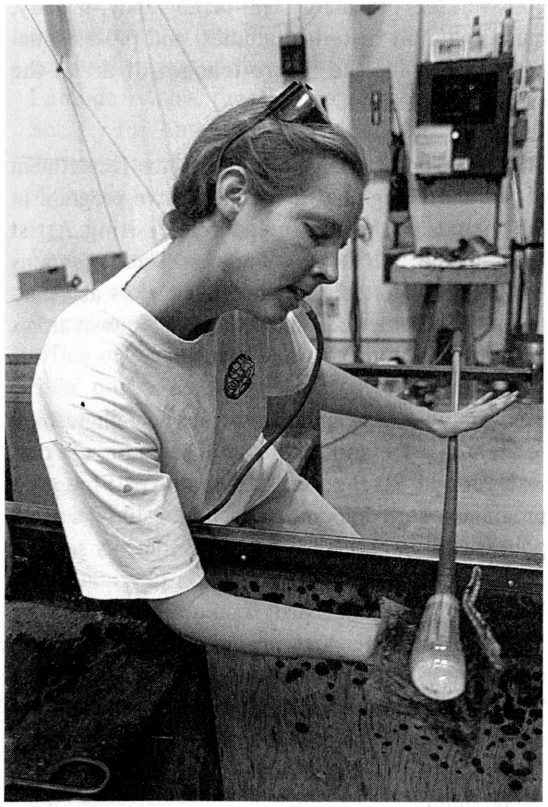
Students who have graduated from accredited high schools may be admitted to the Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts programs. A grade point average of 2.40 (on a 4.0 point scale) is necessary for those students seeking admission to the teacher education program in the Bachelor of Science program. Admission to the Bachelor of Fine Arts program is by portfolio examination with applications accepted each term. Students must have a cumulative grade point average of 2.50 (on a 4.0 point scale) on all work and a 3.00 grade point average in studio courses for admission to the program.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS
ART
SPECIALIZATION IN STUDIO ART

General Education Requirements 50
(Some General Education requirements may be satisfied while completing this major concentration. Students in this degree program must elect option B in this skills area)
Requirements for Major in Art 66
ART 112a,b,c,d,(12), ART 202e(3), ART 225a,b(6)* 21
12 hours from ART 202a, b, c, d, f or g, . 12
Art History 6
9 Hours from 300/400 studio area (major area) 9
6 hours from 300/400 studio area (minor area) 6
9 hours from three different 300/400 studio area(not major area or minor area) 9
Art Electives 3
Electives 8
Completion of Senior Assignment**
Total 124

* Six hours may also count toward General Education advanced course requirements.

** Students should consult their departmental adviser for details regarding the senior assignment.



Student Holly Wolf works on a glass piece in the Art and Design building.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS
ART
SPECIALIZATION IN ART HISTORY

General Education Requirements 50
(Students must elect option B in this skills area)

Requirements for Major in Art History 45
ART 225 (Survey)* 6
39 hours from the following: ART 424a,b, ART 447a,b, ART 448a,b, ART 449a,b, ART 468a,b, ART 469a,b, ART 470, ART 473a,b,ART 480a,b, ART 481a,b, ART 483 39
Electives and/or Minor 29
(Students are urged to elect PHILOSOPHY 360 and ANTHROPOLOGY 305 plus courses in non-visual arts and history. Studio work is encouraged and additional language study advised.)

Completion of Senior Assignment**

Total 124

* Six hours may also count toward General Education advanced course requirements.

** Students should consult their departmental adviser for details regarding the senior assignment.

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE
ART
SPECIALIZATION IN STUDIO ART EDUCATION
(CERTIFICATION K-12)

General Requirement 48
(Some General Education requirements may be satisfied while completing this major concentration)

Requirements for Major in Art 66-69

ART 112a,b,c,d,(12), ART 202a,b,c,d,e (15) 27
12 from different 300/400 studio area . . .12
3 hours from an advanced 300/400 studio area 3
ART EDUCATION courses: ART 289, ART 364,ART 365, (6-12 Certification) . . 9
(K-12 ART EDUCATION courses) ART 289, ART 364,ART 365, ART 300b . . .(12)
ART 225a,b,(6)*, 6 hours ART HISTORY Electives 12
Art elective: 3-6
Professional Education: 21
(Includes CI 200 (2), EDUC 305 (3), EDFD 380 (2), EDUC 381 (1), SPE 400 (3), CI 451B (5), CI 352 (5)

Completion of Senior Assignment**

Total 138

* Six hours may also count toward General Education advanced course requirements.

** Students should consult their department adviser for details of senior assignment.

DEGREE REQUIREMENTS: BACHELOR OF FINE ARTS ART AND DESIGN

Admission to the Bachelor of Fine Arts Degree program is by portfolio only. Candidates for the Bachelor of Fine Arts must maintain a cumulative grade point average of 2.50 (on a 4 point scale) on all work and a 3.00 grade point average (on a 4 point scale) in studio courses to remain in the program.

General Education Requirements 50
(Some General Education requirements may be satisfied while completing this major concentration)

Requirements for Major in Art 84-88
Art 112a, b, c, d (12), Art 202a, b, c, d, e, f or g (18), Art 405 (1), Art 441 (3), Art 225a, b (6)* 40
12 hours from 300/400 studio major area 12
6 hours from 300/400 minor studio area 3
9 hours from 300/400 studio areas (all courses different and not in major or minor studio areas) 9
3 Art History electives 9
2 Art related electives (approval of adviser)** . 6
2-6 hours Senior Exhibition 2-6

Completion of Senior Assignment***

Total 134-138

* Six hours may also count toward General Education advanced course requirements.

** Art courses are not included in these hours.

***Students should consult their department adviser for details of senior assignment.

DEGREE REQUIREMENTS: BACHELOR OF ARTS, BACHELOR OF SCIENCE, AND BACHELOR OF FINE ARTS, TEACHER CERTIFICATION

Students may seek secondary or broad field teaching certification with a degree in Arts in consultation with Art Education and School of Education advisers. Art education and professional education courses needed for certification may be taken as electives. Students pursuing the Bachelor of Fine Arts with certification will exceed the 124-hour degree requirements.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE ART EDUCATION

General Education 48-50
Students seeking teacher certification must take specific general education requirements.
See the Secondary Education section of this catalog.

Major in Art 66-69

ART 112a,b,c,d, ...12
ART 202a,b,c,d,e 15
ART Studio300 level (select from ART 302,305,310,331,358,384,386,393) 12
ART Studio Advanced 300/400 level 3
ART Education ART 289,300b,364, 365 (K-12 certification) .....(12)
ART History ART 225a,b 6
ART History Elective 3
ART Elective 3

Professional Education 21
CI 200 2
EDFD 380 2
EDUC 381 1
EDUC 305 3
SPE 400 3
CI 352 Art Student Teaching (6-12 Certification) 10
OR
CI 352 Art Student Teaching 5
AND
CI 452b Art Student Teaching (K-12 Certification) 5
HED 201 3

Completion of Senior Assignment*

Total 133-138

* Students should consult the department adviser for details for the senior assignment.

MINOR REQUIREMENTS

Students desiring a minor in art should take the following courses: Basic Studio, ART 112 (12); Foundation Studio, ART 202 (9); and History of World Art, ART 225a,b (6). Students seeking a minor in art history should take the following courses: History of World Art, Art 225 a,b (6) plus 12 additional hours from 400 level art history courses.

FEES

Fees are assessed for all studio courses. Fees are billed at the beginning of the semester and should be paid at the Office of the Bursar. Students who drop classes after the second week of the semester will not be eligible for a refund of studio fees.

BIOLOGICAL SCIENCES

PROFESSORS:
Axtell, R.W.; Baich, A.; Brugam, R.B., (Chair); Kitz, D.J.; Kulfinski, F.B.; Smith,M.; Thomerson, J.E.; Wanda, P.E.; Wittig, G.C.

ASSOCIATE PROFESSORS:
Bolyard, M.; Eder, D.J.; Houpis, J.; McCommas, S.; Parker, N.R.

ASSISTANT PROFESSORS:
Krajniak, K.; Schulz, K.

INSTRUCTORS:
AbuSharbain, E.; Santanello, C.

ADJUNCT FACULTY:
Beierman, M., Med Tech; Hendrickson, T.; Royer, Tom, Instructor; Kraemer, B., Med. Tech; Denaro, J., Med Tech; Soto, P. Prox., Med Tech.

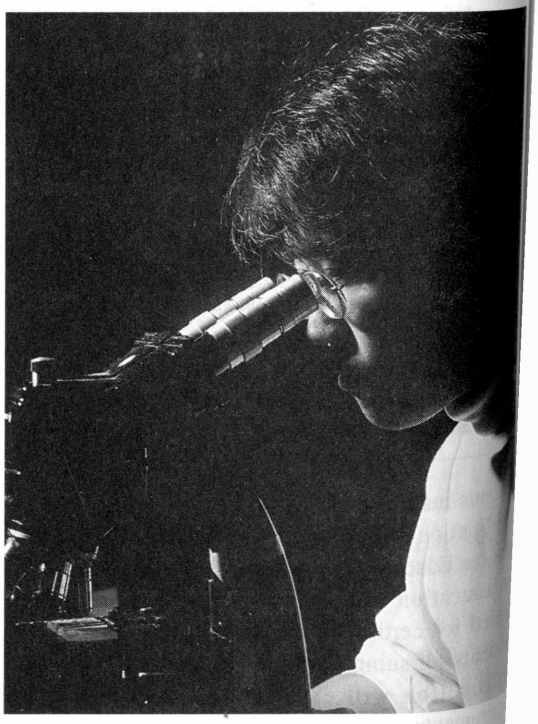
LECTURERS;
Stellyes, L.; Wilson, C.

Biology includes the whole domain of living things; patterns of cellular structure, the underlying biochemical pathways, anatomy and function of whole organisms, the mathematical predictability and molecular basis of inheritance, the flow of energy and matter through living systems, the regulation and interaction of basic life processes, the universality of adaptation, and the interdependence of the biosphere. Like all sciences, biology is both cumulative and open-ended in its discoveries. It teaches the wonders of life, the excitement of discovery and the challenge of the unknown. Students who are curious about living things—how they function or how they relate to the environment—may want to study biology.

The Department of Biological Sciences operates four tissue culture facilities, warm and cold rooms, and a photographic laboratory. Preparative ultracentrifuges, scintillation counters, fraction collectors, spectrophotometers and gel electrophoresis equipment facilitate research in enzymes, proteins and genetic engineering. A comprehensive collection of instruments is available to conduct research in plant physiological ecology: oxygen electrode system with fluorescence probe, Infra Red Gas Analyzer for measurement of CO2 uptake, pressure chamber and thermocouple psychrometer for measuring water potential, and data loggers with a variety of sensors to measure environmental variables. The department maintains substantial collections of insects, fish, amphibians, reptiles, birds, mammals, and plants. The 2,660 acre campus, with its woods and lakes and ponds, provides easily accessible habitats for ecological and other field work.

CAREER OPPORTUNITIES

Many careers are available for people with basic or advanced training in biology. There are opportunities in botany, dentistry, ecology, environmental biology, fisheries biology, genetics engineering, horticulture, immunology, medicine, medical technology, microbiology, molecular biology, parasitology, physiology, wildlife management, and zoology. Technical and supervisory positions are available in federal, state, industrial and university laboratories. Environmentally-related and health-related occupations almost always require a sound basic training in biology. A majority of students entering schools of medicine, dentistry, optometry, osteopathy, veterinary science, chiropractic and podiatry are biology majors. Basic training in biology is also essential for careers in allied health sciences, including nutrition, pharmacy, occupational therapy, and physical therapy.



A student peers into a microscope in a biology lab.

SPECIALIZATIONS IN BIOLOGICAL SCIENCES

The Department of Biological Sciences offers six specializations or options for a Bachelor of Arts or Science degree in Biological Sciences. These are:

a. Biology
b. Ecology, Evolution and Environment
c. Medical Sciences
d. Genetic Engineering
e. Secondary Education
f. Medical Technology

Brief descriptions of these specializations along with the academic requirements for each are given below. The programs are sufficiently flexible to allow students to change from one specialization to another should their goals and interests change.

ADMISSIONS

High school students who plan to major in one of the degree programs in Biological Sciences should complete at least three years of college preparatory mathematics (two years of algebra and one year of geometry), and one year each of chemistry and biology prior to entering the University. A fourth year of college preparatory mathematics (to include trigonometry) is strongly recommended.

Admission to a degree program in Biological Sciences requires an application for a major and acceptance by the department. Once admitted, students are formally affiliated with the department and assigned a faculty adviser. Advisement is mandatory; majors are permitted to register each term only after their course request forms have been approved by the departmental adviser. Students are encouraged to select their major field of study early in their academic careers to ensure orderly progress toward meeting degree requirements. To be admitted, students already enrolled in the University must have a minimum grade point average of 2.0 in science and mathematics courses completed as well as a cumulative grade point average of 2.0 or higher in all courses taken at SIUE. Transfer students should have a 2.0 grade point average in science and mathematics courses taken at other colleges and universities.

ACADEMIC STATUS

1. Students should show satisfactory academic progress to be retained in a degree program. Students may be dropped from the major for any one of the following circumstances :
   a. grade point average of 1.0 or below in any term
   b. cumulative grade point average of less than 2.0 in the major at any time
   c. any combination of withdrawal, incomplete, and failing grades in 50% or more of the courses for which the student is registered during two successive terms
   d. any combination of three withdrawal, incomplete, or failing grades in any single required course in Biology.
2. For readmission, students must meet the same admission requirements as students entering the program for the first time.

GRADUATION REQUIREMENTS

The following requirements must be met in order to obtain a degree in Biological Sciences:

a. earn a minimum of 124 hours of acceptable credit with a cumulative grade point average of 2.0 or higher
b. complete the minimum number of credit hours required for a particular degree
c. complete at least 12 hours of SIUE credit in major courses numbered above 299 with a cumulative grade point average of 2.0 or above
d. earn a GPA of 2.0 or above in all Biology courses numbered above 299
e. complete at least 6 hours of credit in Biology courses numbered above 299 earned at SIUE within 2 years preceding graduation.

Duplicate credit hours earned (through proficiency, transfer, CLEP, or from a course) after credit has been received for similar or more advanced course work in the same subject at SIUE or elsewhere are not applicable toward graduation requirements.

ADVISEMENT

Students interested in majoring in one of the options in biology are advised to apply for a major as early as possible and to consult with a biology adviser without delay. All academic development and high

school deficiency courses must be completed prior to declaring a biology major. Students are informed in writing of advisement procedures and assigned a faculty adviser at the time of declaration. Students are required by the University to consult an adviser prior to registration each term. Enrollment in biology major courses above 121 requires approval of a biology adviser. Biology, particularly specializations in Medical Sciences, Secondary Education, and Medical Technology, requires strict course sequencing if requirements are to be completed in four years. An appointment for advisement may be made by calling the Biology Office at 618-692-3927.

The adviser will be pleased to assist students in preparing a program of study in biological sciences with any one of six specializations.

ACADEMIC REQUIREMENTS

A. Academic Standards

All students pursuing a major in the biological sciences must adhere to the following academic standards in addition to those listed above.

1. A grade of C or better is required in each of the major core courses (120, 121, 219, 220,) before proceeding to the next core course and as prerequisite to courses numbered above 299.
2. No more than 4 hours of D may be counted in the 36 hours required for a major in the biological sciences.
3. The GPA in the major is based on all courses attempted in the major.
4. Any student who receives four grades of D, E, or WE in Biology courses numbered 299 or lower is no longer permitted to enroll in biology classes for credit toward a biology major.

B. Residency and other requirements

Majors in the biological sciences must complete at least 18 of the required hours in biology at SIUE. At least two 400-level courses must be included in the 18 hours. Students may take as many as 8 hours of 491 and 493 together as electives but these will not fulfill the 400-level course requirements. For graduation, all specializations require 28 hours in biology beyond the introductory level. Credit for a biology major will be awarded for courses cross listed with the biology curriculum. One year of a foreign language is required for the Bachelor of Arts degree in all specializations.

Students seeking a minor in the biological sciences must complete at least 9 of the 19 hours of biology at SIUE and obtain a GPA of 2.0 or better in all biology courses attempted at SIUE. Students seeking a minor in biology and other students whose program requirements do not include Chemistry 121 may substitute Chemistry 120 for enrollment in any biology course for which Chemistry 121 is listed as a prerequisite. All biology options require Chemistry 121.

BACHELOR OF SCIENCE/MASTER OF SCIENCE CURRICULUM

Undergraduates with exceptional academic credentials may be able to earn the bachelor's degree and the master's degree in biology in 5 years of study. Admission to this program is based on departmental recommendation to and approval by the Graduate School. Students who are interested in this program option should seek advice from their faculty advisers early in their junior year.

DEGREE REQUIREMENTS: BIOLOGICAL SCIENCES

The curriculum in this program is designed to provide a firm basis in biological sciences for students with a variety of goals. It is an attractive major for students planning to enter graduate school or for students pursuing careers in biological research or in applied work in such areas as agriculture, conservation, and wildlife management. Students in this program may elect to concentrate in such specific subdisciplines as Botany, Microbiology, Physiology, Cellular and Molecular Biology, Genetics, and Zoology by completing their electives through courses in these areas. Some subdisciplines require chemistry courses beyond the minimum requirement. Courses available in each subdiscipline are listed at the end of this section.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE BIOLOGICAL SCIENCES

General Education Requirements 48-50
The General Education Curriculum requires 48-50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the GE Area Natural Sciences and Mathematics requirements and the 3 hours Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills option B (8 hours of Foreign Language) is required.

Biology Requirements 36
120, 121, 219, 220 16
Electives 20
Elective courses may be chosen from any Biology courses permitted for major credit. Electives must include two lecture courses at the 400-level, and a 2 hour assessment course (senior project) must be taken by seniors.

Chemistry Requirements 16-18
121a, b; 125a, b; 241a, b; 245 18
or 121a, b ; 125a, b; 241a, BIOL 332 16

Mathematics/Physics Requirements 16-18
MATH 150 and PHYS 111 8
or PHYS 206a, b (or 211a, b and 212a, b) ..10
STAT 244 3

Electives 7-13

Total minimum hours required 124

SUBDISCIPLINE ELECTIVES

Botany: Electives available include Ecology 365; Plants and Environment 461; Biogeography 462; Ecology and Man 464; Field Biology 470; Topics in Plant Physiology 472; Aquatic Ecosystems 465; Terrestrial Ecosystems 466.

Microbiology: Electives available include Immunology 335; Microbiology 350; Diagnostic Microbiology 351; Microbial Pathogenesis 451; Virology 455.

Physiology: Electives available include Physiology 340; Advanced Physiology 441; Neurophysiology 444a; Topics in Plant Physiology 472.

Cellular and Molecular Biology and Genetics: Electives available include Basic Biochemistry 332; Immunology 335; Microbiology 350; Molecular Biology Laboratory 414; Techniques in Cell and Tissue Culture 415; Recombinant DNA 418; Human Genetics 421; Biochemistry and Molecular Biology 430; Cellular and Molecular Bases of Medicine 431; Biomembranes 433; Molecular Genetics 452; Virology 455.

Zoology: Electives available include Embryology 325; Biogeography 462; Field Biology 470; Entomology 483; Ichthyology 485; Herpetology 486; Mammology 488.

ECOLOGY, EVOLUTION, AND ENVIRONMENT SPECIALIZATION

Recent rapid advances in technology combined with a growing awareness of the impact of human activity on the environment have resulted in the development of broad opportunities in environmental biology.

Ecology is the study of interactions between living organisms and their environment. Evolution provides the theoretical basis which binds all of biology together. Both of these areas combine to help us understand human impacts on natural systems. These areas have both academic and practical importance because they stimulate intellectual curiosity about the natural world and they provide a scientific basis for the solution of modern environmental problems.

The Ecology, Evolution, and Environment Specialization within the Biological Sciences Bachelor's degree program prepares students for positions which require the application of ecological principles to the solution of environmental problems. The specialization also prepares students for advanced study in all areas of biology including wildlife ecology and forestry.

Students selecting this specialization will take a planned sequence of courses which includes basic biological sciences, ecology, evolution, and environmental science. This study may include laboratory and field research. A variety of elective courses is available to allow students to pursue special interests such as plant or animal ecology, environmental management, and evolutionary biology at either the organismal or cellular level. Students should consult their adviser to devise a course schedule to fit their specific talents and interests.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS OR BACHELOR OF SCIENCE
BIOLOGICAL SCIENCES
SPECIALIZATION IN ECOLOGY, EVOLUTION AND ENVIRONMENT

General Education Requirements 48-50
The General Education curriculum requires 48-50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the GE Area Natural Sciences and Mathematics requirements and the 3 hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Language) is required.

Biology Requirements 37
120, 121, 219, 220 16
327 and Biol 365 7
492a* 2
Electives 12
Two 400 level courses, one in a field course, are required.

*492 is a senior assignment course.

Chemistry Requirements 18
121a,b; 125a,b;241a,b;245 18

Mathematics/Physics Requirements 14-18
MATH 150 and PHYS 111 8
or PHYS 206a,b(or 211a,b and 212a,b,) .10
STAT 244 3
CS 108 or MIS 108 3

Electives 4-10

Total minimum hours required 124

MEDICAL SCIENCES SPECIALIZATION

The Medical Sciences Specialization, a pre-health professions curriculum, will prepare students for entry into Medical, Dental, Veterinary, Optometry, Osteopathy, Chiropractic, and Podiatry schools, as well as into many other allied health programs.

Students considering a health-related profession should demonstrate above average ability in the natural sciences. Students should also exhibit traits commonly associated with health practitioners, e.g., persistence, curiosity, good judgment, initiative, emotional maturity, attention to details, and good interpersonal skills. Pre-dental students should also have or develop good manual skills and the ability to make acute judgments on space and shapes.

The biology program described below is designed to provide students with a rigorous course of study which will satisfy the entrance requirements of professional schools, as well as to award students a Bachelor of Science degree either at the end of the four year program, or in the case of early admission, at the end of the first year of professional school (see below).

Students requesting acceptance for the Medical Science Specialization will be advised by a Biology/Medical Science adviser with regard to their academic curriculum. Because professional schools adhere rigidly to their entrance requirements and because there is strict course sequencing for completion of these requirements, students in this specialization should seek advisement early to ensure satisfactory progress.

The Chief Health Professions Adviser maintains a centralized evaluation service to aid students seeking entry into professional schools during the application process. The adviser is available in the Biology Department to help and advise such students with regard to application procedures.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS OR BACHELOR OF SCIENCE
BIOLOGICAL SCIENCES
SPECIALIZATION IN MEDICAL SCIENCE

General Education Requirement 48-50
The General Education curriculum requires 48-50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the GE Area Natural Sciences and Mathematics requirements. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Language) is required.

Biology Requirements 3
120, 121, 219, 220 16
340 4
BIOL 430a,b or CHEM 451a, ...6

Electives 10
Electives include a two-hour assessment course (senior project) which must be taken by seniors, and one 400 level elective course.

Chemistry Requirements .....
121a,b; 125a,b; 241a,b; 245 18

Mathematics/Physics Requirements .....
MATH 150 5
PHYS 206a,b (or 211a,b; and 212a,b) ...10

Electives .....

Total hours required .....

Gretchen Hines, left, watches as Jennefer Gayle, Maureen Montgomery and Julie Tucker examine a human skull in an anatomy and physiology class.

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 36 hours of biology or general electives. In such cases, students earn degrees at the end of the first year of professional school subsequent to their application for graduation and the University's receipt of their transcripts for the first year.

MEDICAL TECHNOLOGY SPECIALIZATION

This degree specialization is designed for those students who wish to become Medical Technologists certified by the American Society of Clinical Pathologists. Medical technologist should have a firm understanding of the theory behind the diagnostic tests which they perform in the clinical laboratory. Their responsibilities encompass all of the clinical laboratory disciplines, such as clinical chemistry, urinalysis, hematology, serology, immunology, blood and organ banking, microbiology, parasitology, and nuclear medicine. As self-motivated, inquisitive scientists, medical technologists contribute to the development of new methods and laboratory instrumentation which aid the physician in the prevention and cure of disease. Most medical technologists are employed in hospitals, but private laboratories, physicians' offices, government agencies, industrial and pharmaceutical laboratories, and university research programs offer increasing opportunities for employment advancements.

The American Medical Association's Council on Medical Education, the American Society of Clinical Pathologists, and the American Society of Medical Technology collaborate in determining minimum standards for educational programs for medical technologists. The first three years of the program take place on the SIUE campus. During this time, students fulfill general education requirements and master fundamental knowledge and skills in biology, chemistry, physics, and mathematics. The fourth year of clinical/professional study takes place in a clinical laboratory setting at one of the University's affiliated hospital schools of medical technology. Acceptance to this last year of study is on a competitive basis and is not guaranteed to individual students in the program. Students enroll at SIUE for 36 hours of credit during the clinical year. The credits are earned

through courses in blood banking, chemistry, coagulation, hematology, microbiology, mycology, parasitology, serology, urinalysis and other subjects as specified in the agreement with each hospital affiliate. Students are awarded the Bachelor of Science in Biology/Medical Technology degree by SIUE upon successful completion of four years in this program. At this time students are eligible to apply for examination by the Board of Registry of the American Society of Clinical Pathologists, and if successful, are certified as medical technologists.

Students in this program should seek advisement early in their academic careers from the Biology/Medical Technology adviser because there is strict course sequencing for the completion of requirements. Careful scheduling is essential to completion of the on-campus academic portion of the program in three years.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS OR BACHELOR OF SCIENCE
BIOLOGICAL SCIENCES
SPECIALIZATION IN MEDICAL TECHNOLOGY

General Education Requirements 48-50
The General Education curriculum requires 48-50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the GE Area Natural Sciences and Mathematics requirements and the three hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Language) is required.

Biology Requirements 30
120, 121, 219, 220 16
332, 335, 340, 350 14

Chemistry Requirements 18
121a,b; 125a,b;241a,b; 245 18

Mathematics/Physics Requirements 9
MATH 120 3
PHYS 111 3
STAT 107 3

Hospital Rotation 36

Total Hours Required 141-143

SENIOR ASSESSMENT FOR MEDICAL TECHNOLOGY STUDENTS

As biology majors, students in the medical technology curriculum take three years of prescribed coursework at SIUE, then complete a fourth year of clinical/professional study in the clinical laboratory at one of SIUE's affiliated hospitals. These students are not in residence on the SIUE campus during their senior year, and in fact, many intern students move to the vicinity of the hospitals— some in St.Louis or Springfield. The Department views the senior assessment for medical technology students in two ways: (i) successful completion of the hospital calendar year education program, and (ii) achieving eligibility to apply for examination by the Board of Registry of the American Society of Clinical Pathologists, the certifying professional body in the United States. An outcome assessment is also provided by the scores received on the registry examination which compares SIUE students' performance with other students in the United States who take the examination at the same time.

GENETIC ENGINEERING SPECIALIZATION

Genetic engineering is a rapidly expanding field in biology. Genetic engineering is a defined method for producing genetic changes in a variety of organisms in the laboratory. A large number of industrial firms and many research laboratories use genetic engineering in their work. Job opportunities are numerous and are increasing in number. Students with training in genetic engineering may be employed in diverse laboratory settings including plant breeding, insecticide development and the production of pharmaceuticals.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS OR BACHELOR OF SCIENCE
BIOLOGICAL SCIENCES
SPECIALIZATION IN GENETIC ENGINEERING

General Education Requirements 48-50
The General Education curriculum requires 48-50 hours of General Education credits. The supporting mathematics and science courses required for this major satisfy 12 hours of the GE Area Natural Science and Mathematics requirements and the three hour (3) Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Languages) is required.

Biology Requirements 36
120, 121, 219, 220 16
418a,b; 452, 492c,d* 11
BIOL 430a,b or CHEM 451a,b 6
BIOL Electives 3
* 492 is a senior assignment course

Chemistry Requirements 16
121a,b; 125a,b; 241a,b; 245 16

Mathematics/Physics Requirements 18
Math 150 5
STAT 244 3
PHYS 206a,b (or 211a,b and 212 a,b) ...10

Electives 4-6

Total hours Required 124

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE
BIOLOGICAL SCIENCES
SECONDARY EDUCATION TEACHER CERTIFICATION

Students interested in Secondary Education certification in Biological Science complete a broad distribution of courses that include all the major areas in biology. This course of study is consistent with the suggestions of the National Science Teachers Association. The program of study is relatively inflexible; students are advised to plan their programs carefully, particularly in the first years. An overall grade point average of 2.5 is required for admission to the School of Education certification program, and a grade point average of 2.5 is required in biology courses before a student may enroll in CI 352 (student teaching).

General Education Requirements 48-50
These must include a course in statistics. Also note that students seeking teacher certification must take specific general education requirements. See the Secondary Education section of this catalog for details.

Biology Requirements 36
120, 121, 219, 220 16
327, 340, 494 11
Any Ecology course with a lab 3
Electives 6
Electives must include a four hour 400-level course with a laboratory and a two hour assessment course (senior project) which must be taken by seniors.

Chemistry Requirements 14-18
Minimum: 121a,b; 125a,b; 120b, 124b ..14
Recommended: 121a,b; 125a,b; 241a,b, 245 18

Mathematics/Physics Requirements 8-10
MATH 150 and 111 8
or PHYS 206a,b (or 211a,b and 212a,b) .10

Professional Education Requirements 28
CI 200-2; Ed 305-3: EDFD 380-2, EDUC 381-1; SPE 400-3; CI 315a-2; CI 315b-2; CI 440-3; CI 352-10

Total hours required 134-142

MINOR REQUIREMENTS IN BIOLOGICAL SCIENCES

Students wishing to complete a minor in biological sciences must take a minimum of 19 hours of biology courses, at least 9 of which must be completed at SIUE, with a grade point average of 2.0 or higher in all biology courses attempted at SIUE. Due to the sequencing of courses, students are advised that it will normally take at least two years to complete the minor.

Courses must include the following:
1. BIOL 120, 121, 219, 220
2. The remaining hours may be completed with any course in biological sciences except 111, 491, 493 or 494.

All the courses in this group have a chemistry prerequisite. Please consult the biology adviser for details.

COMBINED BACHELOR OF SCIENCE AND MASTER OF SCIENCE PROGRAM (3+2 PROGRAM)

Juniors with a grade point Average of 3.0 or better, with approval of the Graduate Committee in Biology and the Dean of the Graduate School, may pursue graduate work while completing the baccalaureate degree. Both degrees could be completed within five years under this arrangement. Please consult with the Biology adviser for additional details about this program.

CHEMISTRY

PROFESSORS:
Eilers, J.E. (Chair); Hahs, S.K. (Dean, College of Arts and Sciences); Patrick, T.B.;

ASSOCIATE PROFESSORS:
Bryan, V.R.; Khazaeli, S.; McClure, J.R.; O'Brien, L.C.

ASSISTANT PROFESSORS:
Dixon, R.P.; Hendrickson, H.P.; Hunsley, J.R.; Keck, P.J.; Voss, E.J.

INSTRUCTORS:
Shabestary, N.; Staley, D.D.

Students who want to major in chemistry or think that they may, should visit or call the Department of Chemistry (Science Laboratory Building, Room 2325; telephone 618-692-2042) as early as possible. They will be referred to a faculty adviser who will help them plan an academic program. Early advisement will enable students to complete their programs with minimum conflicts and within the shortest possible time.

The Department of Chemistry offers several degree programs and active research efforts in all the major subdisciplines of chemistry to satisfy the diverse career goals of students. The department has well equipped laboratories, and students in each degree program can expect to gain experience in Fourier-transform nuclear magnetic resonance spectrometry, Fourier-transform infrared spectroscopy, high pressure liquid chromatography, atomic absorption spectrometry and ultraviolet/visible spectroscopy. Through advanced course work, students can gain experience in laser spectroscopy, vacuum line manipulations, high pressure syntheses and high temperature syntheses. Through the department's research programs, students can gain experience in the most up-to-date techniques in each subdiscipline of chemistry.

Annette Vande Velde works with the Nuclear Magnetic Resonance (NMR) machine in the chemistry lab. The NMR separates compounds and analyzes their mass.

CAREER OPPORTUNITIES

The undergraduate chemistry curricula prepare students for a variety of careers. Many chemistry majors choose to continue their studies with graduate work in chemistry or biochemistry. Others enter schools of medicine, dentistry, veterinary medicine, or pharmacy. Still others begin careers in industry.

Other opportunities to make significant contributions to society are available to chemistry graduates who have additional training in fields such as computer science, ecology, economics, education, law, library science, marketing, medicine, and technical writing.

DEGREES AND CURRICULA

The Department of Chemistry offers Bachelor of Science and Bachelor of Arts degrees. The curricula leading to the Bachelor of Science degree include the following: (a) a curriculum which meets the guidelines of the American Chemical Society for the training of professional chemists; (all graduates will be certified by the American Chemical Society as having completed an approved curriculum); (b) a basic curriculum which offers greater flexibility in the selection of required chemistry courses and electives; and (c) a curriculum which leads to certification for teaching high school chemistry.

The Bachelors of Arts curricula have fewer chemistry requirements than the Bachelor of Science curricula. These curricula provide opportunities to accommodate a variety of students goals: (a) a flexible curriculum which gives a general introduction to chemistry and which is supplemented by electives in chemistry or a minor in another field; (b) a more structured curriculum which provides preparation for the medical science professions.

ADMISSION

High school students who plan to major in one of the degree programs in Chemistry should complete at least three years of college preparatory mathematics (two years of algebra and one of geometry) prior to entering the University. A fourth year of college preparatory mathematics (to include trigonometry) and one year each of biology, chemistry, and physics are strongly recommended.

Randy Weitzel, left, and Jason Hatsock, right, work in the chemistry lab with Assistant Professor Eric Voss.

Admission to a degree program in chemistry requires an application for a major and acceptance by the department. Once admitted, students are formally affiliated with the department and assigned a faculty adviser. Advisement is mandatory; majors are permitted to register each term only after their course request forms have been approved by the departmental adviser. Because the study of science is progressive, students are encouraged to select their major field of study early in their academic careers to ensure orderly progress toward meeting degree requirements. To be admitted, students already enrolled in the University must have a minimum grade point average of 2.4 in science and mathematics courses completed as well as a cumulative grade point average of 2.5 or higher in all courses taken at SIUE. Transfer students should have a 2.6 grade point average in science and mathematics courses as well as a 2.5 average in courses taken at other colleges and universities. Students who do not meet the GPA requirements may be accepted "provisionally" and will receive advisement.

ACADEMIC STANDARDS

1. Students should show satisfactory academic progress to be retained in a degree program. Students may be dropped from the program for any one of the following circumstances:
   a. Grade point average of 1.0 or below in any term;
   b. Cumulative grade point average of less than 2.0 in the major at any time;
   c. Withdrawal, incomplete, and a combination of failing grades in 50% or more of the courses for which the student is registered during two successive terms;
   d. Any combination of three withdrawal, incomplete, or failing grades in any single required course in the major discipline.
2. For readmission, students must meet the same admission requirements as students entering the program for the first time.
3. Grades of C or above in CHEM 121a and CHEM 121b are required of all students before proceeding into any chemistry courses numbered above 199. Transfer students, upper division students and others who have not earned a grade of C or above in CHEM 121 will be required to do so as a condition of acceptance as a major in chemistry.

GRADUATION REQUIREMENTS

The following requirements must be met in order to obtain a degree in Chemistry:

a. Earn a minimum of 124 hours of acceptable credit with a cumulative grade point average of 2.0 or higher.
b. Complete the minimum number of credit hours required for a particular degree.
c. Complete at least 12 hours of SIUE credit in major courses numbered above 299 with a cumulative grade point average of 2.0 or above.
d. Earn a GPA of 2.0 or above in all major courses numbered above 299.
e. Complete at least 6 hours of credit in major courses numbered above 299 earned at SIUE within 2 years preceding graduation.
f. No more than eight semester hours of D in any combination of science or mathematics courses may be counted toward a major in chemistry.

Duplicate credits of several types are not applicable toward graduation requirements: credit hours earned (through proficiency, transfer, CLEP or from a course) after credit has been received for similar or more advanced course work in the same subject at SIUE or elsewhere.

BACHELOR OF SCIENCE/MASTER OF SCIENCE CURRICULUM

Undergraduates with exceptional academic credentials may be able to earn the bachelor's degree and the master's degree in chemistry in 5 years of study. Admission to this program is based on departmental recommendation to and approval by the Graduate School. Students who are interested in this program option should seek advice from their faculty advisers early in their junior year.

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE
CHEMISTRY
AMERICAN CHEMICAL SOCIETY (ACS) APPROVED

The Bachelor of Science degree does not require a minor. A foreign language is strongly recommended.

General Education Requirements 48-50
General Education requires 48 or 50 hours of credit. A total of 15 hours of these hours is satisfied by required courses in the Natural Science and Mathematics (12) and Computer Science (3)

Chemistry Requirements 48
- CHEM 121a,b 8
- CHEM 125a,b 2
- CHEM 241 a,b 6
- CHEM 245 2
- CHEM 331 3
- CHEM 335 1
- CHEM 361a,b 6
- CHEM 365a,b 3
- CHEM 411 3
- CHEM 415 2
- CHEM 431 3
- CHEM 435 1
- CHEM 451a 3
- CHEM 499 0

Additional 3 semester hours from the following chemistry courses: 419, 439, 441, 444, 449, 451b (or BIOL 430b), 459, 469, 471, 479 3

Additional 2 semester hours from the following chemistry courses: 345, 396, 455, 496 2

Mathematics Requirements 10
- MATH 150 5
- MATH 152 5

Computer Science Requirements 3
- CS 108 or 140 or 141 3

Physics Requirements 10
- PHYS 211a,b 8
- PHYS 212a,b, ... 2

Electives 18-20

Minimum Total Credit Hours Required 124

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE
CHEMISTRY

The Bachelor of Science degree does not require a minor. A foreign language is strongly recommended.

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 hours of credit. A total of 15 of these hours is satisfied by required courses in the Natural Sciences and Mathematics (12) and Computer Science (3)

Chemistry Requirements 43
- CHEM 121a,b 8
- CHEM 125a,b 2
- CHEM 241a,b 6
- CHEM 245 2
- CHEM 331 3
- CHEM 335 1
- CHEM 361a,b 6
- CHEM 365a,b 3
- CHEM 411 3
- CHEM 499 0

Additional 6 semester hours from the following chemistry courses:
419, 431, 439, 441, 444, 449, 451a, 459, 469, 471, 479, ... 6

Additional 3 semester hours from the following chemistry courses: 345, 396, 415, 435, 455, 496 3

Mathematics Requirements 10
Math 150 5
Math 152 5

Computer Science Requirements 3
CS 108 or 140 or 141 3

Physics Requirements 10
PHYS 211a,b 8
PHYS 212a,b 2

Electives 23-25

Minimum Total Credit Hours Required 124

DEGREE REQUIREMENTS:
BACHELOR OF ARTS
CHEMISTRY

General Education Requirements 48-50
The General Education curriculum requires 48-50 hours of credit. A total of 23 hours is satisfied by required courses: Foreign Language (8) (Option B); Computer Science (3); and Natural Sciences and Mathematics (12)

Foreign Language Requirements 8

Chemistry Requirements 39
CHEM 121a,b 8
CHEM 125a,b 2
CHEM 241a,b 6
CHEM 245 2
CHEM 331 3
CHEM 335 1
CHEM 361a 3
CHEM 365a 2
CHEM 499 0

Additional 9 semester hours from the following chemistry courses: 361b, 411, 419, 431, 439, 441, 444, 449, 451a, 451b, 469, 471, 479 9

Additional 3 semester hours from the following chemistry courses: 345, 365b, 396, 415, 435, 455, 496 3

Mathematics Requirements 10
MATH 150 5
MATH 152 5

Computer Science Requirements 3
CS 108 or 140 or 141 3

Physics Requirements 10
PHYS 211a,b 8
PHYS 212a,b 2
(or PHYS 206a,b -10)

Approved Supporting Courses or Minor* 12-24

Electives 3-15

Minimum Total Credit Hours Required 124

* Students may take a minor or they may take a group of courses from one or more departments which will support their major educational and career objectives. If they choose the second alternative, the curriculum must include at least four supporting courses that total at least 12 hours of credit; the physics and mathematics course required for the Bachelor of Arts degree do not count as supporting courses.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS
CHEMISTRY
SPECIALIZATION IN MEDICAL SCIENCE**

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 hours of credit. A total of 23 hours of these hours, is satisfied by required courses: in Foreign Language (8), (Option B), Computer Science (3), and Natural Sciences and Mathematics (12)

Foreign Language Requirements 8

Chemistry Requirements 39
CHEM 121a,b 8
CHEM 125a,b 2
CHEM 241a,b 6
CHEM 245 2
CHEM 331 3
CHEM 335 1
CHEM 361a 3
CHEM 365a 2
CHEM 451a,b 6
CHEM 499 0

Additional 3 semester hours from the following chemistry courses: 361b, 411, 419, 431, 439, 441, 444, 449, 459, 469, 471, 479 3

Additional 3 semester hours from the following chemistry courses: 345, 365b, 396, 415, 435, 455, 496 3

Biology Requirements 10
Biology 120 4

Additional 6 semester hours from the following biology courses: BIOL 121, 219, 220, 325, 331, 335, 340 6

** Students admitted to a medical school at the end of their junior year may transfer appropriate medical school credits to complete the requirements for a degree in chemistry from SIUE.

Mathematics Requirements 10
MATH 150 5
MATH 152 5

Computer Science Requirements 3
CS 108 or 140 or 141 3

Physics Requirements 10
PHYS 211a,b 8
PHYS 212a,b 2
(or PHYS 206a,b-10)

Electives 17
(Additional Chemistry and Biology Recommended)

Minimum Total Credit Hours Required 124

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE
CHEMISTRY
SECONDARY EDUCATION TEACHER CERTIFICATION

General Education Requirements 48
The General Education curriculum requires 48 or 50 hours of credit. Students must select Option A with CS 108. Students seeking teacher certification must also take specific general education and professional education requirements. See the Secondary Education section of this catalog for details. A total of 12 of the General Education hours is satisfied by required courses: Natural Sciences and Mathematics (12). An overall grade point average of 2.5 is required for admission to the School of Education teacher certification program. Scheduling for the third and fourth years involves coordination between the chemistry and secondary education departments. Students should contact the Department of Chemistry undergraduate adviser for specific curriculum details.

Chemistry Requirements 36
CHEM 121a,b 8
CHEM 125a,b 2
CHEM 241a,b 6
CHEM 245 2
CHEM 331 3
CHEM 335 1
CHEM 361a 3
CHEM 365a 2
CHEM 494 3
CHEM 499 0

Additional 6 semester hours from chemistry courses numbered 300 or above 6

Health Education Requirements 3
HED 201 3

Professional Education Requirements 28
(See Secondary Education)

Mathematics Requirements 10
MATH 150 5
MATH 152 5

Physics Requirements 10
PHYS 211a,b 8
PHYS 212a,b 2
(or PHYS 206a,b-10)

Biology Requirements 4
BIOL 120 4

Minimum Total Credit Hours Required 127

DEGREE REQUIREMENTS:
CHEMISTRY MINOR

A minor in chemistry requires 24 hours with a grade point average of 2.0 or higher as follows:

CHEM 121a,b 8
CHEM 125a,b 2
CHEM 241a,b 6
CHEM 245 2

Additional 6 semester hours from chemistry courses numbered 300 or above 6

Total Required 24
Note: at least 6 hours must be SIUE credit

ECONOMICS

PROFESSORS:
Ault, D.E.; Elliott, D.S., Jr., (Chair); Hafer, R.W.; Levin, S.L.; Lin, A.Y.; Meisel, J.B.; Rutman, G.L.; Turay, A.M.

ASSOCIATE PROFESSORS:
Edmonds, R.G., Jr.; Kutan, A.M.

ASSISTANT PROFESSOR:
Navin, J.C.

INSTRUCTORS:
Pettit, M.A.B.; Sullivan, T.; and Wolff, L.A.

Economics is the study of how different economic systems determine what goods and services will be produced, the prices and quantities of those goods and services, and who will receive them. All societies, from the most primitive to the most complex, must have economic systems that determine how scarce resources (land, raw materials, labor, machinery, and physical structures) will be used to satisfy the demands of the people living in those societies. Knowledge of economics is essential to understanding problems ranging from the shopper's decision to purchase one brand of bread over another, to businesses' decisions as to which goods and services to produce, to the effects of an oil embargo

on the prices of other goods, to the effects of government spending and taxation. Lawyers, bankers, managers of large and small businesses, government planners and journalists find economics a useful tool in understanding and solving problems.

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, public finance, industrial organization, and antitrust policy. Students develop their programs in cooperation with an economics faculty adviser.

The Department of Economics offers two degrees through the College of Arts and Sciences: a Bachelor of Arts degree with a major in economics and a Bachelor of Science degree with a major in economics. Candidates for either of these degrees must complete 30 semester hours in economics and a minor in business, mathematics, any other social science, or another field approved by the student's economics adviser. Those students planning to enter Ph.D. programs in economics are strongly encouraged to take their minor in mathematics. Students who plan to seek employment upon completion of their bachelor's degree or who plan to pursue graduate work in some other field are advised to elect a minor in a field related to their chosen career.

Students interested in additional information may consult the Economics Department, Building III, Room 3129. Students may also meet with an economics adviser in the Department of Economics.

CAREER OPPORTUNITIES

Economists are employed in all areas of private industry; in federal, state, and local government agencies; in international organizations such as the United Nations and the World Bank; in labor unions; and in colleges and universities. Duties performed by professional economists include market research, forecasting, corporate planning, policy evaluation, economic impact studies, and consulting.

During the past several years, graduates of the SIUE program in economics (including the graduate program) have obtained employment in a variety of institutions. These include commercial banks, government agencies, public utilities, state legislatures, manufacturing and retailing firms, consulting firms, as well as community colleges and small liberal arts colleges. A number of students have continued their study of economics by entering highly competitive Ph.D. programs. Law school is another popular option.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE ECONOMICS

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing this major concentration. Must include MATH 120 and either MIS 108 or CS 108. The Bachelor of Arts program must include eight hours of foreign language. ECONOMICS 111 will not count toward the general education requirements. The intergroup relations and international requirements of the general education program may be satisfied with major courses or electives. ECONOMICS 112 will count as an advanced general education course.

Additional Major Requirements 31
ECON 111,(112)221,301,302 12
ECON Electives (Must include ECON 491, Senior Project,or ECON 492, Senior Honors Thesis) 15
MS 251 4

Minor* 18
(The minor must be approved by the student's adviser.)

Electives 25-27

Total 124

* Students seeking a degree in economics must select a minor from business, mathematics or social science. Other minor concentrations must be approved by an adviser in economics.

ADMISSION/ENTRANCE REQUIREMENTS

The admission/entrance requirements for a degree in economics are the same as for the University. High school deficiencies and Academic Development courses must be completed before applying for a major in economics.

RETENTION

Students in the Bachelor of Arts and Bachelor of Science degree programs are required to maintain a 2.0 (on a 4.0 scale) grade point average in economics.

EXIT REQUIREMENTS

Students completing a degree in economics are required to maintain a 2.0 in economics courses and a cumulative 2.0 grade point average. Students must complete all economics courses in regularly scheduled classes (no credit is granted for correspondence or extension courses.)

Students who have earned credit for a course required for a degree in economics by taking a proficiency examination, by transferring credit for a course, or by taking the course, may not earn credit for graduation by taking a similar or lower division course in economics at SIUE or at other higher education institutions.

Students are required to complete successfully all program requirements, including Economics 491, Senior Project, or Economics 492, Senior Honors Thesis. Economics 491 and 492 are used to assess students' abilities in applying their economic knowledge and communicating effectively the results of their study.

MINOR REQUIREMENTS

Students satisfy the requirements for a minor in economics by taking Economics 111, 112, 301, 302 and two other economics electives at the 300- or 400-level for a total of 18 hours. Students are required to maintain a 2.0 grade point average in economics.

ENGLISH LANGUAGE AND LITERATURE

PROFESSORS:
Bosse, R.B.; Kropp, L.; Petry, A.H. (Chair); Redmond, E.B.; Revard, S.P.; Richardson, B.H.; Schaefer, R.P.; Smithson, I.; Spurgeon, D.A.

ASSOCIATE PROFESSORS:
Butler, D.L.; Funk, A.; Funkhouser, L.K.; Meyering, S.L.; O'Gorman, G.J.; Ragen, B.A.; Robbins, F.W.; Ruff, N.K.; Schmidt, B.Q.; Skoblow, J.; Voller, J.G.; Ziegler, R.J.

ASSISTANT PROFESSORS:
Denby, R.V.; Fonteneau, D.Y.; Zatta, J.D.

INSTRUCTOR:
Violette, P.E.

The study of literature and of the English language encourages appreciation of the significant ideas of the past and present, provides training in effective writing, and offers practical experience in logical and aesthetic analysis. These skills are of particular value in a world in which specific technical capabilities may be threatened by obsolescence. Students prepared in English language and literature are equipped to acquire essential technical skills and to assimilate knowledge crucial to technological and computer based capabilities.

CAREER OPPORTUNITIES

Students majoring in English are well prepared for graduate and professional studies in business, law, and library science. In addition, they may find career opportunities in public relations, journalism, teaching, consulting and editing — particularly when an English major is combined with a major or significant course work in Art and Design, Journalism, Mass Communications, or Speech Communication. Advertising agencies, book publishers, and institutions such as universities, hospitals, major corporations, and federal agencies which have organizational publications employ creative and technical writers, researchers, and editors. Articles by free-lance writers are published in many local and national magazines and newspapers. Although job opportunities in these areas are highly competitive, students who can express themselves clearly and document their ideas through careful research will receive thoughtful consideration from potential employers.

GRADE POLICY

Only courses in which students receive a C or better will be accepted for credit toward the English major or minor.

UNDERGRADUATE HANDBOOK

Students considering a major or minor in English may obtain the **Undergraduate Handbook for English Majors and Minors** as well as the course description bulletin in the office of the Department of English Language and Literature, Peck 3206.

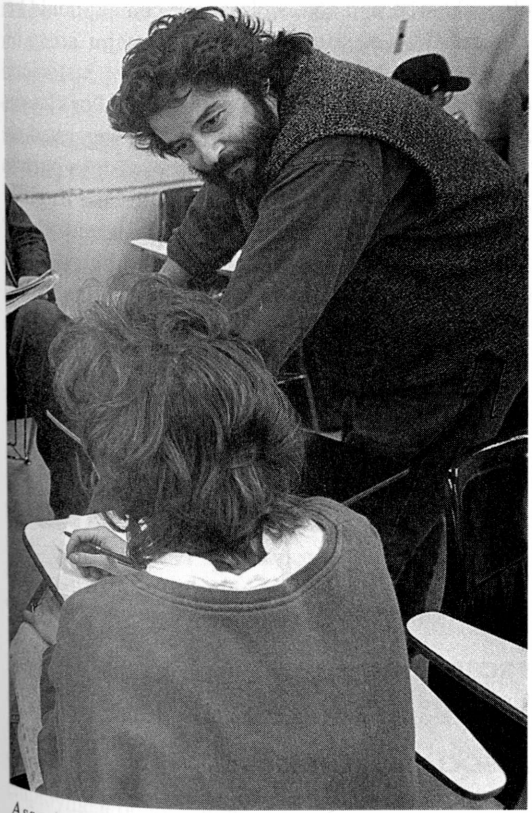
DEGREE REQUIREMENTS: BACHELOR OF ARTS ENGLISH

The major consists of 33 hours in English.

General Education Requirements 48-50
(Some general education requirements may be satisfied while completing this major concentration.)

Requirements for the Major in English 33
- Language Systems 3
  (369, 370, 400, 402, 403, 406, 408, 409, 418, 468)
- Writing 3
  (392, 393, 490, 491, 492, 493)
- Major Authors 3
  (307, 404, 471a, 471b, 473)
- Surveys 9
  (208, 209, 211, 212)
- American Literature at 400-level 3
  (431, 432, 434, 435, 437, 439, 440)
- Electives in English 9
  (Any English course numbered 200 or higher)
- Senior Scholar Project (497) 3

Foreign Language (all hours in same language) 8
Minor 18-21
Additional Electives 12-17
Total 124



Associate Professor Jeff Skoblow works with students in his English class.

Of the 33 hours in English courses, at least 12 must be at the 400-level, and no more than 15 may be at the 200-level. Neither English 497 nor English 499 may count towards the 400-level course requirements. At least 9 hours must be in English literature courses and 3 of these hours must be at the 400-level; at least 6 hours must be in American literature courses and 3 of these hours must be at the 400-level. Only courses in which students receive a C or better will be accepted for credit toward the English major.

Students planning to attend graduate school in English or law school should take two years of a foreign language and should choose English 301, Basic Literary Criticism, or English 495, History of Literary Criticism, as one of their English electives.

Students wishing to earn Illinois state teacher certification with a Bachelor of Arts degree in English may do so by completing all requirements for the Bachelor of Science degree in English and by fulfilling the foreign language requirement. Students choosing this option must also take specific general education courses and complete 28 hours of professional education requirements. See the Secondary Education section of this catalog for details.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE ENGLISH SECONDARY EDUCATION TEACHER CERTIFICATION

The major consists of 36 hours in English.

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing this major concentration. Also note that students seeking teacher certification must take specific general education courses. See the Secondary Education section of this catalog for details.)

Requirements for the Major in English 36
- Language Systems (369, 370, 400, 402, 403, 406, 408, 409, 418, 468)
- One must be 369 or 409. 6
- Writing (392, 393, 490, 491, 492, 493) 6
- One must be 490 or 491
- American Literature at 400-level 3
  (431, 432, 434, 435, 437, 439, 440)
- Major Authors (307, 404, 471a, 471b, 473) 3
- Surveys (208, 209, 211, 212) 9
- Teacher Preparation (475, 485) 6
- Senior Scholar Project (497) 3

Minor or Approved Supporting Courses 18-21
Professional Education Courses 28
Total 130-135

Of the 36 hours required in English courses, at least 15 must be 400-level courses, and no more than 15 may be at the 200-level. Neither English 497 nor English 499 may count towards the 400-level course requirements. At least 9 hours must be in English literature courses and 3 of these hours must be at the 400-level; at least 6 hours must be in American literature courses and 3 of these hours must be at the 400-level. Only courses in which students receive a C or better will be accepted for credit toward the English major. English majors must also maintain a cumulative B average in English courses.

Students, in consultation with the Undergraduate Adviser, may use the 18-21 hours of approved supporting courses to (a) minor in another subject or in Creative Writing or Linguistics within the English department, (b) take additional courses in English or (c) take courses toward satisfying state requirements for certification in speech, journalism, or other fields.

Three semesters (including summer) prior to the semester in which they plan to begin student teaching, students must apply for approval from the Teacher Education Committee of the Department of English Language and Literature. Application is made through the Department's "Student Teaching Screening Process," which is described in detail in the English Department's **Undergraduate Handbook for Majors and Minors.**

The Bachelor of Science major in English fulfills Illinois State certification requirements. Students seeking additional certification to teach English in Missouri should consult the English Department's **Undergraduate Handbook for Majors and Minors** for additional requirements.

ENGLISH MINOR REQUIREMENTS

To complete a minor in English, students must complete 18 hours of English courses numbered 200 or above, with a grade of "C" or higher in each course ; 6 of the 18 hours must be taken in English courses numbered 400 or above. Courses should be selected with the approval of students' advisers and in consultation with the English Department's Undergraduate Adviser.

CREATIVE WRITING MINOR REQUIREMENTS

The minor in creative writing requires a minimum of 18 hours. Students must choose either one of the following programs from the primary sequence: Fiction (English 392, 492, 498) or Poetry (393, 493, 498). Elective courses within the minor in Creative Writing include Television/Radio 359, English 490, 494, 3 additional hours of 498, any 400-level course in literature and any 392, 393, 492, or 493 course that is outside the chosen program. A more complete description of the Creative Writing minor is found in the **Undergraduate Handbook for Majors and Minors,** which can be obtained at the Department of English office, or from the Creative Writing Adviser. English majors who satisfy the Creative Writing minor requirements may substitute any English elective for the three-hour writing requirement.

LINGUISTICS MINOR REQUIREMENTS

The linguistics minor requires a minimum of 18 hours. Students may meet this requirement by selecting from among the following 300- and 400-level courses: English 369, 370, 400, 402, 403, 406, 408, 409, 418, and 468. At least one course should be selected from each of the following major areas of linguistic study: phonology (370, 408); historical change (403, 406); and syntax (369, 409). For classes at the 400-level, English 400 is strongly suggested as an introductory course. Students who wish to pursue the linguistics minor are encouraged to take English 207 as part of their General Education coursework. A minor in linguistics may be combined with a major in English. English majors who satisfy the linguistics minor requirements may substitute any English elective for the three-hour Language Systems requirement.

FOREIGN LANGUAGES AND LITERATURE

PROFESSORS:
Griffen, T.D.

ASSOCIATE PROFESSORS:
Bueno, J.L.; Carstens-Wickham, B.; Fonseca, E.
Mann, J.D. (Chair); Morrison, F.M.;
Zaytzeff, V.

ASSISTANT PROFESSORS:
Bueno, K.A.; Lamothe, A.F.; Pallemans, G.S.

CAREER OPPORTUNITIES

The global awareness and cultural understanding acquired through learning a second language will serve students well in the 21st century. College graduates trained in one or more foreign languages will enjoy a competitive edge in the multicultural work force in most professions in the United States, in most branches of the federal government and in teaching at all levels. They also will find rewarding careers in international business, including import and export trade, translator and consultant positions. Salaries are competitive and travel opportunities are often an exciting job benefit.

COURSES OFFERED BY THE DEPARTMENT

Courses offered by the Department of Foreign Languages and Literature are designed to provide students with insights into the culture and literature of foreign countries while they develop fluency in a second language. The study of a foreign language ranges from an introductory sequence through a minor or major concentration and represents an integral part of a broad, internationally enlightened education. Foreign language proficiency also increases the students' understanding and command of their native language.

The department offers both major and minor concentrations in French, German, and Spanish, leading to a Bachelor of Arts degree. Language courses in Greek, Latin, and Russian are also offered.

All incoming students with one year or more of high school foreign language study are required to take a placement test prior to enrolling in any course in that same language at SIUE. There is no charge for the test and students may earn up to 16 hours of proficiency credit in accordance with University and departmental policies. Please contact the department's office for more information.

It is strongly recommended that students who choose a language major also select an additional major or minor concentration in another discipline. Such a combination will enhance students' educational and employment opportunities.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS *
FOREIGN LANGUAGES AND LITERATURE

General Education ..... .50
Requirements for a Major in Foreign Language ..... .37
FL 111a,b or c**; 201**:202**; 301; 351**; 352**; 400a,b ..... .25
Electives in 300-400 level courses 12-14
Electives 34-38

Total ..... .125

* Students seeking teacher certification should consult with their advisers.

** May satisfy requirements for General Education.

Course work for the teaching field and for professional education is coordinated by the College of Arts and Sciences and the School of Education. For further information regarding the application for a major, consult the Secondary Education adviser or the adviser in the teaching discipline.

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE
FOREIGN LANGUAGES AND LITERATURE
SECONDARY EDUCATION TEACHER CERTIFICATION

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing this major concentration. Also note that General Education requirements for certification differ from University requirements. See Secondary Education section of this catalog for details.
Requirements for Major in a Foreign Language 40-42
FL 111a, b, or c**; 201**; 202**; 301; 351**; 352**; 400a, b ..... .25
FL 486 3
Electives in 300-400 level courses 12-14
Electives, Second Teaching Field 9-20
Professional Education Courses ..... .28
(see Secondary Education requirements)
Total 40-125

MINOR REQUIREMENTS

A minor in French, German, or Spanish consists of the following four required courses and three electives (24 hours):

FL 111a, b, or c**; 201**; 202**; 301. Plus 9 hours of electives at the 300-400 level; at least one elective must be in literature.

Minor in Russian Area Studies
A minor in Russian Area Studies consists of the following 26 hours: Russian 201**; 202**; and the following courses:

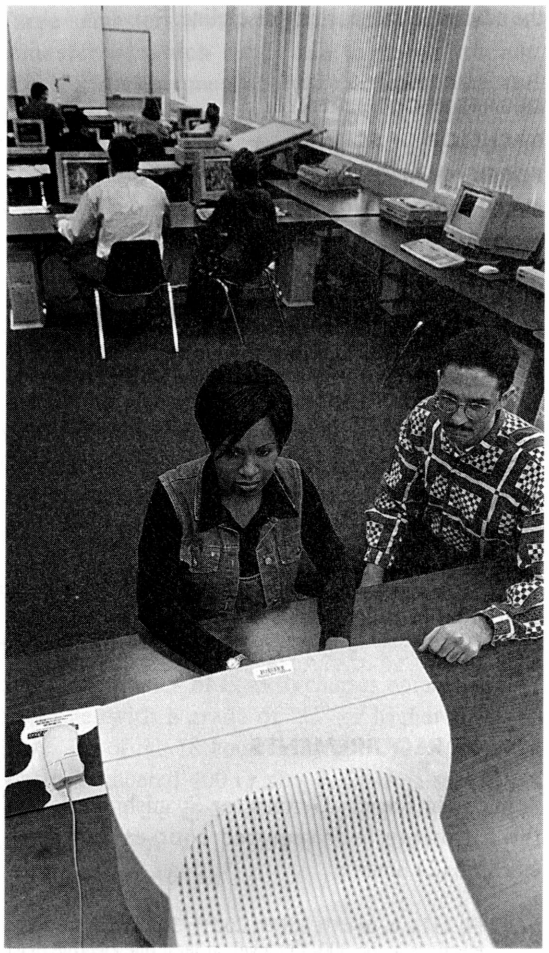
Geography 331**; History 318(a)**;
318 (b)*; 426** ; Philosophy 344**
Political Science 351**

* Students seeking teacher certification should consult with their advisers.

** Satisfies requirements for General Education

PROGRAM COMPLETION REQUIREMENTS

For both majors and minors in the Department of Foreign Languages and Literature, credit is allowed for only those courses in which grades of C or better are earned.



Geography students Tiana Conway and Mike Johnson work in the Geography Information Systems (GIS) lab.

GEOGRAPHY

PROFESSORS:
Stueber, A.M.; Thompson, N.R. (Chair); Thornton, C.A.; Woods, W.I.

ASSOCIATE PROFESSORS:
Clements, D.W.; Odemerho, F.O.

ASSISTANT PROFESSORS:
Dupigny-Giroux, L.A.; Pearson, R.S.; Shaw, W.; Zhou, B.

The Department of Geography offers the Bachelor of Science and the Bachelor of Arts degrees in Geography. Majors who wish to teach geography may take a curriculum that leads to teacher certification. A degree in geography requires a minimum grade of C in courses completed for the major.

Geography, concerned with the earth as the home of people, stresses the locational analysis of human activities and their relationships with the environment. While geography is one of the most time-honored disciplines reflecting curiosity about people and places, it is also an applied discipline which offers insights about present and future issues involving environment, culture, society, economy and politics.

The breadth of geographic inquiry accommodates students who have broad interests and goals. Students may emphasize physical aspects of the environment, cartography/geographic information systems, economic geography, human settlements, and teaching.

Geography majors are encouraged to consult with their advisers and should consider the use of elective hours to expand a particular area of interest. Physical geographers should consider a minor in the physical sciences; the cartographer and computer oriented student might consider a minor in mathematics or computer science.

CAREER OPPORTUNITIES

A geographer with a bachelor's degree has opportunities for employment in a wide variety of businesses and public organizations. Geographers

graduates have found employment as planners, environmental analysts, locational and industrial development analysts, cartographers, foreign service and intelligence officers, historic preservation specialists, and teachers at the elementary or secondary school level. The program also prepares students to continue their geographic studies at the graduate level, which may provide opportunities to teach in community colleges and universities.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS OR BACHELOR OF SCIENCE
GEOGRAPHY

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing the major concentration. Also note that students seeking teacher certification must take specific general education requirements. See the Secondary Education section of this catalog for details.)

(Candidates for the Bachelor of Arts degree must elect Option B in the general education skills area).

Geography Core Requirements 21
200, 201, 314, 315, 320, one upper level regional course, and 420
Geography Electives 12
Minor 18-21
Electives* 20-25

Total 124

* Students must complete the constitution requirement. A course fulfilling this requirement may be included in the general education or elective requirements.

Geography majors may apply six hours of the applicable core courses toward the advanced science or social science General Education requirement.

MINOR IN GEOGRAPHY REQUIREMENTS

The minor in geography requires that students take 18 credits consisting of courses at the 200-level or above. The student is required to take Geography 200 or 201, one physical course, and one regional course for a total of 9 credits. The remaining 9 credits in geography may be taken as electives. A minimum grade of C is required in courses completed for the minor. The courses should be selected in consultation with the undergraduate adviser in geography.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS OR BACHELOR OF SCIENCE
GEOGRAPHY
SECONDARY EDUCATION
TEACHER CERTIFICATION

Students who wish to teach at the secondary level may choose the degree Bachelor of Arts or Bachelor of Science with a major in Geography. Students must meet the course requirements for the major. Students must also meet general education requirements and complete 28 hours of professional education requirements for secondary education certification. Interested students are referred to the Secondary Education section of this catalog.

HISTORICAL STUDIES

PROFESSORS:
Chen, C.C.; Jacobitti, E.E.; Kimball,S.B.; Millett, R.L.; Nordhauser, N.E.; Pearson, S.C.; Portwood, S.J.; Taylor, J.A.; Weingartner, J.J.

ASSOCIATE PROFESSORS
Cha-Jua, S.K.; Grant, S.B.; Hansen, S.L.; Nore, E.; Santoni, W.D. (Chair)

ASSISTANT PROFESSORS
Cheeseboro, A.Q.; Effros, B.; Frick, C.C.

The study of history begins with questions about how things came to be as they are or were; these questions contribute to a greater understanding of ourselves and others.

Historians approach the study of the past in many ways. Some attempt to analyze the entire spectrum of historical evolution within a particular period or within a specific nation. Others, working within or across national histories, specialize in the history of particular social institutions, such as the family, business or churches, or the historical development of ideologies or of cultural concepts such as race or gender. Historians borrow tools freely from other disciplines. For some historians the methodologies of the social sciences become critical tools for the study of the past while others prefer a historical approach more akin to the methods of the humanities and literature. Most adopt some mixture of methodologies.

Some historians argue that studying the past brings them to a better understanding of the present. For them, the past provides useful insights into the current behavior of individuals and institutions. Others stress the uniqueness of every historical situation and are less prone to seek lessons in the past. Most historians contend that the discipline does give students of history a breadth of perspective that improves their ability to understand events and to function in today's world.

Students applying for a major in any history program must have completed the general education requirements for writing skills (English 101 and 102 or equivalent) and all high school course deficiencies. Students should arrange an interview with the undergraduate adviser in history as soon as possible after applying for a major.

CAREER OPPORTUNITIES

The Department of Historical Studies has two options within its bachelor's degree program. One, the Bachelor of Arts degree, is often the first step in preparation for a career as a professional historian. It is also excellent preparation for the study of law or for many other kinds of professional training. The other, the Bachelor of Science degree, may be preferred by students contemplating careers in the business world, government service, journalism and editing.

Finally, students planning to teach in the public schools may choose either a Bachelor of Arts or a Bachelor of Science degree with a major in history. Any one of these programs provides an opportunity for students to study subjects of great interest while developing skills that prepare them for a variety of career options.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE HISTORY

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing this major concentration. Also note that History 200, 201, or 431 satisfies the University's constitution requirement).

(For a Bachelor of Arts degree in History, students must select option B in the general education skills area).

Major Requirements 35
Four courses from HIST 111a, b, 112a, b, 113, 114, 130, 200, 201 (two must be from the European or World surveys and two from the United States surveys) 12

HIST 301 (Historical Methods) 3

Six courses elected by the students at the upper-level (302-499); History mini-courses (300) may be substituted for up to three credit hours of this requirement; at least three credit hours must be outside European and U.S. history. 18

HIST 401 (Historical Research-Senior Assignment) 2

Minor* 18-21

Electives 8-23

Total 124

* (Students seeking a Bachelor of Arts or Bachelor of Science degree are required to have a minor).

The Bachelor of Science degree program is identical to the Bachelor of Arts degree program, except that students are not required to study a foreign language. A Foreign Language is strongly recommended for students who plan to pursue graduate study.

TRANSFER COURSES

History courses transferred in at the freshman and sophomore levels regardless of description, will be considered as meeting the basic level requirement at SIUE. All History courses successfully completed at junior colleges and/or community colleges will transfer as meeting only lower division requirements (1XX or 2XX courses). History at SIUE requires two American History survey courses and two courses from either European or world history surveys. Students not meeting the distribution requirement may have to take additional survey courses.

PROGRAM COMPLETION REQUIREMENTS

Beginning Fall semester, 1996, students must receive a grade of C or better in all History courses taken to meet major requirements.

MINOR REQUIREMENTS

The minor requires that students select three courses from History 111a, b, 112a, b, 113, 114, 130, 200, 201. At least one of these courses must be in European or World history and at least one must be in United States history. In addition, four courses at the upper level (301-499) must be completed. History

mini-courses (300) may be substituted for up to three credit hours of this requirement. At least three credit hours must be in either world history (HIST 112) or in an upper level course in an area other than European and United States history. Students must receive a grade of C or better in all History courses taken to meet minor requirements.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS OR BACHELOR OF SCIENCE
HISTORY
SECONDARY EDUCATION
TEACHER CERTIFICATION

Students who intend to teach at the secondary level may choose either the Bachelor of Arts or the Bachelor of Science degree with a major in history. The major constitutes the teaching field specialization. Students pursuing this degree must also complete work sufficient to qualify for certification in a second teaching field. Work completed for a minor will normally satisfy this requirement.

All students in this program, including transfer students and those who already have a Bachelor's degree, must achieve an overall GPA of 2.5 or above and a GPA in History of 2.75 (including past institutions).

Students must also complete 28 hours of professional education requirements in the School of Education for certification. Students interested in Secondary Education requirements should refer to the Secondary Education section of this catalog.

MASS COMMUNICATIONS

PROFESSORS:
Bukalski, P.J.

ASSOCIATE PROFESSORS:
Baker, N. (Acting Chair); Maynard, R.S.; Regnell, B.C.

ASSISTANT PROFESSORS:
Cooper, C.; Murphy, P.; Roark, V.

INSTRUCTOR:
Landers, J.

This is an age in which the media are growing and changing at unprecedented rates. A recent issue of **THE NEW YORKER** stated that the media are the fastest growing industries in the United States today. In the past two decades new media forms have emerged, including pay-per-view television, direct satellite transmission, on-line newspapers and magazines, and many others. The pace of change is rapid, so rapid, in fact, that **USA TODAY** has stated, "...all media companies are in the process of evolving into as-yet-undetermined new entities."

The curriculum in mass communications seeks to train students for this changing world. While some specialized skills are essential in order to enable students to meet current standards, the goal of the mass communications curriculum is to produce graduates who are independent professionals with the ability to grow and to change with the times. Thus, the program is designed to prepare students for entry into the workforce, as well as to provide the foundation for effective lifelong learning and personal growth within the media.

In order to meet the challenges of the contemporary media and to provide a comprehensive media background, the mass communications curriculum has been designed with a number of components.

The **introductory core** of four courses consists of a study of mass media systems and three introductory skills courses. MC 201, Media Systems, encourages an appreciation for the significant ideas that continue to impact the changes and development of mass media systems. In the three parallel introductory skills courses, MC202 (Writing for the Media), MC 203 (Audio Production for the Media), and MC 204 (Visual Production for the Media), students acquire essential analytical and artistic skills in writing, audio production, and visual production. These skills are broadly applicable and not bound to specific technologies that may be threatened by obsolescence. These skills are fundamental to all media, new and old.

Students are required to choose and to complete a **professional option** consisting of five courses. The options offered are journalism, television/radio, corporate and institutional media, media advertising, electronic journalism, and visual communication. The courses in the options build on the introductory core and are designed to provide training that will enable a student to develop abilities appropriate for today's media.

The **advanced core** encourages students to develop an understanding of the social, political, legal, economic, artistic, and technological environment in which media works are produced and consumed. Further, the advanced core encourages students to think carefully and critically about the nature and significance of the media in our society. Included in the advanced core are MC 401, Media Law and Policy; MC 402, Media Administration; and MC 403, Media Critical Theory. The advanced core concludes with a required professional **internship**; it provides a real life work experience that enriches the education of every major.

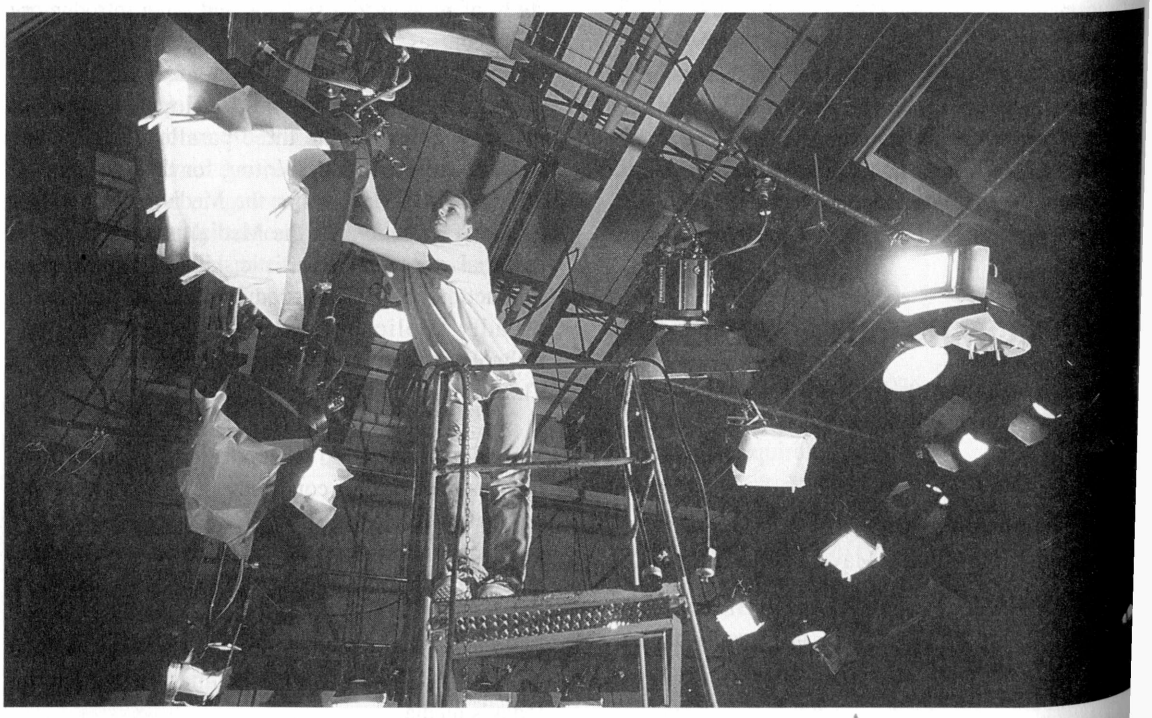
The major includes two free electives that are designed to enable students to explore their own interests and to broaden the background provided by the required courses. A minor outside the department is required.

The greater St. Louis metropolitan area is the 19th largest media market in the United States. SIUE's mass communications program takes advantage of the resources of the region by regularly scheduling media professionals for guest appearances in classes, by using professionals as part-time faculty, and by placing students in internships in significant media organizations.

CAREER OPPORTUNITIES

Departmental graduates go into many areas of mass media — daily and weekly newspapers, general and specialized magazines, radio and television, media relations and publicity in businesses and institutions, industrial and corporate publications and electronic media, advertising, teaching, photojournalism and other areas of visual communications, media sales and management, audio and video production and direction, electronic media performance, film, public broadcasting, and small format and closed circuit video in business and industry. Several graduates have established their own media companies.

Graduates of the program are employed by the **Los Angeles Times, Madison Square Garden Cable** in New York City, the **Fort Lauderdale Sun and Sentinel**, the **Seattle Post-Intelligencer**, General Motors and **USA Today**. Their responsibilities range from covering the White House for the Mutual Network to heading Gannett Central; from writing noteworthy books to scripting motion pictures; from supervising corporate annual reports and image magazines to directing advertising agencies. They enter the legal profession, become college professors, specialize in investigative reporting, edit scientific and industrial publications, and serve as Congressional press aides.



A student adjusts the lights in the TV studio in preparation for a broadcast performance for class.

ADMISSION, RETENTION, AND GRADUATION REQUIREMENTS

1. With the exception of incoming freshmen and transfer students, individuals wishing to apply for a major in mass communications are required to have at least a 2.2 grade point average.
2. Students in the mass communications major and minor must earn a C or better in MC 201 and 202 in order to declare a major or minor in the department.
3. Students must maintain at least a 2.2 GPA. If they fail to do so, they will be dropped from the program.
4. Students may attempt (including withdrawals after the second week of the term) any Department of Mass Communications course twice.

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE OR
BACHELOR OF ARTS
MASS COMMUNICATIONS

General Education 48-50

Requirements for a Major in Mass Communications 45
- Introductory Core: MC 201, 202, 203, 204 12
- Advanced Core: MC 401, 402, 403, 481 12
- Professional Option 15
- Choose one of the following:
  - Journalism: MC 321, 322, 323, 324, 342
  - Television/Radio: 331, 332, 333, 334, and either 335 or 423
  - Corporate and Institutional Media: 321, 323, 422, 431, and either 333 or 423
  - Media Advertising: 325, 334, 421, 422, and 451
  - Electronic Journalism: 324, 331, 332, 336, and either 333 or 423
  - Visual Communication: 341, 342, 441 plus two of the following: MC 323, 421, 442,; ART 301, 302, 311, 312; THEA 480, 482, 485

Electives 6

Minor Outside of Mass Communications 18

Electives 11

Total 124

MASS COMMUNICATIONS MINOR

The Mass Communications minor requires MC 201 and 202 and additional courses selected in consultation with the departmental minor adviser for a total of 21 hours.

MATHEMATICS AND STATISTICS

PROFESSORS:
Cooper, M.W.; Ho, C.; Jarosz, K.; Ledzewicz, U.; Pal, A.; Phillips, P.H.; Rigdon, S.E. (Chair); Shiue, W.K.; Steinberg, D.I. (Associate Dean, College of Arts and Sciences); Verderber, N.L.; Wilson, H.K.

ASSOCIATE PROFESSORS:
Holden, L.S.; Lu, C.; Parish, J.L.

ASSISTANT PROFESSORS:
Hasty, M.; Karimpour, R.; Neath, A.A.; Sewell, E.C.

Mathematics, the queen of sciences, is both a language and a science. As a language, mathematics is used to translate relationships within the universe into mathematical expressions and equations, that is, into mathematical models. The importance of mathematics in this regard was emphasized by Galileo more than three centuries ago when he said that "the laws of nature are written in the language of mathematics". Throughout history, mathematics has played an important role in the efforts of the human race to understand the world and to control the environment. As a science, mathematics is concerned not only with computation but, more importantly, with the study of relations, interdependencies, and inferential structures. It is a rapidly growing field of study, concerned with problems from within mathematics and from the social sciences as well as the natural sciences. Consequently, students who major in mathematics have a wide range of career opportunities open to them.

With the progress in computers and computing technology, knowledge of the mathematical sciences is more important today than ever before. After having played a central role in the natural sciences for many years, mathematics has recently become more and more useful in the social sciences and, to a lesser extent, in the humanities. Economics, political science, sociology, psychology and other social sciences now rely on mathematics, particularly statistics, to understand, to control and to predict social phenomena.

The Department of Mathematics and Statistics offers programs leading to a Bachelor of Arts or a Bachelor of Science degree with a major in mathematical studies. In addition, as a result of the various applications of mathematical sciences, the department offers a variety of service courses for students majoring in other disciplines.

Please note that most of the courses in this Department have other courses as prerequisites. Before enrolling in a course in mathematics, statistics or operations research, students must complete the prerequisite(s) with a grade of C or higher. A grade of D in a prerequisite course indicates inadequate preparation to continue to the next course.

CAREER OPPORTUNITIES

Since mathematics provides the basic language and method for science and technology, a country needs to have many people who are well trained in mathematical subjects in order to be technologically competitive in a world economy. Mathematicians, statisticians, actuaries, and mathematical educators will continue to be needed by the government, industry, business, and schools. For a computer science, electrical engineering, industrial engineering, or physics student, a mathematics major may be a useful and easily attained second major. A mathematics major is also appropriate preparation for graduate studies in several areas including mathematics, operations research, statistics, engineering mathematics, and law. Statistics provides career possibilities that deserve special mention. Students with undergraduate majors in statistics may find positions doing actuarial work with insurance companies or doing work in quality control and reliability with industrial firms. Also, recent job studies indicate shortages of statisticians and operations researchers trained at the graduate level. Some students enter professional programs in business, law, and medicine after completing a mathematics major. And, of course, the continuing need for highly motivated, well-trained mathematics teachers in the schools has been well publicized.

Departmental advisers can provide information about career possibilities in the mathematical sciences and can suggest elective courses that would be appropriate to various career goals and interests, including the intention to pursue graduate studies.

ADMISSION

To be admitted to the mathematics and statistics program, students must satisfy one of the following:

1. Complete MATH 120 and 125, or mathematics courses having these as prerequisites (or equivalent courses at another accredited institution of higher education), have a GPA of 2.0 or higher in all university mathematics courses, and have a GPA of 2.0 or higher in all University courses taken.
2. Complete in high school, seven semesters of university preparatory mathematics courses including a course in trigonometry, and have no grade lower than a C in those courses. Students who do not qualify for admission to an academic program in the department but hope to seek admission later are encouraged to obtain advice from a faculty member in the department.

ACADEMIC STATUS

For the purposes of this Department, the grade point average in university mathematics courses will be computed on the basis of all courses attempted, including repeated courses. A student may be dropped from this program for any one of the following circumstances:

a. Grade point average of 1.0 or below in any term.
b. Cumulative grade point average of less than 2.0 in courses in mathematics, statistics and operations research at any time.
c. Withdrawal, incomplete, or a combination of failing grades in 50% or more of the courses for which the student is registered during two successive terms.
d. Any combination of three grades of D, E, UW, WP, or WE in any single required course in mathematics, statistics, or operations research.

For purposes of computing the GPA of a student seeking admission, the student may not use credit hours earned (through proficiency, transfer, CLEP, or from a course), after credit has been received for similar or more advanced course work in the subject at SIUE or elsewhere. For readmission, students must meet the same admission requirements as students entering the program for the first time.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE MATHEMATICS

The distinction between the Bachelor of Arts and Bachelor of Science degrees through the Department of Mathematics and Statistics is the language requirement. Students seeking majors in this department may choose to be awarded the Bachelor of Arts degree rather than the Bachelor of Science degree provided the electives include 8 hours of credit in a foreign language which is neither English nor the individual's native language.

Students must choose from one of the five programs described below, which include four options in mathematical studies, and a major in mathematics for secondary school teachers. Through a choice of electives, students may adjust these programs to their goals and interests.

In addition to the specific requirements stated below for each program, students must meet the following requirements:

a. Earn a minimum of 124 hours of acceptable credit with a cumulative grade point average of 2.0 or higher;
b. Complete at least 12 hours of SIUE credit in major courses numbered 300 or above with a cumulative GPA of 2.0 or higher;
c. Earn a GPA of 2.0 or higher in all mathematics, statistics, or operations research courses numbered 300 or above at SIUE within 2 years preceding graduation;
d. Complete at least 6 hours of credit in mathematics, statistics, or operations research courses numbered above 299 at SIUE within 2 years preceding graduation.

Duplicate credits earned (through proficiency, transfer, CLEP, or from a course) after credit has been received for similar or more advanced course work in the subject at SIUE or elsewhere are not applicable toward graduation. Students who receive a grade of D in any mathematics, statistics, or operations research course may not count that course toward requirements for a mathematics major.

THE MATHEMATICS CORE

All of the programs offered by the Department of Mathematics and Statistics require completion of the Mathematics Core, which consists of the following courses: Mathematics 150, 152, 250, 223, 320, 321, and 350. Completion of Computer Science 140 or 141 and PHYS 211a and 212a are also required for all programs. These courses total 33 hours, of which 12 are applicable to General Education requirements. (PHYS 211a satisfies 3 hours of the introductory General Education requirements; the Mathematics courses satisfy 6 hours of the advanced General Education requirements; and Computer Science 140 or 141 satisfies 3 hours of the Skills requirement in Statistics/Computer Programming.)

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE MATHEMATICAL STUDIES SPECIALIZATION IN MATHEMATICAL SCIENCES

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the general education requirements. For the Bachelor of Arts degree, Skill Option B (8 hours of Foreign Language) is required.

Mathematics Core Requirements 26
MATH 150, 152, 250, 223, 320, 321, 350

Mathematics Specialization 18
MATH 420, 421, 450a,b, 451, and one additional Mathematics course at the 400 level

Science Requirement 25
CS 140 or 141, PHYS 211a,b and 212a,b,and one additional 300-level course in Physics, Chemistry, Biology, or Computer Science; 9 additional hours in mathematics, statistics, operations research, biology, chemistry, physics or engineering. (This requirement is in addition to the General Education requirements.)

Senior Seminar and Senior Project 4
MATH 498, 499

Free Electives 13-15
(Eight hours must be in Foreign Language for the Bachelor of Arts degree).

Minimum Total Requirement 124

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE MATHEMATICAL STUDIES SPECIALIZATION IN APPLIED MATHEMATICS

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the general education requirements. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Language) is required.

Mathematics Core Requirements 26
MATH 150, 152, 223, 250, 320, 321, 350

Required Mathematics Courses 15
MATH 305, 451, 464, 465, 466

Mathematics Electives 6
Any two of the following courses: MATH 421, 437, 450a ,b, STAT 480a, b, Operations Research 440, 441, 442

Science Requirements 21-25
CS 140 or 141, PHYS 211a,b, and 212a,b, and two additional courses in the sciences

Senior Seminar and Senior Project 4
MATH 498, 499

Free Electives 10-16
(Eight hours must be in Foreign Language for the Bachelor of Arts degree)

Minimum Total Requirement 124

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE MATHEMATICAL STUDIES SPECIALIZATION IN STATISTICS

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the general education requirements. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Language) is required.

Mathematics Core Requirements 26
MATH 150, 152, 223, 250, 320, 321, 350

Science Requirements 8
CS 140 or 141: PHYS 211a, 212a

Required Statistics Courses 9
STAT 480a,b, 482

Statistics-Related Electives 9
Any three courses chosen from STAT 478, 481, 483, 484, 485, 486, 487, 488; Operations Research 440, 441, 442; Math 465, 466 , except that only one of Operations Research 440, MATH 465, 466, may be counted toward this requirement.

Supporting Courses 18
Either a minor, or nine additional hours of mathematics, statistics, or operations research and nine hours of supporting courses approved by the adviser.

Senior Seminar and Senior Project 4
MATH 498, 499

Free Electives 12-14
(Eight hours must be in Foreign Language for the Bachelor of Arts degree).

Minimum Total Requirement 124

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE MATHEMATICAL STUDIES SPECIALIZATION IN ACTUARIAL SCIENCE

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the general education requirements. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Language) is required.

Mathematics Core Requirements 26
MATH 150, 152, 223, 250, 320, 321, 350

Science Requirements 8
CS 140 or 141; PHYS 211a, 212a

Required Courses for Actuarial Science 15
STAT 480a,b; MATH 305, 465; Operations Research 440

Related Electives 6
Any two courses selected from STAT 478, 481, 482, 483, 484, 485, 486, 487, 488; Operations Research 441, 442; Math 466

Minor in Business Administration 21

Senior Seminar and Senior Project 4
MATH 498, 499

Free Electives 6-8
(Eight hours must be in Foreign Language for the Bachelor of Arts degree)

Minimum Total Requirement 124

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE MATHEMATICS SECONDARY EDUCATION TEACHER CERTIFICATION

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the general education requirement. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Language is required). Also note that students seeking teacher certification must satisfy specific General Education requirements. See the Secondary Education section of this catalog for details. An overall grade point average of 2.5 is required for admission to the School of Education teacher certification program.

Mathematics Core Requirements 26
MATH 150, 152, 223, 250, 320, 321, 350

Science Requirements 8
CS 140 or 141, PHYS 211a,b and 212a,b, and two additional courses in the sciences

Required Courses 9
MATH 311, 435; STAT 380

Electives 9
Choose one of the following options:
a) Math 305 or Math 315, and two 400-level MATH, STAT or OR courses
b) Three 400-level MATH, STAT, or OR courses

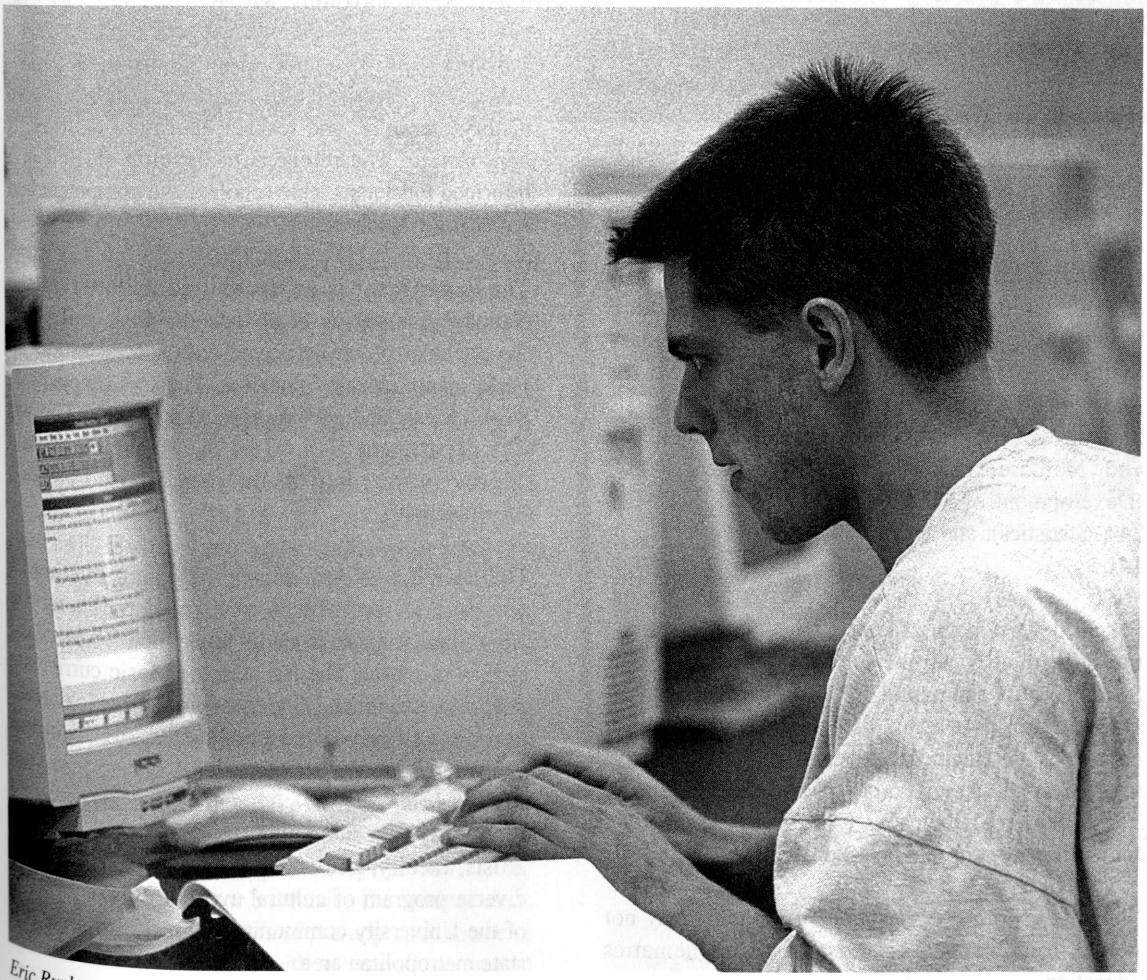
HE 201 3

Professional Education Requirements 28
See Secondary Education

Senior Seminar and Senior Project 4
MATH 498, 499

Free Electives 0-1

Minimum Total Requirement 124



Eric Rush works in the lab during his MATH 305 class.

SENIOR PROJECT

All seniors are required to take MATH 498 & 499 (Senior Seminar and Senior Project), which carry 2 credits each. MATH 499 is graded Satisfactory or Unsatisfactory. Passing this course is required for graduation. The student is required to consult with a member of the mathematics/statistics faculty to prepare a proposal for a culminating project. The Senior Assignment Committee, established for this purpose, must approve all proposals. The completed project is evaluated by the Project Evaluation Committee and includes both the documentation and an oral presentation by the student. Members of the faculty are invited to attend the oral presentation.

MINORS IN MATHEMATICS AND STATISTICS

The Department offers minors in three areas: Mathematics, Statistics, and Mathematics Education. A minor in Mathematics consists of MATH 150 and 152 (Calculus I and II), and nine hours of Mathematics (Statistics or Operations Research) courses at the 200 level or above, of which six hours must be at the 300 level or above and at least three of these six hours must be from Mathematics. A minor in Statistics consists of MATH 150 and 152 and nine additional hours of Statistics courses at the 300 level or above. A Minor in Mathematics Education consists of MATH 150, MATH 223 (Logic and Mathematical Reasoning), MATH 311 (Teaching of Secondary Mathematics), and three courses chosen from the following: MATH 320 (Introduction to Algebraic Structures); MATH 435 (Foundations of Euclidean and Non-Euclidean Geometry); MATH 400 (Development of Modern Mathematics); Statistics 244 (Statistics); and either Computer Science 140 or 141.

For all three minors, at least six hours of courses at the 300 level or above must be taken at SIUE. Students must maintain a GPA of at least 2.0 in all mathematics, statistics and operations research courses taken (including repeats), and a GPA of at least 2.0 in all these courses at the 300 level or above. The Minor in Mathematics Education is appropriate for certification for middle school teaching.

Students majoring in mathematical studies may not minor in mathematics, statistics, or mathematics education.

MUSIC

PROFESSORS:
Bell, J.R.; Brown, S.M.; Ho, A.; Perry, R.K.; Perry, L.W.; Pival, J.E.; Rogers, K.C.; Stamps, D.B.; Turner, S.T.; Van Camp, L.W.; Woodard, J.P.

ASSOCIATE PROFESSORS:
Abraham, R.D. (Chair); Haydon, R.G.; Smith, D.A.

ASSISTANT PROFESSORS:
Coan, D.; Eaton, R.; Hinson, J.M.; Korak J.; Thomas, R ; Wells, P.

ASSISTANTS IN MUSIC:
Anderson, M.J.; Gross, J.G.;

The faculty in the Department of Music believe that students interested in undergraduate academic programs in music should receive a comprehensive musical background which includes cultural knowledge through the general education program, individual performance, ensemble performance, scholarly studies in music theory and history/literature, and teacher education courses, if appropriate. The intent is to develop skilled and informed musicians, able scholars and competent and enthusiastic teachers.

The department is an accredited member of the National Association of Schools of Music and offers the Bachelor of Music degree with specializations in Performance, Music Education, Theory/Composition, Studio Music and performance, and Musical Theater. The department also offers the Bachelor of Arts degree with majors in Music and Music Merchandising.

The Bachelor of Arts degree, designed for students who wish to specialize in music within a liberal arts curriculum, may serve as the foundation for advanced studies in music. The Bachelor of Music curriculum prepares students for professional performance careers and advanced graduate study in music performance and music education.

Frequently scheduled concerts and recitals by guest artists, faculty, and students offer an excellent and diverse program of cultural events for the enjoyment of the University community and residents of the bi-state metropolitan area.

Associate Professor Rick Haydon watches students Miles Vandiver (standing at left), Scott Schwesig and Chris Giglotti (far right) mix a recording in the Music recording studio.

The Music Computer Laboratory is designed primarily to support the educational and individual creative activities of students majoring or minoring in music. However, it is considered an "open access" facility, and as such, welcomes all University students on a space-available basis. The laboratory contains twenty-two networked stations, each equipped with a MIDI synthesizer. It also houses a central file server, CD-ROM players, color monitors, videodisk, video and audio tape recording and playback equipment, laser printers, a scanner, and a variety of other peripherals. Over two hundred different titles of operating software are provided.

Students wishing to minor in music must consult with a designated adviser in order to develop an approved program before beginning course work. Students minoring in music must take at least one course in Music Theory and two courses in Music History/Literature, as approved by the adviser. In order to obtain a minor in music, the student must complete a total of 24 hours of pre-approved music or general education courses with an overall average of 2.6 or better. Music minors are expected to build a concentration in one particular area of music; a minimum of eight (8) hours in any one area constitutes a concentration. The following areas of concentration are suggested: Performance, (solo and ensemble); Theory; History/Literature; Jazz; Music Merchandising and Music Education. Certain activities such as Private Applied study, advanced level courses and some ensembles require an audition and/or prior approval of the instructor.

CAREER OPPORTUNITIES

A degree in music may lead to many interesting and productive careers in music and music-related fields. Some of the career opportunities available to graduates of the bachelor's degree programs in music include teaching in public and private schools; playing professionally in symphony orchestras, studio orchestras, and jazz groups; or performing in choruses, recitals, operas,oratories and musical theater;and composing and arranging. Additional opportunities exist in music publishing, music management and sales, music criticism, music librarianship, and private studio teaching.

ADMISSION AND ADVISEMENT

Students seeking admission to any degree program in music must perform an acceptable audition prior to admission. Students are not permitted to register for private lessons until they complete the audition requirement. To schedule an audition, please write or call the Music Department office at 618-692-3900. Transfer students must take a placement test in music theory (written and aural) and class piano.

Students desiring to pursue any academic program in music are advised to file an Application for a Major upon entry to the University through the Office of Academic Advising and Counseling. Students applying for a major are issued the appropriate curriculum guide and Music Student Handbook, both of which contain requirements for the degree.

DEGREE REQUIREMENTS: BACHELOR OF ARTS MUSIC

Courses in this program are for students who wish to study music as part of their general cultural education. Such courses may also be taken as background for advanced studies in music.

General Education Requirements 50
(Some General Education requirements may by satisfied while completing this major concentration. Students in this degree program must elect option B in the skills area which includes Foreign Language.)*

Requirements for Major in Music 50-54
Music 125 (8), 225 (8), 121 (2), 221 (2), and electives (8) 28
Music private applied (2 hours per Semester) 8
Music 139 (2,2) Diction for Singers (required for voice students) 4
Music Literature 4
Music major ensemble 4
Music 357 6
Minor Concentration 18
Electives 13
Minimum 124

* Also counts toward general education skills requirement.

DEGREE REQUIREMENTS: BACHELOR OF ARTS MUSIC SPECIALIZATION IN MUSIC HISTORY/LITERATURE

The Bachelor of Arts degree with a specialization in music history/literature will serve students who wish to specialize within a liberal arts curriculum and provide a foundation for advanced students within the discipline.

General Education 50
(Some General Education requirements may be satisfied while completing this major concentration. Students in this degree program must elect option B in the skills area which includes Foreign Language.)**

Requirements for Major in Music 53-57

Music 125(8), 225(8), 121(2), 221(2) 20
Music, private applied (2 hours per semester) .8
Music 139 (2,2) Diction for Singers (required for voice students) 4
Music Major Ensemble 4
Music 357 6
Music 326 3
Music 442 3
Music Literature Electives 6

Electives 23

Minimum 124

** Also counts toward general education skills requirement.

DEGREE REQUIREMENTS: BACHELOR OF ARTS MUSIC SPECIALIZATION IN MUSIC MERCHANDISING

General Education Requirements 50
(Some General Education requirements may be satisfied while completing this major concentration. Students in this degree program must elect option B in the skills area, which includes Foreign Language.)*

Requirements for Major in Music 60-63
Music 125(8), 225 (8), 121(2), 221(2), and electives (3) 23
Music major ensemble 4
Music private applied (2 hours per semester) 8
Music 139 (2,2) Diction for Singers (required for voice students) 4
Music 357 6
Music 395 6
Music 495 12

Minor Concentration (Business) 21
- Marketing 300 3
- Management 340 3
- Economics 111, 112 6
- Accounting 200, ...3
- Elective 3
- GBA 300 3

Minimum 124

* Also counts toward general education skills requirements.

DEGREE REQUIREMENTS: BACHELOR OF MUSIC SPECIALIZATION IN PERFORMANCE

General Education Requirements 50
(Some General Education requirements may be satisfied while completing this major concentration. Students in this degree program must select option B in the skills area, which includes Foreign Language).*

Requirements for Major in Music 75-87
- Music 125 (8), 225 (8), 121 (2), 221(2), 309a(3), 312a,(3), 318(2), 326a (3) 442a(3)** 34
- Music 357*** 6
- Music, private applied (major instrument) 24-32
- Music 139 (2,2) Diction for singers (required for voice students) 4
- Music, major ensemble (one hour per semester)**** 8
- Music 411 2

Minimum 124

* Students concentrating in voice or theory/composition should include two years of foreign language (generally one year each of French and German). Students should consult with the Music adviser regarding the sequence to be followed. Foreign language counts toward the general education skills requirement. This requirement is in addition to Music 139.

** Students with a concentration in piano may substitute 6 hours in Music 413 and/or 461 in lieu of 309a, 312a, and 422a. May also substitute 165(2) and secondary instrument/voice(2) for class piano.

*** Up to 6 hours may also count toward general education advanced course requirements.

**** Students with a concentration in piano may substitute a maximum of 6 hours in MUS 365 as partial fulfillment of this requirement.

DEGREE REQUIREMENTS: BACHELOR OF MUSIC SPECIALIZATION IN JAZZ PERFORMANCE

General Education Requirements 48
(Some General Education requirements may be satisfied while completing this major concentration.)

Requirements for Major in Music 86
- Music 125(8), 225(8), 121(2), 221(2), 331(2), 357(6) 28
- Music 337(2) 330(6), 409(4), 430(2), 436(2), 439(2) 18
- Music, private applied (major instrument) 24-32*
- Music, major ensemble (1 or 2 hours per semester) 16

Minimum 124

* Does not include voice.

DEGREE REQUIREMENTS: BACHELOR OF MUSIC SPECIALIZATION IN MUSIC EDUCATION

General Education Requirements 48
(Some General Education requirements may be satisfied while completing this major concentration. Also note that students seeking teacher certification must take specific general education requirements. See the Secondary Education section of this catalog for details.)*

Requirements for Major in Music 80
- Music 115 (2), 125 (8), 225 (8), 121 (2), 221 (2), 112a,b (2), 113 (1), 114 (1), 116a,b (2), 301a,b,c (6), 309a (3), 318a,b (4), 326a (3), 411 (2) 46
- Music 357 6
- Music, private applied (major instrument)** 16
- Music 139 (2,2) Diction for Singers (required for voice students) 4
- Music, major ensemble (one hour per semester)*** 8

Professional Education Requirements 24
- CI 200 2
- Foundations of Education 380 2
- Educ 381 1
- Education 305 3
- Special Education 400 3
- Curriculum and Instruction 451c(5) and Curriculum and Instruction 352 (5) 10
- CI 440 for Missouri Certification 3

Additional Requirement 3
- Health Education 201

Minimum 155

* Students concentrating in voice or theory/composition should include two years of foreign language (generally one year each of French and German). Students should consult with their music adviser regarding sequence to be followed. Foreign Language counts toward the general education skills requirement. This requirement is in addition to Music 139.

** One year of French or German is recommended for the student with a choral emphasis in music education.

*** Music 165(2) is required of all students with piano emphasis. Music 365(2) may be substituted for ensemble requirements.

**** Study on a secondary instrument is possible if requirements for class instructions are met by proficiency.

Prior to approval for student teaching, students must satisfy the course of study and proficiency prerequisites as established by the Music Department.

DEGREE REQUIREMENTS: BACHELOR OF MUSIC SPECIALIZATION IN THEORY/COMPOSITION

General Education Requirements 50
(Some General Education requirements may be satisfied while completing this major .concentration. Students in this degree program elect option B in the skills area, is which foreign language).*

Requirements for Major in Music 78
Music 125(8), 225(8), 121(2), 221(2), 309(6), 312(6), 326(6), 357(6), 411(2), 442 (6)** 52
Music, private applied*** 12
Music, major ensemble 8
Music electives**** 6

Minimum 124

* Students concentrating in voice or theory/composition should include two years of foreign language (generally one year each of French and German). Students should consult with the music adviser regarding the sequence to be followed. Courses taken in Foreign Language may be used in meeting the general education skills requirement. This requirement is in addition to Music 139.

** Up to 6 hours in Music 357 may also count toward general education requirements.

*** Private applied piano until proficiency is satisfied; thereafter, any instrument or voice. Students are excepted to enroll for applied study for a total of 6 semesters. Voice students must take 139(4).

**** A program of electives must be approved by a faculty committee. Students with emphasis in composition normally elect 412 (6), those students emphasizing music theory normally elect 481.

DEGREE REQUIREMENTS: BACHELOR OF MUSIC SPECIALIZATION IN MUSICAL THEATER

General Education Requirements 50
(Some General Education requirements may be satisfied while completing this major concentration).
Requirements in Theater 28
Dance 114 (3), 210a(2), 211(2), 212a(2), 213(1) 10
Acting: Theater 112a(3), 112b(3), 210(3 9
Musical Theater Workshop: Theater 309 (3) 3
Introduction to Technical Theater:Theater 150a,or b,(3) 3 Modern Theater History: Theater 401 b (3) 6
Requirements in Music 56
Music, private applied voice 16
Music 139 (2,2) 4
Choral ensemble: 444 (1, 1, 1, 1) 4
Musical theater ensemble: Music 342(1), Theater 230(2), 330(2), 430(2) 7
Music:Music 125 (8), 225 (8), 121(2), 221(2) 20
Music History: Music 357b(3) 3
Music 411 2

Minimum 124

MINOR REQUIREMENTS

Students wishing to minor in music must consult with a designated adviser to develop an approved program before beginning course work. Students studying music theory must take at least one course in theory and one course in music literature as approved by the adviser. In order to obtain a minor in music, students must complete a total of 24 hours in approved music courses with a cumulative average of 2.60 or better.

Students seeking minors in music are expected to build a concentration in one particular area of music. a minimum of 8 hours in any one area constitutes a concentration. The following areas of concentration are suggested: Performance (solo and ensemble); Theory; History/Literature; Jazz; and Music Education. Certain activities such as private applied study, advanced level courses, and some ensembles require an audition and/or prior approval of the instructor.

PHILOSOPHICAL STUDIES

PROFESSORS:
Barker, J.A.; Corr, C.A.; Danley, J.R. (Chair); Glossop, R.J.; Hamrick, W.S.; Nabe, C.M.; Paxson, T.D.; Ruth, S.; Simon, M.A.

ASSOCIATE PROFESSORS:
Keene, C.A.; Kim, S.K.; Lawrence, E.G.; Vailati, E.; Wolf, R.G.

ASSISTANT PROFESSORS:
Cataldi, S.L.; Fields, G.P.

Philosophy is the attempt to think carefully and critically about the nature of the world, the significance of life, and goals we should pursue both as individuals and as a society. Philosophers consider a number of complex questions which may include the following:

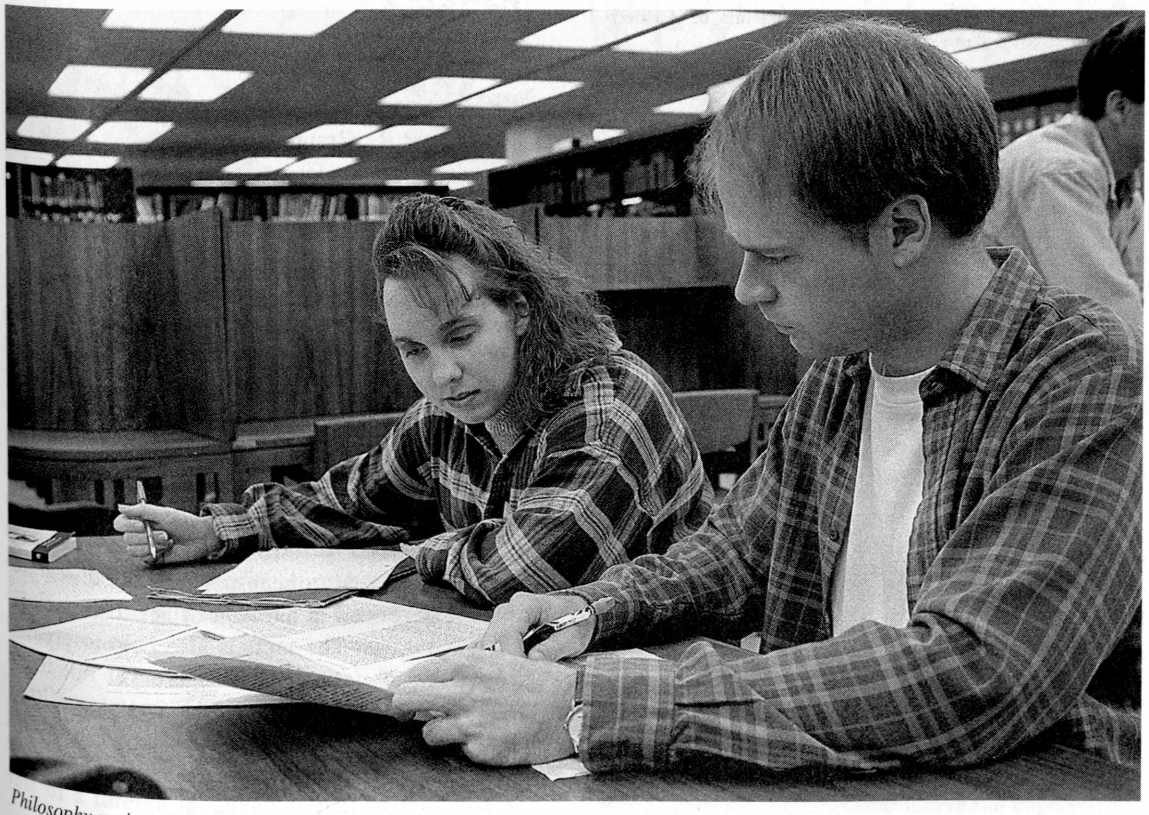
- What is the nature and what are the limits of power that society can exercise legitimately over the individual?
- What makes human life valuable and worthy of respect?
- Are moral values objective or subjective?
- Is there a God? If so, what is God's relationship to the world?
- How can one decide whether a work of art is beautiful?
- Do human beings have free will?

These pursuits also involve inquiring into the reasons for beliefs about these issues. Thus, philosophers are forced to consider the additional problem of what kinds of reasons are sound reasons.

CAREER OPPORTUNITIES

One value of philosophy lies in its ability to help willing students grow and develop as persons. Philosophy is helpful to people in all occupations and professions because it can help them think more carefully and critically, and can lead to a greater sensitivity to issues and persons. Consequently, philosophy is a desirable minor for almost everyone.

Philosophy is especially appropriate as a minor for those who plan to enter the professions of teaching, law, medicine, journalism, theology, science, and social service. Philosophy is an appropriate major for those planning various types of government careers



Philosophy majors Julie Guthrie and Darin Finke work together in Lovejoy Library.

in the Foreign Service, for example, or with the National Institutes of Health. In addition, because of the modest number of hours required for a philosophy major, many students find it convenient to plan a double major, uniting philosophy with such other academic fields as political science, English, foreign language, business, computer science, mass communication, and art. For additional information or assistance concerning the philosophy program, please contact the Department of Philosophical Studies in the Peck Building.

ADMISSION REQUIREMENTS

Undergraduate students who intend to apply for a major in philosophy must satisfactorily complete (with a grade of C or better) Philosophy 106 or its equivalent before applying for a major in philosophy. Philosophy 106 or its equivalent does not count for credit toward the major in philosophy.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS
PHILOSOPHY

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing this major concentration.)

Requirements for Concentration in Philosophy
- Total Number of Hours Required in Philosophy 33
- Specific Required Philosophy Courses 18
- Philosophy Electives 15
- Required Courses:
  - Philosophy 233 (Philosophies and Diverse Cultures) 3
  - Philosophy 300 (Ancient Greek and Roman Philosophy) 3
  - Philosophy 302 (Classical Western Modern Philosophy) 3
  - Philosophy 320 (Ethics) 3
  - Philosophy (Theories of Knowledge) or Philosophy 330 (Metaphysics) 3
  - Philosophy 490 (Special Problems) 3

Other Program Requirements:
- Foreign Language 8
- Minor 18
- Additional Electives 15-17

Total 124

Every philosophy major must complete the senior assignment in order to graduate.

MINOR REQUIREMENTS

A minor in philosophy consists of 18 hours in philosophy courses. Philosophy 111 may count toward the 18 hours. Students must successfully complete (earn a grade of C or above in) Philosophy 106 or its equivalent before they apply for a minor in philosophy. Philosophy 106 or its equivalent does not count for credit toward the minor in philosophy.

It is strongly recommended that all students elect Philosophy 111 early in their careers; the hours credited will count toward the major in Philosophy only if they are among the first nine credit hours in Philosophy. If students are considering graduate work in philosophy, they should take two years of a foreign language, preferably French or German, and Philosophy 213 or 411.

ACADEMIC STANDARDS

For both majors and minors in philosophy, credit is allowed only for those philosophy courses in which the grade earned is C or above.

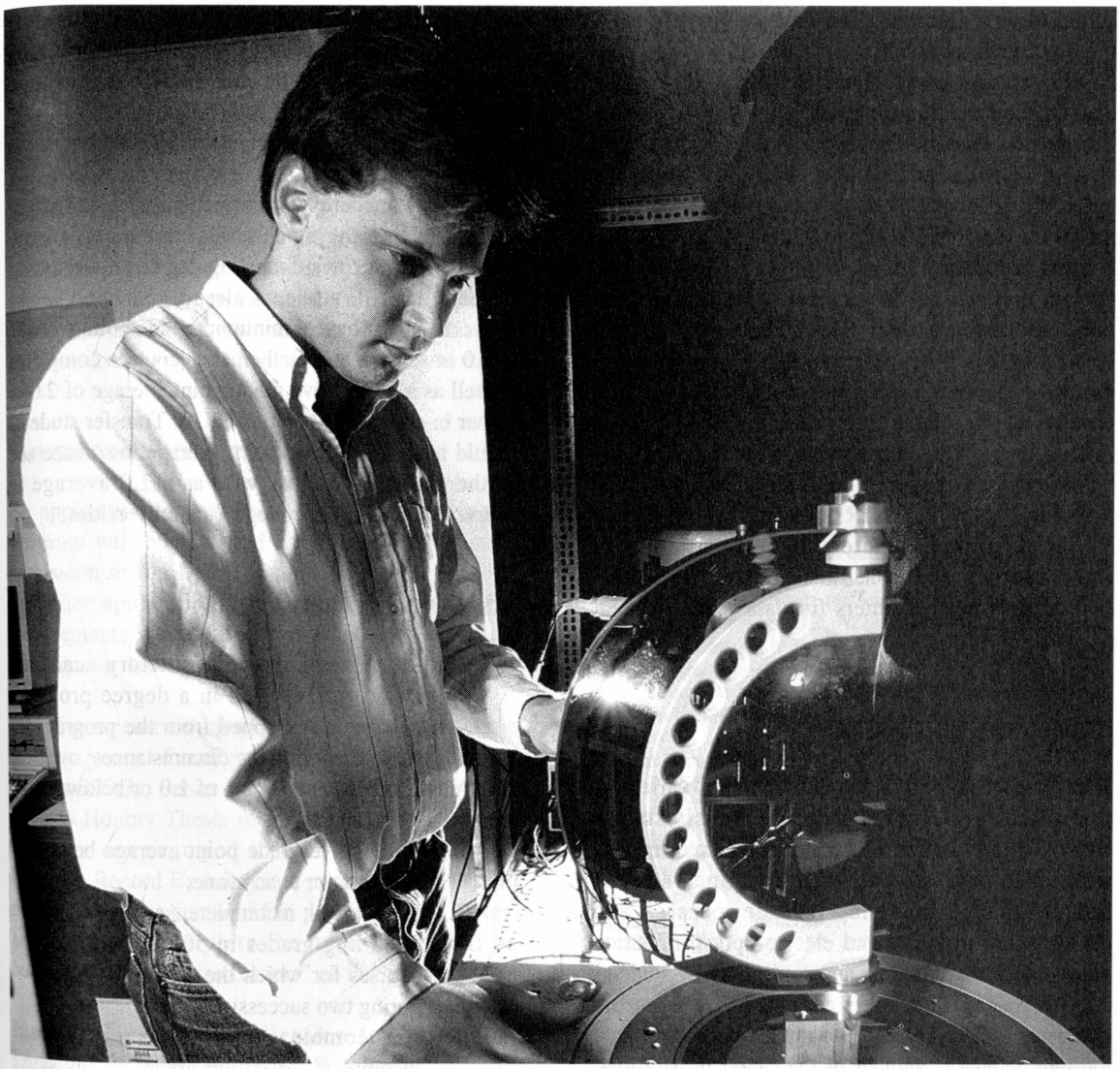
PHYSICS

PROFESSORS:
Boedeker, R.R.; Braundmeier, A.J.(Chair); Chow, H.C.; Henderson, G.A.; Hill, R.C.; Kang, I.J.; Swamy, P.N.

ASSOCIATE PROFESSORS:
Pogatshnik, G.J.; Zurheide, F.W.

ASSISTANT PROFESSOR:
Parman, C.E.

Physics is a study of the basic building blocks of the universe and of the laws which govern their interactions. Students of physics attempt to develop images or descriptions of the universe using mathematical and conceptual models which are continually revised in the light of new observations and discoveries. The models also help to predict properties of nature which have yet not been observed. Students will study classical physics (the physics of Newton and Maxwell), Einstein's theory of relativity, Bohr's theory of the atom (which forms



A student performs a test on a face shield being developed for NASA.

a bridge between classical physics and modern physics), and, modern physics, including quantum theory and atomic and nuclear physics. Throughout their study of physics, students learn applications which lead to a variety of specialized fields of study. For example, solid state theory of semiconductors and transistors brings students into contact with electrical engineering and the electronic industry; classical mechanics introduces the techniques of the mechanical and civil engineer; and nuclear physics acquaints the student with nuclear fission and nuclear fusion reactions.

The Department of Physics provides two degree programs: the Bachelor of Arts and the Bachelor of Science. The Bachelor of Arts degree requires one year of a foreign language as part of the general education requirements for the major. The Bachelor of Science degree is recommended for those students planning to work in industry immediately upon graduating, or for those students who wish to pursue graduate studies in Physics. Students wishing to pursue a career in teaching may obtain certification with either degree by meeting additional requirements.

The Department of Physics maintains four teaching laboratories where students develop measurement and data analysis skills. The use of computers for data collection is emphasized in many of the experiments. Several of the classical experiments in physics are performed while other experiments stress understanding the fundamental concepts of physics. Senior students often develop individual experiments

suited to their interests. The Physics Department's three research laboratories are devoted to basic and applied studies of problems in laser optics, laser materials, optical thin films, surface physics, and thin film semiconductors. The laser laboratory is equipped with a Continuum YG660 Nd: YAG laser with harmonic generators that produce nanosecond laser pulses at 1064, 532, 355, and 266 nm. The optical coating laboratory has complete facilities for the design, production, and analysis of multiple-layer metal and dielectric thin films. The semiconductor laboratory has facilities to produce thin films by evaporation and R.F. sputtering, measure DC electrical properties and make electrical noise measurements. Students working in these laboratories have access to vacuum coaters, a Perkin-Elmer Lambda 9 UV/VIS/NIR spectrophotometer, a Nomarski interferometer and related support equipment. In addition, these laboratories have several desk-top computers for data collection and analysis.

CAREER OPPORTUNITIES

A degree in physics opens the door to a variety of scientific and technical careers. Physicists are employed in industrial and national laboratories, and work with other scientists and engineers. Such industrial functions may include research and development in lasers and electro-optics, radiation damage and measurement and control. Many students choose to continue their education by pursuing graduate studies. Teaching at any level from primary through college is another of the career possibilities. Because of the fundamental nature of the subject, a bachelor's degree in physics is an ideal point of departure for specialized study in almost any field from astronomy to philosophy to music.

ADMISSION

High school students who plan to major in Physics should complete at least three years of college preparatory mathematics(two years of algebra and one year of geometry) prior to entering the University. A fourth year of college preparatory mathematics (to include trigonometry) and one year of biology, chemistry, and physics are strongly recommended.

Admission to a degree program in Physics requires an application for a major and acceptance by the department. Once admitted, students are formally affiliated with the department and assigned a faculty adviser. Advisement is mandatory; majors are permitted to register each term only after their course request forms have been approved by a departmental adviser. Because the study of science is progressive, students are encouraged to select their major field of study early in their academic careers to ensure orderly progress toward meeting degree requirements. To be admitted, students already enrolled in the University must have a minimum grade point average of 2.0 in science and mathematics courses completed as well as a cumulative grade point average of 2.0 or higher in all courses taken at SIUE. Transfer students should have a 2.0 grade point average in science and mathematics courses as well as a 2.0 average in courses taken at other colleges and universities.

ACADEMIC STANDARDS

1. Students should show satisfactory academic progress to be retained in a degree program. Students may be dropped from the program for any one of the following circumstances:
   A. Grade point average of 1.0 or below in any term;
   B. Cumulative grade point average below 2.0 in the major at any time;
   C. Withdrawal, incomplete, and a combination of failing grades in 50% or more of the courses for which the student is registered during two successive terms;
   D. Any combination of three withdrawals, incomplete, or failing grades in any single required course in the major discipline.
2. For readmission, students must meet the same admission requirements as students entering the program for the first time.

GRADUATION REQUIREMENTS

The following requirements must be met in order to obtain a degree in Physics:

A. Earn a minimum of 124 hours of acceptable credit with a cumulative grade point average of 2.0 or higher;
B. Complete the minimum number of credit hours required for a particular degree;
C. Complete at least 12 hours of SIUE credit in major courses numbered above 299 with a cumulative grade point average of 2.0 or above;

D. Earn a GPA of 2.0 or above in all major courses numbered above 299;
E. Complete at least 6 hours of credit in major courses numbered above 299 earned at SIUE within 2 years preceding graduation.

Duplicate credits of several types are not applicable toward graduation requirements: credit hours earned (through proficiency, transfer, CLEP, or from a course) after credit has been received for similar or more advanced course work in the same subject at SIUE or elsewhere.

PHYSICS HONORS PROGRAM

An application for admission to the Physics Honors Program will be accepted only upon the student's admission to the Deans' Scholars Honors Program and after application for a major in Physics. The requirements for admission to the Deans' Scholars program are described elsewhere in this catalog.

The Honors curriculum core courses are taken in the last two years of study and include Junior Physics Honors 390(3), Senior Physics Honors 490 (3), and Physics Honors Thesis 495(3). In addition, Honors students are required to take the quantitative Graduate Record Examination, or the equivalent, and achieve a score in the 85th percentile or better. Students who complete the curriculum will be recognized by "Physics Honors" on the diploma.

Upon receiving an application to the Honors Program, the designated Deans' Scholars adviser will serve as the adviser for Physics Honors Students. The faculty adviser will assist students in completing the program requirements.

DEGREE REQUIREMENTS: BACHELOR OF ARTS PHYSICS

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the GE Area Natural Sciences and Mathematics requirements. For the Bachelor of Arts degree, Skills Option B (8 hours of Foreign Languages) is required. Also note that students seeking teacher certification must take specific general education requirements. See the Secondary Education section of this catalog for details.

Physics Requirements 43
PHYS 211a,b, 212a,b, 302, 303, 308, 310, 312, 318, 405a,b, 415a,b, 420 or 421

Chemistry Requirements 10
CHEM 121a,b, 125a,b,

Mathematics Requirements 17
MATH 150, 152, 250, 305

Electives and/or Minor . . . . . .4 - 6

Minimum Required 124

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE PHYSICS

General Education Requirements 48-50
The General Education curriculum requires 48 or 50 of General Education credit. The supporting mathematics and science courses required for this major satisfy 12 hours of the GE Area Natural Sciences and Mathematics requirements. Also note that students seeking teacher certification must take specific general education requirements. See the Secondary Education section of this catalog for details.

Physics Requirements 43
PHYS 211a,b, 212a,b, 302, 303,308, 310,312, 318,405a, b; 415a, b; 420 or 421

Chemistry Requirements 10
CHEM 121a,b, 125a,b,

Mathematics Requirements 17
MATH 150, 152, 250, 305

Electives and/or Minor . . . . . .4 - 6

Minimum Required 124

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE PHYSICS SECONDARY EDUCATION TEACHER CERTIFICATION

Students who wish to teach at the secondary level may choose the Bachelor of Science degree with a major in Physics. This major constitutes the teaching field specialization for the education degree. Students must meet the course requirements for the major and maintain an overall 2.5 grade point average. Students must also meet general education and complete 28 hours of professional education requirements for secondary education certification plus Health Education 201. Interested students are referred to the **School of Education** section of this catalog.

MINOR REQUIREMENTS

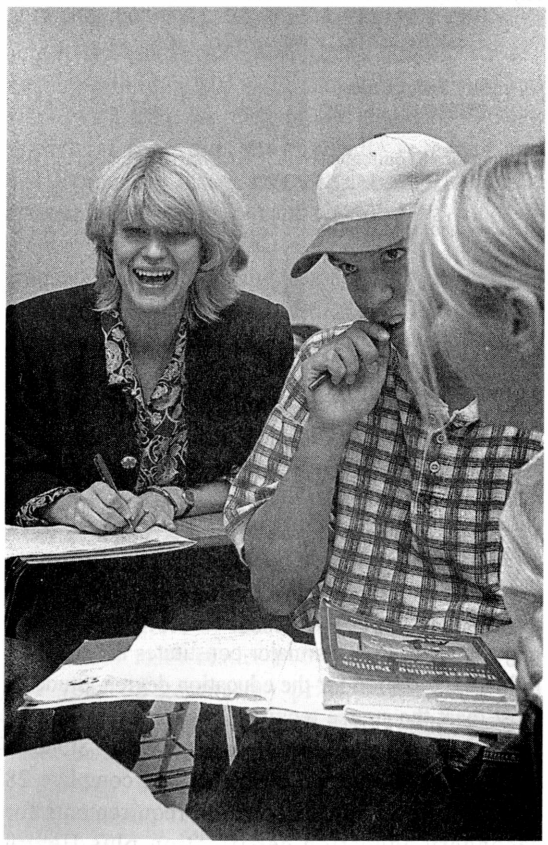
The minor program in Physics consists of 18 hours including 211, 212, and 302 with a grade point average of 2.0 or higher. The remaining 4 hours of elective courses are physics courses above 302, subject to approval by the Physics Department Chair. At least 6 hours must be SIUE credit.

POLITICAL SCIENCE

PROFESSORS:
Feeney, W.R.; Jacobitti, S.D.

ASSOCIATE PROFESSORS:
Farrell, J.V.; McCabe, D.F. (Chair); Schwartz, D.F.; Westefield,L.P.

ASSISTANT PROFESSORS:
Bailey, M.B.; Mauer, L.M.



Political Science Assistant Professor Lynn Mauer works with Kyle Anderson and Emma Regner (right) in class.

The Department of Political Science offers courses broadly concerned with the study of government and politics, organized in six sub-fields. In American politics, students examine various aspects of the American political system, including legislatures, parties, campaigns and elections, and issues of public policy. In comparative politics, students explore the political, legal, and administrative processes of other countries. Students in international relations study the relations among nations and relations with international bodies such as the United Nations. In political theory, students examine the attempts of important thinkers to define the functions of the state and the rights and obligations of citizens. Students in this field also study efforts to develop comprehensive theories of politics through analysis and the evaluation of political behavior. In public administration, students explore bureaucracies and ways in which public business is conducted. In public law, students examine the nature of the judicial process and the role of the courts in interpreting and applying the Constitution of the United States.

The study of political science can serve as preparation for a number of different careers, as the core of a liberal education, or as a source of interesting and valuable electives. In an era in which government has become more important in our daily lives, knowledge of government and its processes is vital if citizens are to be able to cope with or influence it.

Students entering political science programs must have previously completed the General Education requirement for writing skills courses (i.e., English 101 and 102 or equivalent) and must have completed all high school course deficiencies. Students should consult the department's undergraduate advisers as soon as possible after applying for a major. The adviser will provide students with initial orientation to the department's programs and will arrange for their continuing advisement. A pre-law adviser aids students in preparing courses of study and can provide useful information about law school admission. Faculty members in public administration can provide course work, information, and guidance for undergraduates planning a career in public service.

The department conducts two internship programs in which students can obtain both practical experience and an opportunity to evaluate potential careers. The Legal Internship places selected pre-law students in the offices of public defenders, prosecuting officers

and court officials. The Internship in Government provides an opportunity for students to work in the offices of local, county or state officials. Among the resources available to students is the Political Science Laboratory, which contains a growing collection of reference materials, including guides to the data of the Inter-University Consortium for Political and Social Research.

CAREER OPPORTUNITIES

Students who major in political science have entered careers in business, government service (at the federal, state or local levels), law, teaching, journalism, and public and private interest groups. Recent projections by both government and public agencies indicate demand will continue near the present level for government employees, for lawyers, and for college graduates interested in careers in government. A major in political science provides knowledge of political and bureaucratic processes and analytical skills. Such students will have, as well, an opportunity to develop specialized knowledge in a number of policy areas. Careers in business organizations or with interest groups often call for similar skills. Many students have found this major a useful preparation for law school as well as for the practice of law. In all of these areas experience gained in an internship can be a significant advantage.

In addition to preparation for specific careers, a major in political science can provide general career-building skills. Courses which focus on the analysis of political and social data help students develop analytical and reasoning skills. Students also have opportunities to become familiar with statistical techniques and computer usage and to develop writing skills.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE POLITICAL SCIENCE

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing this major concentration. Also note that students seeking teacher certification must take specific general education courses. See the Secondary Education section of this catalog for details.)
(For the Bachelor of Arts degree, option B in general education skills must be chosen.)

Major Requirements 33
A minimum of 33 hours, including 111 and 112, and at least 3 hours in four of the six subfields: American Government and Politics, Comparative Politics, International Relations, Political Theory, Public Administration, and Public Law.

Minor 18-21

Electives** 19-25

Total 124

* Requirements for the Bachelor of Science degree differ from those for the Bachelor of Arts degree in that a foreign language is not required. A minimum grade point average of 2.0 is required in major courses.

** Students must complete the University's constitution requirement. A course fulfilling this requirement may be included in the general education or elective requirements.

EXIT REQUIREMENTS

All students majoring in political science must complete a Senior Assignment, which includes a comprehensive written examination and a portfolio, during their last term in residence.

MINOR REQUIREMENTS

The requirements for a minor in political science include the following: a minimum of 18 hours, including 111 and 112, and at least one course in three of the six areas of specialization. A minimum grade point average of 2.0 is required in political science courses.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE POLITICAL SCIENCE SECONDARY EDUCATION TEACHER CERTIFICATION

Students who intend to teach at the secondary level may choose either a Bachelor of Arts or the Bachelor of Science degree with a major in political science. Students must meet the political science requirements for the major and the general education requirements. Students pursuing this degree must also complete enough work to qualify for certification in a second teaching field. Students interested in Secondary Education requirements should refer to the **School of Education** section of the catalog.

SCIENCE

ASSOCIATED FACULTY:
AbuSharbain E.M. (Biological Sciences); Bryan, V.R. (Chemistry); Hasty, M.L. (Mathematics); Parman, C.E. (Physics); Smith, F.M. (Biological Sciences); Keck, P.J. (Chemistry); Winnett, D.A. (Education); Zurheide, F.W. (Physics)

Under the description entitled "Science" are collected science courses and programs that are cross-disciplinary in nature and those that are primarily for students interested in Teacher Education. Students interested in science and/or mathematics education should seek advice from one of the faculty members listed above.

The College of Arts and Sciences, in cooperation with the Department of Curriculum and Instruction in the School of Education, offers a broad teaching field program in General Science. This program, through which prospective teachers can meet Illinois certification requirements to teach General Science in junior high and middle schools, satisfies the guidelines of the National Science Teachers Association.

Prospective teachers, both elementary and secondary, are served by a Science Resource Center that contains samples of textbooks, teaching aids, videotapes, and computer programs for the teaching of science. A complete set of Mathematics and Science kits may be borrowed from the Science Resource Center for student teaching.

DEGREE REQUIREMENTS:
GENERAL SCIENCE EDUCATION
SECONDARY EDUCATION TEACHER CERTIFICATION

General Education Requirements 48
The General Education Program requires 48 or 50 hours of General Education credit. The mathematics and science courses required for this major satisfy the 12 hours required for the GE Area in Natural Sciences and Mathematics. An overall grade point average of 2.5 is required for admission to the School of Education teacher certification program.
Skills Option A (48 hours) is recommended, and the Skills course CS 108 is required for this major.

Biology Requirements 12
BIOL 120, 121, 219
Chemistry Requirements 8-10
CHEM 120a,b, and 124a,b (CHEM 121a,b and 125a,b)
Earth/Space Requirements 9
ESCI 111, GEO 210
PHYS 356
Mathematics Requirements* 8
MATH 125, 150
Physics Req 10
PHYS 206a,b (or PHYS 211a,b and PHYS 212a,b)
Methods of Teaching Science 6
One of BIOL 494, CHEM 494, GEOG 441, PHYS 494, plus 3 hours from SCI 341, 405, 412, 415, 425, 435, 452, 489

Health Education 201 3

Professional Education Requirements 28
See Secondary Education

Electives 2-4
(A course in statistics is recommended.)

Total 124

* For Illinois endorsement to teach junior high/middle school mathematics, see Department of Mathematics, Education Minor. This minor will satisfy the mathematics requirements for the General Science Program.

SOCIAL WORK

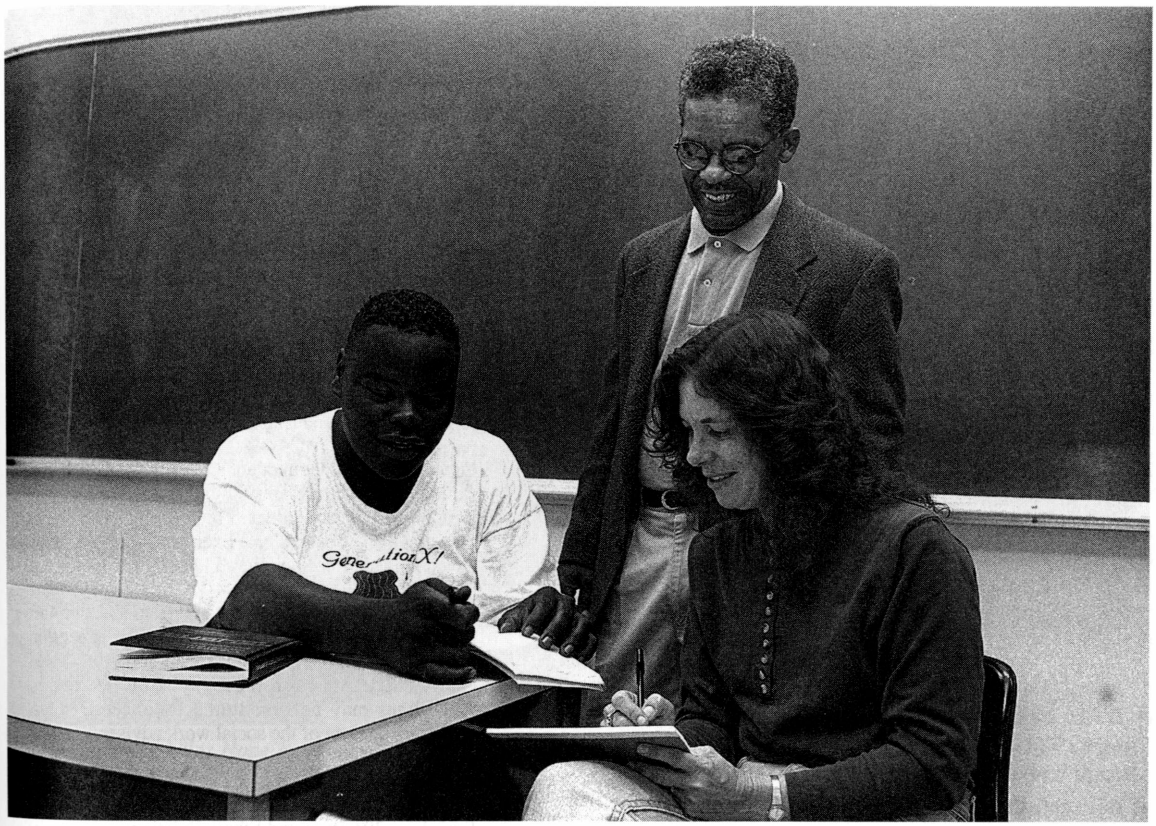
PROFESSOR:
Regulus, T.A.; Trent, J. W. (Chair)

ASSOCIATE PROFESSORS:
Cingolani, J.; Kissman, K.

ASSISTANT PROFESSOR:
Brown, V.; Wesley, C.A.

INSTRUCTOR:
Selmi, P.

The undergraduate social work program focuses on the knowledge, values, and skills needed for social work practice. Its primary purpose is to prepare graduates for entry-level direct practice in social work. A secondary objective of the program is to prepare graduates for specialized graduate studies in social work. The program has been accredited by the Council on Social Work Education. The accredited status of the program enables graduates to take the state licensing examination for social workers subsequent to completion of post-graduation practice experience.



Social Work Professor Tom Regulus talks with Chris Sutherland and Terri Smith.

Although the social work program prepares generalists for many types of practice, it offers opportunities to explore specific interests through the selection of electives and the field placement setting. The program consists of specified courses in the General Education Program, supporting courses in other disciplines, and social work courses. Social work is a profession concerned with helping to solve problems in the interactions between people and their social environments and with providing people access to needed resources and social services. The social worker acts as a facilitator of change with individuals, families, groups, organizations and communities, promotes improvement in social conditions, and serves as an advocate for people who are discriminated against or disadvantaged.

In addition to on-campus coursework, social work students do field-work in local social service agencies in several courses. This culminates in the senior field placement (SW 482 and 483) which requires a total of four hundred hours of supervised social work practice in a local agency over two consecutive semesters. This field placement is arranged in advance with the Practicum Coordinator and is designed to meet students' needs and interests within the context of the educational objectives of the program.

ADMISSIONS REQUIREMENTS

Students may apply for acceptance into the major anytime after one semester of full-time college or university enrollment, (or the equivalent number of credits) with a grade point average of 2.5 or above. Students wishing to major in social work must meet with a social work adviser to receive permission to enter the program.

In addition to evidence of academic ability demonstrated by grades, other factors are considered in the admissions process. Much of the knowledge and many skills needed for successful practice can be taught in a formal setting, but students' personal characteristics are also a factor in successful learning and competent practice. The faculty assumes a responsibility to the profession, to students, and to the

consumers of social services to admit to the program those persons with good potential for effective social work practice. Other factors considered in the admissions process are students' ability to communicate thoughts and feelings clearly and effectively and evidence of initial commitment to social work as a career. Other factors may be considered in the admissions process with the informed consent of the student. Students who plan to enter the program should meet with a social work adviser as early as possible.

It is important that students become familiar with sequences and prerequisites for courses in this major and the various required and recommended courses offered by collaborating departments.

RETENTION STANDARDS

All required social work courses must be completed with a grade of C or above. If a student receives a grade of D, E, WE, or WP in a required social work course, that course must be completed on the next attempt with a grade of A, B, or C. If this requirement is not met, the student must petition the faculty for approval to enroll in the course for a third attempt.

Students must maintain a cumulative average of C or above in social work courses. Each student's progress is reviewed after completion of SW 315 to determine whether the student will be permitted to enter the senior practicum courses.

CAREER OPPORTUNITIES

The Bachelor's degree in social work qualifies graduates for practice in entry-level positions in a wide range of social service settings. Most graduates work in health or mental health or family service agencies. The Bachelor's degree from a Council on Social Work Education accredited program qualifies graduates to take the licensing examination in Illinois after three years of professional experience. In addition, most graduate social work programs offer advanced standing to entering students with the Bachelor's degree in social work.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE SOCIAL WORK

General Education Requirements 48-50

NOTE: Eight hours of foreign language are required for a Bachelor of Arts degree. There are specific General Education requirements for social work majors. These should be completed before enrolling in 400 level social work courses. Some general education courses are prerequisites for some social work courses. See course descriptions for specific prerequisite requirements. The following general education courses are required:

Economics 111 or equivalent
Biology 111 or equivalent
History 111b or equivalent
Statistics 107 or equivalent (Exempted for B.A. majors)
Psychology 111 or Sociology 111 or Anthropology 111

One course each in Philosophy and English Literature at Introductory or Advanced levels with the exception of Philosophy 106.
NOTE: Some general survey courses in these disciplines may be substituted for the introductory course by consent of the social work adviser.

Supporting Courses 12
Sociology 312-Social Research Methods
Sociology 304-Race and Ethnic Relations
OR
Speech Communication 210- Interracial Communication
Economics 327-Social Economics: Issues in Income Distribution, Employment and Social Policy
Political Science 342-Issues in American Public Policy

Social Work Required Courses 41
200, 201, 301, 302, 303, 315, 316, 400, 401, 482, 483

Social Work Electives 6

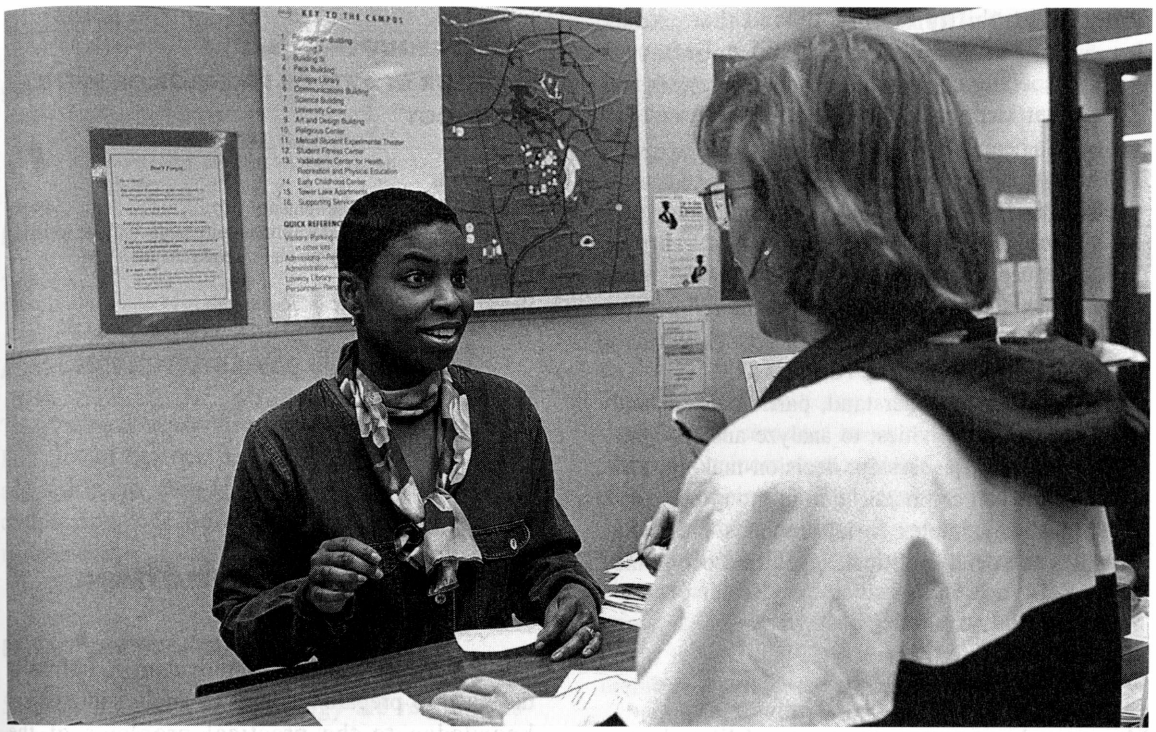
Electives 15-17

Total 124

SENIOR ASSIGNMENT

As part of the University's assessment program, all undergraduate majors in social work are required to complete a senior assignment. The senior assignment in social work is based on several written and oral assignments in the field placement courses (SOCW 482 and SOCW 483), as well as evaluation by placement supervisors of students' readiness for professional practice.

Further information on the senior assignment in social work may be obtained from the departmental office, Peck Building, Room 1231.



Deitria Chapman helps Hope Erwin-Sipes in the Office of Admissions and Records as part of an internship for her sociology program.

SOCIOLOGY

PROFESSORS:
Barlow, H.D. (Chair); Blain, R.R.; Farley, J.E.; Finkelstein, M.; Handel, W.H.

ASSOCIATE PROFESSORS:
Riley, L.E.

ASSISTANT PROFESSORS:
Hamer, J.; Markowitz, L.

Sociology is the scientific study of human groups and relationships. A major purpose is to find efficient and effective ways to improve them. Sociologists study human values, customs, leadership, and cooperation and conflict in every kind and size of group including families, schools, religions, corporations, the economy, government, cities, and societies. Sociologists use questionnaire surveys, participant observation, government statistics, and computer simulations to find patterns and general principles that can help solve problems of group living ranging from infant mortality and juvenile delinquency to world population growth and migration. Sociologists investigate causes of crime and underground illegal activities, racial, gender, and ethnic conflict, poverty, social inequality, health care, and workplace change. Applied sociologists use sociological insights to identify and solve practical problems in group living. Many students majoring in other fields find sociology courses relevant to their studies.

STATEMENT OF MAJOR GOALS: SOCIOLOGY

The undergraduate major in Sociology seeks to foster the development of the following knowledge and skills while encouraging students to become well-informed, active citizens who appreciate creativity and diversity.

1. Understanding the Sociological Perspective:
   a. The ability to comprehend that society has an existence and reality above and beyond the individuals and groups that comprise it; that social relations are self-generating and ongoing.
   b. The ability to identity and analyze gender, race, and class differences that unify and divide people; to understand interests, needs, and power differentials as they relate to the social distribution of human resources; to understand cultural diversity and relativity, and to appreciate human interdependence.

c. The ability to comprehend that social norms, roles, values, and beliefs are socially constructed through processes of interaction and the application of meanings to people, actions and events.

2. Analytical/Problem-Solving Skills:
The ability to define a problem, generate appropriate data, pose solutions, assess consequences and effects, and to use quantitative and qualitative methodologies in the refinement of sociological knowledge.

3. Participatory and Policy-Analysis Skills:
The ability to understand, participate in, and foster group activities; to analyze and facilitate cooperation, leadership, decision-making, and interpersonal communication in group contexts; to analyze complex social problems and relate them to social, political, legal, and economic policies.

CAREER OPPORTUNITIES

Many employers stress that a good liberal arts education is an excellent foundation for specialized skills that can be learned on the job. A major in one of the social sciences is often preferred by industry, government and private service agencies. While professional training in sociology is primarily associated with advanced degrees, there are many employment opportunities for those with a liberal arts major in sociology.

The optional concentration in Employment Relations (see below) adds occupationally relevant training to the liberal arts program in sociology. In addition to the classroom and experiential training in employment relations, the concentration helps develop marketable research and communication skills. The required internship helps create job opportunities and provides training and research skills that make students more attractive to potential employers.

More detailed information on career opportunities for sociology graduates is available in the departmental office, Room 1230, Peck Building. Interested students may also contact the chair or undergraduate advisers by calling 618-692-3713.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE SOCIOLOGY

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing the major requirements.)

Requirements for Major in Sociology 30
Sociology 312, 410, 451, 495 12
Sociology Electives 18

Electives 44-46
Bachelor of Arts 44
Bachelor of Science 46

Total 124

PROGRAM OPTION IN EMPLOYMENT RELATIONS

The Program Option in Employment Relations is designed to prepare students to apply sociological knowledge to the practical problems of the workplace. Fundamental changes in work and industry have intensified employer demands for broadly skilled professionals, supervisors, administrators, coordinators and consultants capable of critically evaluating, planning and implementing workplace changes.

In addition, Employment Relations places great emphasis on the acquisition of practical knowledge through case study analyses and an internship (Soc 433) in an actual employment setting. As interns, students have the opportunity to apply course concepts, ideas, and methods in a supervised employment context. As the capstone learning experience in developing concrete skills and abilities, the internship may provide students with valuable contacts and networks that will be of use to them in achieving their professional and career goals. For more information, please contact the Employment Relations Adviser in the Peck Building, Room 1210.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE SOCIOLOGY EMPLOYMENT RELATIONS OPTION

General Education Requirements 48-50
Requirements for the Sociology Major with the Program Option in Employment Relations 45

Sociology 111, 312, 338, 410, 431, 433, 451 21

Sociology Electives 9-15

Non-sociology Electives from a list provided by the Employment Relations Adviser 9-15

Electives 29-31

Total 124

ADMISSIONS/ENTRANCE REQUIREMENTS

The admission requirements for a Bachelor of Arts or Bachelor of Science degree in Sociology include admission to the University and successful completion of high school course specific requirements.

RETENTION STANDARDS

Students majoring in sociology are required to maintain a cumulative average of 2.0 (C) or above in their sociology courses.

PROGRAM COMPLETION REQUIREMENTS

A cumulative grade point average of 2.0 or above in sociology courses is required for graduation. Ordinarily, up to 15 semester hours of transfer credit in Sociology may be accepted. No more than nine semester hours from community colleges will be accepted for credit toward the major. Transfer credit will be accepted only if the course grade is "C" or above. Social Work courses do not count toward the 30 semester hours required for the major.

SENIOR ASSIGNMENT

As part of the University's assessment program, all undergraduate majors in sociology are required to complete a senior assignment. General majors (those not enrolled in the Program Option in Employment Relations) must take Sociology 495 (Senior Seminar) **after** completion of 21 semester hours of sociology. Sociology 495 is offered in Spring and sometimes Fall terms.

Students enrolled in Employment Relations are required to take Sociology 433 (Internship) as part of their senior assignment. Employment Relations students are not required to enroll in Sociology 495, but they are required to complete the written and oral components of the senior assignment in their final spring term. A grade of C or better on the senior assignment is required for graduation. Further information on the senior assignment in sociology may be obtained from the departmental office, Peck Building, Room 1230.

MINOR REQUIREMENTS

For a minor in sociology, students are required to complete 21 semester hours of sociology electives. Sociology minors must maintain an average of 2.0 or above in their sociology courses. Ordinarily, nine semester hours of transfer credit may be counted toward the sociology minor. Transfer credit will count toward the sociology minor only when the grade is C or above. Social Work courses do not count toward the 21 semester hours of sociology credits required for the minor.

SPEECH COMMUNICATION

PROFESSORS:
McClearey, K.E.; Munshaw, J.A.; Salden, D.R.; Stoppe, R.L.; Valley, D.B.(Chair)

ASSOCIATE PROFESSORS:
Perkins, L.L.; Zamanou, S.

ASSISTANT PROFESSORS:
Stern, L.A.; Wrobbel, E.D.

Speech Communication is a discipline whose roots go back to the work of great orators and teachers of persuasive speaking in ancient Egypt, Athens, and Rome. The study of communication involves developing theories and research tools to analyze, explain, and improve human interaction. Departmental courses focus on two-person interaction, small group decision making, communication patterns in organizations and other complex systems, and speaker-audience interaction in public speaking contexts.

The department encourages students to work closely with faculty in advising, teaching, research projects, and informal interactions. Speech Communication majors and minors receive their formal academic

advisement from a faculty member assigned by the Director of Undergraduate Studies. Students interested in careers as communication professionals may contact the department at (618) 692-3090.

CAREER OPPORTUNITIES

Within American society, employers increasingly recognize the need for more effective communication. As a result, job opportunities for graduates trained in speech communication are prevalent in business and industry, government agencies, educational systems, non-profit organizations, and community-based resource centers. Graduates often have several career choices. Examples of communication careers some departmental graduates have entered are: school teachers and administrators; managers, trainers, and consultants in organizations; public relations; facilitators in human relations and employee assistance programs; sales; and, government. Career opportunities in communication are expanding for women and minorities.

The department is committed to helping undergraduate majors identify jobs and work environments for which they are suited best, and to assist them in selecting internships, minors, and elective courses to complement the speech communication major.

ADMISSION TO THE MAJOR

In order to be accepted as a major in speech communication, a student must have completed the General Education oral skills course SPC 103 (or equivalent) with a grade of C or higher and must have a cumulative grade point average of 2.0 or higher (on a 4.0 scale).

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE SPEECH COMMUNICATION

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing the major concentration. Also note that students seeking teacher certification must take specific general education requirements. See the Secondary Education section of this catalog for details.) All students must complete the University's constitution requirement.

Requirements for Major in Speech Communication 38
1. SPC 223, 239, 330 and 409 13
2. Two Presentation Skills courses 6
Select from SPC 104, 200, 261 and 300.
3. Two Conceptual Area courses 6
Select from SPC 111, 410, 411, 431, 433 and 434
4. Four Communication Applications 12
courses. Select from SPC 201, 203, 210, 213, 305, 313, 331, 403, 413, 414, 423, 435, 461, 462 and 464
5. Elective in Speech Communication. 1
Students may select from any of the above courses or SPC 103, 105, 309, 419 add 491

Minor 18
(The actual number of hours for the minor may vary, depending upon the field that is selected.)

Electives 18-20

Total 124

In addition to their academic responsibilities, the department expects students to integrate into their learning a broad range of campus and community communication activities. The independent projects course, SPC 309, offers one to six hours of academic credit for such activities. SPC 491, an internship course, enables qualified juniors and seniors to gain professional experience in career environments.

Majors seeking certification for teaching should meet with the Director of Speech Communication Education for advisement and current information. In addition to the speech communication major, these students should select a minor in a second teaching field and should expect to complete 28 hours of professional education courses, including student teaching, as part of their general electives. Certification in speech from the State of Illinois requires a minimum of one course in each of the following areas: Public Speaking (SPC 105 or SPC 200), Interpersonal Communication (SPC 103 or SPC 223), Group Discussion/Dynamics (SPC 201), and Oral Interpretation (SPC 261). SIUE requires a methods course for teaching speech (SPC 461). The State of Illinois requires three courses in English (General Education courses may be counted) and teacher certification candidates must pass a broadly-based competency test in the major area.

DEGREE REQUIREMENTS: BACHELOR OF ARTS SPEECH COMMUNICATION

The requirements are the same as those described above, plus eight hours of the same foreign Language as part of the 18-20 elective hours.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS OR BACHELOR OF SCIENCE
SPEECH COMMUNICATION
TEACHER CERTIFICATION

Students seeking the Bachelor of Arts or the Bachelor of Science degree for teacher certification must take the program outlined above for majors, including SPC 261 and SPC 461, and must meet general education and professional education requirements as required by the School of Education.

MINOR REQUIREMENTS

To be accepted as a minor in speech communication, a student must have a cumulative grade point average of 2.0 or higher (on a 4.0 point scale). An 18-hour minor (21 hours for a second teaching field) in speech communication may be comprised of any courses offered in the speech communication curriculum. Students and their respective advisers will set up a minor program which includes courses that best meet the students' academic and career interests. Students selecting speech communication as a second teaching subject must include SPC 261 and SPE 461. No more than one of the three general education oral communication skills courses (SPC 103, 104, and 105) may be applied to the 18 semester hours necessary for the minor. At the time they apply for their minor (or earlier), students should consult with the speech communication Director of Undergraduate Studies at (618) 692-3090.

THEATER AND DANCE

PROFESSORS:
Bukalski, P.J.; Grivna, W.J.; Jarrell, J.C.; Sweezey, C.O.; Tallant, A.M.

ASSOCIATE PROFESSORS:
Mackie, W.C. (Chair); Shaul, K.J.

ASSISTANT PROFESSORS:
Cocuzza, P.; Smith, J.A.

INSTRUCTORS:
Beals, P.C.; Hiller, W.; Lee, N.K.; Quinn, D.A.

ASSISTANTS IN THEATER AND DANCE:
Goldston, V.

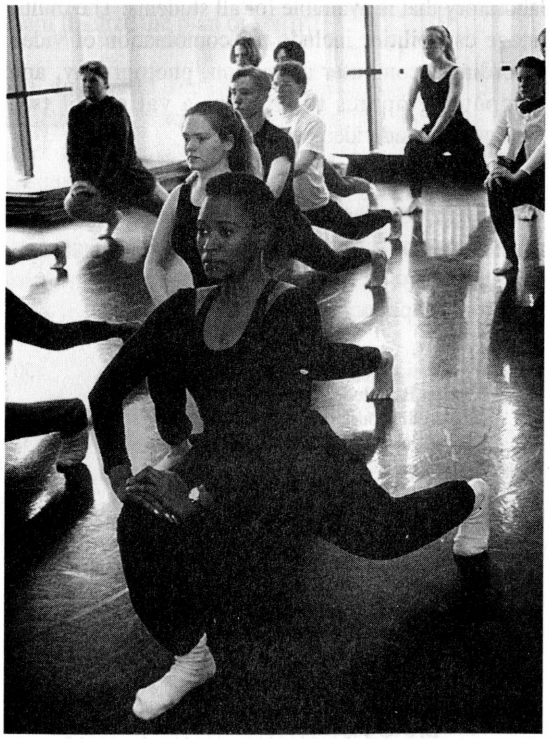
CAREER OPPORTUNITIES

An undergraduate degree in theater or dance provides a student with preprofessional theater and dance training in acting, directing, dance, choreography, technical production, and design.

Since employment in professional theater and dance is very competitive, career opportunities largely depend upon the graduate's initiative and artistic skills. In addition to preparing students for work in professional theater, entry into professional training schools, or entry into graduate programs in theater or dance, the degree in theater and dance also may lead to career opportunities in television, radio, and promotional work.

DESCRIPTION OF DEPARTMENT, UNITS, AND PROGRAMS

The Department of Theater and Dance provides instruction and practical performance experience in all phases of theater and dance production for the stage.



A dance class works out in the large dance studio in the Communications building.

The Department enhances the liberal arts experience of students through general education courses and through mainstage and student experimental theater productions. Students majoring in theater and dance may elect either a general liberal arts degree in theater and dance or one of three specialization programs: performance, design/technical theater, and dance.

Practicum training studios enable students to learn the arts of theater and dance through instruction and participation in a series of major and minor presentations for class, University, and community audiences through the Student Experimental Theater Organization and the University Dance Organization.

All students desiring further information about work in theater and dance should contact the Department of Theater and Dance. Students must be advised by a member of the department faculty who may grant permission to enroll in courses.

Students in the theater/dance major and minor must maintain at least a 2.0 GPA and must complete each course with a grade of C or above to remain in the program.

The Electronic Imaging laboratory in the Department of Theater and Dance is a specialized multi-image laboratory that is available for all students. The multi-image capabilities include the combination of video recordings, computer animation, photography, and computer graphics to produce a variety of two dimensional and video products.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE THEATER

General Education Requirements 50
(Option B-includes foreign language)
(Six credit hours of major courses may satisfy General Education requirements while completing this degree.)
Major Requirements 39
Core Courses:
THEA 112a, 150a, 150b, 265, 320 14
DANC 114, 214 4
DANC 210a, or 210b 2
Major Courses:
Two of the following:THEA 401a, THEA 401b, or DANC 440 6
THEA 204 3
Practicum—select from THEA 130, 230, 330, 430, 450, 460, 470, DANC 460 2
Assessment Project-Selected From THEA 455, DANC 450, or THEA 410a 3
Electives in Theater and Dance 6

Minor Requirements 21-24
A minor must be in a field which is included in the general education program or approved by the department. (Actual number of credit hours determined by the minor selected.)

Electives 14
(At least 9 credit hours of electives must be taken outside the Department of Theater and Dance.)

Total 124-127

DEGREE REQUIREMENTS: BACHELOR OF ARTS* OR BACHELOR OF SCIENCE THEATER SPECIALIZATION IN DESIGN/TECHNICAL THEATER

General Education Requirements 48-50
(Six credit hours of major courses will satisfy General Education requirements while completing this specialization.)
Major Requirements 47
Core Courses:
THEA 112a, 150a, 150b, 265, 320, ... 14
DANC 114, 214 4
DANC 210a, or 210b 2
Specialization Courses:
THEA 204, 250, 401a, 401b
THEA 350, 260, 270, 480 or 482 24
Senior assignment (THEA 455) 3

Art and Design Minor Requirements 24
A minor in Art and Design is required for the Specialization in Design/Technical Theater.

Electives 6

Total 125-127

* The Bachelor of Arts degree requires General Education Option B which includes study of a Foreign Language.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE THEATER SPECIALIZATION IN DANCE

General Education Requirements 48-50
(Six credit hours of major courses may satisfy general education requirements while completing this specialization.)
Major Requirements 52
Core Requirements:
THEA 112a, 150a, 150b, 265, 320 14
DANC 114, 210a, 214 6

Specialization courses:
Technique and performance-DANC 210b, 211a, 211b, 310a, 310b, 311a, 311b, 410a, 411a 18
Theory classes-DANC 320, 420a, 420b, 430, 440 11
Senior Assignment (assessment)-DANC 450 3

Electives 6
Minor in other disciplines 21

Total 127-129

* The Bachelor of Arts Degree requires General Education Option B which includes study of a foreign language.

DEGREE REQUIREMENTS:
BACHELOR OF ARTS* OR BACHELOR OF SCIENCE
THEATER
SPECIALIZATION IN PERFORMANCE

General Education Requirements 48-50
(Six credit hours of major courses may satisfy General Education requirements while completing this specialization.)

Major Requirements 50

Core Courses:
THEA 112a, 150a, 150b, 265, 320, ... 14
DANC 114, 214 4
DANC 210a, or 210b 2
Specialization courses:
THEA 112b, 210, 215, 310, 401a, 401b, 204, 410b 24
Performance practicum selected from-
THEA 130, 230, 330 or 430 3
Senior Assignment-THEA 410a 3

Electives 9
Minor in other Discipline 21

Total 128-130

* The Bachelor of Arts Degree requires General Education Option B which includes study of a foreign language.

THEATER AND DANCE MINOR

The theater performance minor consists of twenty-three hours: THEA 112a, 150a, 265, DANC 114, and twelve (12) hours of approved electives in theater and/or dance.

THE BACHELOR OF LIBERAL STUDIES

The Bachelor of Liberal Studies degree program is designed to provide the opportunity for students to pursue a broad based education in liberal arts and sciences. Students in the program are offered the flexibility to develop individualized programs of study with an interdisciplinary focus. Unlike other majors, the Bachelor of Liberal Studies emphasizes breadth of study rather than focus on a single discipline. The program is designed to meet the needs of students whose interests may not be fully met with specific curricula and who have integrative abilities to plan and develop a program appropriate to those interests.

Admission to the degree program is based upon approval of a proposed plan of study prepared by students in accord with the requirements listed below. The proposal should include a statement of educational goals and the revelance of the Bachelor of Liberal Studies degree to those goals. Students should have at least a 2.0 grade point average at the time of entry into the program.

Once admitted to the program, students are assigned to the Bachelor of Liberal Studies academic adviser in Academic Counseling and Advising who will help them finalize the plan of study.

An approved student proposal constitutes an educational contract, which may be modified only after approval by the BLS adviser. The educational contract should reflect a curriculum with an interdisciplinary focus in broad area requirements as well as in elective courses. Students who plan to pursue graduate study should develop a contract which can satisfy graduate admission requirements.

Students should apply for a Bachelor of Liberal Studies major before their senior year. Seniors may enter the program by special permission provided they agree to complete at least 30 semester hours of prescribed course work after entry into the program.

CAREER OPPORTUNITIES

The Bachelor of Liberal studies is intended to enhance knowledge in a variety of areas. The extensive course alternatives available through this program allow students to tailor their curriculum to meet their individual needs.

The program is of special value to those who are not seeking a career based in a single discipline, to those who already possess occupational skills, and to those who seek enrichment of their personal and professional lives. Part-time students are able to complete this degree through evening and weekend courses.

DEGREE REQUIREMENTS

Each student should develop an educational contract which will satisfy the following requirements:

A. Total number of hours required ..... 124 hrs.
B. General Education .....48-50 hrs.
C. Required Courses in Arts and Sciences .. 45 hrs.
At least 15 semester hours, in addition to the general education requirements, should be completed in each broad area below with grades of C or better:
  a. Natural and Physical Sciences .....15 hrs.
  b. Social Sciences .....15 hrs.
  c. Fine Arts and Humanities .....15 hrs.
Not more than 6 of the 15 hours required in each area may be satisfied through introductory courses.
D. Elective Hours .....28-40 hrs.
  1. General Electives .....4-10 hrs.
  2. Focused Electives .....24-30 hrs.
A specific interdisciplinary focus will be formulated upon entering the program and will become a part of students' educational contracts. The courses taken to satisfy elective hours will explicitly relate to this focus.
E. Senior Project .....3-6 hrs.

The Senior Project serves as the senior assessment with emphasis on the academic breadth of the Liberal Studies program. The nature of the experience must be specified and approved in advance by the student's adviser and the project supervisor. Experiences might include a practicum experience or internship, an integrative research paper or presentation, or a creative project.

At least 30 hours of the total required for graduation should be earned through junior or senior level courses (300 level or above).

INTERDISCIPLINARY MINORS

In addition to the major programs above, minor concentrations are also available in a variety of traditional disciplines noted elsewhere in this catalog. Four interdisciplinary minors are described below.

MINOR IN BLACK AMERICAN STUDIES

The Black American studies minor is multidisciplinary, with courses in seven departments. Within the 18 hours required for this minor, students are required to take two specific courses: English 340 and History 130. The remaining 12 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:

Anthropology 310, 311, 411
Art 469a
English 205, 341, 342
History 352a, b, 442
Music 338
Political Science 342
Sociology 304

For additional information regarding this minor or any of the courses and for course advisement, contact the Black Studies adviser, currently Rudolph Wilson, Rendleman Building, Room 3108. A description of the program and a schedule of courses offered each term are available at the office.

MINOR IN CLASSICAL STUDIES

The minor in Classical Studies is a multidisciplinary program sponsored by the College of Arts and Sciences and supported by the Departments of Art and Design, English Language and Literature, Foreign Languages and Literature, Historical Studies, and Philosophical Studies.

The Classical Studies minor contributes to cultural enrichment through the study of Latin and Greek, and of the history, philosophy, literature, and art of the Greek and Roman civilizations; to language sensitivity by close attention to the grammatical and syntactical structure of Latin and/or Greek and by

careful analysis of texts: to expansion of a general working vocabulary; and to knowledge of special vocabularies of such fields as medicine, law, theology, and foreign languages derived from Latin and Greek.

REQUIREMENTS

The minor in Classical Studies requires 20 credit hours of courses designated Classical Studies. Of these, eight hours are required either in Greek or in Latin. Credit is granted for only those courses in which grades of C or above are earned.

Greek 101, 102 (Introduction to Greek)
Greek 201, 212 (Intermediate Greek)
Greek 499 (Readings in Ancient Greek)
Latin 101, 102 (Introduction to Latin)
Latin 201, 202 (Intermediate Latin)
Latin 499 (Readings in Latin)
Foreign Languages and Literature 141
(Building Vocabulary Through Latin and Greek Word Elements)
Foreign Languages and Literature 401
(Comparative Latin and Greek Grammar)
English 303
(Literary Masterpieces: Ancient and Medieval)
English 310 (Classical Mythology and Its Influence)
History 113 (Survey of Ancient Civilization)
History 303 (History of Ancient Near East)
History 304 (History of Greece)
History 306a,b (History of Rome)
Philosophy 300
(Ancient Greek and Roman Philosophy)
Philosophy 440 (Classical Political Theory)
Same as Political Science 484
Art 225a (History of World Art)
Art 447a,b (Ancient Art)

Because the following courses have variable content, they require advance approval by the Coordinator of the Classical Studies Minor:

Foreign Languages and Literature 390 -3
Readings
History 300 - 1 to 3 Special topics
History 400 - 3 Topics in History
History 410 - 1 to 3 Directed Readings
Humanities 301-3, 302-3, 303-3 Humanities Honors
Humanities 400 - 1 to 3 Symposium in the Humanities
Philosophy 490 - 3 Special Problems
Philosophy 495 - 1 to 3 Independent Readings

For additional information, please contact the Coordinator of Classical Studies, currently Edwin Lawrence, Peck Building, Room 0224, 618-692-3266 or 618-656-7153.

MINOR IN PEACE STUDIES

The Peace Studies minor is interdisciplinary and designed to provide students an understanding of one of the major issues of contemporary society—the problem of eliminating war in favor of nonviolent means of resolving disputes.

Relevant information comes from the areas of political science, philosophy, history, economics, anthropology, psychology, and sociology. This minor enables students to receive recognition for taking courses that address the problem of war and peace from the perspective of various disciplines.

The Peace Studies minor is especially appropriate for students planning to enter professions such as journalism, radio or television newscasting, government service, teaching, law, or international business. It is also a good minor for people interested in preparing themselves for their roles as citizens in a democracy.

For additional information and advisement assistance, call 618-692-3376 or 618-692-2250, or visit the Coordinator of the Peace Studies Program, Ronald Glossop, in Peck Building Room 2212.

REQUIREMENTS

The minor in Peace Studies requires 18 hours. Only courses not used by students for their majors can be counted toward these 18 hours.

Students with a minor in Peace Studies should note not only the courses required for the minor, but also the prerequisites for these courses. It is advisable to take IS 340 - The Problem of War and Peace, early in the junior year in order to acquire a background for the other courses chosen for the minor.

Required Courses: . . . . . .9 hrs.
IS 340-3 The Problem of War and Peace
POLS 370-3 Introduction to International Relations

AND one of the following courses related to recent international conflict:

HIST 344b-3 History of American Diplomacy (Since 1919)
HIST 416-3 World War I and Its Aftermath
HIST 418-3 World War II
HIST 422b-3 Late Modern Europe (World War I through World War II)
HIST 422c-3 Late Modern Europe (Since World War II)
POLS 472-3 International Organizations

Elective courses: . . . . . .9 hrs.

Students select elective courses related to the problem of war in the 20th century which are approved by the Coordinator of the Peace Studies Program. The Coordinator will provide a list of approximately 40 courses which are suitable electives.

MINOR IN WOMEN'S STUDIES

Women's Studies is a growing interdisciplinary field which emphasizes gender perspectives and contributions of women. Women's experience and learning styles have often been omitted in the traditional curriculum and textbooks. Consequently, Women's Studies courses focus on issues relating to gender as well as many untold stories of women, their lives, and their work.

Since its beginning in the United States in the early 1970's, Women's Studies has generated much scholarly inquiry into gender difference. In particular, Women's Studies encourages equal dignity and empowerment for women and men, and examines teaching styles and educational theories that incorporate women's concerns and experience.

A background in Women's Studies is valuable in the changing workplace with greater numbers of women seeking career advancement and entrepreneurial opportunities. Areas in which students have found Women's Studies of particular benefit include Anthropology, Business Administration, Communication, Education, English, History, Nursing, Philosophy, Political Science, Psychology, and Sociology.

REQUIREMENTS

The minor concentration in Women's Studies consists of 15 hours in courses designated as Women's Studies; not more than six hours may be taken at the lower division level. A grade point average of 2.50 is required in Women's Studies courses. Normally, a student takes WMST 200 Issues in Feminism first. Many of the 23 courses offered are cross listed with a discipline and meet advanced general education requirements as well as Intercultural, Interdisciplinary, and Intergroup Relations requirements.

Students interested in the Women's Studies minor should contact the Coordinator of Women's Studies, PB 1227, Campus Box 1350, or call 618-692-5060. A description of the program and a schedule of courses offered each term is available from the Coordinator.

3-2 PROGRAM IN OCCUPATIONAL THERAPY

Effective June 30, 1995, the 3-2 Program in Occupational Therapy is closed to new participants.

Only those students already identified and formally participating in the program will be allowed to continue and apply for admission to Washington University through the 3-2 Program. For further information, please contact the 3-2 Coordinator (see below).

The information below is provided for those students already participating in the program.

ADMISSION TO WASHINGTON UNIVERSITY

During the third year of study at SIUE, 3-2 participants apply for admission to the Washington University program in Occupational Therapy (see below).

SIUE's 3-2 Program Coordinator must notify Washington University by December 1 of all students who will be applying for the program for the following fall. Therefore, all students should inform SIUE's 3-2 Program Coordinator by November 15 of their intention to apply.

Minimum admission standards include a 3.0 GPA completion of the Graduate Record Examinatio

Performers rehearse for the SIUE Theater Production of "Hello Dolly." Left to right, Erick Price, Margaret Bear, Eddie Hitchcock and Regina Hankins.

(GRE), and completion of the Occupational Therapy prerequisite courses with a grade of C or better in each course. While 3-2 students (from SIUE and the other colleges and universities which participate with Washington University in similar 3-2 programs) are given preference, admission is not guaranteed.

While enrolled at Washington University, students pay the Washington University tuition and fees. Financial Aid information is available from the Washington University 3-2 Occupational Therapy office.

SIUE Occupational Therapy 3-2 students must complete (with a grade of C or above) the following courses as prerequisites for admission into Washington University's Occupational Therapy Program:

1. ENG 101
2. All of: BIOL 120, 121, 219, 220, 340; and either 441 or 444a
3. CHEM 121a and b, and CHEM 125a and b; and either CHEM 120b or CHEM 241ab and 245
4. PHYS 111, PHYS 206a; or PHYS 211a and 212a
5. PSYCH 111, 201, and 431
6. Any sociology or anthropology course (at least three credits)
7. Any political science or economics course (at least three credits)
8. STAT 107 or STAT 244 or PSYCH 211
9. PHIL 321 preferred; also acceptable, any one of: PHIL 106, 111, 213, or 320

Note: Items 2 and 3 above satisfy the requirements for a minor in biological sciences.

Students are encouraged to take as much science as possible, as doing so will not only enhance their chances of being admitted to Washington University's Occupational Therapy Program, but will also enhance their chances for success once enrolled.

For further information contact:

David Steinberg, 3-2 Coordinator
Southern Illinois University at Edwardsville
Peck 3409
Box 1608, Edwardsville, Il 62026-1608
618-692-5067

Program in Occupational Therapy
Washington University School of Medicine
4444 Forest Park Avenue
St. Louis, MO 63108
314-286-1600

SCHOOL OF BUSINESS

dean m. robert carver

SCHOOL OF BUSINESS

The School of Business offers undergraduate degree programs designed to: (1) prepare students for careers in business and related fields, (2) provide an educational foundation for advanced study in one or more of the business disciplines and lifelong learning, and (3) encourage students to develop an understanding of the social, political, legal, and economic environments in which business decisions are made. These curricula stress the development of oral, written, and interpersonal skills, analytical reasoning, conflict resolution, and an understanding of the effects of culture, globalization, and time on the choices students may make.

The School offers the following undergraduate degree programs: the Bachelor of Science in Accountancy, the Bachelor of Science in Business Administration, the Bachelor of Science in Business Economics, and the Bachelor of Science in Management Information Systems. Teacher certification may be obtained though the School of Education upon completion of certain courses offered by the Schools of Education and Business.

The undergraduate and graduate programs offered by the School are accredited by the American Assembly of Collegiate Schools of Business.

FACULTY

PROFESSORS:

Ault, D.E.; Carver, M.R. (Dean, School of Business); Elliott, D.S.,Jr.; Hafer, R.W.; Harrick, E.J.; Hirsch, M.L.,Jr.; Kaikati, J.G.; King, T.E.; Klepper, R.W;LaGarce, R.F.; Levin, S.L.; Lin, A.Y.; Meisel, J.B.; Rutman, G.L.; Schultheis, R.A.; Segal, M.N.; So, Y.C.; Strickland, D.E.; Sullivan, G.M.; Sumner, M.; Turay, A.M. (Dean, Graduate School);Virgo, J.M.; Werner, D.J. (Provost and Vice Chancellor for Academic Affairs)

ASSOCIATE PROFESSORS:

Bharati, R.C.;Bock, D.B.; Costigan, M.; Edmonds, R.G.,Jr.; Giacobbe, R.W.; Kutan, A.; Lovata, L.M.; Lynch, J.M.; Michlitsch, J. F.; Ortegren, A.K.; Puro, M.; Ravichandran, Ravi; Schrage, J.F.

ASSISTANT PROFESSORS:

Crain, S.;Joplin, J.R.; Martell, K.; Navin, J.; Pannirselvam, G.; Reed, B.; Schoenecker, T.; Swanson, L.

INSTRUCTORS:

Crain, S.; Erthal, M.J.; Harting, K.; Mauch, E.; Mussulman, J.; Pettit, M.A.B.; Small, N.S.; Sullivan, T.; Washburn, J.; Wolff, L.

ADMISSION

Students in "good standing" should seek admission to the School of Business as "beginning" business majors after admission to the University and completion of any academic deficiency and high school deficiency courses. Students will be counseled by advisers in the School of Business Student Services office. Business Economics majors will be counseled by Economics faculty advisers.

For "advanced" status, students must meet the following requirements:

1. Earn grades of C or better in the following lower-division courses: MATH 120, MS 251, ACCT 200, 210 (or 311 if planning to major in Accountancy), ECON 111, 112, and MIS 108.
2. Earn grade of C or better in GBA 300.
3. Have a cumulative grade point average of at least 2.0 in all course work taken prior to seeking admission to the School.

Upon completion of these requirements, students may apply for full admission to the School by completing the Business Admission Request Form. This form may be obtained from the School of Business Student Services office, Classroom Building II, room 3301 (phone 618-692-3840). All applications are reviewed. Students who are not admitted or who do not meet the criteria for unconditional admission may request admission as exceptions by writing to the Associate Dean, Box 1051, School of Business, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1051.

Transfer students who have earned an Associate of Arts or Sciences degree will be admitted to the

School after having completed courses equivalent to those listed above and completion of GBA 300 with a grade of C or better. Transfer students should contact the School of Business Student Services office with questions concerning the transferability and equivalency of course work completed at other institutions. The School of Business accepts lower-division courses taken at other institutions only as lower-division (100- and 200 level) courses. Once enrolled at SIUE, students seeking a major or minor in the School must obtain prior approval from the Associate Dean of the School of Business, the appropriate Department Chair, or Program Director before taking course work at another institution that is intended to satisfy a SIUE degree requirement.

ACADEMIC REQUIREMENTS

Students must fulfill the following requirements in order to earn a Bachelor of Science degree from the School of Business:

- Maintain a cumulative grade point average of 2.0 in all course work taken at SIUE and maintain a cumulative grade point average of 2.0 in all course work taken in the School of Business.
- Earn grades of C or better in MGMT 441 and the course taken to fulfill the research requirement with a grade of C or better on the research report.
- Complete the senior assignment, GBA 490, with a grade of C or better.
- Complete the senior year requirement of 30 semester hours in residency.
- Complete all business courses in regularly-scheduled classes. (No credit is granted for correspondence or extension courses).
- Complete a minimum of 62 credit hours offered by departments outside of the School of Business.(MIS 108, MS 251, ECON 111, 112, and 221 may be included in the 62 hours.)

Each undergraduate business program requires the completion of a minimum of 124 semester hours of acceptable credit. Once credit has been earned for a course (by taking the course, a proficiency exam, transfer credit or CLEP exam), additional credit may not be applied toward graduation requirements by taking similar or lower-division courses in that area at SIUE or another institution.

Because these programs emphasize leadership and interpersonal skills and employers seek graduates with evidence of these skills, business students are strongly advised to participate in the Student Leadership Development Program and to enroll in MGMT 495.

SCHOOL OF BUSINESS ADVISEMENT AND COUNSELING

The School of Business Student Services office assists students in scheduling courses to meet program requirements and provides guidance and counseling to those with academic problems. This office will also assist students who seek career advice by suggesting the names of faculty who provide such assistance. Students should contact this office prior to declaring a major or minor in Business, for additional information about the School's programs, and the procedures for enrolling and completing degree requirements.

ATTENDANCE

Because there is a high demand for business courses, failure to attend the first class session may result in the student being dropped from the course. Further, all qualified students seeking to enroll in business courses for the first time will be given priority over those students seeking to repeat business courses. Enrollment in repeat courses is by closed class card only, issued on the first day of class.

ACCOUNTANCY

The degree program in Accountancy prepares students for entry into a professional career in accounting in either the private or public sector. The program is designed to provide students with an educational foundation upon which they can grow professionally in the practice and study of accounting as they progress throughout their careers.

CAREER OPPORTUNITIES IN PROFESSIONAL ACCOUNTING

There are several career paths available to students of professional accounting. The possibilities include employment in public accounting, private industry, and government. Public accounting offers the

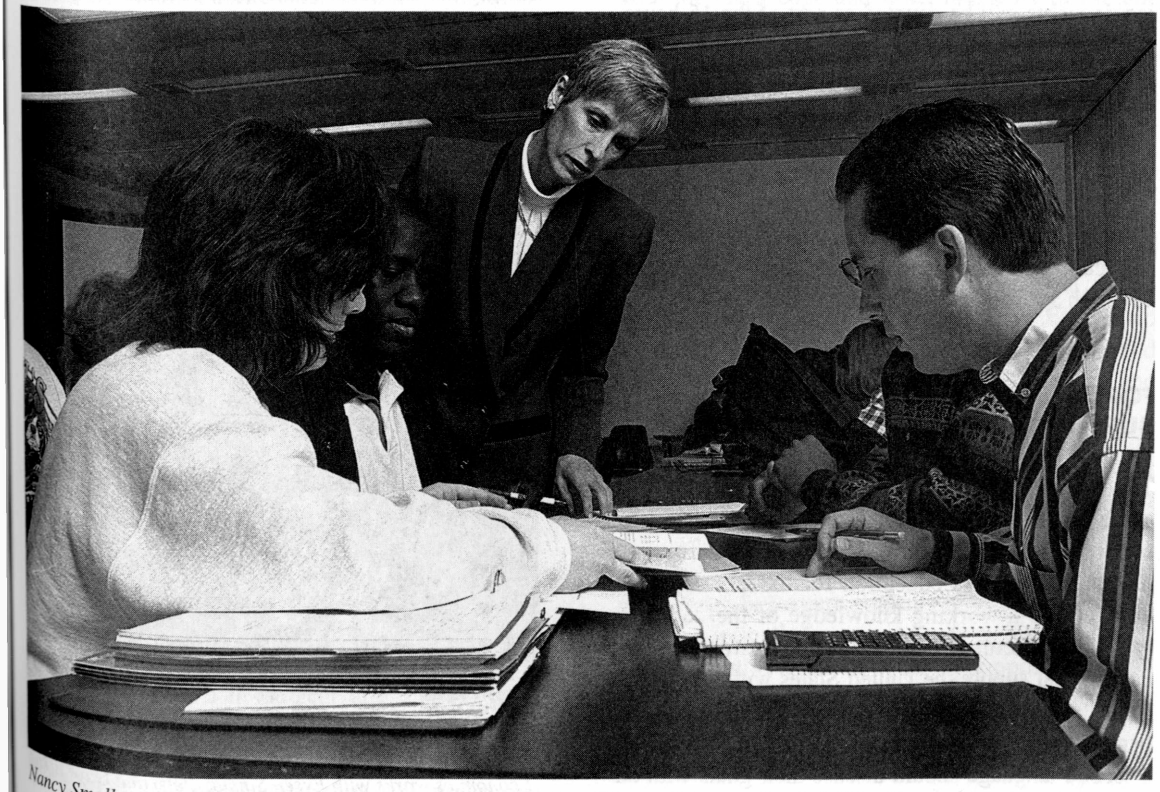
opportunity to gain exposure to a wide variety of clients, their business practices, and their accounting methods. Professional certification as a Certified Public Accountant is achieved by passing the Uniform CPA Examination. Public accountants may work in the areas of auditing, tax, or management advisory services. Graduates who work in private industry and government agencies may be employed as managerial or cost accountants or as internal auditors. Appropriate professional certifications within this segment of the accounting profession are Certified Management Accountant and Certified Internal Auditor. Based on their wide range of business exposure and knowledge, many accountants ultimately move into high-level management positions.

ADMISSION, RETENTION, AND GRADUATION

To be admitted to the Bachelor of Science in Accountancy program, students must meet all requirements for admission to the School of Business with the exception of the completion of Accounting 210. In addition, students must have at least a 2.5 grade point average overall at SIUE and in all required accounting courses taken at SIUE. Students may apply for admission to the Accountancy program after completing Accounting 200, 301, and 311. Once admitted to the program, candidates who fail to maintain at least a 2.5 grade point average at SIUE, both overall and in required accounting courses, may not take additional accounting courses until the grade point requirements are met. (They may repeat those taken previously, subject to School of Business policy.) Students remaining below a 2.5 grade point average either overall or in required accounting courses for two terms may be dropped from the Accountancy program. In addition, a student may be dropped from the Accountancy program for receiving any combination of three withdrawal, incomplete, or failing grades in a single required accounting course.

Graduation in Accountancy requires a 2.5 grade point average overall at SIUE and in all required accounting courses taken at SIUE. Candidates also must satisfy the program research requirement and the University's senior assessment requirement (GBA 490).

Prior to admission to the program, students should contact the School of Business Student Services office for consultation with an adviser to plan a program of study. Students also will be assigned an adviser from the accounting faculty.



Nancy Small works with students (from left to right) Maria Heise, Thierno Niang and Rick Killday in an accounting class.

BUSINESS ADMINISTRATION

The degree program in Business Administration provides students with a basic understanding of the functional areas of business, the behavior of organizations, and decision-making processes. The courses listed under the program requirements encompass the foundation areas of business as defined by the American Assembly of Collegiate Schools of Business. These courses provide students with (a) quantitative and analytical skills, (b) an understanding of the economic, social, political, and legal environments in which business decisions are made, (c) knowledge of accounting and information systems, (d) organizational behavior, development, goal-setting, and management of human resources, (e) an understanding of the ethical and global issues confronting business, and (f) leadership and team-building skills through the student's analysis of business cases.

Students may elect to pursue an approved specialization. Those students who do not elect a specialization may take no more than 15 hours in a given business discipline beyond the foundation areas. School of Business courses used to meet the interdependency and multicultural perspective requirements will be counted as part of the 15 hours. Students are encouraged to select their specializations and electives in consultation with a faculty adviser.

WRITTEN COMMUNICATION SKILLS

Written communications are stressed throughout the curriculum. To graduate, students must pass GBA 490 with a grade of C or better.

FOREIGN LANGUAGES AND THE BUSINESS CURRICULUM

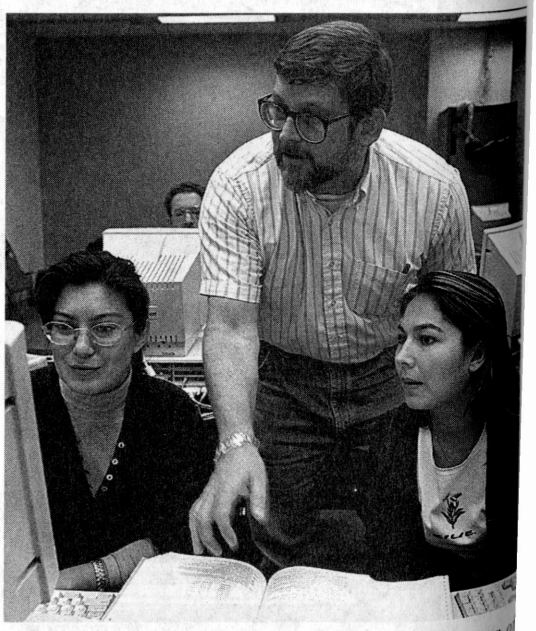
The School of Business strongly recommends that students use some of their electives to acquire oral and reading proficiency in at least one foreign language. Business education for the 21st Century will require a working knowledge of the cultures, political structures, and economic systems of the nations that supply the United States with goods and services and which provide markets for United States firms. Students interested in acquiring proficiency in a second language should discuss their goals with an adviser.

INTERNATIONAL EXCHANGE PROGRAMS

The School of Business has developed student and faculty exchange programs with Business Schools and Universities in France, Great Britain, Mexico, and the Netherlands. These programs permit students to pay tuition and register for course work at SIUE while completing the requirements for credit at one of these foreign institutions. Participation in an exchange program will meet the multicultural requirement for graduation. Students interested in studying abroad may obtain more information and an application from Dr. Stanford Levin, Director, International Exchange Program, Economics Department, Box 1102, School of Business, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026 (618-692-2542).

AREAS OF SPECIALIZATIONS,ELECTIVES, AND CAREER OPPORTUNITIES

Students seeking a Bachelor of Science degree may complete one of the specializations described below. Students are encouraged to discuss their career objectives and the various elective courses with a faculty adviser in the School of Business before making this decision. The School of Business Student Services office may be contacted for a list of the specializations and their requirements.



Radcliffe "Pug" Edmonds, Associate Professor of Economics works with Evsen Sinmaz (left) and Gaye Erkut during class.

ECONOMICS

The specialization in economics provides students with knowledge of analytical methods for solving basic problems affecting profit and growth of the business organization. In addition, economics offers courses that are fundamental to forecasting, planning, and budgeting. Graduates of the program are qualified for careers in administration and management of business firms, in banking and insurance, and in federal, state and local government agencies. Graduation with this specialization requires a 2.0 grade point average in economics courses.

ENTREPRENEURSHIP

The entrepreneurship specialization focuses on the special problems of new venture development and the management of the small business enterprise. The specialization prepares students for entrepreneurial and managerial roles in small ventures as well as for new venture management and "intrapreneurship" roles in larger firms. By careful selection of courses in other areas of business, students can prepare for positions in manufacturing, service, or retailing organizations. The specialization requires a practicum (MGMT 476) in which students work with start-up ventures, small businesses, or small business development groups to apply their knowledge to small business problems.

FINANCE

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

HUMAN RESOURCE MANAGEMENT

The human resource management specialization provides students with the general and technical knowledge and skills for entry-level positions and careers in the Personnel or Human Resource Management (HRM) function of organizations. Courses emphasize both the general theory of HRM, the expanding role of HRM in organizational effectiveness, the development and effective utilization of human resources in organizations, and the technical areas of selection, compensation, labor relations, training, and performance appraisal. The specialization prepares students for professional careers in a wide variety of organizations.

INTERNATIONAL BUSINESS

The international business specialization is an interdepartmental specialization emphasizing the increasingly global dimensions of business. Through courses focusing on the international dimensions of management, marketing, finance, and economics, students gain an understanding of the international aspects of business. The specialization is designed for students interested in positions in the areas of international trade and finance and industrial development. The School of Business also has agreements with several foreign universities and a foreign internship program through which students can experience the international aspects of education and work and enhance their foreign language capabilities.

MANAGEMENT

The management specialization provides students with the knowledge and skills necessary to become effective managers in organizations. The courses in this specialization emphasize the complex nature of organizations and the skills and knowledge necessary to manage human resources, design effective organizational systems, and diagnose and solve organizational problems. In addition, the specialization emphasizes the increasingly global nature of business and coping with change in the internal and external environments. The specialization provides the flexibility to accommodate students with a variety of interests and prepares them for managerial careers in private and public sector organizations.

MANAGEMENT INFORMATION SYSTEMS

The Management Information Systems specialization is designed to prepare students to develop business-related information systems. Students learn to design information systems in order to support decision-making and the operation of businesses and other organizations. The design process includes specification of hardware, software, and personnel.

MARKETING

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

PRODUCTION AND OPERATIONS MANAGEMENT

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

Students with a specialization in production and operations management are prepared for entry-level positions with career growth capability in the organizational functions of inventory control. Graduates are prepared to begin careers as plant managers, hospital administrators, transportation managers, or any managerial role where the duties involve scheduling, quality control, cost control, or inventory management.

MINOR FOR NON-BUSINESS MAJORS

Students who have already declared their major in a non-business field and who have completed their general education requirements may earn a minor in Business Administration by completing a minimum of 21 hours (maximum of 30 hours) in approved course work including the following courses: ACCT 200; ECON 111, 112; GBA 300; MGMT 340; and MKTG 300. Electives from other business courses are to be chosen in consultation with a business adviser and should be related to the student's educational and career objectives.

To earn a minor in Business Administration, students must complete a minimum of nine hours in residence, which must include GBA 300, earn a grade of C or better in GBA 300, maintain at least a C average in all other course work leading to the minor, and have a cumulative GPA of at least 2.0. College of Arts and Sciences Economics majors may not count ECON 111, ECON 112, or any Economics major course in the 21 hours required for the Business Administration minor.

Students interested in a business minor should contact the School of Business Student Services office for assistance in planning a minor program.

BUSINESS ECONOMICS

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

ACADEMIC REQUIREMENTS

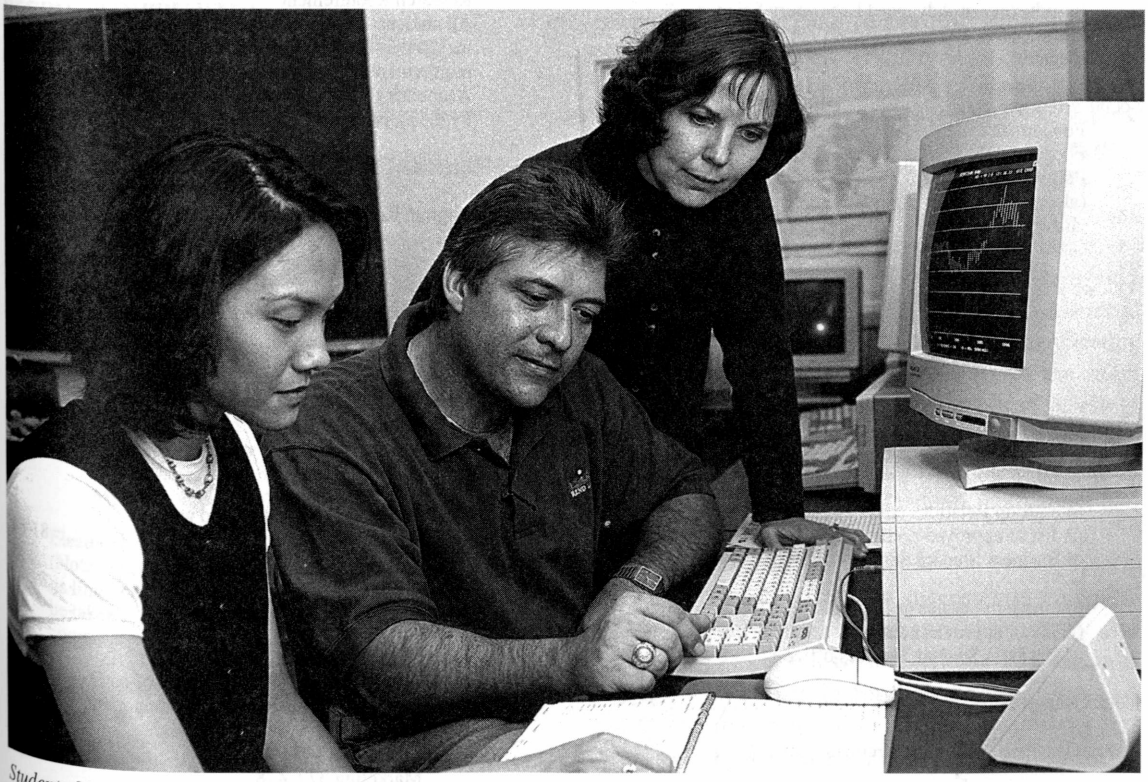
In addition to satisfying the Bachelor of Science degree requirements of the School of Business, students must fulfill these additional requirements: (1) maintain a 2.0 average in all economics courses, (2) earn a grade of C or better in Economics 417. No credit is granted for correspondence or extension courses.

MANAGEMENT INFORMATION SYSTEMS

The Bachelor of Science in Management Information Systems prepares students for entry into a professional career in business computing. The program is designed to provide students with skills in business systems analysis and design, business systems implementation, database design and implementation, and communications systems design. Students also obtain a breadth of knowledge in the business disciplines, including accounting, economics, finance, management, and marketing. This combination of education in the computing discipline and the business disciplines is widely sought after by employers today.

The demand for graduates with an undergraduate degree in Management Information Systems has risen consistently and continues to rise. Recent studies of projected occupational demand for graduates indicate that the computing and information systems field is one of the most rapidly-growing fields in business and service organizations. Positions in great demand include systems analyst, programmer/ analyst, network administrator, database designer, MIS project manager, systems consultant, and training specialist. Positions of emerging importance include telecommunications analyst, Internet specialist, and help desk consultant. Employers of information systems graduates include corporations, consulting firms, contract software development firms, small businesses, and government organizations.

To be admitted to the B.S. in Management Information Systems, students must meet all requirements for admission to the School of Business. Further information about the program can be obtained by contacting the Program Director within the Department of Management Information Systems and the advisers within the School of Business Student Services office. The program is supported by members of the MIS Advisory Board which represents approximately twenty business and service organizations in the St. Louis and southwestern Illinois regions. Their participation provides students with internship and project opportunities as well as job prospects upon graduation. Through this partnership with industry, the faculty are able to design courses using state-of-the-art methods and technologies which are greatly needed in the job market today.



Students Mei Lee (left) and Danny Micheletto work with their instructor as they study information from an information system that provides a direct link to a worldwide securities data base.

OTHER PROGRAMS

COOPERATIVE EDUCATION AND INTERNSHIPS

Internships are available for credit (see GBA 399). For enrollment certification purposes, University sponsored cooperative education participation is considered equivalent to full-time enrollment. This requires formal enrollment in an approved co-op course through the Career Development Center.

PROGRAM REQUIREMENTS

General Education — Hours

Skills Courses 15
- English 101, 102 6
- Speech 104 or 105 3
- Philosophy 106 3
- MIS 108* 3

Fine Arts and Humanities (must include one survey of literature course) 9
- Introductory Fine Arts or Humanities 3
- Introductory or Advanced Fine Arts or Humanities 3
- Advanced Fine Arts or Humanities 3

Natural Sciences and Mathematics 9
- Introductory or Advanced Laboratory Science 3
- Mathematics 120* 3
- Elective 3

Social Sciences 12
- Economics 111* 3
- Economics 112* 3
- Political Science 112 3
  (also meets Constitution requirement)
- History elective** 3

* Courses which require a grade of C or better

** A list of approved courses is available from the School of Business Student Services office. Students seeking the Bachelor of Science in Business Economics should take History 111b

Interdisciplinary Studies (IS)
(GBA 300 satisfies the IS requirements for business majors and minors)

Intergroup Relations (IR) 0-3
(A list of approved courses is available from the School of Business Student Services office.)

International Issues or International Culture 3
(A list of approved courses is available from the School of Business Student Services office.)

Total General Education hours 48-51

Special Business Major Requirements 4

- Management Science 251* 4

Total General Education and Special Business Major Requirements 52-55

GENERAL SCHOOL OF BUSINESS REQUIREMENTS

Program Core Requirements 29

- Accounting 200*
- Finance 320
- General Business Administration 300*, 490*
- Management 340, 341, 441
- Management Information Systems 342
- Marketing 300
- Production and Operations Management 315

Total Hours: General Education, Special Major and General School of Business Requirements 81-84

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE IN ACCOUNTANCY

Total hours for General Education and general School of Business Requirements 81-84

- General Business Administration 400 3
- Accounting 301, 302, 311, 312, 315, 321, 340, 401, 431 27
- Accounting Electives, 3 hours from the following courses: 3

  Accounting 450a-e
  or alternatives approved by the Department

  Research Requirement:
  All students must take an approved course that includes a significant research report. The research requirement normally will be met by taking Accounting 450a-e, or other course specified by the Department.

- Electives outside the School of Business 7

Total Program Requirements: 124

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Total hours for General Education and general School of Business requirements 81-84

- Accounting 210* 3
- General Business Administration 400 3
- Research Requirement 3
  to be selected from the following list of courses that contain a significant research component:

  Economics 417
  Marketing 377, 478
  MS 312
  MIS 470
  or approved non-Business research course.

Specialization Courses 12-15

Electives 16-19
(Note: Elective choice within School of Business is limited since at least 62 hours in total must be taken in non-business/General Education courses.)

Total Program Requirements: 124

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE IN BUSINESS ECONOMICS

Total hours for General Education and general 81-84
School of Business requirements

Accounting 210* 3
Economics 221, 301, 302, 343, 435, ...18
417 (satisfies School of Business research requirement)

Economics Electives 6
(Two courses are required
ECON 327 may be used to satisfy the IR requirement.)

Electives outside the School of Business 1-4

Other Electives 12

Total Program Requirements: 124

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE IN MANAGEMENT INFORMATION SYSTEMS

Total hours for General Education and general School . .81-84
of Business Requirements

Accounting 210* 3
General Business Administration 400 3

Research Requirement 3
MIS 470

Computing Core 24
CS 150, 151 6
MIS 270, 260, 450, 464, 468 15
Elective (one of the following 3
(CS 250, 312, 314, 320, 407, 438,
MIS 460, 472, 488, 490, or 495)

Electives 7
(Note: elective choice within School of Business is limited since at least 62 hours in total must be taken in non-business/General Education courses.)

Total Program Requirements 124

AFROTC

ADJUNCT FACULTY:
Boot, R. (Lt. Col., USAF); Johnston, T.; Ochoa, M.; Oppedal, J.; Prouhet, D.

AEROSPACE STUDIES

The Aerospace Studies program (AFROTC) is divided into two parts: The General Military Course, the freshman/sophomore level curriculum, and the Professional Officer Course, the junior/senior level curriculum. The General Military courses cover two main themes: The Air Force Today and The Air Force Way. The Professional Officer courses emphasize the professional development of the future Air Force Officer. The curriculum covers Air Force Leadership and Management and Preparation for Active Duty. Field trips to Air Force bases supplement classroom instructions and familiarize the cadet with Air Force operations and organizations.

Leadership Laboratory is taken two hours per week throughout the student's enrollment in the AFROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. The first two years of the Leadership Laboratory includes a study of Air Force customs and courtesies, drill and ceremonies, issuing military commands, instructing, directing and evaluating the preceding skills, studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. The last two years of the Leadership Laboratory consist of activities classified as advanced leadership experiences. They involve the planning and controlling of military activities of the cadet corps, the preparation and presentation of briefings and other oral and written communications, and providing interviews, guidance, and information which will increase understanding, motivation, and performance of other cadets.

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

Field Training provides leadership and officership training in a military environment, which demands conformity to high physical and moral standards. Within this structured environment, cadets are screened for officer potential as measured against field training standards. Motivation and professional development are achieved through various programs such as flight orientation, marksmanship, and survival training. Cadets in the four-year program participate in four weeks of field training. Cadets in the two or three year programs (except for prior AF service) must attend the six week Field Training session, which is identical to the four week program plus 90 hours of General Military curriculum. Field training is offered during the summer months at selected bases throughout the United States, usually between a student's sophomore and junior years. Major areas of study include Air Force Orientation, Officer Training, aircrew/aircraft orientation, survival training, base functions and physical training.

Students who apply for entry into the two or three year programs must complete successfully six weeks of field training prior to enrollment in the Professional Officer Course. The major areas of study included in the six week Field Training program are essentially the same as those conducted at four-week Field Training, plus the academic curriculum of the General Military Course including Leadership Laboratory. No direct academic credit is awarded for Field Training.

Federal and state scholarships are available for AFROTC cadets; any academic major may apply. Applications may be submitted by detachment personnel to Head Quarters Reserve Officers Training Corps (AFROTC), Maxwell Air Force Base, AL.

ARMY ROTC MILITARY SCIENCE

ADJUNCT FACULTY OF MILITARY SCIENCE:

Burns, H.J. (Lieutenant Colonel, United States Army); Greenberg, S.N.; Nazario, E.D.; Russell, T.J.; Teske, K.D.

MILITARY SCIENCE

The purpose of Military Science is to develop young women and men into junior commissioned officers for positions of responsibility in the Army Reserve, Army National Guard, or Active Army. Those who successfully complete the Reserve Officers' Training Corps program normally earn commissions as Lieutenants in the United States Army.

ARMY ROTC

ROTC may be completed in several different ways as outlined below.

1. Four-Year Option. Military Science is traditionally offered as a four-year option. It is best to start as a freshman, but special arrangements can be made for those who start as sophomores. The first two years of Military Science are voluntary (without service obligation) and designed to give students a perspective on their leadership ability and what the Army can offer them. Students who decide to continue in ROTC and pursue a commission, sign an agreement with the Department of the Army to accept a commission upon completion of the last two years of Military Science. In return the Army agrees to provide a subsistence allowance (up to $3,000) and to provide all necessary uniforms and Military Science books.

2. Two-Year Option. The two-year option is designed to provide greater flexibility in meeting the needs of students desiring commissions in the United States Army. SIUE students who do not participate in the four-year option or are community college transfer students are eligible for enrollment. Basic prerequisites for entering the two-year option are:

a. Students must be in good academic standing (minimum 2.0 GPA) and pass an Army medical examination.

b. Students must have two academic years of study remaining (undergraduate or graduate). If students are undergraduates, they must have junior status.

Students attend a six-week summer camp to obtain the knowledge acquired by students in the four-year option. Attendance at the basic camp does not obligate students in any way and is only intended to provide students experience with Army life and its opportunities. Students earn up to 10 credit hours and are paid approximately $750 for attendance at basic camp.

SIMULTANEOUS MEMBERSHIP

Students who qualify for simultaneous membership (members of the Army Reserve or National Guard) can complete the military science program in two years and earn more than $6,500 at the same time. Upon graduation, a student may request to stay in the reserve or select active duty.

VETERANS

Veterans of any of the Armed Forces, who are academically aligned, may qualify for advanced placement and should contact the Military Science office for details.

ROTC SCHOLARSHIPS

The Army Reserve Officers' Training Corps currently has 12,000 scholarships which pay for tuition and fees, books, and provides $150/ monthly for the academic year. These scholarships cover periods of four years, three years, and in some circumstances, two years. SIUE freshmen should apply in January for the three-year scholarships. Special consideration for scholarships is given to students in engineering, nursing, business, and any of the physical sciences. Scholarship students normally incur a four-year active duty obligation. They may request reserve duty to serve with the National Guard or Army Reserve, or may initially compete for scholarships which guarantee reserve or guard duty.

In addition, Illinois State Army ROTC scholarships are available. These scholarships pay for tuition on a charter basis and are renewable. Please contact the Military Science office for details.

QUALIFICATIONS

All students who desire to enter the Army Reserve Officers' Training Corps must be United States citizens, be in good physical condition, and have high moral character. Students must be at least 17 years old to enroll and not over 32 when they receive their commission. Additional qualifications to be admitted into the advanced course include an academic average of C or better and passing an Army medical examination.

ACADEMIC PREPARATION

The SIUE Army Reserve Officers' Training Corps academic preparation consists of two parts: (1) earning a degree in the student's chosen academic subject, and (2) completion of 22 semester hours (four year option) or 12 semester hours (two-year option) of the Military Science curriculum. The courses in Military Science are University level academic courses. The curriculum consists of classroom instruction and a leadership laboratory in which students receive leadership experience. Additionally, each contracted cadet is required to enroll in a few select professional military education courses.

LEADERSHIP LABORATORY

Leadership Laboratory is required of all students enrolled in Military Science classes. Classes are held two hours each week unless otherwise designated. In addition, students attend one mandatory field training exercise each semester. Leadership Laboratory develops individual military skills and leadership ability through participation in drill and ceremonies, survival training, rappelling, field training exercises and exposure to progressively greater responsibilities within the Cadet Corps organization.

EXTRACURRICULAR ACTIVITIES SPONSORED BY ARMY ROTC

Army ROTC students are encouraged to participate in a wide variety of extracurricular activities designed to enhance the development of individual leadership skills and military knowledge. These activities include the Ranger Challenge Team, Drill Team, Color Guard, Cadet Club and intramural sports. Students not enrolled in ROTC may participate in these activities with the permission of the Professor of Military Science.

GRADUATE STUDY

The Army realizes the importance of a graduate degree for its personnel. There are several programs available to assist ROTC graduates in obtaining an advanced degree. The Army sends selected Second Lieutenants immediately to graduate school (with full pay and allowances) to pursue advanced degrees in select disciplines. Other officers may request postponement of active duty for two years to continue graduate study. Students who are accepted into medical school may take up to four years to complete their studies. There are numerous opportunities for an officer to complete a Master's degree in service and receive financial assistance from the Army. Educational assistance opportunities in the Guard and Reserve tend to vary by state.

Members of the Army ROTC on campus serve as the color guard at the Nursing convocation. The students are (left to right) Cory Ramsey, LaVonne Barnes, Tonia Festerman and Kellie Johnson.

Sandy Engelke works with first grade students during her student teaching assignment. She is now employed as an elementary teacher in the Bethalto School District.

SCHOOL OF EDUCATION

dean gary hull

SCHOOL OF EDUCATION

The School of Education offers undergraduate programs in professional education, psychology, and speech pathology and audiology. Professional education programs prepare students for teaching positions in early childhood, elementary, health education, secondary, special, and physical education. The Department of Psychology offers both a comprehensive major and a program for students who wish to pursue graduate study in Psychology. Speech Pathology and Audiology majors pursue a program of study for the purpose of helping individuals with communication disorders. Through any of the undergraduate programs, students may also become qualified to enter graduate studies in the School of Education.

ADMISSION AND ADVISEMENT

Procedures for admission to different programs in the School of Education vary; therefore, students should consult the appropriate department chair for specific information. Teacher education students must be officially admitted to a program in the designated department to secure a student teaching assignment, be graduated in teacher education, and qualify for a teaching certificate. For admission to any program in teacher education, a student must present a grade point average of at least 2.5, must receive a grade of C or better in both English 101 and 102, and pass a test of basic skills.

Undergraduate advisers work with students interested in pursuing any of the programs offered by the School of Education. Students should consult with advisers to obtain information about employment opportunities, courses in their field, certification requirements, and aptitudes associated with successful professional practice. Students may arrange to see advisers by requesting appointments in the office of the appropriate department in the School of Education. Undergraduate advisers for certification in Early Childhood, Elementary, Secondary, and Special Education are located in the Office of Clinical Experience, Certification and Advisement.

STUDENT APPEALS

Student appeals relating to teacher education and certification recommendations may be made to the School of Education Student Affairs Committee. In appealing such matters, students have the right to be represented by an attorney. For further information, please contact the Associate Dean for Instruction, School of Education.

DEGREES AND CERTIFICATES

The School of Education grants the Bachelor of Science degree with majors in Early Childhood Education, Elementary Education, Health Education, Physical Education, and Special Education. The Bachelor of Arts and Bachelor of Science degree with majors in Psychology and Speech Pathology and Audiology are also offered. Upon successful completion of a teacher education program, students qualify for the teaching certificate in the State of Illinois and may also qualify for teaching certificates in other states. Students taking degrees in other majors may qualify for a secondary teaching certificate by completing an approved program in teacher education. Speech pathology majors who wish to pursue work in public schools must first obtain a masters degree. Those interested in this option should consult with the appropriate adviser.

ACCREDITATION

The following undergraduate teacher education programs have received approval from the Illinois State Board of Education and are accredited by the National Council for the Accreditation of Teacher Education. Students should check with their advisers regarding the differences between Special K-12 certificates and other certificate programs.

CERTIFICATES

Early Childhood
Elementary (K-9)

SECONDARY CERTIFICATES (6-12)

Art
Biology
Business
Chemistry

English
French
General Science Education
Geography
German
Health Education
History
Mathematics
Physical Education
Physics
Political Science
Spanish
Speech Communication

SPECIAL CERTIFICATES (K-12)

Art
Emotionally Disturbed
Music
Learning Disabilities
Physical Education
Educable Mentally Handicapped
Speech Pathology
Pre-student Teaching Clinical Experiences

The Illinois State Board of Education requires a minimum of 100 clock hours of pre-student teaching clinical experiences in the area for which a student seeks certification. This experience, which must be completed prior to student teaching, is arranged through the Office of Clinical Experiences, Certification, and Advisement, Bldg. 11, Room 1122.

STUDENT TEACHING

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

Student teaching requires full-day involvement in a public school. Accordingly, 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 their time and energy. Requests for course overload during student teaching must be approved by the Department Chair and the Associate Dean for Instruction of the School of Education. Student teaching is not available during the summer term.

HOW TO APPLY

The student teaching application procedure begins during the year prior to the assignment. Each department which has a program leading to teacher certification has established policies regarding the 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 for application information. Student teaching application packets may be obtained from the Office of Clinical Experiences, Certification and Advisement, Bldg. 11, Room 1122. Students should check carefully for application deadline dates.

PREREQUISITES

Following are the prerequisites for registering and receiving an assignment for student teaching:

1. All prospective teachers, regardless of teaching field or academic major, must be admitted to and follow an approved teacher education program. Students must, therefore, consult with a School of Education adviser to make certain 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 96 hours. Students must have a minimum cumulative grade point average of 2.5 in advance of the student teaching assignment. Transfer students must be in residence for one semester prior to beginning student teaching.
3. Students must have a 3.0 grade point averages or higher in professional education coursework. No grade lower than a C is acceptable in professional education courses.
4. Students must complete all required major and professional education courses, as well as all pre-student teaching clinical experiences.
5. In compliance with University policy, record of a physical examination taken no more than 90 days prior to the student teaching assignment must be on file in University Health Service. A report of a tuberculosis skin test or X-ray taken within the same period is also required.
6. In addition to the physical examination record, the student teaching application packet includes a student profile sheet, record of eligibility, and Illinois certification application. All forms must be completed with assistance from other

University personnel and submitted by the posted due date.

The School of Education maintains several video recording studios which afford students opportunities to practice specific teaching skills under specified conditions. Typically, students present short lessons to small groups of students. Subsequently, tapes of the lessons are analyzed and evaluated by the students and their instructors. Laboratory assignments comprise part of the requirements in teacher education courses. In addition to the preparatory function, the laboratory facilities enable faculty and students to study the teaching process.

CURRICULUM AND INSTRUCTION

PROFESSORS:
Baden, D.J. (Associate Dean); Meyer, V.E.; Nall, S.M.; O'Brien, T.C.; Patty, D.L.; Rockwell, R.E.; Williams, R.A.

ASSOCIATE PROFESSORS:
DeToye, L.M.(Chair); Wilson, R.G.; Winnett, D.A.

ASSISTANT PROFESSORS:
Borgia, E.T.; Gallagher, W.J.; Havis, B.J.; Jewett, T.O.; Koehnecke, D.S.; Owens, J.L.; Searcy, L.; Smith, R.E.; Whipple, M.M.

INSTRUCTOR:
Woodcock, N.

CAREER OPPORTUNITIES

The Department of Curriculum and Instruction offers programs leading to the Bachelor of Science Degree in Education which fulfill requirements for certification to teach Elementary Education, Early Childhood Education, and Secondary Education. Elementary certification includes kindergarten through grade nine. With the Illinois Early Childhood Certificate, students are certified to teach children from birth through grade three. The Secondary Certificate provides certification for teaching grades six through twelve. Certification in Art Education, Music Education, and Physical Education provides certification for teaching Kindergarten through grade twelve.

Randall Smith, Assistant Professor in Curriculum and Instruction, works with elementary education majors Connie Cassnio, Wendy Chamberlain, Jill Thall and Carrie Boyer.

David Winnett, Associate Professor in Curriculum and Instruction works with school children on an outdoor science project.

ELEMENTARY EDUCATION

The program in Elementary Education requires 54 hours of general education courses, 53 hours of professional education courses, 3 hours of health education course and 18 hours in an academic emphasis. Transfer students may be required to complete additional hours in general education to meet certification requirements.

TO BE ADMITTED, STUDENTS MUST:

1. Complete 42 semester hours of course credit and have a cumulative grade point average of 2.5 or higher, including past institutions;
2. Pass the designated basic skills test (TAP);
3. Receive a grade of C or better in English 101, English 102, Speech 103, Philosophy 106, and Statistics 107 or their equivalents, and
4. Successfully complete the introductory course, Curriculum and Instruction 200.

Requirements 1, 2, and 3 above must be met before students may enroll in Curriculum and Instruction courses. The basic skills test is given only at scheduled times; therefore, students should consult the Office of Clinical Experiences, Certification and Advisement in Classroom Building II, Room 1110 for specific dates for the test. Registration is through Instructional Services in the Peck Building, Room 1404.

The elementary education program is field based, involving students and professors in regular participation in public school classrooms. The courses in Field I and Field II require students to participate in the public schools, thereby meeting and exceeding the state requirement of at least 100 hours of clinical experience. Students must pre-register for all field experience courses in the Office of Clinical Experiences, Certification and Advisement.

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

To enter Field I and move to Fields II and III, the student must maintain a 2.5 GPA, and earn a grade of C or better in all field courses. Normally, a student also must receive a satisfactory recommendation from the cooperating teacher and University instructor.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE DEGREE ELEMENTARY EDUCATION

Students seeking certification in Elementary Education must meet both SIUE General Education requirements and Illinois State Board of Education Minimum Requirements for State Certification.

I. General Education 54

A. Skills (including Mathematics) 15
English 101 — 3
English 102 — 3
Speech 103 — 3
Philosophy 106 — 3
Statistics 107 — 3

B. Fine Arts and Humanities 9
Art 111 — 3
Music 111 — 3
Advanced Literature — 3

C. Interdisciplinary Studies 3
(to meet non-western culture requirement)
Interdisciplinary Studies 324 or 326 — 3

D. Natural Sciences and Mathematics 15
(Both biological and physical sciences needed, including one laboratory component)
Introductory Science — 3
Introductory Science — 3
Advanced Science — 3
Advanced Science — 3
Introduction to Mathematics — 3

E. Social Sciences 12
History 200 or 201 — 3
Psychology 201 — 3
Political Science 112 — 3
Geog/Soc/Econ/Psy 111 — 3

II. Health and Physical Development 3
Health 201 — 3

III. Academic Emphasis 18
(Including 9 hours minimum at 300 or 300+ level; consult adviser for options)

IV. Professional Education 53

A. Core and Elementary
Pre-clinical Coursework 17
Curriculum and Instruction 200 — 2
Education Foundations 380 — 2
Education 381 — 1
Education 305 — 3
Special Education 400 — 3
Art 300a — 3
Physical Education 330 — 3

B. Field Experience I 9
Curriculum and Instruction 314 — 3
Curriculum and Instruction 413 — 3
Curriculum and Instruction 337 — 3

C. Field Experience II 15
Curriculum and Instruction 338 — 3
Curriculum and Instruction 343 — 3
Curriculum and Instruction 445 — 3
Curriculum and Instruction 415 — 3
Curriculum and Instruction 442 — 3

D. Field Experience III 12
Curriculum and Instruction 451 — 10
Curriculum and Instruction 452 — 2

TOTAL 128

The Senior Project, a University project, is an integral part of the course which accompanies student teaching, CI 452. Additional details are provided by the University student teaching supervisor who serves as the CI 452 course instructor.

Students pursuing a career in teaching should make certain their courses are in compliance with University and departmental degree requirements as well as state certification requirements. Information regarding these requirements is provided to undergraduates by the Education advisers located in the Office of Clinical Experiences, Certification, and Advisement. Important notices are posted for review.

Students are obligated to read the University catalog and to study the Teacher Education Handbook which are available at the SIUE campus bookstore. The Teacher Education Handbook is required for the Introduction to Education (CI 200) course. Students are encouraged to purchase and review it as soon as they identify an interest in the teaching profession. Students should then schedule an appointment with a School of Education adviser.

EARLY CHILDHOOD EDUCATION

The Early Childhood Program consists of 57 semester hours of professional education courses, 3 hours of health education and 18 hours in an academic concentration. Transfer students may be required to complete additional hours in general education to meet certification requirements.

Policies and procedures relative to admission, retention, and exit requirements explained in the previous elementary education section apply to students in the early childhood education program as well. Students regularly participate throughout the program in pre-kindergarten public school programs, child care centers, kindergarten and primary classrooms. The early childhood program provides opportunities for students to accumulate at least 100 hours of pre-student teaching clinical experiences.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE DEGREE EARLY CHILDHOOD EDUCATION

Students seeking certification in Early Childhood Education must meet both SIUE General Education requirements and Illinois State Board of Education Minimum Requirements for State Certification.

I. General Education 54

A. Skills (including Mathematics) 15
English 101 — 3
English 102 — 3
Speech 103 — 3
Philosophy 106 — 3
Statistics 107 — 3

B. Fine Arts and Humanities 9
Art 111 — 3
Music 111 — 3
Advanced Literature — 3

C. Interdisciplinary Studies 3
(to meet non-western culture requirement)
Interdisciplinary Studies 324 or 326 — 3

D. Natural Sciences and Mathematics 15
(Both biological and physical sciences needed, including one laboratory component)
MATH 111 or 120 — 3
PHYS 111, CHEM 111 or ESCI 111 — 3
Biology Course — 3
SCI 341 (lab) or Advanced Science — 3
Advanced Science — 3

E. Social Sciences 12
History 200 or 201 — 3
Political Science 112 — 3
Geog/Soc/Econ/Psyc 111 — 3
Psychology 201 — 3

II. Health and Physical Development 3
Health 201 — 3

III. Academic Emphasis 18
(including 9 hours minimum at 300 or 300+ level; consult adviser for options)

IV. Professional Education 53

A. Core and Early Childhood Coursework 23
Curriculum and Instruction 200 — 2
Education 305 — 3
Special Education 400 — 3
Curriculum and Instruction 201 — 3
Curriculum and Instruction 420 — 3
Curriculum and instruction 421 — 3
Special Education 490 — 3
EDFD 380 — 2
EDUC 381 — 1

B. Field Experience I 6
Curriculum and Instruction 317 — 3
Curriculum and Instruction 423 — 3

C. Field Experience II 15
Curriculum and Instruction 338 — 3
Curriculum and Instruction 343 — 3
Curriculum and Instruction 445 — 3
Curriculum and Instruction 415 — 3
Curriculum and Instruction 442 — 3

D. Field Experience III 12
Curriculum and Instruction 450 — 5
Curriculum and Instruction 451 — 5
Curriculum and Instruction 452 — 2

TOTAL 131

REQUIREMENTS FOR TEACHER CERTIFICATION SECONDARY EDUCATION

Secondary Education is a sequence of professional courses leading to a teaching certificate for secondary schools. In the first two years, students complete a program of general education in Skills, Fine Arts and Humanities, Social Sciences and Natural Sciences and Mathematics. During this time, students also enroll in Curriculum and Instruction 200, Introduction to Education. During the third and fourth years, students ordinarily complete work in the major teaching field and in professional education. Students must complete the mandatory 100+ pre-clinical hours prior to student teaching.

Students wishing to teach at the secondary level may choose one of two options:

Obtain a Bachelor of Arts degree in a major field and obtain teaching certification through courses offered by the Department of Curriculum and Instruction in the School of Education. (For example, a Bachelor of Arts degree in History through the College of Arts and Sciences with teacher certification.) This option requires that students take a full year of a foreign language, an oral communication course and critical thinking, statistics or computer programming.

Obtain a Bachelor of Science degree in a major field and obtain teaching certification through courses offered by the Department of Curriculum and Instruction in the School of Education. (For example, a Bachelor of Science degree in History through the College of Arts and Sciences with teacher certification.)

Students do not obtain a major in Secondary Education in either of the two options. In the two options, students major in an academic discipline other than education and the degree is granted by the College or School which offers the appropriate major. Some disciplines do not offer the options identified

above. In order to choose the degree option which best suits their needs and career aspirations, students should consult with an adviser in the major field and an adviser in the School of Education.

Regardless of the degree option chosen, teacher certification requires admission into teacher education through the School of Education, specific general education and professional education courses, 100 pre-clinical hours, and student teaching.

ADMISSION REQUIREMENTS FOR TEACHER CERTIFICATION, SECONDARY EDUCATION

To be admitted into the teacher certification program, students must:

1. Complete 42 semester hours of course credit and have a cumulative grade point average of 2.5 or higher, including past institutions;
2. Pass the designated basic skills test (TAP);
3. Receive a grade of C or above in English 101, English 102, Speech Communication 103, 104 or 105, Mathematics 106, or Statistics 107 or their equivalents, and
4. Complete successfully the introductory course, Curriculum and Instruction 200.

DEGREE REQUIREMENTS: SECONDARY TEACHER CERTIFICATION

The guidelines which follow pertain to the completion of certification requirements. Some programs may take more than eight semesters for completion of certification requirements, depending on the teaching fields selected.

I. General Education 48-50
Students are required to fulfill all University General Education requirements. Within the General Education program, the following specific requirements for certification may be fulfilled concurrently. A grade of C or above is required in all skills courses.

A. Skills Option A — 15 hours
English 101
English 102
Speech Communication 103
Philosophy 106 or Mathematics 106*
Computer Science 108*, MIS 108 or Statistics 107*

Students may choose General Education Skills Option B, with a foreign language; however, they are also required to complete an oral communication course, and a critical thinking or computer programming course.

In accordance with University policy, students are required to complete a total of ten courses in the three Arts and Sciences areas. The distribution of the ten courses depends upon the students' majors and interests. Specific requirements for teacher certification are indicated below. These requirements cannot be waived.

B. Fine Arts and Humanities — 9 or 12 hours This requirement includes one English course.
C. Natural Science and Mathematics — 9 or 12 hours
This requirement includes a college level mathematics course* as well as 9 semester hours of science to include one biological science course and one physical science course (one laboratory course must be included).
D. Social Sciences — 9 or 12 hours
Students are required to complete Psychology 111, one of History 200 or 201, and Political Science 112 (one of the history courses or Political Science 112 may also be used to fulfill the Constitution requirement).
E. Interdisciplinary Studies — 3 hours
A course in non-western or third-world culture is required.

II. Health and Physical Development 3
Health Education 201

III. Major in Teaching Field 33-42
(See departmental outlines for specific information for each major)

IV. Minor, Second Teaching Field, or supporting courses 12-25
(Many students will need to meet the requirements for a second teaching field. In some cases, students will earn a minor in a specific subject. Other students may take courses which support their major but do not constitute a complete minor in an area. In some cases the second teaching field may require more extensive coursework than is required in the minor. Please consult the Secondary Education adviser for details.)

V. Professional Education 28
(Art, Health Education, Music and Physical Education follow a different set of professional education requirements as listed in the appropriate sections of the catalog.) A grade of C or better is required in all professional education courses.
Curriculum and Instruction 200 — 2
Education Foundations 380 — 2
Education 381 — 1
Special Education 400 — 3
Education 305 — 3
Curriculum and Instruction 315a — 2
Curriculum and Instruction 315b — 2
Curriculum and Instruction 440 — 3
Curriculum and Instruction 352 — 10

TOTAL: 124-128

* Students may meet the mathematics requirements by taking STAT 107 or MATH 106 in the skills area.

ADDITIONAL UNIVERSITY REQUIREMENT

The University requires students to submit a Senior Project. This requirement is an integral part of the program. Details are available in the adviser's office.

EDUCATIONAL LEADERSHIP

PROFESSORS:
Ahlbrand, W.P. (Associate Dean); Hull, G.L. (Dean); Nelson, C.E.; Popp, J.A.

ASSOCIATE PROFESSORS:
Andris, J.F.; Hildebrand, R.F.; Nelson, W.A. (Chair); Polite, M.M.; Richards-Ellsworth, R.R.; Smith, C.A.

ASSISTANT PROFESSORS:
Repovich, L.D.; Crooks, S.M.

INSTRUCTOR:
Taylor, M.H.

The Department of Educational Leadership primarily offers graduate degree programs. However, the faculty provides a number of support courses which are integral to all undergraduate teacher education programs. In addition, the Department offers a minor in Instructional Technology.

MINOR IN INSTRUCTIONAL TECHNOLOGY

Undergraduate students may obtain a minor in Instructional Technology. A minor consisting of 21 hours for non-education majors and for students intending to teach at the secondary level is offered through the Educational Leadership Department. Elementary education majors may also elect to pursue selected courses in Instructional Technology. Required courses for the minor are Instructional Technology 410 and Instructional Technology 435. Additional courses for the minor should be scheduled with the assistance of the Instructional Technology Program Director in the Educational Leadership Department, Bldg. III, Room 1117.

HEALTH, RECREATION AND PHYSICAL EDUCATION

PROFESSOR:
Baker, John A.W. (Chair)

ASSOCIATE PROFESSORS:
Covington, N.K.; Goldsmith, M.D.; Kristoff, L.D.; Luedke, G.C.

ASSISTANT PROFESSORS:
Bigham, E.M.; Klein, N.; Lox, C.; Prince, A.R.; Treasure, D.C.; Woodard, R.

The Department of Health, Recreation and Physical Education offers undergraduate programs for students interested in careers in health education or physical education. Students interested in careers in physical education have three emphases from which to choose while those in health have two options.

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

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

HEALTH EDUCATION

Drawing from the biological, social, and behavioral sciences, the program in Health Education provides knowledge and skills essential for functioning as a Health Educator in today's challenging world. Students choosing to major in Health Education will be required to select from two program options: School Health Education or Community Health Education.

For those choosing School Health Education, the program leads to the Illinois Secondary Teaching Certificate which applies to the teaching of Health in grades six through twelve. For those selecting Community Health Education, the program provides the knowledge and skills necessary to become certified as a Health Education Specialist. Community Health Educators find employment opportunities in public health agencies; volunteer and private agencies; hospitals and other health care settings; local, state, and national governmental agencies; and business and industrial settings.

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

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE DEGREE
HEALTH EDUCATION
SCHOOL HEALTH OPTION

ENTRANCE REQUIREMENTS

To be admitted, students must present a minimum GPA of 2.5 as well as meet all other teacher education admission requirements. To be retained, majors must maintain a GPA of 2.5 in their SIUE course work and obtain a grade of B or better in HED 201 and grades of C or better in all HED major classes.

EXIT REQUIREMENTS

Students are required to complete a Senior Assignment. Successful completion of an appropriate student teaching assignment culminates the student's professional preparation.

DEGREE REQUIREMENTS

General Education .....52 hours
- Written Expression 6
  - ENG 101 3
  - ENG 102 3
- Option A — Skills 9
  - SPC 103 or 105 3
  - MATH or PHIL 106 3
  - CS 108 or STAT 107 3
- Introductory Courses 19
  - Fine Arts and Humanities 3
    - ENG 111 3
  - Natural Sciences and Mathematics ...10
    - BIOL 222 3
    - CHEM 120a and 124a 4
    - MATH 111 3
  - Social Sciences 6
    - PSYCH 111 3
    - SOC 111 3
- Advanced Courses 15
  - Fine Arts and Humanities 6
    - Choice:
    - SPC 223 recommended 3
    - Choice:
    - ENG 340 recommended 3
  - Natural Sciences and Mathematics 3
    - BIOL 203 3
  - Social Sciences 6
    - POLS 112 3
    - HIST 200 or 201 3
- Interdisciplinary Course 3
  - IS 324 or 326

Health Education Core Major Requirements .....30 hours
- HED 201, 205, 250, 334,
- HED 355, 360, 455, 470,
- NURS 203, BIOL 240A

School Health Education Requirements .....37 hours
- HED 460, 465, 471
- CI 200, 315b, 352k,
- EDFD 380, EDUC 305, 381, SPE 400

Second Teaching Field .....14 hours

Total Hours Required for Graduation .....133 hours

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE DEGREE
HEALTH EDUCATION
COMMUNITY HEALTH EDUCATION OPTION

ENTRANCE REQUIREMENTS

To be admitted, students need a minimum GPA of 2.5 and completion of English 101 and 102 with grades of C or above. To be retained, majors must maintain a GPA of 2.5 in their SIUE course work and obtain a grade of B or better in HED 201 and grades of C or better in all HED major classes.

EXIT REQUIREMENTS

Students will be required to complete a Senior Assignment. Successful completion of an appropriate field experience will culminate the student's professional preparation.

DEGREE REQUIREMENTS

General Education .....49 hours
- Written Expression 6
  - ENG 101 3
  - ENG 102 3
- Option A — Skills 9
  - SPC 103 or 105 3
  - MATH or PHIL 106 3
  - CS 108 or STAT 107 3
- Introductory Courses 16
  - Fine Arts and Humanities 3
    - Choice of 111 approved courses 3
  - Natural Sciences and Mathematics 7
    - BIOL 111 3
    - CHEM 120a and 124 a 4
  - Social Sciences 6
    - PSYCH 111 3
    - SOC 111 3

Advanced Courses 15
Fine Arts and Humanities 6
Choice of approved courses . .6
Natural Sciences and Mathematics 3
BIOL 203 3
Social Sciences 6
Choice:
SOC 481 recommended 3
HIST 200 or 201 3
Interdisciplinary Course 3
Choice:
IS 342 recommended 3

Health Education Core Major Requirements . . . . . .30 hours
HED 201, 205, 250, 334
HED 355, 360, 455, 470
NURS 203, BIOL 240A

Community Health Education Requirements . . . . . .39 hours
HED 313, 390, 391, 405
HED 410, 463, 464, 499
SPC 223, PSYC 206

Approved Major Electives . . . . . .9 hours
Three or more courses selected from the following:
HED 400, 460, 462, 465, 471, 489 or from appropriate disciplines approved by the adviser.

Total Hours Required for Graduation . . . . . .127 hours

HEALTH EDUCATION MINOR REQUIREMENTS

The Department of Health, Recreation, and Physical Education offers a minor in Health Education which may be selected by majors in any field. A minor in Health Education may assist those who wish to receive teacher certification in Health, but it is still necessary to complete a major in an approved certification program.

The minor consists of 21 semester hours. Students are required to take HED 201, 205, and 355. The remaining 12 hours are chosen from other Health Education courses with the consent of an adviser. Students desiring the teacher certification described above must take HED 250, 460, 470 and 471 in addition to the required courses listed above. Students desiring a community health education focus should complete HED 390 and 391.

PHYSICAL EDUCATION

MAJOR PROGRAMS

The major in Physical Education requires a minimum of 32 semester hours, including 17 hours in course work which provides a theoretical perspective, 7 hours in skill techniques, and 8 hours of electives. However, students who plan to obtain a teaching certificate must complete additional courses. The number of courses will vary according to whether students are interested in the secondary (6-12) or special (K-12) certificate. Requirements for each certificate differ and students should contact an adviser for additional information. Completing all requirements for the teacher certification program may necessitate additional time beyond the traditional four year degree.

MINOR PROGRAMS

Two minors are available, one for students who wish to study physical education as a matter of personal interest, the other for students who plan to coach in either a school or non-school setting. Neither of these minors will certify students to teach physical education in K-12 schools in Illinois.

ACTIVITY COURSES

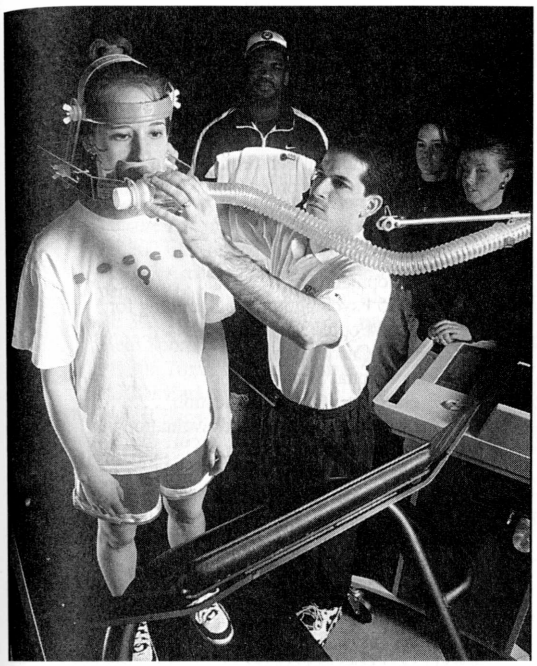
In addition to the major and minor, the Department of Health, Recreation and Physical Education offers a variety of physical activity courses. These courses, numbered PE 112 through 260 may be taken on a Pass/No Credit basis. Additionally, PE 270, Personal Wellness, is offered.

ADMISSIONS AND ENTRANCE REQUIREMENTS FOR MAJORS AND MINORS

Prior to completing the application for a major or minor, students must remedy all high school deficiencies and complete all academic development courses. To be admitted to a program in physical education, students not seeking teacher certification must present a grade point average of 2.5. Students seeking teacher certification must present a grade point average of 2.5 and meet all other entrance requirements specified by the School of Education which pertain to teacher certification requirements.

RETENTION STANDARDS FOR ALL MAJORS

In order to remain in good standing in the program, students must maintain a cumulative grade point average of 2.5 for noncertification programs and a grade point average of 2.5 for certification programs.



Assistant Professor Kurt Lox of Health, Recreation and Physical Education monitors a readout as a student exercises on a treadmill.

To remain in good standing, students must achieve a specified grade in the major courses according to these standards: for skill technique courses, students may receive a C grade in no more than two courses (all other grades must be A or B); for theory courses, students may receive a grade of D in only one course and a grade of C in no more than four courses. All other grades must be A or B. Students are required to achieve a grade of A or B in PE 330 and PE 435.

EXIT REQUIREMENTS FOR ALL MAJORS

Courses must be repeated if the minimum grade expectations are not met. If pursuing the major with teacher certification, completion of student teaching and all other requirements pertaining to eligibility for secondary or K-12 teacher certification must be met. All students must complete the Senior Assignment which demonstrates synthesis of the major concepts of the discipline as a part of the course requirements in PE 455 or PE 460.

RETENTION STANDARDS — COACHING MINOR

In order to remain in good standing in the minor program for coaching, students must maintain a grade point average of 2.25. Students may earn a D in only one course and a C in only three courses for the minor. All other grades must be an A or B.

RETENTION STANDARDS FOR THE PHYSICAL EDUCATION MINOR

To remain in good standing in the Physical Education minor, students must maintain a grade point average of 2.25. In required and elective skill technique courses students may earn a grade of C in no more than two courses; all other grades must be A or B. For the required and elective theory courses, students may earn only one D and no more than two C grades. All other grades must be A or B.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE DEGREE PHYSICAL EDUCATION

GENERAL EDUCATION .....48 hours
- Written Expression 6
  ENG 101 and ENG 102

- Option A — Skills 9
  SPC 103 or 105; CS 108 or STAT 107;
  MATH 106 or PHIL 106

- Introductory Courses 15
  Fine Arts and Humanities (Select one) 3
  ART 111; ENG 111; FL 111; MUS 111; PHIL 111;
  SPC 111; THEA 111
  Natural Sciences and Mathematics 6
  BIOL 111, CHEM 120a and 125a or PHYS 130a
  Social Sciences 6
  PSYC 111 and SOC 111

- Advanced Courses 15
  Fine Arts and Humanities 6
  One of: ENG 207, 370, 371, 403
  One of: ENG 202, 203, 204, 205, 211, 212, 340
  Natural Sciences and Mathematics 3
  BIOL 200 or 205
  Social Sciences 6
  POLS 112 and HIST 200 or 201

- Interdisciplinary Course 3

PHYSICAL EDUCATION .....32 hours

- Skill Techniques 7
  - PE 300 Strength Training and Fitness .1
  - PE 301 Aquatic Activities and Lifetime Leisure Pursuits 2
  - PE 307 Basketball, Soccer, Volleyball .2
  - PE 303 Archery, Badminton, Bowling .2
  - OR
  - PE 304 Golf, Tennis, Racquetball 2
- Theoretical Base 17
  - PE 315 Homokinetics I 3
  - PE 316 Homokinetics II 3

PE 318 Basic Concepts 2
PE 420 Physiological Effects of Motor Activity 3
PE 440 Psychological Perspectives of Physical Education and Sport 2
PE 450 Cultural Perspectives of Physical Education and Sport 2
PE 460 Internship in Physical Education 2
Electives 8
(Select any additional PE 300/400 level courses)

Second Major and/or Minor(s) .....44 hours

Total Hours for Graduation .....124 hours

PHYSICAL EDUCATION MAJOR SECONDARY (6-12) CERTIFICATION

GENERAL EDUCATION .....54 hours

Written Expression 6
ENG 101 and ENG 102
Option A — Skills 9
SPC 103 or 105; CS 108 or STAT 107; MATH 106 or PHIL 106
Introductory Courses 18
Fine Arts and Humanities (Select one) 3
ART 111; ENG 111; FL 111; MUS 111; PHIL 111; SPC 111; THEA 111
Natural Sciences and Mathematics 9
BIOL 111 and MATH 111; CHEM 120a and 125a; or ESCI 111; PHYS 130a
Social Sciences 6
PSYC 111 and SOC 111
Advanced Courses 18
Fine Arts and Humanities 6
Select one from:
ENG 207; 370; 371; 403
Select one from:
ENG 202; 203; 204; 205; 211; 212; 340
Natural Sciences and Mathematics 3
Select one from:
BIOL 203; BIOL 205; SCI 341
Social Sciences 9
POLS 112 and HIST 200 or 201
Select one from: HIST 112; 352. 354; 356; 358; 360; 454
Interdisciplinary Course 3

PHYSICAL EDUCATION .....50 hours

Skill Techniques 13
PE 300 Strength Training and Fitness .1
PE 301 Aquatic Activities and Lifetime Leisure Pursuits 2
PE 302 Educational Rhythms 1
PE 303 Archery, Badminton, Bowling .2
PE 304 Gold, Tennis, Racquetball 2
PE 305 Track & Field, Wrestling, Field Sports 2
PE 306 Tumbling and Gymnastics 1
PE 307 Basketball, Soccer, Volleyball .2

Theoretical Base 15
PE 315 Homokinetics I 3
PE 316 Homokinetics II 3
PE 318 Basic Concepts 2
PE 420 Physiological Effects of Motor Activity 3
PE 440 Psychological Perspectives of Physical Education & Sport 2
PE 450 Cultural Perspectives of Physical Education & Sport 2

Pedagogical Base 22
PE 320 Motor Learning and Development 3
PE 325 Psychomotor Programming for Special Populations 2
PE 330 Curriculum and Instructional Strategies for Elementary Physical Education 3
PE 430 Measurement and Evaluation in Physical Education 2
PE 435 Curriculum and Instructional Strategies for Secondary Physical Education 3
PE 455 Senior Professional Seminar ..0
PE 462 Field Experience in Secondary Physical Education 2
HED 201 Healthful Living 3
Electives (P.E.) 4

PROFESSIONAL EDUCATION 23
EDUC 305 Educational Psychology ...3
EDUC 381 Multicultural Society 1
EDFD 380 Foundations of Education ..2
CI 200 Introduction to Education 2
SPE 400 The Exceptional Child 3
CI 352p Student Teaching 12

Total Hours for Graduation .....127 hours

PHYSICAL EDUCATION MAJOR SPECIAL (K-12) CERTIFICATION

GENERAL EDUCATION .....54 hours

Written Expression 6
ENG 101 and ENG 102
Option A — Skills 9
SPC 103 or 105; CS 108 or STAT 107; MATH 106 or PHIL 106
Introductory Courses 18
Fine Arts and Humanities (Select one) 3
ART 111; ENG 111; MUS 111; PHIL 111; SPC 111; THEA 111
Natural Sciences and Mathematics 9
BIOL 111 and MATH 111
One of CHEM 120a, or ESCI 111; PHYS 130a
Social Sciences 6
PSYC 111 and SOC 111
Advanced Courses 18
Fine Arts and Humanities 6
Select one from:
ENG 207; 370; 371; 403
Select one from: ENG 202; 203; 204; 205; 211; 212; 340
Natural Sciences and Mathematics 3
Select one from:
BIOL 203; 205; SCI 341
Social Sciences 9
POLS 112 and HIST 200 or 201

Select one from: HIST 112; 352; 354; 356; 358; 360; 454
Interdisciplinary Course 3

PHYSICAL EDUCATION .....50 hours

Skill Techniques 13
PE 300 Strength Training and Fitness .1
PE 301 Aquatic Activities and Lifetime Leisure Pursuits 2
PE 302 Educational Rhythms 1
PE 303 Archery, Badminton, Bowling .2
PE 304 Golf, Tennis, Racquetball 2
PE 305 Track & Field, Wrestling, Field Sports 2
PE 306 Tumbling and Gymnastics 1
PE 307 Basketball, Soccer, Volleyball .2
Theoretical Base 15
PE 315 Homokinetics I 3
PE 316 Homokinetics II 3
PE 318 Basic Concepts 2
PE 420 Physiological Effects of Motor Activity 3
PE 440 Psychological Perspectives of Physical Education and Sport 2
PE 450 Cultural Perspectives of Physical Education and Sport 2
Pedagogical Base 22
PE 320 Motor Learning 3
PE 325 Psychomotor Programming for Special Populations 2
PE 330 Curriculum and Instructional Strategies for Elementary Physical Education 3
PE 332 Developmental and Self-Testing Activities 2
PE 334 Low Organized and Lead-Up Games 2
PE 430 Measurement and Evaluation in Physical Education 2
PE 435 Curriculum and Instructional Strategies for Secondary Physical Education 3
PE 455 Senior Professional Seminar ..0
PE 461 Field Experience in Elementary/ Middle School Physical Education 1
PE 462 Field Experience in Secondary Physical Education 1
HED 201 Healthful Living 3

PROFESSIONAL EDUCATION .....23 hours
EDUC 305 Educational Psychology ...3
EDUC 381 Multicultural Society 1
EDFD 380 Foundations of Education ..2
CI 200 Introduction to Education 2
SPE 400 The Exceptional Child 3
CI 352p and EdEl 451d Student Teaching 12

Total Hours for Graduation .....127 hours

PHYSICAL EDUCATION MINOR

Physical Education .....24 hours
Required 14
PE 300 Strength Training and Fitness .1
PE 302 Educational Rhythms 1
PE 303 Archery — Badminton — Bowling 2
OR
PE 304 Golf — Tennis — Racquetball 2
PE 307 Basketball — Soccer — Volleyball 2
PE 315 Homokinetics I 3
PE 420 Physiological Effects of Motor Activity 3
PE 440 Psychological Perspectives of Physical Education and Sport 2
OR
PE 450 Cultural Perspectives of Physical Education and Sport 2
Electives 10
(Select any additional PE 300/400 level courses)

COACHING MINOR

Physical Education .....24 hours
Required 22
PE 315 Homokinetics I 3
PE 316 Homokinetics II 3
PE 360 Coaching Techniques 2
PE 365 Theory of Coaching 3
PE 370 Care and Prevention of Athletic Injuries 2
PE 375 Coaching Practicum 2
PE 420 Physiological Effects of Motor Activity 3
PE 440 Psychological Perspectives of Physical Education and Sport 2
PE 450 Cultural Perspectives of Physical Education and Sport 2
Electives 2
(Select any additional PE 300/400 level courses)

PSYCHOLOGY

PROFESSORS:
Ferguson, E.D.; Kleinman, K.M. (Chair); Lamp, R.E.; Reuterman, N.A.; Traxler, A.J.

ASSOCIATE PROFESSORS:
Krohn, E.J.; Rogers, B.J.

ASSISTANT PROFESSORS:
Bartels, L.E.; Daus, C.S.; Grice, J.W.; Pomerantz, A.M.; Thomas, S.L.

LECTURERS:
Bauer, C.A.; Pogatshnik, L.W.

ASSISTANT IN PSYCHOLOGY:
Ruhl, R.

Undergraduate courses in psychology acquaint students with both the methods used and the knowledge gained by psychologists in their continuing efforts to understand behavior. Students study basic psychological processes such as learning, perception, and motivation; the development of

behavior, personality, and coping skills from conception through old age; human interaction in social settings; and the effects of physical and psychological stress upon coping skills and mental health.

Psychology is both a scholarly scientific discipline which seeks to understand and explain behavior and an applied profession which seeks to alleviate psychological problems and enhance human potential.

The psychology major prepares students for a variety of occupations and serves as pre-professional training for students wishing to attend graduate school and pursue careers as psychologists. The psychology major is also valuable preparation for other professional careers such as medicine, dentistry, and law.

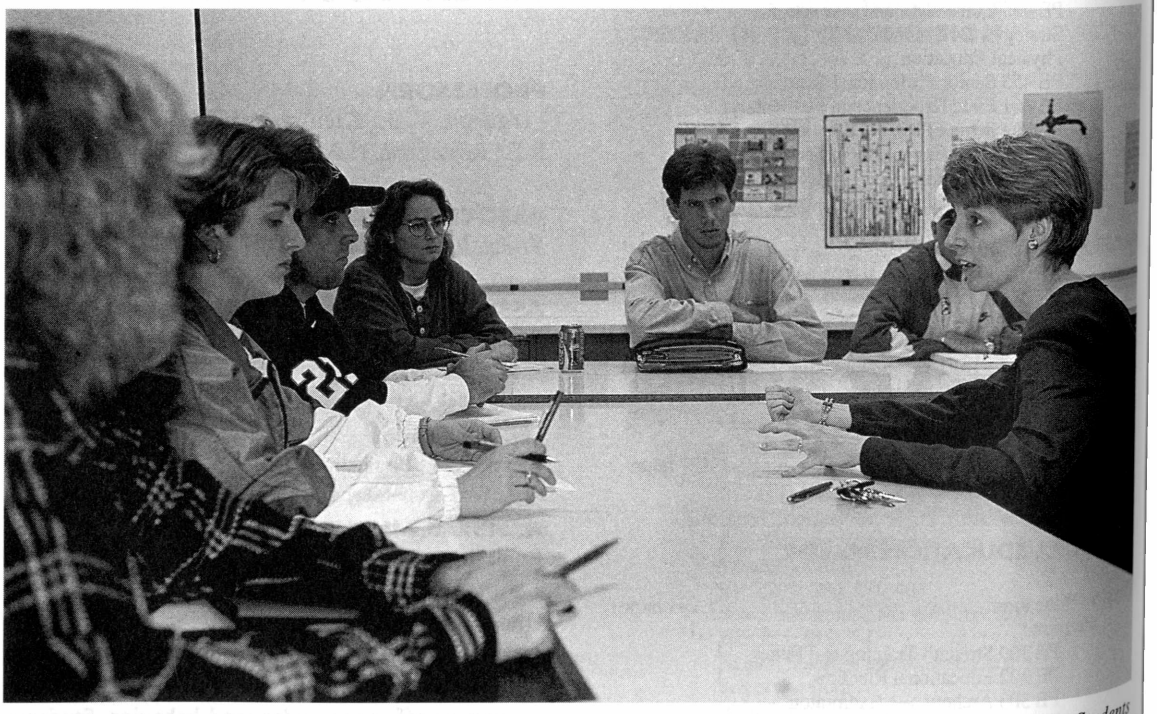
CAREER OPPORTUNITIES

Graduate training (at the master's or doctoral level) is a prerequisite for a career as a psychologist. However, students obtaining an undergraduate major in psychology will find themselves well prepared to pursue a variety of careers in which basic knowledge of psychological processes is valuable, e.g., personnel officers, laboratory technicians, sales or public relations specialists, suicide prevention workers, mental health or corrections workers, youth counselors, child care workers, substance abuse counselors, and statisticians and research analysts.

PROGRAMS IN PSYCHOLOGY

Students must be advised and have a program plan on file with the department prior to being accepted as a major. Advisers may be used as resources for information about the department, University and career opportunities, as well as course scheduling and program changes.

All students applying for a major in psychology should take Psychology 111 as a first course in psychology. Majors should complete the core sequence of Psychology 111, 211 and 212 in sequence within the first three semesters after acceptance as majors. Psychology 211 must be successfully completed before students enroll in 212. Majors and minors who desire to transfer credit from other colleges or universities must have their transcripts evaluated as soon as possible by a psychology adviser so that any credits accepted may be noted in their files.



Assistant Professor Susan Thomas (right) of the Psychology Department, listens to a discussion in an honors seminar. Students are (left to right) Marilyn Kennedy, Melony Patton, James Enyart, Celeste Hunt, Andrew Richards and Chris Koenig.

Aspects of the psychology curriculum which may be of interest are: (a) the Robert J. McLaughlin Psychology Honors Academy which provides student members with the opportunity to attend special seminars and to work closely with faculty in a variety of applied and research settings, and (b) independent readings, research and field study courses in which students may read extensively in an area of their interest, or work in either a laboratory or field setting under the supervision of a faculty member.

DEGREE REQUIREMENTS: BACHELOR OF ARTS DEGREE PSYCHOLOGY

General Education Requirements (Option B) 50
(Including 8 hours of Foreign Language)

Requirements for Major in Psychology 34
(Some general education requirements may be satisfied while completing this major concentration.)
Psychology 111, 211, 206, 212 and 440; one of 201, 203, 204 or 487; and one of 310, 311, 312 or 313 plus four electives are required of psychology majors.
Psychology 111, 211 and 212 should be completed within three semesters after completion of the application for a major.

Minor 21
Electives 19
Total 124

Students who wish to major in psychology and who transfer from community colleges must complete at least 18 hours of 300 and 400 level psychology courses at SIUE (or other accredited four-year institutions and SIUE combined). Students who wish to major in psychology and who transfer from accredited four-year institutions must complete at least 12 hours of psychology courses at SIUE.

A cumulative grade average of 2.0 in psychology courses is required both to remain and to graduate as a psychology major. Students will be removed from the major when the cumulative grade average in psychology drops below 2.0 for two consecutive semesters. Such students must apply (when the cumulative grade average reaches 2.0) for re-admission to the psychology program. Students must earn at least a C in all required courses. At least nine hours of psychology courses must be at the 400 level.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE DEGREE PSYCHOLOGY

This degree program is identical to the Bachelor of Arts degree program with the exception that no foreign language is required. The General Education requirements (Option A) total 48 hours, thus allowing for 21 hours of electives. All students should plan their programs in consultation with their advisers.

MINOR REQUIREMENTS

A minor in psychology consists of a minimum of 21 hours. Psychology 111 is required in addition to 18 hours of psychology electives. Students intending to pursue an occupation related to psychology (e.g., counseling or personnel work) should also include in their programs Psychology 211 and 212 and psychology electives to meet minimum hour requirements.

Students who have completed Statistics 107 or Sociology 312 should not include Psychology 211 in their programs of study for a minor in psychology.

Minors who desire to transfer credit from other colleges or universities must have their transcripts evaluated as soon as possible by a psychology adviser in order that any credits earned may be noted in their files. Students transferring from community colleges must complete at least 12 semester hours of 300 and 400 level psychology courses at SIUE (or other accredited four-year institutions and SIUE combined) towards the minor. Students transferring from accredited four-year institutions must complete at least six semester hours of psychology courses at SIUE toward the minor.

A GPA of 2.00 in psychology courses is required both to remain and to graduate with a psychology minor. Students will be removed as a minor when the cumulative grade average in psychology drops below 2.0 for two consecutive semesters. Such students must apply (when the cumulative grade average reaches 2.0) for re-admission to the program. Students must earn at least a C in Psychology 111. At least six hours of psychology courses must be at the 400 level for the minor in psychology.

EXIT REQUIREMENT

The Senior Assignment is required of all senior psychology majors. Details may be obtained from a psychology adviser.

SPECIAL EDUCATION

PROFESSORS:
Murdick, N.L. (Chair); Wagner, R.M.

ASSOCIATE PROFESSORS:
Brimer, R.W.; Stein, J.R.

ASSISTANT PROFESSORS:
Boyle, J.F.; Jackson, J.T.; Weishaar, M.K.

The Department of Special Education offers preparation programs at the undergraduate level for teaching children with behavioral disorders, learning disabilities, and mental retardation. The Department also offers coursework in teaching gifted, socially maladjusted, trainable mentally retarded students in preschool, elementary schools, secondary schools, and in career and vocational schools.

Students majoring in the study of mental retardation, behavioral disorders, or learning disabilities may seek certification.

ADMISSION TO THE DEPARTMENT OF SPECIAL EDUCATION

Admission to the Department of Special Education requires satisfactory completion of the pre-special education program described in the section below. A student handbook and application forms for admission to the major are available in the Office of Clinical Experiences, Certification, and Advisement, Bldg. 2, Room 1110. Applications should be completed at least one semester prior to the completion of admission requirements.

The requirements for admission to the Department of Special Education are:

1. Admission to Southern Illinois University at Edwardsville,
2. A passing score on the designated basic skills test,
3. A cumulative grade point average of 2.5 or higher for 42 semester hours of coursework,
4. Grades of C or higher in each course included in the 15 hours of skills coursework,
5. A grade of B or higher in Special Education 400 or an equivalent professional level course,
6. Application for admission to the special education program, 2 page autobiography, and transcript of all coursework completed. These should be submitted or mailed to:

   Undergraduate Adviser
   Department of Special Education
   Southern Illinois University at Edwardsville
   Edwardsville, Illinois 62026-1062

   The departmental application is not to be confused with the application for admission to Southern Illinois University at Edwardsville. Applications for admission to the University must be obtained through Admissions and Records.

RETENTION

Students must maintain a 2.5 grade point average overall and a 3.0 grade point average in professional education and special education coursework. Students whose grade averages fall below the required level will receive a letter of warning stating that they will not be permitted to take additional special education courses until the GPA returns to the required level. Students who do not achieve a 2.5 cumulative grade average and/or a 3.0 for professional and special education coursework will be dismissed from the department.

Students dismissed from the department for academic deficiencies may appeal through the Special Education Undergraduate Adviser to the Department Appeals Committee. Students may be directed to retake specific coursework to raise the cumulative grade average.

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE DEGREE
SPECIAL EDUCATION

SINGLE CERTIFICATION

General Education Requirements 57
Skills Courses 15
English 101; English 102; Speech

Communication 103, 104, or 105; Mathematics 106 or Philosophy 106; and Statistics 107, Computer Science 108 or Management Information System 108

Fine Arts and Humanities 12
Art 111; Music 111; One 200 or 300 level literature course; and One advanced level Fine Arts and Humanities course

Natural Science and Mathematics 12-15
Biology 111, Biology 120 with Laboratory, or Chemistry 120a with Laboratory; Mathematics 111; Biology 203 or 205; Geography 210 or 211 (one science course must include a laboratory)

Social Sciences 12
Geography 111; Psychology 111; Political Science 112; and History 200 or 201

Interdisciplinary Studies 3
Interdisciplinary Studies 324 or 326

Professional Education Requirements 24
Education 305; 381
Educational Foundations 380
Curriculum and Instruction 314; 337; 338; 415; 413
Health Education 201

Special Education Requirements 42

Choose one of the options below as a primary area for certification:

Behavior Disorders	Learning Disabilities	Educable Mentally Handicapped
400	400	400
410a	410g	410b
411	411	411
420a	420g	420b
430	430	430
450	450	450
470	470	470
481	481	481
415	415	415
490	490	490
499a	499g	499b

Special Education Electives 12
Special Education 410a, 410g, 410b, 410c, 420a, 420g, 420b, 420c, 410t, 411, 420t, 440, 441, 450, 496, 498, 499a, 499g, 499b; Curriculum and Instruction 317, 343, 412, 413, 445; Physical Education 330; Mathematics 435; Psychology 203

Total 135*

* Normally the major requires more than four years of University study for completion.

MINOR REQUIREMENTS

Students wishing to minor in special education must complete 21 semester hours of Special Education coursework. All undergraduate courses may be included in the minor with the exception of the assessment course, the methods courses, and student teaching. Courses must be completed with a grade of "C" or higher.

PRE-CLINICAL EXPERIENCES

The Illinois State Board of Education requires 100 clock hours of pre-clinical experience in each area of special education for which the student is seeking certification. This experience, which must be completed prior to student teaching, is arranged through the Office of Clinical Experiences, Certification, and Advisement.

STUDENT TEACHING

Student teaching is the culminating experience in the special education teacher preparation program. It is required to meet the degree requirements of the department, school and University, the certification requirements of the States of Illinois and Missouri, and Standards of the National Council for the Accreditation of Teacher Education and the Council for Exceptional Children.

Student teaching demands full-day involvement in an appropriate, approved public school program for students with disabilities. Therefore, students should avoid employment during the student teaching experience and should schedule student teaching at a time when they are free of other demands on their time and energy. Requests for an overload during student teaching must be approved by the Department Chair and the Associate Dean of the School of Education. Student teaching is not available during the Summer term.

Official student teaching application packets are available from the Office of Clinical Experiences, Certification, and Advisement.

Admission to the Department does not guarantee that students may engage in student teaching. Permission to take student teaching is based on (a) cumulative GPA 2.5 or higher, (b) a GPA of 3.0 or higher in special education and professional education

coursework, and (c) successful completion of all professional and special education coursework. There may not be any D or Incomplete grades on the student's transcript in Professional and Special Education course requirements as of the end of the semester prior to student teaching.

SENIOR ASSIGNMENT

Students are required to complete a Senior Assignment in conjunction with Special Education course 481. The senior assignment enables students to demonstrate the integration of their general education and special education coursework.

STUDENT COUNCIL FOR EXCEPTIONAL CHILDREN

The Department of Special Education sponsors a Chapter of the Student Council for Exceptional Children. Students are encouraged to become members of the Chapter and participate in meetings with guest speakers, develop community projects with individuals who have disabilities, and read professional journals. Membership is open to all students.

SPEECH PATHOLOGY AND AUDIOLOGY

ASSOCIATE PROFESSORS:
Engelman, D.A. (Associate Dean, College of Arts and Sciences); Hoge, D.R.; Parthasarathy, T.K.

ASSISTANT PROFESSORS:
Harrison, J.M.; Salas-Provance, M.; Tucker, F.

INSTRUCTOR:
Holmes, J.H.

LECTURERS:
Harman, K.

CAREER OPPORTUNITIES

Certified speech-language pathologists and audiologists find employment in a variety of settings, including hospitals, community clinics, colleges and universities, state and federal agencies, industry, rehabilitation centers, and nursing homes. Some graduates in speech-language pathology enter public school settings, where the mandate of state and federal legislation has made service delivery to all children with communicative disorders necessary. Some graduates establish private practices or become affiliated with physicians. Currently, employment possibilities are plentiful.

DEPARTMENT DESCRIPTION

Members of the professions speech pathology and audiology serve more than twenty million Americans with disordered communication. Speech-language pathologists study human communication, its normal development, and its disorders. Their responsibilities include the identification, evaluation, and remediation of individuals having communicative disorders. They also work toward the prevention of disorders of speech, hearing and language through public education, early identification of problems, and research into the causes and treatment of disorders.

Audiologists are concerned with normal and defective hearing. Their responsibilities include the prevention of hearing loss and the identification and rehabilitation of those who have impaired hearing. Audiologists utilize tests and instruments to determine whether a hearing loss is present and then work in a variety of ways to assist clients in making the best use of residual hearing. Like speech-language pathologists, audiologists are concerned with research in the hearing process and hearing disorders.

In order to meet the standards established by the American Speech-Language-Hearing Association, students wishing to pursue a career in either speech pathology or audiology must complete a Master's degree. Students wishing to be certified by the state of Illinois must complete a Master's degree in speech pathology, participate in student teaching, and pass state-wide proficiency tests. Before registering for student teaching, students must secure written consent of the department of Speech Pathology and Audiology and must have completed academic and clinical requirements. No minor concentration in Speech Pathology and Audiology is offered at the undergraduate level. Specific requirements and options must be approved by the department.

The faculty of the Department of Speech Pathology and Audiology are clinically certified by the American Speech-Language-Hearing Association (ASHA). The terminal program in speech pathology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of ASHA and entitled by the Illinois State Board of Education.

Students seeking admission to the program must have a 3.0 GPA. For additional information, contact the Department of Speech Pathology and Audiology at 618-692-3662.

DEGREE REQUIREMENTS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE SPEECH PATHOLOGY AND AUDIOLOGY

General Education Requirements 48-50
(Some General Education requirements may be satisfied while completing this major concentration).*

Requirements in Speech Pathology and Audiology 41-46
- Basic courses: Speech Pathology and Audiology 231, 312, 320, 321,322 15
- Speech Pathology Courses: 201, 441, 442, 444, 445, 446, 499 17
- Audiology courses:
  - Speech Pathology and Audiology 461, 471 6
- Clinical procedures and practices:
  - Speech Pathology and Audiology 449 ..1-2
- Optional Courses:
- Speech Pathology and Audiology 450** or 498 or approved elective 3-6
- Requirements in Related Areas 12
- Psychology 111 , 201, 205 9
- Special Education 400 3

Requirements for Illinois Certification in Speech and Language Impaired 9
- Education 305 3
- Foundations of Education 380 2
- Health 3
- Educ 381 1

Approved Electives 7-13

Total 124

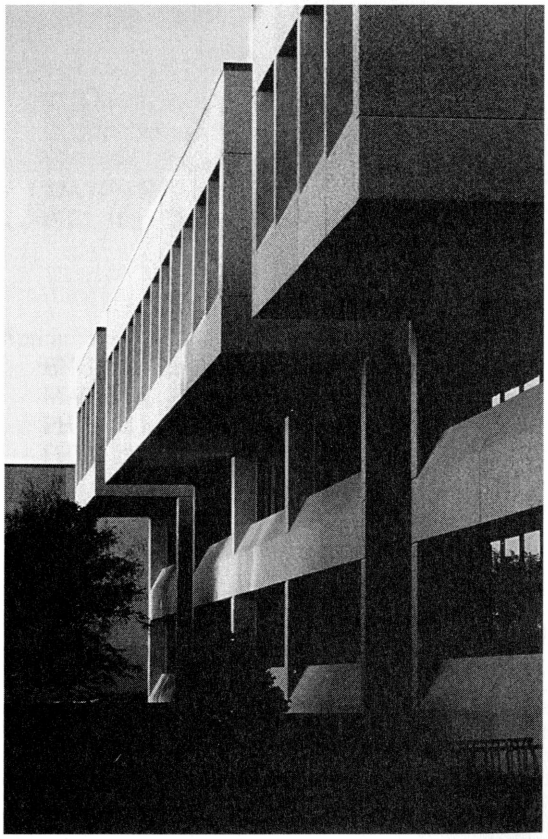
Eight hours of foreign language are required for the Bachelor of Arts option.

* Psyc 111 counts as one Introductory Social Science course. For teacher certification students must take one English course at the advanced level, and three science courses at the Introductory or Advanced level. At least one of these science courses must have a laboratory. Finally, students seeking teacher certification must complete either one Introductory or Advanced Mathematics course. The Advanced Social Science courses are met by PSYCH 201 and PSYCH 205. One course in non-Western or Third-World Cultures is also required. Students seeking teacher certification are required to take both POLS 112 and one of HIST 200 or 201.

** Required for Illinois Certification.

EXIT REQUIREMENTS

In addition to meeting all University exit requirements (including the Senior Assignment), students must earn grades of C or above in all departmental courses.



Building II is home to the Speech Pathology and Audiology department.

SCHOOL OF ENGINEERING

dean harlan bengtson

SCHOOL OF ENGINEERING

The School of Engineering offers the bachelor of science degree with majors in Civil Engineering, Computer Science, Construction, Electrical Engineering, Industrial Engineering, and Mechanical Engineering and a Bachelor of Arts degree in Computer Science. The Civil Engineering, Electrical Engineering, Industrial Engineering, and Mechanical Engineering programs are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Students interested in any of the majors offered by the School of Engineering should seek advisement from the School of Engineering when they initially enroll in the University. Enrollment in 300- or 400-level courses in a particular engineering program is limited to students who have been admitted to the upper division in that program as described below. Other students wishing to enroll in 300- or 400-level engineering courses may do so only with the permission of the department chair.

Students enrolled in the School of Engineering must purchase a scientific calculator and some technical textbooks; the purchase of a personal computer is highly recommended.

ADMISSION TO SCHOOL PROGRAMS

Students admitted to programs offered by the School of Engineering shall have met University admission requirements and the following additional School of Engineering requirements:

1. completion of all Academic Development courses required by the University
2. completion of any required courses to address high school deficiencies
3. completion of MATH 120 - College Algebra (or high school equivalent) with a grade of C or better, and
4. cumulative grade average of at least 2.0 (on a 4.0 scale).

Students who want to declare a major or who are considering a major in any School of Engineering program should contact the Associate Dean of Engineering, 200 University Park, room 2210, telephone 618-692-2534, as early as possible. Early declaration and advisement will enable students to enroll in courses which are major-restricted and complete their programs with minimum conflicts within the shortest possible time.

Freshman-year courses are the same for the four engineering programs and are shown in the following sample program.

FRESHMAN YEAR

Fall	
CHEM 121a - General Chemistry	4
CHEM 125a - General Chemistry Lab	1
ENG 101 - English Composition	3
MATH 150 - Calculus I	5
PHIL 106 - Critical Thinking	3
	16
Spring	
ENG 102 - English Composition	3
MATH 152 - Calculus II	5
PHYS 211a - University Physics	4
PHYS 212a - University Physics Lab	1
SPC 103 - Interpersonal Comm	3
	16

ENROLLMENT IN UPPER-DIVISION ENGINEERING COURSES

Eligibility for upper-division courses in civil engineering, electrical engineering, industrial engineering and mechanical engineering requires satisfactory completion of common lower-division core courses and special requirements for the specific major.

The specific requirements for enrollment in upper-division engineering courses for each major are given in the departmental sections which follow. Entry points for electrical engineering are fall, spring, and summer terms. Entry points for civil engineering are fall and spring terms. Industrial engineering and mechanical engineering students normally will enter the upper-division programs in fall terms.

Application forms for admission to upper-division engineering courses are available in departmental offices as well as the Associate Dean's office, 200 University Park, room 2210. An application should be filed in the appropriate departmental office no later than March 15 for summer or fall term admission, and no later than October 15 for spring term admission. Late applications will be considered on a space-available basis.

The Admissions Committee of the appropriate department considers applications. Students whose applications are rejected may not register for upper-division engineering courses. If the rejection is based upon enrollment limitations, students may reapply for a different engineering program or for later entry in the same program. If the rejection is based on failure to complete lower-division courses, students may apply for entry when the requirements are completed.

ENROLLMENT LIMITATIONS

The number of students accepted at each engineering program upper-division entry point is restricted due to class size limitations. Priority will be assigned as follows using grade point ranking for the lower-division courses required for each program's upper-division admission:

1. current SIUE students who have 12 or fewer lower-division transfer hours, Illinois transfer students, and students from regional community colleges with approved School of Engineering articulation programs, ranked by program lower-division grade point average (2.0 and above) and
2. other transfer students ranked by program lower-division grade point average (2.25 and above).

TRANSFER STUDENTS

Transfer students wishing to enter one of the programs offered by the School of Engineering should contact the Associate Dean of Engineering for a transfer credit evaluation at least 30 days prior to the beginning of the term for which entry is desired. Students must supply copies of the pertinent transcripts and any other materials, such as course descriptions or syllabi, that may be needed for the evaluation.

Only courses completed with a grade of C or better will be considered for transfer credit. In addition, only courses which are part of an ABET-accredited engineering program and have been completed within the last ten years will be considered toward any 300- or 400-level engineering course requirement.

An artist's rendering of the new Engineering Building whose construction is scheduled to begin in Spring, 1998.

Transfer students who satisfy part or all of the University general education requirements by transfer courses or a previous degree must also satisfy the School of Engineering humanities and social sciences requirements for the bachelor of science degree. Any remaining humanities and/or social sciences requirements will be specified by the Associate Dean as part of the transfer credit evaluation.

MINORITY AND WOMEN ENGINEERING SERVICES

The School of Engineering provides support services for minority and women students including orientation for new students, advisement, counseling and assistance in networking, internship placement, and career planning. For further information, contact Ronald Banks, 200 University Park, room 2213, 618-692-2541.

CIVIL ENGINEERING

PROFESSORS:
Ardis, C.V.; Bengtson, H.H.(Dean, School of Engineering); Hanna, S.J.(Associate Dean); Lin, C.(Chair); Rossow, M.P.

ASSOCIATE PROFESSOR:
Panahshahi, N.

ASSISTANT PROFESSORS:
Cross, W.B.; Morgan, S.M.

INSTRUCTORS:
Jensen, M.A.; Pierce, R.G.

Civil engineering is concerned with creating and maintaining the infrastructure of modern industrialized society. Civil engineers conceive, design, and construct physical works such as bridges, buildings, stadiums, warehouses, power plants, factories, canals, pipelines, highways, airports, rapid transit lines, railroads, harbor facilities, dams and water supply, waste-water treatment, storm water run-off, and solid-waste management systems including hazardous wastes.

The Department of Civil Engineering offers a curriculum that provides students with a rigorous background in mathematics, physical science, and civil engineering. Elective courses are available in the environmental, structural, geotechnical, transportation, and materials areas. Baccalaureate graduates are prepared to hold an entry-level position in industry or government, or to pursue graduate study. During the senior year, students are encouraged to complete the Fundamentals of Engineering Examination, the first step in achieving registration as a professional engineer. Students interested in civil engineering will find facilities available for conducting basic soil mechanics procedures such as soil classification, permeability, compaction, direct shear, consolidation, and triaxial tests. In addition, equipment for demonstrating hydraulic phenomena, conducting tensile and torsional testing, analyzing water and wastewater, and testing concrete and asphalt mix designs is provided.

CAREER OPPORTUNITIES

Civil engineers are employed in technical and managerial positions by structural design, transportation, environmental design, construction, consulting, and manufacturing companies. Civil engineers also work as members of teams of engineers and scientists in the aerospace, petroleum, biomedical, automotive, telecommunication, and other industries. In addition, many civil engineers are employed by city, state and federal governmental agencies.

ENROLLMENT IN UPPER-DIVISION CIVIL ENGINEERING COURSES

The requirements for enrollment in upper-division civil engineering courses are:

1. satisfactory completion of all University and School of Engineering admission requirements
2. an approved application for enrollment in upper-division engineering courses
3. satisfactory completion of the lower-division courses CHEM 121a, 125a; CE 204, 206, 206L, 240, 242; ENG 101, 102; MATH 150, 152, 250, 305; ME 262; PHYS 211a, 211b, 212a, 212b; and SPC 103, with a grade point average of at least 2.0 for the above courses required for non-transfer students, transfer students from articulated programs, and Illinois resident transfer students; a grade point average of at least

2.25 for the above courses is required for other transfer students and

4. a grade of C or above in CE 240, 242, and in ME 262.

ACADEMIC STATUS

Students must maintain the following standards. Students who fail to do so will be placed on probation in the civil engineering major.

1. Students must maintain a cumulative grade point average of at least a 2.0 in courses taught in the School of Engineering.
2. Students must maintain a cumulative grade point average of at least 2.0 in civil engineering courses numbered above 299.
3. Students must receive no more than two failure grades, incompletes, and/or withdrawals in any combination for a single course required in the major.

Students placed on probation should seek immediate advisement and will be given the conditions required for removal from probation. If the conditions are not met, students are dropped from the major and may not enroll in upper-division civil engineering courses. After one year, students are eligible to reapply for admission to the major. Students dropped from the major may direct a written appeal to the departmental Academic Standards Committee.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE CIVIL ENGINEERING

Natural Science and Mathematics Courses 32
- CHEM 121a, 125a 5
- MATH 150, 152, 250, 305 17
- PHYS 211a, 211b, 212a, 212b 10

Engineering Courses 65
- CE 204, 206, 206L, 240, 242, 315, 330, 330L, 340, 354, 354L, 376, 380, 415L, 416, 440, 442, 493 44
- CE Electives* 9
- EE 210 3
- IE 345 3
- ME 262, 310 6

Fine Arts and Humanities Courses 9
- Intro Fine Arts/Humanities Courses 6
- PHIL 323 3

Social Science Courses 9
- ECON 111, 112 6
- Adv Social Science/Constitution 3

Skills Courses 15
- ENG 101, 102 6
- PHIL 106 3
- SPC 103, 104, or 105 3
- STAT 380 3

Interdisciplinary Course 3

Total 133

* The **civil engineering** electives must be selected with the approval of a faculty adviser and must contain at least 2.5 credit hours of design content. A curriculum guide with a list of **civil engineering** electives and the design credit hours for each is available in the departmental office.

Below is a sample program to use as a guide.

FRESHMAN YEAR

Fall
- CHEM 121a - General Chemistry 4
- CHEM 125a - General Chemistry Lab 1
- ENG 101- English Composition 3
- MATH 150 - Calculus I 5
- PHIL 106 - Critical Thinking 3

16

Spring
- ENG 102 - English Composition II 3
- MATH 152 - Calculus II 5
- PHYS 211a - University Physics 4
- PHYS 212a - University Physics Lab 1
- SPC 103 - Interpersonal Comm 3

16

SOPHOMORE YEAR

Fall
- CE 204 - Engr Graphics and CAD 2
- CE 240 - Statics 3
- ECON 111 - Macroeconomics 3
- MATH 250 - Calculus III 4
- PHYS 211b - University Physics 4
- PHYS 212b - University Physics Lab 1

17

Spring
- CE 206 - Engr Measurements 2
- CE 206L - Engr Measurements Lab 1
- CE 242 - Mechanics of Solids 3
- ECON 112 - Microeconomics 3
- Intro Fine Arts/Humanities 3
- MATH 305 - Differential Equations 3
- ME 262 - Dynamics 3

18

JUNIOR YEAR

Fall
- CE 315 - Fluid Mechanics 4
- CE 340 - Structural Analysis I 3
- CE 354 - Intro to Geotechnical Engr 3
- CE 354L - Geotechnical Lab 1
- ME 310 - Thermodynamics 3
- STAT 380 - Statistics 3

17

Spring
- CE 330 - Engr Materials 2
- CE 330L - Engr Materials Lab 1
- CE 376 - Transportation Engr 3
- CE 380 - Intro Environmental Sci & Engr . 3
- CE 440 - Steel Design 3
- Intro Fine Arts/Humanities 3

15

SENIOR YEAR

Fall
- CE 415L - Applied Fluid Mechanics Lab . . 1
- CE 416 - Engineering Hydrology 3
- CE 442 - Reinforced Concrete Design 3
- CE Elective I 3
- EE 210 - Electric Circuits 3
- PHIL 323 - Engr, Ethics, and Prof 3

16

Spring
- CE 493 - Engineering Design 3
- CE Elective II 3
- CE Elective III 3
- IE 345 - Engineering Economic Analysis . . 3
- Interdisciplinary Course 3
- Adv Social Science/Constitution 3

18

EXIT REQUIREMENTS

A cumulative grade point average of 2.0 or higher is required for courses taught in the School of Engineering; a cumulative grade point average of 2.0 or higher is required for civil engineering courses numbered above 299; and students must complete a senior assignment included as part of CE 493 - Engineering Design. In addition to department requirements, students must complete all University requirements for graduation.

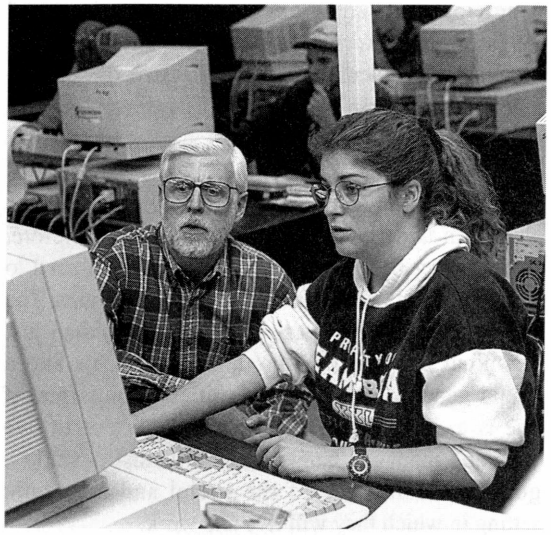
COMPUTER SCIENCE

PROFESSORS:
Hattemer, J.R.; Isaacson, J.D.; Livingston, M.L.; Stephen, G.G.

ASSOCIATE PROFESSORS:
Waxman, B.M.(Chair); Wu, T.

ASSISTANT PROFESSORS:
Weinberg, J.B.; White, W.W.

Computer science is the study of processes and machines that describe and transform information. The fundamental quest underlying all of computing is



Professor Greg Stephen and Tracey Connor, a senior in Computer Science, work together in class.

a determination of all that can be automated. The roots of the discipline extend deeply into mathematics and engineering. Mathematics contributes methods of analysis to the field; engineering contributes methods of design. The discipline was born in the early 1940's with the joining of algorithm theory, mathematical logic, and the invention of the stored program electronic computer.

At present, nine areas cover the field of computing: algorithms and data structures, programming languages, computer architecture, numerical and symbolic computation, operating systems, software methodology and engineering, database and information retrieval systems, artificial intelligence and robotics, and human-computer communications. Each area is very broad. For example, human computer communications includes computer graphics. Computer architecture includes the design of personal computers, supercomputers, and massively parallel computers. Some aspects of computing such as parallel and distributed computation pervade all of the areas.

Each area has a theoretical component, significant abstractions, and substantial design and implementation issues. The theory is the underlying mathematics. Abstraction deals with models of possible implementations. The models suppress details while retaining essential features, and provide means for predicting the future systems. Design deals with the process of specifying a problem, transforming the problem statement into a design

specification, and repeatedly inventing and investigating alternative solutions until reliable, maintainable, documented, and a tested design that meets cost criteria is achieved. The design process must recognize social, legal, and ethical constraints.

Although change is constant in computing, the change in underlying concepts is gradual; therefore, students preparing for a career in computing need to develop a firm understanding of basic principles. The ability to grow and change requires more than just technical expertise. Communication skills and a sound general education are critically important if one is to have the capacity and perspective to live with and manage change. Students must develop a good understanding of the social and economic setting in which they will live and work.

The major professional organizations for computing are the Association for Computing Machinery and the Computer Society of the Institute for Electrical and Electronic Engineering. The members of these organizations work together to define the goals and content of undergraduate programs in computing. Faculty members of the Department of Computer Science are members of both professional organizations, participate in the organizations, and are committed to maintaining a program which meets professional standards. The goals and content of the department's curricula reflect the recommendations of both professional organizations.

CAREER OPPORTUNITIES

The outlook for a person with a bachelor's degree in computer science remains good. Areas of application continue to expand, maintaining the demand. Departmental advisers can provide information about career possibilities in computer science and can suggest elective courses that would be appropriate for various career goals and interests, including the intention to pursue graduate studies.

ADMISSION AND RETENTION

Students who want to major in computer science or who are considering computer science as a major should call or visit the Department of Computer Science (Building II, Room 2310, telephone 618-692-2386) as early as possible. They will be referred to a faculty adviser who will provide more information about the curricula and the department and help them plan an academic program. Early advisement will enable students to complete their programs with minimum conflicts and within the shortest possible time.

In order to be admitted to the Bachelor of Science or Bachelor of Arts program, students must meet the following conditions:

1. Completion of all Academic Development courses required by the University
2. Completion of any courses required to address high school deficiencies
3. Completion of MATH 120 - College Algebra (or high school equivalents) with a grade of C or better, and
4. cumulative grade average of at least 2.0 (on a 4.0 scale).

Students may be dropped from the program in any of the following circumstances: (1) a GPA of less than 2.0 in all computer science courses, (2) a GPA of less than 2.0 in all mathematics courses, (3) a cumulative GPA of less than 2.0, (4) failure to enroll in courses fulfilling program requirements for three consecutive terms, (5) a GPA of 1.0 or below in any term, (6) a combination of withdrawal, incomplete, and failing grades in 50% or more of the credits for which the student is registered during two consecutive terms, (7) any combination of three withdrawals, incompletes, or failing grades in any single required computer science course. For readmission, students must meet the same admission requirements as students entering the program for the first time.

PROGRAM OF STUDY

The Department of Computer Science offers a Bachelor of Science curriculum and a Bachelor of Arts curriculum. The Bachelor of Arts curriculum has fewer computing, mathematics, and science requirements than the Bachelor of Science curriculum; it allows students to design a program of study that will include a minor in another discipline or, with an appropriate selection of courses, a second major.

Both curricula require students to complete a senior project during their last year of study. Department advisers can provide detailed information about the senior project requirement.

To graduate, students must complete the specific program requirements and meet the following conditions: (1) complete at least 12 hours of

computer science credits at SIUE in courses numbered above 299 and with a cumulative GPA of 2.0 or above, (2) have a GPA of 2.0 or above in all computer science courses numbered above 299, and (3) complete at least 6 hours of credit in major courses numbered above 299 at SIUE within two years preceding graduation.

DEGREE REQUIREMENTS:
BACHELOR OF SCIENCE
COMPUTER SCIENCE

Natural Science and Mathematics Courses 31
- MATH 150, 152, 223 and one of MATH 250, 305, 321, 423 16
- PHYS 211a, 211b, 212a, 212b 10
- Natural Sciences Electives
  - At least 5 hours selected from CHEM 121a, 125a, PHYS 302, 308, 310, 312, 318 5

Computing Core 35
- CS 140, 150, 151, 250, 312, 314, 320, 325, 330, EE 382, 483

Computing Electives 12
- Four courses selected from: CS 416, 423, 425, 434, 438, 444, 447, 454, 456, 482, 490, EE 481, 482, MATH 465

Senior Project 4
- Computer Science 498, 499

Fine Arts and Humanities Courses 9
- Intro Fine Arts/Humanities Courses 6
- Adv Fine Arts/Humanities Course 3

Social Science Courses 9
- Intro Social Science 3
- Adv Social Science 3
- Adv Social Science/Constitution 3

Skills Courses 15
- ENG 101, 102 6
- PHIL 106 3
- SPC 103, 104, or 105 3
- STAT 380 3

Interdisciplinary Course 3

Free Electives 6

Total 124

DEGREE REQUIREMENTS:
BACHELOR OF ARTS
COMPUTER SCIENCE

Natural Science and Mathematics Courses 21
- MATH 125, 150, 152, 223 16
- PHYS 211a, 212a 5

Computing Core 35
- CS 140, 150, 151, 250, 312, 314, 320, 325, 330, EE 382, 483

Computing Electives 6
- Two courses selected from: CS 416, 423, 425, 434, 438, 444, 447, 454, 456, 482, 490, MATH 465

Senior Project 4
- CS 498, 499

Fine Arts and Humanities Courses 9
- Intro Fine Arts/Humanities Courses 6
- Adv Fine Arts/Humanities Course 3

Social Science Courses 9
- Intro Social Science 3
- Adv Social Science 3
- Adv Social Science/Constitution 3

Skills 17
- ENG 101, 102 6
- Foreign Languages 8
- STAT 380 3

Interdisciplinary Course 3

Free Electives 20

Total 124

MINOR REQUIREMENTS

The minor in computer science is 19 hours and consists of the courses CS 140 or 141, CS 150, CS 151, CS 250, CS 312, and CS 320. Note that MATH 223 is a prerequisite for CS 250. The required courses must be completed with a GPA of 2.0 or above. At least six semester hours must be earned at SIUE.

CONSTRUCTION

PROFESSOR:
Snell, L.M.(Chair)

ASSOCIATE PROFESSOR:
Bodapati, N.

ASSISTANT PROFESSORS:
Kay, D.H.; Rapp, R.R.

The objective of the construction program is to provide graduates with the knowledge and skills necessary to coordinate the multifaceted aspects of the construction industry. Course work presents basic scientific principles augmented by business and engineering practices and procedures.

CAREER OPPORTUNITIES

The construction industry is one of the largest components of the present economy. The construction work force includes skilled and unskilled labor, engineers, accountants, financial analysts, business managers, and construction professionals. The scope of construction ranges from most modest projects costing a few hundred dollars to projects whose total cost may be billions of dollars. The nature of the industry is such that continuing changes in technology produce a need for construction professionals trained in the managerial and scientific techniques of construction.

ACADEMIC STATUS

Students must maintain the following standards. Failure to do so will result in probation in the construction major.

1. Students must maintain a cumulative grade point average of at least 2.0 in construction courses.
2. Students must maintain a cumulative grade point average of at least 2.0 in all construction courses numbered above 299.
3. Students must receive no more than two failure grades, incompletes, and/or withdrawals in any combination for a single course required for the major.

Students who are placed on probation should seek immediate advisement and will be given the conditions which must be satisfied for removal of the probation. If the conditions are not met, students will be dropped from the major. Students dropped from the construction major may not enroll in upper-division construction courses. After one year, students are eligible to reapply for admission to the major. Students dropped from the major may direct an appeal to the departmental Academic Standards Committee.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE CONSTRUCTION

Natural Science and Mathematics Courses 19
- CHEM 120a, 124a 4
- MATH 150, 152 10
- PHYS 211a, 212a 5

Construction Courses 57
- CNST 120, 201, 202, 264, 301, 321,332, 341, 351, 352, 403, 411, 451, 452, 475 48
- CNST Electives 9

Business Courses* 15
- ACCT 200, 210 6
- ECON 331 3
- FIN 320 3
- GBA 300 3

Engineering Courses 6
- CE 240, 242 6

Fine Arts and Humanities Courses 9
- Intro Fine Arts/Humanities Courses 6
- Adv Fine Arts/Humanities Course 3

Social Science Courses 9
- ECON 111, 112 6
- Adv Social Science/Constitution 3

Skills Courses 15
- ENG 101, 102 6
- PHIL 106 3
- SPC 103, 104, or 105 3
- MIS 108 3

Total 130

* These courses fulfill the requirements for a minor in business.

Below is a sample program for construction students to utilize as a guide.

FRESHMAN YEAR

Fall
- CNST 120 - Intro to Construction 1
- MATH 150 - Calculus I 5
- ENG 101 - English Composition 3
- CHEM 120a - Genl, Org, & Biol Chem 3
- CHEM 124a - Genl, Org, & Biol Chem Lab 1
- MIS 108 - Computer Concepts 3

16

Spring
- MATH 152 - Calculus II 5
- ENG 102 - English Composition 3
- PHYS 211a - University Physics 4
- PHYS 212a - University Physics Lab 1
- SPC 103 - Interpersonal Comm 3

16

SOPHOMORE YEAR

Fall
- ACCT 200 - Fund of Financial Acct 3
- PHIL 106 - Critical Thinking 3
- CNST 202 - Construction Methods 3
- CE 240 - Statics 3
- ECON 111 - Macroeconomics 3
- Intro Fine Arts/Humanities 3

18

Spring
- ECON 112 - Microeconomics 3
- CE 242 - Mechanics of Solids 3
- CNST 201 - Construction Materials 3
- ACCT 210 - Managerial Acct 3
- Intro Fine Arts/Humanities 3

15

JUNIOR YEAR

Fall
- CNST 264 - Layout & Measurements 4
- FIN 320 - Financial Management 3
- CNST 332 - Mechanical Systems/HVAC . . 3
- CNST 351 - Concrete & Formwork 3
- Adv Social Science/Constitution 3

16

Spring
- CNST 301 - Soils 4
- CNST 321 - Electrical Systems 3
- CNST 341 - Plans & Specifications 3
- CNST 352 - Intro to Steel Structures 3
- Construction Elective I 3

16

SENIOR YEAR

Fall
- ECON 331 - Labor Economics 3
- CNST 403 - Planning & Scheduling 4
- GBA 300 - Found of Bus Knowledge 3
- CNST 451 - Estimating and Bidding 4
- Construction Elective II 3

17

Spring
- CNST 452 - Construction Management . . . 4
- CNST 411 - Construction Contracts 3
- CNST 475 - Senior Seminar 3
- Adv Fine Arts/Humanities 3
- Construction Elective III 3

16

EXIT REQUIREMENTS

Construction students must meet all University requirements for graduation and the following construction program requirements:

1. maintain a cumulative grade point average above 2.0 in all construction courses and
2. complete the Construction Senior Assignment.

MINOR REQUIREMENTS

Twenty-one hours are required for a minor in construction. The courses are to be selected from the construction curriculum with approval by the Chair of Construction.

ELECTRICAL ENGINEERING

PROFESSORS:
Bollini, R.(Chair); Godhwani, A.

ASSOCIATE PROFESSORS:
Alkin, O.; Chen, J.; Smith, S.R.; Umbaugh, S.E.; Youn, L.T.

ASSISTANT PROFESSORS:
Engel, G.L.; Noble, B.L.

INSTRUCTOR:
Pashea, M.W.

Electrical engineering is concerned with the development and application of electrical technology in areas such as communication, computers, control, medicine, robotics, and electric power to enhance and enrich human life. Electrical engineers conceive, design, and construct devices and systems such as digital audio systems (compact disk players and recorders), high definition television systems, microwave ovens, intelligent dishwashers and refrigerators, telecommunication systems and computers at home, automatic control and navigational systems for the space shuttle, computer assisted tomographic (CAT Scan) systems, and Magnetic Resonance Imaging (MRI) systems in hospitals.

The Department of Electrical Engineering offers a comprehensive curriculum that provides students with a rigorous background in mathematics, physical sciences, humanities, social sciences, and electrical engineering. Elective courses are offered in communications, computers, control, digital signal processing, image processing, and power. A specialization in computer engineering is offered for those wishing to concentrate in this area. The course requirements for this specialization, along with regular electrical engineering, are shown separately. Baccalaureate graduates are prepared either to hold an entry-level position in industry or government or to pursue graduate study.

The Department of Electrical Engineering has several well-equipped modern laboratories for computation, simulation, and measurement. Individual laboratories to support elective courses in the areas of computers, control, digital signal processing, image processing, and power are also available to students.

CAREER OPPORTUNITIES

Electrical manufacturing companies use large numbers of engineers for design, development, research, manufacturing, and sales. Public utilities employ electrical engineers. Other potential employers include oil companies, railroads, food processing plants, biological laboratories, chemical plants, aircraft, missile and space industries, and various branches of the federal government.

ENROLLMENT IN UPPER-DIVISION ELECTRICAL ENGINEERING COURSES

The requirements for enrollment in upper-division electrical engineering courses are:

1. satisfactory completion of all University and School of Engineering admission requirements
2. an approved application for enrollment in upper-division engineering courses
3. satisfactory completion of the lower-division (core) courses CHEM 121a, 125a; EE 210, 211; ENG 101, 102; MATH 150, 152, 250, 305; PHYS 211a, 211b, 212a, 212b; and SPC 103, with a grade point average of at least 2.0 for the above courses required for non-transfer students, transfer students from articulated programs, and Illinois resident transfer students; a grade point average of at least 2.25 for the above courses is required for other transfer students and
4. a grade of C or better in each of the courses EE 210 and 211.

ACADEMIC STATUS

Failure to maintain any of the following standards will result in upper-division students being placed on academic probation in the electrical engineering major.

1. Students must maintain a cumulative grade point average of at least 2.0 in courses taught in the School of Engineering.
2. Students must maintain a cumulative grade point average of at least 2.0 in electrical engineering courses numbered above 299.
3. Students must receive no more than two failure grades, incompletes, and withdrawals in any combination for a single course required in the major.

Students placed on academic probation should seek immediate advisement and will be given the conditions required for removal from probation. If the conditions are not met at the end of the term, students are dropped from the major and may not enroll in upper-division electrical engineering courses. After one year, students are eligible to reapply for admission to the major. Students dropped from the major may direct a written appeal to the departmental Academic Standards Committee.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE ELECTRICAL ENGINEERING

Natural Science and Mathematics Courses	36
CHEM 121a, 125a	5
MATH 150, 152, 250, 305	17
PHYS 211a, 211b, 212a, 212b,302	14
Engineering Courses	62
EE 210, 211, 326, 327, 340, 341, 351, 352, 365, 375, 382, 404, 405	43
EE Electives	12
IE 345	3
CE/ME 244	4
Fine Arts and Humanities Courses	9
Intro Fine Arts/Humanities Courses	6
PHIL 323	3
Social Science Courses	9
ECON 111, 112	6
Adv Social Science/Constitution	3
Interdisciplinary Course	3
Skills Courses	15
CS 140	3
ENG 101, 102	6
SPC 103, 104, or 105	3
PHIL 106	3
Total	134

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE ELECTRICAL ENGINEERING - COMPUTER ENGINEERING SPECIALIZATION

Natural Science and Mathematics Courses	39
CHEM 121a, 125a	5
MATH 150, 152, 223, 250, 305	20
PHYS 211a, 211b, 212a, 212b, 302	14
Engineering Courses	45
EE 210, 211, 326, 327, 351, 352, 382, 404, 405, 483	33
EE/CS Electives	9
IE 345	3
Computer Science Courses	11
CS 150, 151, 250, 312, 314	
Fine Arts and Humanities Courses	
Intro Fine Arts/Humanities Courses	6
PHIL 323	3

Social Science Courses 9
ECON 111, 112 6
Adv Social Science/Constitution 3
Interdisciplinary Course 3
Skills Courses 15
CS 140 3
ENG 101, 102 6
SPC 103, 104, or 105 3
PHIL 106 3

Total 135

Below is a sample program for electrical engineering students to utilize as a guide.

FRESHMAN YEAR

Fall
CHEM 121a - General Chemistry 4
CHEM 125a - General Chemistry Lab 1
ENG 101 - English Composition 3
MATH 150 - Calculus I 5
PHIL 106 - Critical Thinking 3
16

Spring
ENG 102 - English Composition 3
MATH 152 - Calculus II 5
PHYS 211a - University Physics 4
PHYS 212a - University Physics Lab 1
SPC 103 - Interpersonal Comm 3
16

SOPHOMORE YEAR

Fall
MATH 250 - Calculus III 4
PHYS 211b - University Physics 4
PHYS 212b - University Physics Lab 1
EE 210 - Circuit Analysis I 3
CS 140 - Introduction to C++ 3
ECON 111 - Macroeconomics 3
18

Spring
MATH 305 - Differential Equations 3
PHYS 302 - Modern Physics 4
EE 211 - Circuit Analysis II 4
ECON 112 - Microeconomics 3
Intro Fine Arts/Humanities 3
17

JUNIOR YEAR

Fall
EE 326 - Electronic Circuits I 4
EE 340 - Electromagnetics 3
EE 351 - Signals and Systems 3
EE 382 - Digital Systems Design 4
Intro Fine Arts/Humanities 3
17

Spring
EE 327 - Electronic Circuits II 4
EE 352 - Stochastic Processes 3
EE 365 - Control Systems 3
EE 375 - Intro to Communications 3
CE/ME 244 - Engineering Mechanics 4
17

SENIOR YEAR

Fall
EE 341 - Electrical Machines 4
EE 404 - Electrical Engr Design 3
EE Elective I 3
EE Elective II 3
PHIL 323 - Engr, Ethics, and Prof 3
16

Spring
EE 405 - Elec Engr Design Lab 2
EE Elective III 3
EE Elective IV 3
IE 345 - Engr. Economic Analysis 3
Adv Social Science/Constitution 3
Interdisciplinary Course 3
17

Below is a sample program for electrical engineering students with a computer engineering specialization to utilize as a guide.

FRESHMAN YEAR

Fall
CHEM 121a - General Chemistry 4
CHEM 125a - General Chemistry Lab 1
CS 140 - Introduction to C++ 3
ENG 101 - English Composition 3
MATH 150 - Calculus I 5
16

Spring
ENG 102 - English Composition 3
MATH 152 - Calculus II 5
MATH 223 - Logic & Math Reasoning . . . 3
PHYS 211a - University Physics 4
PHYS 212a - University Physics Lab 1
16

SOPHOMORE YEAR

Fall
EE 210 - Electrical Circuits 3
CS 150 - Intro to Computing I 3
MATH 250 - Calculus III 4
PHIL 106 - Critical Thinking 3
PHYS 211b - University Physics 4
PHYS 212b - University Physics Lab 1
18

Spring
- EE 211 - Circuit Analysis II 4
- CS 151 - Intro to Computing II 3
- Intro Fine Arts/Humanities 3
- MATH 305 - Differential Equations I 3
- SPC 103 - Interpersonal Comm 3

16

JUNIOR YEAR

Fall
- EE 326 - Electronic Circuits I 4
- EE 382 - Digital Systems Design 4
- CS 250 - Algorithms & Data Structures ...3
- CS 312 - Intro to Comp Org & Architecture ..3
- ECON 111 - Macroeconomics 3

17

Spring
- EE 327 - Electronic Circuits II 4
- EE 351 - Signals & Systems 3
- CS 314 - Operating Systems 3
- Intro Fine Arts/Humanities 3
- PHYS 302 - Modern Physics 4

17

SENIOR YEAR

Fall
- EE 352 - Stochastic Processes 3
- EE 404 - EE Design 3
- EE 483 - Computer Design 3
- EE/CS Elective 3
- ECON 112 - Microeconomics 3
- Adv Social Science/Constitution 3

18

Spring
- EE 405 - EE Design Laboratory 2
- EE/CS Electives 6
- IE 345 - Engr Economic Analysis 3
- Interdisciplinary course 3
- PHIL 323 - Engr, Ethics, & Prof 3

17

EXIT REQUIREMENTS FOR ELECTRICAL ENGINEERING PROGRAMS

Degree requirements include the following:

1. satisfactory completion of all University requirements for graduation
2. a cumulative grade point average of 2.0 or higher for courses taught in the School of Engineering
3. a grade point average of 2.0 or higher in electrical engineering courses numbered above 299
4. completion of at least 30 hours of the required electrical engineering courses at SIUE and
5. completion of Senior Assignment contained in EE 404 and 405.

MINOR REQUIREMENTS

A minor in electrical engineering requires 22 hours. The courses required are: EE 210, 211, 326, 327, 351, 382.

INDUSTRIAL ENGINEERING

ASSOCIATE PROFESSORS:
Eneyo, E.S.; Lee, H.F.; Van Roekel, J.H. (Program Director)

ASSISTANT PROFESSOR:
Karacal, S.C.

Industrial engineering is a professional discipline having extraordinary breadth of application. It is principally concerned with the analysis and design of systems and procedures for organizing the basic resources of production—people, materials, and equipment—in order to achieve specific objectives. An industrial engineer deals with the design, improvement, and installation of integrated systems drawing upon specialized skills in the mathematical, physical, managerial, and behavioral sciences, together with the principles and methods of engineering analysis, for specifying, predicting, and evaluating the results to be obtained from such systems.

Throughout the program, there is an integrated series or sequence in the major field that includes not only basic and fundamental courses but specialized courses in the fields of facilities design, production planning and control, quality control, computer-integrated manufacturing, and operations research. These specialized courses reflect the impact of recent developments in operations research, information processing, and automation.

The Industrial Engineering Program has a computer-integrated manufacturing laboratory that is equipped with a wide variety of industrial quality automation equipment including several robots, programmable logic controllers, an automated storage and retrieval system, a loop conveyor, several flexible manufacturing cells, a vision system, a bar code

reading system, and a comprehensive computer-integrated manufacturing software package. Students interested in human factors will find facilities for evaluating ergonomic systems and work methods and measuring human performance.

CAREER OPPORTUNITIES

The industrial engineer is specifically prepared to function as a problem-solver, innovator, coordinator, and change agent. Industrial engineers practice in all phases of manufacturing industries, service industries, and government agencies.

For instance, in a manufacturing organization, an industrial engineer may be concerned with the design of a single work place involving one or more persons and one or more machines. In designing such work places, the industrial engineer must not only consider the capabilities of machines but also the physiological and psychological capabilities and limitations of humans. Industrial engineers also are involved in the design of computer-integrated manufacturing processes with robots, in the design of entire plants, and in the design of systems to control the production, inventory, and quality of large numbers of complex products. At higher corporate levels, there are concerns with plant and warehouse locations, the development of sales forecasts, and the evaluation of proposals to produce new products and the building of new or improved production facilities.

In service industries and governmental agencies, the same skills used as an industrial engineer to design manufacturing systems are also useful in designing better systems to care for patients in hospitals, assisting the judicial systems, providing fast and more accurate mail distribution, improving airline reservation methods, and controlling large space projects. The complexity of modern industrial and service organizations and the emphasis on increased effectiveness, efficiency, and productivity have led to a growing need for industrial engineering analysis and design and an increasing demand for industrial engineering graduates. This increased demand recognizes the versatility of the modern industrial engineer in being responsive to the challenges of a rapidly changing society. Although industrial engineering is a comparatively new professional area, having developed over the last five decades, it is already one of the nation's largest and most rapidly-growing engineering professions.

ENROLLMENT IN UPPER-DIVISION INDUSTRIAL ENGINEERING COURSES

The requirements for enrollment in upper-division industrial engineering courses are:

1. satisfactory completion of all University and School of Engineering admission requirements
2. an approved application for enrollment in upper-division engineering courses
3. satisfactory completion of the lower-division (core) courses CE 240; CHEM 121a, 125a; CS 140; EE 210; ENG 101, 102; MATH 150, 152, 250, 305; ME 262; PHYS 211a, 211b, 212a, 212b; and SPC 103; with a grade point average of at least 2.0 for the above courses is required for non-transfer students, transfer students from articulated programs, and Illinois resident transfer students; a grade point average of at least 2.25 for the above courses is required for other transfer students
4. a grade point average of 2.0 or better in CS 140, CE 240, EE 210, and ME 262 (both original and repeat grades are computed in the grade point average) and
5. a grade of C or above in STAT 380.

ACADEMIC STATUS

Students must maintain the following standards. Students who fail to do so will be placed on probation in the industrial engineering major.

1. Students must maintain a cumulative grade point average of at least 2.0 in courses taught in the School of Engineering.
2. Students must maintain a cumulative grade point average of at least 2.0 in industrial engineering courses numbered above 299.
3. Students must receive no more than two failure grades, incompletes, and/or withdrawals in any combination for a single course required in the major.

Students placed on probation should seek immediate advisement and will be given conditions required for removal from probation. If the conditions are not met, students will be dropped from the major and may not enroll in upper-division industrial engineering courses. After one year, students will be eligible to reapply for admission to the major. Students dropped from the major may direct an appeal to the departmental Academic Standards Committee.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE INDUSTRIAL ENGINEERING

Natural Science and Mathematics Courses 35
- CHEM 121a, 125a 5
- MATH 150, 152, 250, 305 17
- PHYS 211a, 211b, 212a, 212b 10
- STAT 380 3

Engineering Courses 61
- CE 204, 240, 242 8
- EE 210, 382 7
- IE 335, 345, 365, 370, 415, 451, 465, 468, 470, 483, 484 34
- IE Electives* 9
- ME 262 3

Fine Arts and Humanities Courses 9
- Intro Fine Arts/Humanities Courses 6
- PHIL 323 3

Social Science Courses 9
- ECON 111, 112 6
- Adv Social Science/Constitution 3

Skills Courses 15
- CS 140 3
- ENG 101, 102 6
- PHIL 106 3
- SPC 103, 104, or 105 3

Interdisciplinary Course 3

Total 132

* The industrial engineering electives must be selected with the approval of a faculty adviser and must contain at least two hours of design content. A curriculum guide with a list of industrial engineering electives and the design hours for each is available in the department office.

Below is a sample program for industrial engineering students to utilize as a guide.

FRESHMAN YEAR

Fall
- CHEM 121a - General Chemistry 4
- CHEM 125a - General Chemistry Lab 1
- ENG 101 - English Composition 3
- MATH 150 - Calculus I 5
- PHIL 106 - Critical Thinking 3

16

Spring
- ENG 102 - English Composition 3
- MATH 152 - Calculus II 5
- PHYS 211a - University Physics 4
- PHYS 212a - University Physics Lab 1
- SPC 103 - Interpersonal Comm 3

16

SOPHOMORE YEAR

Fall
- CE 204 - Engr Graphics and CAD 2
- CE 240 - Statics 3
- ECON 111 - Macroeconomics 3
- MATH 250 - Calculus III 4
- PHYS 211b - University Physics 4
- PHYS 212b - University Physics Lab 1

17

Spring
- CS 140 - Introduction to C++ 3
- EE 210 - Circuit Analysis I 3
- MATH 305 - Differential Equations I 3
- ME 262 - Dynamics 3
- STAT 380 - Statistics for Applications 3
- Intro Fine Arts/Humanities 3

18

JUNIOR YEAR

Fall
- ECON 112 - Microeconomics 3
- IE 335 - Intro to Info Processing Systems 3
- IE 345 - Engr Economic Analysis 3
- IE 370 - Manufacturing Processes 3
- Intro Fine Arts/Humanities 3
- CE 242 - Mechanics of Solids 3

18

Spring
- EE 382 - Digital Systems Design 4
- IE 365 - Quantitative Methods in IE 3
- IE 415 - Operations Res - Deterministic 3
- IE 451 - Methods Des & Work Measure 3
- IE 470 - Manufacturing Systems 3

16

SENIOR YEAR

Fall
- IE 465 - Design & Control of Quality Sys 3
- IE 468 - Operations Research - Simulation 3
- IE 483 - Production Planning & Control 3
- IE Elective I 3
- Interdisciplinary Course 3

15

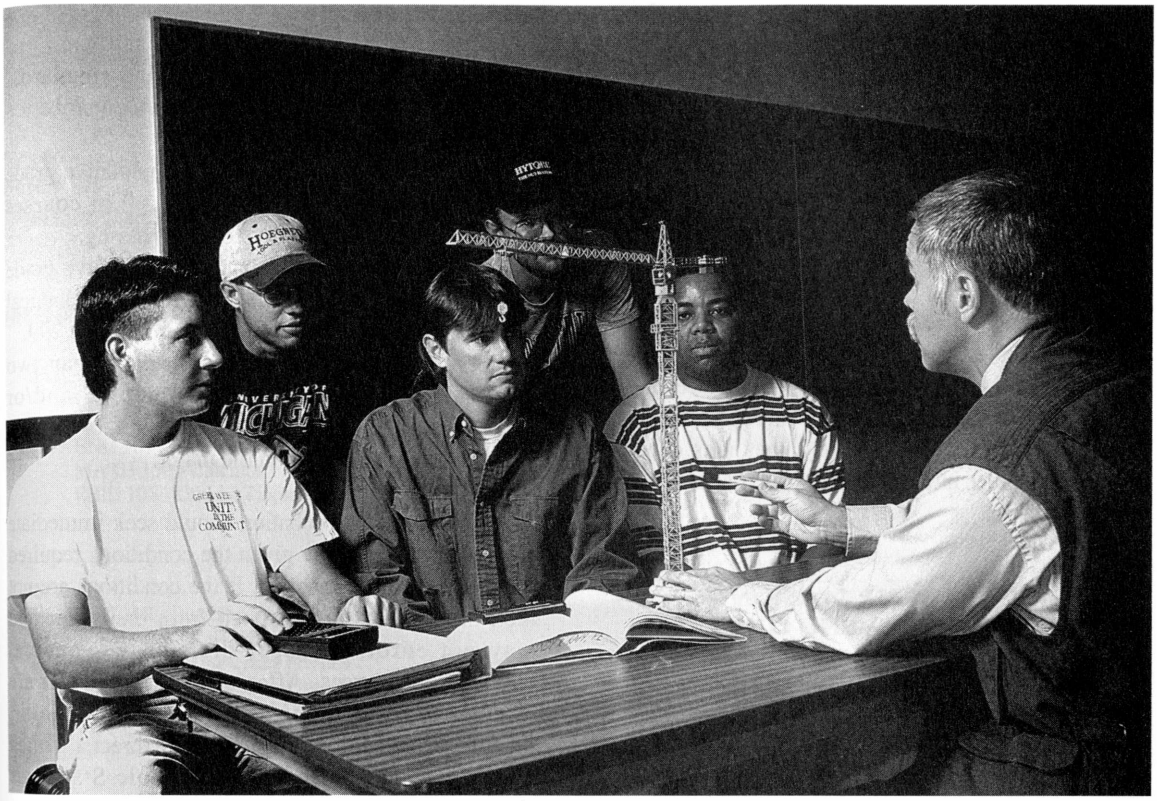
Spring
- IE 484 - Facilities Analysis and Design 4
- IE Elective II 3
- IE Elective III 3
- PHIL 323 - Engr, Ethics, & Prof 3
- Adv Social Science/Constitution 3

16

EXIT REQUIREMENTS

Degree requirements include the following:

1. a cumulative grade point average of 2.0 or higher for engineering courses



Assistant Professor Randy Rapp talks with students (left to right) Rob Meuer, Kris Davis, Brett Wagner, Chris Kuni and Daniel Sathekge.

2. a cumulative grade point average of 2.0 or higher for industrial engineering courses numbered above 299
3. completion of all departmental and University requirements and
4. completion of the senior assignment as part of the IE 484 - Facilities Analysis and Design.

MINOR REQUIREMENTS

Eighteen hours are required for the industrial engineering minor, including IE 345, 365, 370, and 451. The remaining two courses are electives to be selected from the following four courses: IE 465, 468, 470, and 483. Other substitute electives are subject to approval by the Director of the Industrial Engineering Program.

MECHANICAL ENGINEERING

PROFESSOR:
Anderson, T.P. (Chair)

ASSOCIATE PROFESSORS:
Gu, K.; Saniei, N.

ASSISTANT PROFESSORS:
Romick-Allen, R.; Yan, X.

Mechanical engineering is concerned with the generation and utilization of energy as well as with structures and motion in mechanical systems. The program of study prepares students to contribute to the profession by applying existing technologies to new problems as well as developing new technologies for the resolution of existing problems. Mechanical engineers apply their knowledge and creative abilities to a diverse array of problems such as designing systems for operation at the bottom of the sea and in outer space, as well as the hostile environments found in many industrial processes.

Mechanical engineers examine the basic phenomena of fluid turbulence or superconductors and the characteristics of composite materials, develop earthquake resistant nuclear power plants and other facilities, and examine alternative energy conversion techniques for mobile and central station use.

CAREER OPPORTUNITIES

Upon graduation, mechanical engineers are prepared to contribute to society through professional practice in industry or government or to continue their education through graduate study in engineering or the applied sciences. Alternatively, they may choose to pursue a career in a related area such as business, law, or medicine.

ENROLLMENT IN UPPER-DIVISION MECHANICAL ENGINEERING COURSES

The requirements for enrollment in upper-division mechanical engineering courses are:

1. satisfactory completion of all University and School of Engineering admission requirements
2. an approved application for enrollment in upper-division engineering courses
3. satisfactory completion of the lower-division (core) courses CE 240, 242; CHEM 121a, 125a; EE 210; MATH 150, 152, 250, 305; ME 262; PHYS 211a, 211b, 212a, 212b; and SPC 103; with a grade point average of at least 2.0 for the above courses is required for non-transfer students, transfer students from articulated programs, and Illinois resident transfer students; a grade point average of at least 2.25 for the above courses is required for other transfer students
4. a grade point average of 2.0 or better in ME 262, CE 240, CE 242, and EE 210 (both original and repeat grades are computed in this grade point average) and
5. a grade of C or better in ME 262 and CE 240 or their equivalent.

   Note: All grade point averages for the Mechanical Engineering Program are computed using the original and repeat grades.

ACADEMIC STATUS

Students must maintain the following standards. Students who fail to do so will be placed on probation in the mechanical engineering major.

1. Students must maintain a cumulative grade point average of at least 2.0 in courses taught in the School of Engineering.
2. Students must maintain a cumulative grade point average of at least 2.0 in mechanical engineering courses numbered above 299.
3. Students must receive no more than two failure grades, incompletes, and/or withdrawals in any combination for a single course required in the major.

Students placed on probation should seek immediate advisement and will be given the conditions required for removal from probation. If the conditions are not met, the students are dropped from the major and may not enroll in upper-division mechanical engineering courses. After one year, students are eligible to reapply for admission to the major. Students dropped from the major may direct a written appeal to the departmental Academic Standards Committee.

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE MECHANICAL ENGINEERING

Natural Science and Mathematics Courses	35
CHEM 121a, 125a	5
MATH 150, 152, 250, 305	17
PHYS 211a, 211b, 212a, 212b	10
STAT 380	3
Engineering Courses	61
ME 262, 310, 312, 312L, 315, 350, 350L, 370, 380, 410, 470L, 480, 482	35
ME Electives*	12
CE 204, 240, 242	8
EE 210	3
IE 345	3
Fine Arts and Humanities Courses	9
Intro Fine Arts/Humanities Courses	6
PHIL 323	3
Skills Courses	15
CS 140	3
ENG 101, 102	6
PHIL 106	3
SPC 103, 104, or 105	3
Social Science Courses	9
ECON 111, 112	6
Adv Social Science/Constitution	3
Interdisciplinary Course	3
Total	132

* The mechanical engineering electives must be selected with the approval of a faculty adviser and contain at least 1.5 hours of design content. A curriculum guide with a list of the mechanical engineering electives and the design credit hours for each is available in the departmental office.

Below is a sample program for mechanical engineering students to utilize as a guide.

FRESHMAN YEAR

Fall
- CHEM 121a - General Chemistry 4
- CHEM 125a - General Chemistry Lab 1
- ENG 101 - English Composition 3
- MATH 150 - Calculus I 5
- PHIL 106 - Critical Thinking 3

16

Spring
- ENG 102 - English Composition 3
- MATH 152 - Calculus II 5
- PHYS 211a - University Physics 4
- PHYS 212a - University Physics Lab 1
- SPC 103 - Interpersonal Comm 3

16

SOPHOMORE YEAR

Fall
- ECON 111 - Macroeconomics 3
- CE 204 - Engr Graphics & CAD 2
- CE 240 - Statics 3
- PHYS 211b - University Physics 4
- PHYS 212b - University Physics Lab 1
- MATH 250 - Calculus III 4

17

Spring
- ECON 112 - Microeconomics 3
- EE 210 - Circuit Analysis I 3
- CE 242 - Mechanics of Solids 3
- ME 262 - Dynamics 3
- MATH 305 - Differential Equations I 3

15

JUNIOR YEAR

Fall
- ME 310 - Thermodynamics 3
- ME 315 - Fluid Mechanics 4
- ME 350 - Dynamics of Machines 3
- ME 350L - Dynamics Laboratory 1
- CS 140 - Introduction to C++ 3
- Intro Fine Arts/Humanities 3

17

Spring
- ME 312 - Adv Thermodynamics 3
- ME 312L - Thermal Science Lab 1
- ME 370 - Materials Engineering 3
- ME 380 - Design of Machine Elements ... 4
- STAT 380 - Statistics 3
- Interdisciplinary Course 3

17

SENIOR YEAR

Fall
- IE 345 - Engineering Economics 3
- ME 410 - Heat Transfer 3
- ME 480 - Mech Engr Design I 3
- ME - Elective I 3
- ME - Elective II 3
- Intro Fine Arts/Humanities 3

18

Spring
- ME 470L - Stress Laboratory 1
- ME 482 - Mech Engr Design II 3
- ME - Elective III 3
- ME - Elective IV 3
- PHIL 323 - Engineering Ethics 3
- Adv Social Science/Constitution 3

16

EXIT REQUIREMENTS

Degree requirements include the following:

1. a cumulative grade point average of 2.0 or higher in engineering courses
2. a cumulative grade point average of 2.0 or higher is required for mechanical engineering courses numbered above 299
3. completion of all departmental and University requirements and
4. completion of a senior assignment as part of ME 480 - Mechanical Engineering Design I and ME 482 - Mechanical Engineering Design II.

MINOR REQUIREMENTS

Eighteen hours are required for a minor in mechanical engineering, including ME 262 and 310. The remaining courses are electives to be selected from among the mechanical engineering courses subject to approval by the Chair of Mechanical Engineering.

SCHOOL OF NURSING

dean felissa cohen

SCHOOL OF NURSING

OVERVIEW OF THE SCHOOL

The School of Nursing offers a Bachelor of Science degree in nursing for non-nurses and registered nurses with Associate degrees or diplomas in nursing. The program prepares a generalist in professional nursing; graduates are eligible to take the NCLEX-RN examination for licensure as a registered nurse. The state-approved program is accredited by the National League for Nursing and provides a foundation for graduate education.

Nursing courses build on a foundation in the liberal arts and sciences and are concentrated in the last two years of study. Clinical experiences are an integral part of the nursing major. Health care agencies in southwestern Illinois and in St. Louis cooperate with the School of Nursing in providing opportunities to practice clinical skills. The Community Nursing Services' nurse-managed center located in East St. Louis provides particular emphasis on nursing activities aimed at health promotion and primary health care.

Nursing is a dynamic, scientific, and humanistic profession that assists people in promoting good health practices throughout their lives. Professional nurses practice in settings such as hospitals, community health departments, schools, outpatient clinics, surgicenters, birthing centers, and home health and mental health agencies. The practice of professional nursing includes application of scientific and psychosocial theories to the care of clients and is broad in scope. The professional nurse works closely with other health care professionals but may also be in autonomous practice.

Faculty in the School have advanced preparation in many clinical specializations and fields, including community health nursing, gerontological nursing, maternal-child nursing, medical-surgical nursing, mental health nursing, and nursing of children as well as family, pediatric, adult and women's health nurse practitioner. Faculty maintain an active role in clinical practice, research, scholarly inquiry, and professional service.

The School of Nursing maintains a nursing skills laboratory which provides undergraduate students with opportunities to see, learn, and practice nursing skills and procedures in simulated settings. All dimensions of health assessment (e.g., physical examinations, blood pressure readings, and eye examinations) are practiced in the laboratory prior to clinical experiences. In addition, nursing students use computer laboratories which contain interactive video and computer-assisted instruction as part of their classroom work. Students learn clinical nursing skills at a variety of off-campus sites, including hospitals, nursing homes, home health care agencies and a wide variety of agencies. Most of the clinical agencies are located in surrounding communities in the Metro East area including Troy, Belleville, East St. Louis, Alton, Granite City, Bond County, and St. Louis, MO.

ADMISSION REQUIREMENTS

APPLICATION PROCEDURE

Students seeking admission to the School of Nursing must first be admitted to the University by contacting the Office of Admissions and Records. Students should then make an appointment with an adviser in the School of Nursing. Call 618-692-3956 for an appointment. Admission to the University and application to a major in Nursing do not guarantee admission to the School of Nursing.

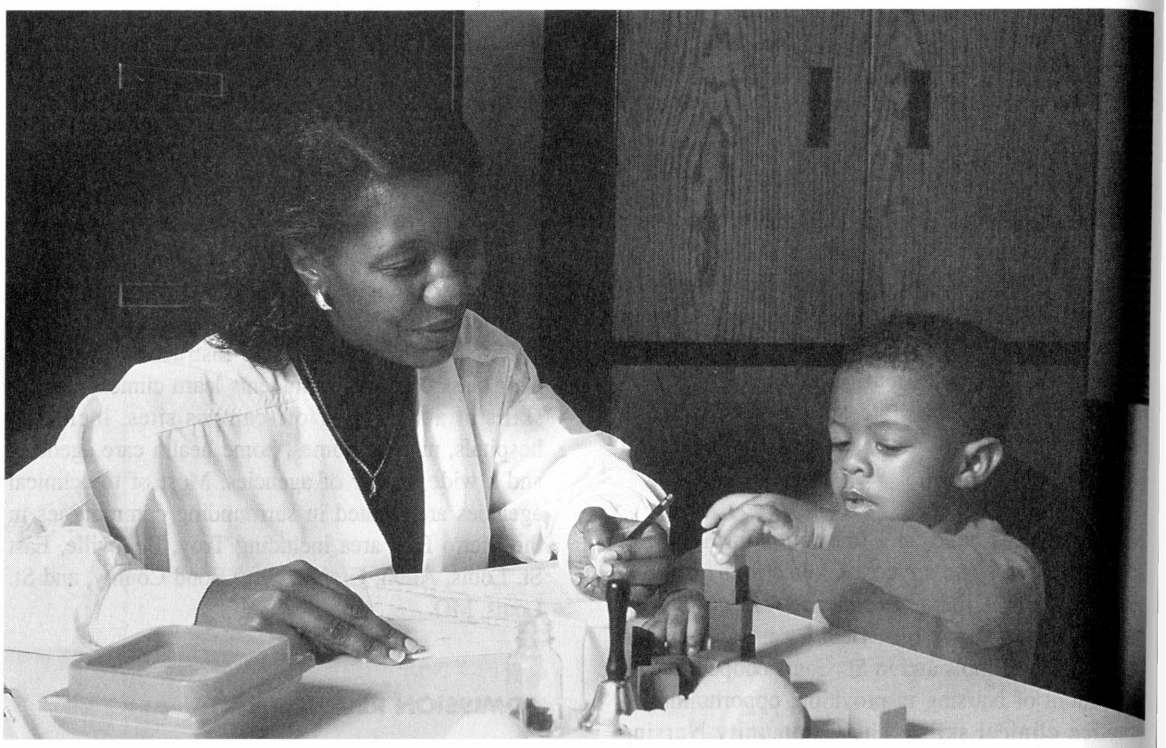
Applicants must apply according to the deadlines below. Forms for this purpose are available from the School of Nursing. Deadline dates for application are:

ADMISSION	APPLICATION
Fall Semester	September 1 through February 28/29
Spring Semester	March 1 through August 31

Applicants for each semester are reviewed by the Student Affairs Committee of the School of Nursing and notified of their status in time to register if accepted.

An applicant to the School of Nursing will be considered ready to be reviewed for admission when all of the following criteria are met:

1. Admission to the University.



Nursing student Ramona Blanton-Smith works with a child at SIUE's East St. Louis clinic.

2. Completed application on file in the School of Nursing by the deadline. An application is considered complete when the application, official transcripts of all college coursework, and a record of current course enrollment are in the applicant's file. Applicants are responsible for ensuring that their materials are received (Box 1066, School of Nursing) by March 1 for fall admission and by September 1 for spring admission. **ALL MATERIALS MUST BE IN THE APPLICANT'S FILE PRIOR TO THE DEADLINE IN ORDER FOR THE APPLICANT TO BE CONSIDERED FOR ADMISSION.** Applicants' files completed after those dates will be reviewed on a space available basis.
3. Successful completion of prerequisite courses with grades of C or better.
4. Minimum prerequisite grade point average of 2.7 on a 4.0 scale (including all transfer credit as well as credit at SIUE).
5. Selective criteria placement (to be implemented only if the number of qualified applicants exceeds the positions available). These criteria are available in the School of Nursing.

Students are normally considered for admission during their sophomore year; however, a special Freshman Admission Initiative is available for students with ACT scores above 25. Information about this initiative can be obtained from the School of Nursing.

COURSES TO BE COMPLETED PRIOR TO ADMISSION

Skills Requirements:
- English 101 and 102
- Interpersonal Communication (SPC 103)
- Introductory Social Science Requirements: Two of: Anthropology 111, Economics 111, Geography 111, Hist 111, Political Science 111, Psychology 111, or Sociology 111
- Human Growth and Development (NURS 203)

Biophysical Science Requirements:
- Inorganic, Organic and Biochemistry (Chem 120a, b),
- Bacteriology (Biol 250),
- Anatomy and Physiology I (Biol 240a),
- Anatomy and Physiology II (Biol 240b)

A grade of C or better must be earned in all prerequisite courses.

ADDITIONAL GENERAL EDUCATION REQUIREMENTS WHICH MAY BE COMPLETED AFTER ADMISSION

Phil 320, Ethics or Phil 321, Ethics in Medicine (prior to semester 6), Statistics 107 (prior to semester 5), Phil 106 (prior to semester 4), one (1) Advanced Social Science, one (1) 300- or 400-level elective course.

TRANSFER STUDENTS

If the applicant has attended another college or university, an official transcript must be sent to the Office of Admissions, SIUE, Box 1047, and to the School of Nursing, Box 1066. The prerequisite grade point average will be calculated in the School of Nursing. **RECORDS MUST BE UPDATED EACH SEMESTER** by having a copy of the grade slip or transcript sent to the School of Nursing.

Transfer students follow the same procedures for admission and must meet the same criteria. Students who wish to be admitted with prerequisite course credits transferred from elsewhere must submit the following to the School of Nursing:

1. Application dated appropriately.
2. Official transcript(s).
3. Bulletin(s) current at the time courses were taken. In lieu of a bulletin, descriptions obtained from official sources or syllabi may be requested by the Student Affairs Committee of the School of Nursing.

Nursing courses will transfer only from NLN accredited baccalaureate programs with approval of the Student Affairs Committee of the School of Nursing. Transcripts plus course descriptions or syllabi are required for review by the Committee. The minimum number of credit hours required to earn a Baccalaureate degree is 124. Of the required 124 hours, at least 60 must have been earned at a four-year institution and at least 30 must be earned at SIUE. Students must complete all University and School of Nursing requirements in order to receive a degree from SIUE.

REGISTERED NURSES

Registered nurses follow the same University admission procedure and must meet the same criteria described above for transfer students. In addition, for admission into the School of Nursing, applicants to the Baccalaureate-completion program must pass the National League for Nursing Mobility Profile II examinations and present proof of current professional nurse licensure in the state where they are employed. After admission, R.N. students must have an Illinois license and a license in the state where they will be doing their clinical practice.

SCHOOL RETENTION REQUIREMENTS

The School expects its students to maintain a minimum grade of C in all courses in the nursing major. Students who fail a nursing course will be referred to the Student Affairs Committee. Students will be dropped from all courses in the School of Nursing when they fail two nursing clinical courses, or one nursing clinical course and one nursing classroom course, or two nursing classroom courses. After admission to the School, students must maintain a cumulative grade point average of at least 2.00 to continue in the nursing program.

All nursing majors are required to file reports of a physical examination and immunizations prior to their entering the first semester of nursing courses. Yearly tuberculin skin testing is required. The Student Handbook for Undergraduates and the BSN-Completion Student Handbook issued to students accepted into the School of Nursing contain full details.

FACULTY

PROFESSORS:
Bell, D.E.; Boyd, M.A.; Clement, J.M.; Cohen, F.L., (Dean); de Meneses, M.R.

ASSOCIATE PROFESSORS:
Beaman, M.L.; Custer, M.S.; Sykes, R.K.

ASSISTANT PROFESSORS:
AuBuchon, B.L.; Baccus, M.G.; Baier, M.A.; Bernaix, L.W.; Draper, V.N.; Fearing, A.D.; Lambert, S.L.; Mabunda-Temple, G.; Martin, B.C.; Mitchell, S.I.; Newton, M.A.; Rumfelt, J.J.; Tartasky, D.S.; Williams, L.D.

CLINICAL ASSISTANT PROFESSOR:
Holliday, V.G.

INSTRUCTORS:
Schmidt, C.A.; Wacker, M.L.

CLINICAL INSTRUCTOR:
Mahiger, L.M.

LECTURERS:
Arras, R.E.; Burke, K.A.; Comrie, R.W.; Evers, L.L.; Gaddy, J.L.; Heard, S.; Jackle, M.E.; Jobe, M.A.; Jones, M.K.; Ketchum, K.M.; McGraw-Houchens, M.A.; Mueggenburg, I.K.; Petroff, V.L.; Zanger, M.E.

CAREER OPPORTUNITIES

The Bachelor's degree in nursing qualifies graduates for beginning practice in entry-level positions in a wide range of health care settings such as hospitals, nursing homes, clinics, industries, schools, and community health agencies. Professional nurses are in demand across the country; graduates of this program usually find employment before or soon after graduation. Students have numerous opportunities for part-time employment while attending school.

PROGRAM COMPLETION REQUIREMENTS

Completion of the following are required in order to fulfill degree requirements:

School of Nursing requirements
General Education requirements
Senior Assignment

REQUIREMENTS

	Hours	Gen Ed.	School of Nursing
Semester 1 - Fall			
English 101	3	•	•
Speech 103	3	•	•
Chem 120a	3	•	•
Chem 124a	1	•	•
Biol 111	3	•	•
GE elective (Fine Arts)	3	•	
TOTAL	16		
Semester 2 - Spring			
English 102	3	•	•
Biol 250	3		•
Chem 120b	3	•	•
Chem 124b	1	•	•
Anth 111, Econ 111, Geog 111, POL 111, Psyc 111, Soc 111 (take two of these courses)	6	•	
TOTAL	16		
Semester 3 - Fall			
Biol 240a	4	•	•
Phil 106	3	•	•
Stat 107	3	•	•
Elective	3		
Nurs 203	3		•
TOTAL	16		
Semester 4 - Spring			
Biol 240b	4	•	•
Phil 320	3	•	•
GE elective (Adv Soc Sci)	3	•	•
Nurs 204	3		•
Nurs 214	4		•
TOTAL	17		
Semester 5 - Fall			
(Nurs 335RN)	3		•
Nurs 300	3		•
Nurs 305	4		•
Nurs 315	3		•
Nurs 350	3		•
Nurs 351	2		•
TOTAL	18		
Semester 6 - Spring			
GE Elective at 300- or 400-level	3	•	•
Nurs 306	3		•
Nurs 360	2		•
Nurs 326	3		•
Nurs 362	2		•
Nurs 316	2		•
TOTAL	15		
Semester 7 - Fall			
IS	3	•	
(Nurs 437RN)	3		•
(Nurs 473RN)	3		•
Nurs 407	4		•
Nurs 417	3		•
Nurs 470	4		•
Nurs 471	2		•
TOTAL	16		
Semester 8 - Spring			
Nurs 408	4		•
Nurs 418	3		•
Nurs 428	2		•
Nurs 480	4		•
Elective	3		(only if needed)
TOTAL	13/16		

TOTAL = 124 semester hours

DEGREE REQUIREMENTS: BACHELOR OF SCIENCE DEGREE IN NURSING FOR REGISTERED NURSES

General Education Requirements
Skills Courses .....15 sem. hrs.
English 101 3
English 102 3
Speech 103 3
STAT 107 3
PHIL 106 3
Social Sciences
6 sem. hrs. — introductory level
6 sem. hrs. — advanced level
Natural Sciences and Math
3 sem. hrs. — introductory level
6 sem. hrs. — advanced level
Fine Arts and Humanities
6 sem. hrs. — introductory level
3 sem. hrs. — advanced level (PHIL 320)
Interdisciplinary course
3 semester hours

TOTAL = 48 semester hours

NURSING PROGRAM

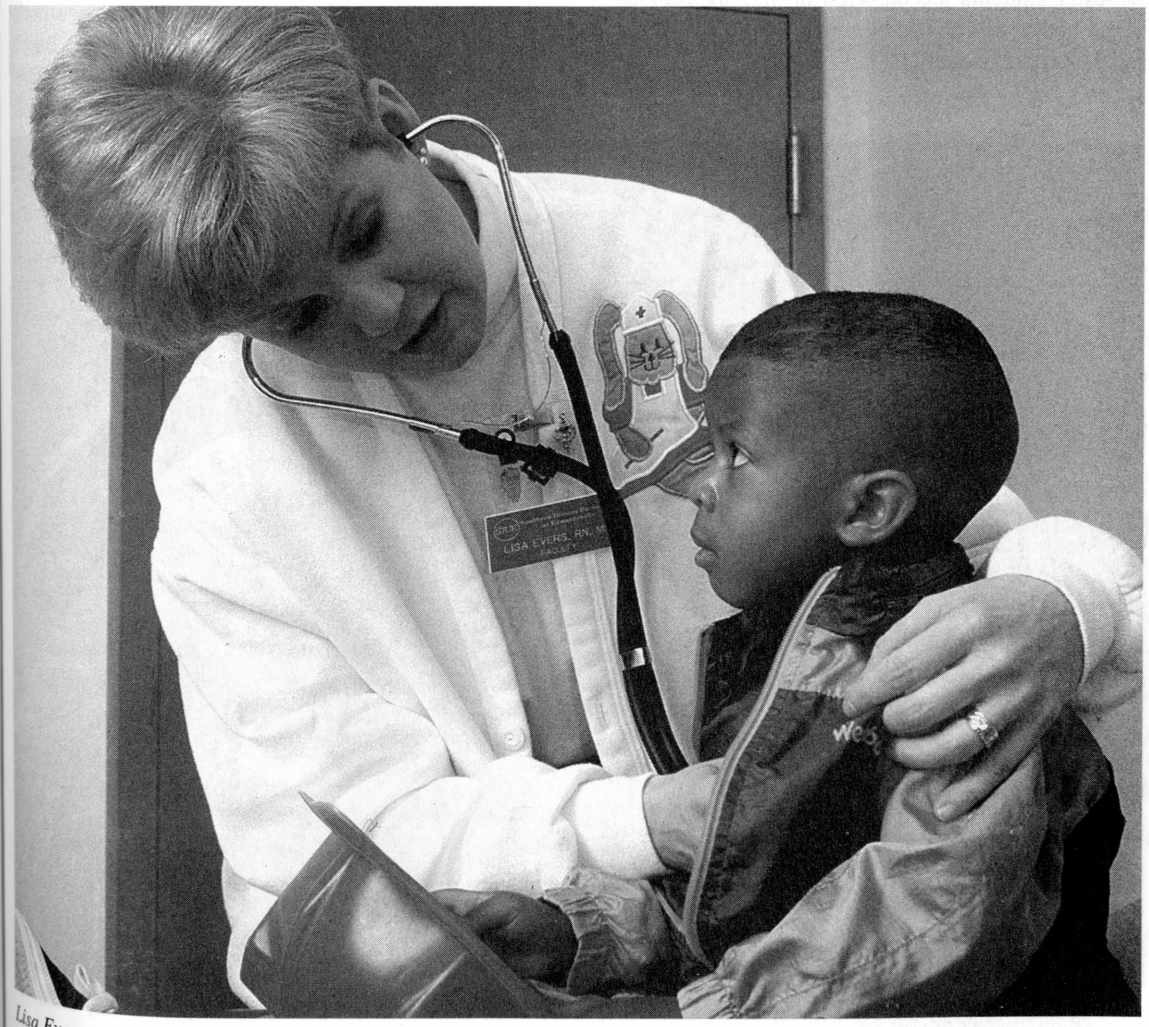
N335 — Professional Nursing Processes I .....3 hrs.
N315 — Professional Nursing Processes II .....3 hrs.
N316 — Professional Nursing Processes III .....2 hrs.
N417 — Professional Nursing Processes IV .....3 hrs.
N437 — Professional Nursing Processes V .....3 hrs.
N473 — Management and Role Change Pract .....3 hrs.
N408 — Conceptual Basis V: Strategies for Promoting Health in the Community .....4 hrs.
N480 — Nursing Practicum V: Appl. of Strategies for Promoting Health in the Community .....4 hrs.

** Total General Education Hours 48
** Total Nursing Hours by Enrollment 25
** Total Nursing Hours by NLN Tests 35

** Life Span/Developmental Concepts .....3 hrs.

**Total Hours = 111

Elective hours to meet University requirements of 124 hours for graduation are also required.



Lisa Evers of the School of Nursing examines a young patient.

MINOR REQUIREMENTS

A minor in Nursing is not available.

OTHER SOURCES OF INFORMATION

Prospective students and students may obtain additional information from brochures, the Student Handbook for Undergraduate Nursing Students, and the RN Student Handbook.

MISCELLANEOUS

Students should be prepared to purchase uniforms and the equipment kits for the clinical laboratory courses. Clinical fees are associated with some courses.

Some textbooks must be purchased during the first semester students are enrolled in nursing courses. These books will be used throughout the curriculum and cost approximately $500.

Students are required to carry health insurance. Injuries and/or exposures to infectious agents may result in a need for tests and/or treatment. The cost of the tests and/or treatments are the responsibility of students enrolled in the School of Nursing. Students must provide their own transportation to and from clinical agencies.

The School of Nursing offers the BSN Completion Program in southern Illinois at sites such as the John A. Logan College campus, the Rend Lake College campus, and Shawnee Community College campus and in southeastern Illinois in the Effingham/Olney areas.

A School Nurse Program enabling the BSN nurse to apply for certification by the Illinois State Board of Education is also available.

Students are required to maintain current CPR and first aid certification while enrolled in the School of Nursing.

Nursing student Dwayne Springman practices a nasogastric insertion on fellow student Shannon Saunders as Wendy Glassock and instructor Mary Ann Barber observe.

UNIVERSITY HONORS PROGRAMS

DEANS' SCHOLARS HONORS PROGRAMS

The Deans' Scholars Honors Program was established to assist outstanding students in planning individualized academic programs. It enables talented students to study in one or two academic areas in depth, or to explore a variety of courses outside their major. The Deans' Scholars program serves students from all disciplines.

Students admitted as Deans' Scholars plan their academic programs with the help of faculty advisers in their major areas of interest. Some of the usual graduation requirements are modified, so that students have the opportunity to explore a number of areas of interest or to study more intensively an area of concentration. Students have the opportunity to choose courses in diverse areas, thereby obtaining a broad education. Returning students who have been away from academic study for a number of years may find the flexibility of the Deans' Scholars program particularly appealing.

To fulfill the general education requirements, Deans' Scholars take at least 30 semester hours. Of these, 27 hours must be in the three General Education areas: fine arts and humanities; natural sciences and mathematics; and social sciences. The 27 hours are distributed equally among the three areas but no more than nine hours may be taken at the 111 level. Students may fulfill no more than six hours of their General Education requirements through courses from their academic major. In addition to the above, Deans' Scholars are required to take three semester hours of Deans' Scholars honors hours.

Deans' Scholars are required to complete one course examining Intergroup Relations and a second course exploring either international culture or international issues. These courses fulfill the appropriate General Education area requirements.

As a general rule, freshman, sophomore, and junior level students who have been admitted to the University and who have a grade point average of at least 3.5 (4.0 scale) are eligible to apply. Letters of recommendation are required from at least three instructors who are familiar with the student's high school or university work. High-ranking high school seniors are encouraged to apply for admission to the Deans' Scholars program upon matriculation at SIUE. A personal interview is required as the final step in the selection.

Selection of Deans' Scholars students is made on the basis of candidates' previous academic work, together with the letters of recommendation from instructors. Candidates complete the admission requirements by filing a program responsibility form showing courses that they have already taken and those they plan to take. Upon approval of the program of study, students are formally designated as Deans' Scholars. For more detailed information, please inquire at the Deans' Scholars Office, Provost's Office, Box 1021.

DEANS' SCHOLARS GENERAL EDUCATION REQUIREMENTS

COURSE REQUIREMENTS

Minimum Hours

1. Fine Arts and Humanities .....9 hours
   (Three courses for a total of no fewer than nine semester hours)
2. Natural Sciences and Mathematics .....9 hours
   (Three courses for a total of no fewer than nine semester hours)
3. Social Sciences .....9 hours
   (Three courses for a total of no fewer than nine semester hours)
4. Deans' Scholars Honors Hours .....3 hours
   (or an Interdisciplinary Course)
5. One course in Intergroup Relations 0-3
   (May be applied to satisfy no more than three hours of requirements in 1, 2 or 3 above as appropriate)
6. One course in International Culture or International Issues 0-3
   (May be applied to satisfy no more than three hours of requirements in 1, 2 or 3 above as appropriate)

TOTAL .....30 hours
(no fewer than 10 courses)

CHANCELLOR'S SCHOLARS PROGRAM

The Chancellor's Scholars Program, funded principally by individual grants through the Southern Illinois University at Edwardsville Foundation, provides attractive financial assistance and individualized educational opportunities at Southern Illinois University at Edwardsville to outstanding freshmen selected on a competitive basis.

Chancellor's Scholars will:

- Receive a scholarship for up to eight semesters covering all tuition and fees at the in-state tuition rate for undergraduate programs
- Choose from a variety of special introductory and advanced courses to complete rich and challenging programs of studies
- Work with faculty mentors, who, by reason of scholarship, interest, and sensitivity, are highly qualified to serve as personal advisers, teachers, and mentors
- Become eligible for membership in the Deans' Scholars Honors Program, which provides a high degree of challenge and flexibility in the curriculum
- Assist in the promotion of scholarly activity and contribute to the intellectual and cultural life of the University.

Selection of Chancellor's Scholars is made by the Chancellor's Scholars Committee on the basis of the candidate's previous academic work and special talents. To be considered for the scholarship, an applicant must submit the following:

- An application for undergraduate admission to the University on the prescribed form
- A scholarship application on the prescribed form
- ACT or SAT scores
- At least three letters of recommendation from principals, high school teachers, or counselors on the prescribed form
- Evidence of special talents or abilities
- Evidence of extra curricular activities, if applicable
- An official copy of the high school transcript, indicating rank in class at the end of the sixth semester or later.

All application and supporting materials should be forwarded, by the prescribed date, to Student Financial Aid, Campus Box 1060, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1060.

STUDENT COLLOQUIUM

Students wishing to study subjects not in the regular curriculum or to experiment with new approaches to learning may propose a Student Colloquium. Approved Student Colloquia enable students to plan and carry out units of study and to receive course credit for their work.

Five or more students who agree upon a subject for study during the semester may form a class section. Students wishing to participate in a colloquium must have sophomore or higher standing at the time of registration. A minimum of five students must complete the colloquium and participate in the determination of grades in order to be eligible to receive credit.

Students interested in forming a colloquium must identify a faculty member willing to serve as a sponsor for the group. The faculty sponsor must approve the topic and the terms of the proposal. The faculty sponsor, upon the request of the participants, will be available for help and advice during the course of the term. Colloquium proposals must be prepared on the prescribed form available from the Office of the Provost.

After obtaining the adviser's approval, the proposal should be submitted to the Dean of the College of Arts and Sciences. Course proposals must reach the Dean in final form no later than one week before the beginning of the semester during which the colloquium will be conducted. The Dean will determine whether the proposed colloquium is appropriate for credit and for the number of credit hours the colloquium course will receive. The Dean also makes certain that the proposed colloquium does not duplicate courses already available in the University curriculum.

In the final weeks of the semester, the members of the colloquium summarize their accomplishments and evaluate their achievements; they submit a final report to the faculty adviser before the close of the final examination period of the term for which the colloquium will be credited. The faculty adviser forwards the final report to the Dean recommending approval or disapproval along with the reasons supporting the recommendation. The Dean determines whether or not credit should be granted for the colloquium.

Students who complete the colloquium receive grades of pass or no credit. A colloquium proposal is essentially a contract from which registrants may not be able to withdraw without the consent of the other participating students.

Students may obtain up to three hours of colloquium credit in any one term, but may not obtain more than six hours of such credit during their undergraduate careers. Although colloquium credit normally applies only toward elective hours, in special areas students may appeal for General Education credit or for credit toward a major or minor field of study. In cases of such appeal the Dean of the College of Arts and Sciences or the chair of the appropriate department, whichever is appropriate, will render the decision.

UNDERGRADUATE RESEARCH ACADEMY

The Undergraduate Research Academy (URA) at SIUE encourages, supports, and enables students to conduct original research and creative activities at the undergraduate level. The Academy recognizes that student talents can be uncovered in ways that do not appear through the usual format of classroom instruction and testing. Because the University requires all students to undertake a Senior Assignment as part of University assessment, the URA serves to highlight and support students who seek honors recognition for this activity. An undergraduate research or creative activity enhances the quality of the baccalaureate experience by giving students opportunities to pursue ideas independently, to interact with the faculty, and to engage more fully in the educational process of discovering and creating. Undergraduates who become directly involved in original scholarly activity are usually able to obtain jobs more easily upon graduation and are also more likely to become committed to advancing knowledge and to enter graduate studies.

Twice each year, in cooperation with the academic departments at SIUE, the URA recruits eligible students as URA Fellows to undertake research and creative activity under the guidance of dedicated faculty members. The process involves several stages: submitting a proposal and budget for approval, actually doing the research or creative activity during the semesters specified in the proposal; participating in periodic URA events, preparing a final report in publishable form; and presenting the results at the URA Symposium. The URA provides budgetary support for conducting the scholarly activity as well as advisory support during preparation of the proposals and reports. The Office of Undergraduate Assessment and Program Review, in which the URA is housed, assists students during their work by arranging purchase of commodities and services as necessary and by providing prompt administrative support as needed. The academic departments and the supervising faculty mentor(s) provide all necessary research guidance and facilities. In addition, URA Fellows receive a fellowship award in two installments, the first after submission of their proposals and the second after they have completed their reports and made their final presentations.

Students who have been accepted as a major in any of the disciplines at SIUE and who maintain a grade point average of 2.3 or better are eligible to compete for URA Fellowships. Students must have junior or senior standing at the time they conduct their URA work and, often, may use the URA project to fulfill the Senior Assignment requirement for graduation. Proposals must be signed and submitted in the prescribed form to the Undergraduate Research Academy, Office of Undergraduate Assessment and Program Review, Box 1300, SIUE, Edwardsville, IL 62026-1300.

More information and application/proposal forms may be obtained from Departmental offices, offices of the Deans, or the Office of Undergraduate Assessment and Program Review (618-692-2640).

Student Misty Smith conducts an experiment in a Chemistry lab.

INSTRUCTIONAL SERVICES

ACADEMIC DEVELOPMENT COURSES AND SERVICES

Instructional Services, located on the first floor of Peck classroom building, offers students a variety of support services designed to maximize their opportunities for academic success in the University. These services include academic development courses; workshops; testing programs; and individual assistance in the Writing Center. Students may develop skills in such subjects as reading, writing, and mathematics and such study skills as time management, note taking strategies, test preparation, organizing for study, and career decision making.

Some students who enter the University take placement tests as part of the University's assessment plan and as a way of determining at which level in reading, writing, and mathematics students should begin their study. The University requires freshmen to meet minimum competency in each of these areas prior to their enrollment in introductory level general education courses. Freshmen who need to prepare themselves for entry into the general education curriculum may do so through developmental courses offered through Instructional Services. These courses help students reach their goals. Developmental courses in reading are available to assist students to develop critical comprehension skills necessary for understanding and effectively using university texts. Developmental mathematics courses are designed to prepare students for college algebra if their major programs require such and to enter general education science and mathematics courses. Basic writing courses are designed to assist students to write logical, clear expository essays relatively free from mechanical errors. This preparation will encourage their success in English composition and in introductory general education courses, all of which require written assignments. Other enhancement courses in reading speed and efficiency, study skills, and career planning and development are available to students who wish to focus on these specific areas. Classroom activities in all Instructional Services courses involve students actively in developing their skills. Computer-assisted instruction is frequently incorporated into courses. Out-of-class study groups are also encouraged.

TESTING SERVICES

A complete range of testing services is available to students. Instructional Services administers the Miller Analogies Test; The Graduate Record Examination; The American College Test (ACT); The College Level Examination Program (CLEP); proficiency examinations; the Constitution examination; examinations for the Schools of Education and Nursing; and University placement tests.

Students may earn academic credit for their prior knowledge by taking CLEP and proficiency examinations. For more information, please refer to the section entitled **Credit Earned by Examination, Extension, and Correspondence.**

Students who are required to complete placement tests prior to admission or advisement may obtain information from Instructional Services by visiting Peck Building, Room 1404 or calling 618-692-3717.

INSTRUCTIONAL AND TUTORIAL ASSISTANCE

Instructional Services provides assistance to students enrolled in developmental mathematics courses and college algebra through its mathematics resource area in Peck Building, Room 1414. Students are helped on a first-come, first-served basis by qualified peer tutors and instructors. Small groups are welcomed and students are encouraged to use the area for working with other students on their mathematics assignments. For additional information, call 618-692-2039.

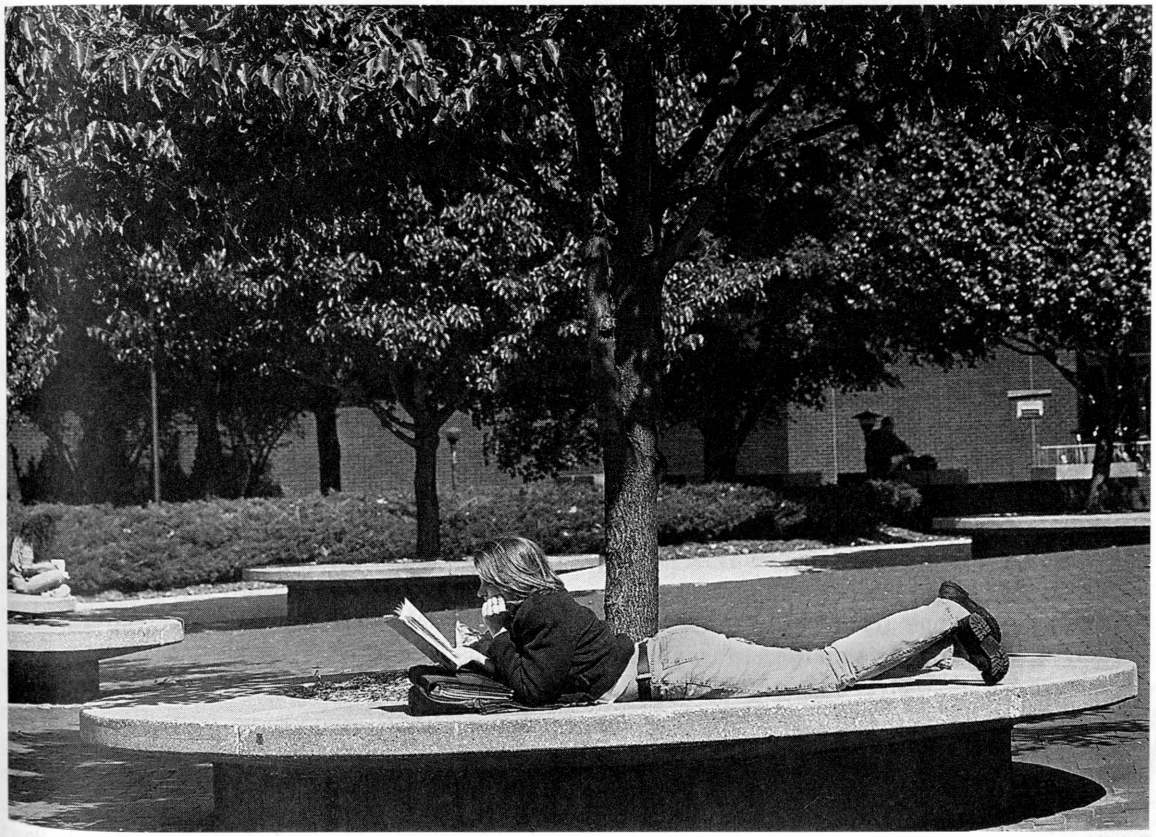
As an academic support unit, Instructional Services offers support to students beyond the developmental course level. Students who would like to improve their reading skills may contact Instructional Services reading instructors. Instructors will assist students in increasing their comprehension and in building vocabulary skills, increasing reading rates, and developing techniques for reading textbook materials. Appointments may be made in the Peck Building, Room 1404 or by calling 618-692-3717.

The Writing Center provides individual assistance with papers, reports, and theses. Self-instructional materials are also available on a wide variety of writing-related topics, such as organization, paragraphing, grammar, and English as a second language. Appointments are recommended for assistance with papers. The Writing Center is located in Peck Building, room 1419, and is open for daytime, evening, and weekend use. For more information, contact the center at 618-692-2045 or wcenter@siue.edu (e-mail).

Tutorial assistance may also be provided by individual departments. Students should contact the specific department to determine whether such assistance is available.

Additional student support is available to students in the form of academic survival workshops which Instructional Services staff provide each term. Workshops include such topics as time management, organizing for study, test and final examination preparation, managing academic stress, and strategies for beginning research papers. These one or two hour workshops are free to students and are listed in the Schedule of Classes each term.

Instructional Services staff are located in the 1400 wing of the Peck classroom building and are available to assist students. For additional information or assistance, students should stop by the Instructional Services office in Peck 1404 or call 618-692-3717.



A beautiful day brings students outdoors to study.

STUDENT DEVELOPMENT AND UNIVERSITY ACTIVITIES

KIMMEL LEADERSHIP CENTER

Students enrolled at the University will find many opportunities for developing their potential and obtaining challenging leadership and service roles. Student Government, the Student Leadership Development Program, student organizations, intercollegiate athletics, University committees, honorary organizations, and departmental activities offer such opportunities.

The Kimmel Leadership Center, located on the first floor of the University Center, provides students with numerous services, programs and activities to assist them in developing their potential. The Kimmel Leadership Center is the focal point for Student Government and its functions, the Student Leadership Development Program, student organizational activities, and several related student sponsored activities.

STUDENT GOVERNMENT

Student Government provides opportunities for students to become involved in the decision-making processes of the University. As one of three constituency bodies of the University, Student Government represents the interests of students and collaborates with the administration on many policy matters. In addition, Student Government allocates student funds, appoints representatives to various University and student committees, recognizes student organizations, and reviews student fees.

Student Government is comprised of five executive officers: the Student Body President, the Vice President, the Finance Chair, the Personnel and Public Relations Chair, and the Student Trustee, a member of the SIU Board of Trustees. In addition, there is a twelve member Student Senate and a Student Government staff.

Students interested in Student Government may visit the Student Government Office located in the Kimmel Leadership Center, or they may call 618-692-3819 to obtain information.

STUDENT LEADERSHIP DEVELOPMENT PROGRAM

The Student Leadership Development Program provides opportunities for students to develop professional and leadership skills, gain practical experience, and enhance their civic awareness through participation in leadership modules, and University and community service.

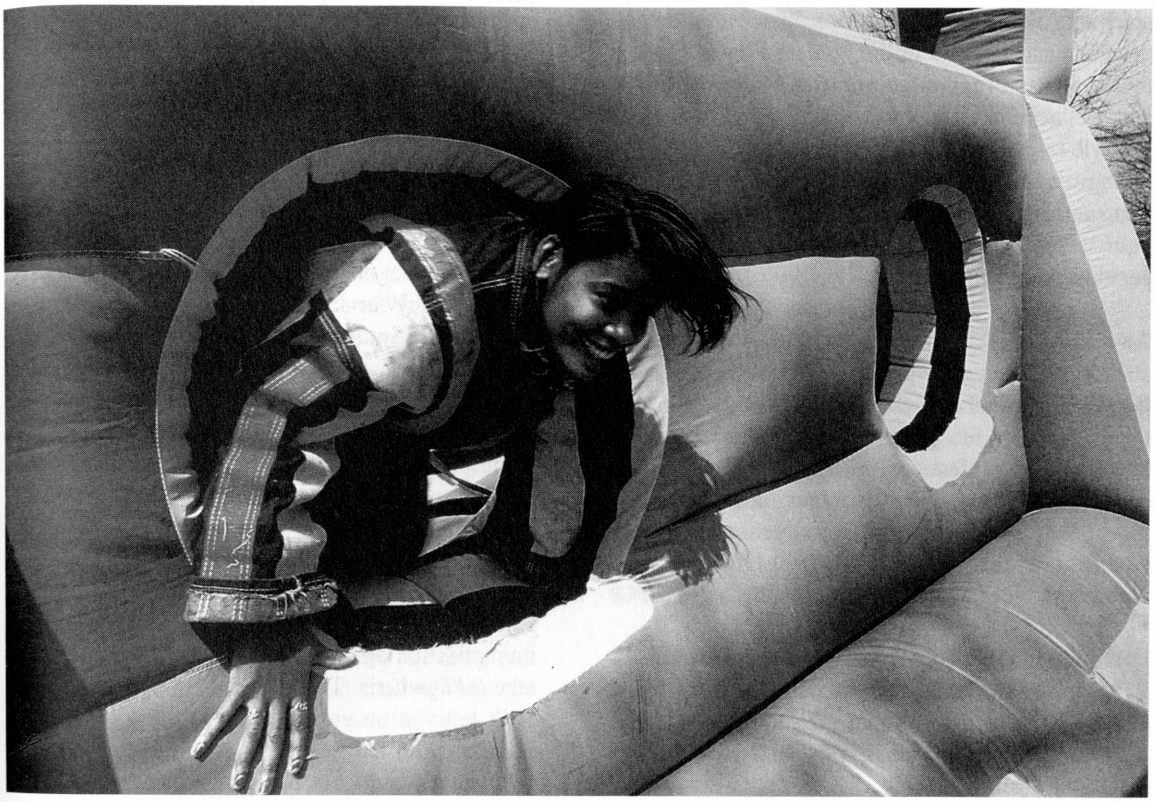
The Student Leadership Development Program is open to all enrolled students. Students are encouraged to begin the program during the freshman year. The program, designed to accommodate varying student interests and schedules, may be completed at each student's own pace. Students who successfully complete the program receive a Student Leadership Transcript. For additional information about the program and its requirements, contact the Kimmel Leadership Center at 618-692-2686.

STUDENT ORGANIZATIONS AND ACTIVITIES

Students who have an interest in developing their leadership potential may wish to become actively involved in one or more of the 130 recognized student organizations. In addition to honorary organizations which encourage and recognize academic achievement, student organizations address educational, religious, social, recreational, and political interests. All enrolled students may participate in student organizations and their activities.

Throughout the year, seasonal activities offer students opportunities to become involved in campus life. These activities include Welcome Week, Pow Wow, Homecoming, Black History Month, and Springfest.

The Kimmel Leadership Center plans, coordinates, and co-sponsors a variety of campus programs. Students participating in the Student Leadership Development Program as well as other interested students may contribute service to such events as the Senior Fair, Elderhostel, Red Cross Blood Drives, Preview SIUE, and Welcome Week.



Springfest brings challenges like the velcro obstacle course!

UNIVERSITY CENTER BOARD

The University Center Board (UCB) serves as both an advisory board and a program council. As an advisory board, UCB functions as the primary recommending body to the Director of the University Center. The Advisory Board consists of: Building Services and Facilities Committee, Finance Committee, and Policy Review Committee.

The UCB Program Council plans and produces many events and activities on campus. The Council provides a wide variety of entertainment, cultural, educational, and recreational programs for the SIUE community. The Program Council consists of: Current Affairs, Ethnic Flair, Performing Arts, Public Relations, Advertising/Promotions, Recreation, UC Attractions, and Visual Arts.

Students interested in developing their skills in program planning may obtain additional information in the Kimmel Leadership Center located in the University Center or call 618-692-2686 for information.

STUDENT LEGAL SERVICES

Students may seek legal counsel and referrals through a licensed attorney. Through the services of the attorney, students may gain an understanding of legal processes and the law. The attorney advises and assists students on matters such as landlord/tenant disputes, contracts, consumer rights, family matters, bankruptcy, small claim matters, traffic matters, and wills. In addition to legal consultation, the attorney provides referrals to other attorneys as well as a notary service.

Enrolled students may receive assistance through the Student Legal Services Program. For additional information, call 618-656-4649.

WELLNESS ACTIVITIES

The University provides an environment for developing healthful habits and offers many opportunities for students, faculty, and staff to participate in programs and activities which promote healthy lifestyles and enhance physical, social,

spiritual, occupational, emotional and intellectual development. Located in the Student Fitness Center, the Wellness Program coordinates National Health and Wellness Week and provides personal fitness and lifestyle assessments along with recommendations for change. Assistance is also available for stress management, the development of good nutritional habits, and many other elements impacting your personal well-being.

An integral part of Wellness activities is the Alcohol and Drug Education component. Established in 1986 to provide alcohol and substance abuse education for the University, the program provides referrals for those needing professional assistance; offers alcohol education seminars, specific training and workshops for student athletes and student organizations; and coordinate the National Collegiate Alcohol Awareness Week activities.

For additional information about the Wellness Program or Alcohol and Drug education, call 618-692-B-WELL.

RECREATIONAL AND LEISURE ACTIVITIES: CAMPUS RECREATION

Students may participate in a wide variety of recreational and leisure activities offered through Campus Recreation. Opportunities for involvement include a wide selection of intramural sports, sport clubs, aquatics, informal recreational activities, family programs, and special events.

The Vadalabene/Student Fitness Center is available during the day, in the evenings, and on weekends to serve the recreational needs of the University community. Opened in the spring of 1993, the Student Fitness Center offers greatly enhanced opportunities for fitness and recreational pursuits. The Student Fitness Center contains:

- four indoor courts for basketball, volleyball, tennis, indoor soccer and roller hockey
- a suspended jogging track
- a 4,000 square-foot weight room
- a child care facility
- the wellness resource lab
- a student social lounge with wide screen TV

The adjoining Vadalabene Center offers:

- an indoor pool
- eight racquetball courts

For additional information about programs, services, and recreational opportunities, contact Campus Recreation at 618-692-B-FIT.

HEALTH SERVICE

Health Service provides general outpatient care, laboratory diagnostic testing, sexuality awareness, and pharmacy services to members of the University community. Students must be enrolled in order to utilize the services and will be expected to complete a medical history form prior to or at the time of the initial visit. Physical examinations for participation in specific University activities such as varsity athletics are also provided through Health Service.

All students entering the University are required to provide Health Service with a completed Immunization Record Form and proof of immunization against measles, mumps, rubella, and tetanus/diphtheria. This requirement is in compliance with legislation enacted by the State of Illinois. Students who fail to comply with the immunization requirement will not be allowed to register for a subsequent term. For additional information about the services provided by Health Service or the immunization requirement, call 618-692-2843.

INTERCOLLEGIATE ATHLETICS

The Intercollegiate Athletic Program provides students with opportunities to enhance their education, to represent the University, and to participate in competitive sports while developing skills and understanding. Undergraduate students possessing the necessary requirements, capabilities, and interests are encouraged to participate. Participation, however, is secondary to the academic obligation of students.

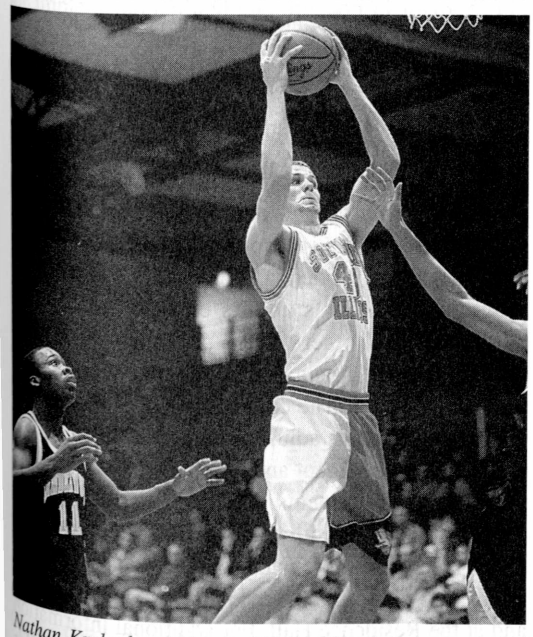
The athletic program consists of 14 varsity sports with seven for men, including baseball, basketball, cross country, soccer, tennis, track, and wrestling. The women's sports include basketball, cross country, soccer, softball, tennis, track and volleyball. The University is a member of the National Collegiate Athletic Association (NCAA), The Great Lakes Valley Conference (GLVC), and competes in Division II.

Cougar athletic teams have established a successful tradition of accomplishment with 16 NCAA National

Championships. The men's soccer team captured the first national Division II title in 1972 and Division I crown in 1979. Men's tennis captured seven consecutive Division II titles between 1978 and 1984. The men's basketball team earned its first trip to the NCAA tournament in 1986 and returned in 1987 and 1989. The baseball, wrestling, and tennis teams are perennial qualifiers for these respective championships. The SIUE wrestlers amassed three consecutive national titles between 1984 and 1986. The baseball team has made 17 appearances in NCAA tournament play.

The women's tennis and softball teams are annual contenders for a championship berth. The tennis team achieved its fourth consecutive national title in 1989, while the softball squad has qualified for five national championships, finishing second in 1982. Women's basketball and soccer have enjoyed highly successful seasons. Each qualified for the National Tournament in 1993-94, and soccer again in 1996. The track and cross country program has had several NCAA All-Americans and numerous NCAA qualifiers from both the men's and women's programs.

Athletic scholarships are available in all varsity sports and are awarded by the respective head coach. All entering freshman student athletes must fulfill the NCAA's high school core requirements in order to compete during their freshman year. Prospective students may wish to seek information from the high school counselor early in the junior year, and should apply with the NCAA clearinghouse early in their senior year.



Nathan Kreke heads for the basket. He also was awarded the Oates and Associates Civil Engineering Scholarship at Honors Day.

Facilities for home contests include the state-of-the-art 3,000 seat Olympic Festival Track and Field Stadium, which also houses Bob Guelker Field; the 4,000-seat Vadalabene Center; a varsity and practice softball complex, the 1,500-seat Roy Lee Field for baseball, six varsity tennis courts, and a national caliber cross country course.

Students who wish to become involved in intercollegiate athletics should call 618-692-2871 or e-mail ehess@siue.edu and request an appointment with the appropriate head coach. The Cougars also provide information on the World Wide Web at http://www.siue.edu/ATHLETIC.

SPIRITUAL DEVELOPMENT

Students and other members of the University may participate in the activities of the Religious Center, which is home for the campus ministries of several denominations. The individual ministries maintain their own schedule of varied events, including worship services, and may collaborate on ecumenical activities. The Center seeks to assist students and others who wish to enrich their spiritual lives. Ministers offer listening sessions, spiritual counseling, varied activities, and facilitate the connection of individuals with other resources on and off campus.

THE STUDENTS' ADVOCATE

The Vice Chancellor for Student Affairs is vitally interested in developing students' potential and in providing an environment which assists students in meeting their educational and career objectives. Students are encouraged to seek assistance from the Vice Chancellor for Student Affairs on any matter that concerns them. The Vice Chancellor serves as the students' ombudsman and can be particularly helpful in the resolution of problems involving more than one office or agency of the University. The Vice Chancellor for Student Affairs may be consulted on matters of student rights and responsibilities, student conduct, and grievance procedures.

Students who wish to seek the assistance of the Vice Chancellor for Student Affairs may call 618-692-2020 or make an appointment in the Rendleman Building, Room 2306.

SERVICES FOR STUDENTS

ACADEMIC COUNSELING AND ADVISING

Students confer at least once each term with an academic adviser, who provides advice regarding appropriate courses, career options, and related matters. Advising is mandatory for all students prior to registration each term. For additional information, please refer to the section on **Registration.**

Academic advisers are located in Peck Building 1315. Appointments for undecided and undeclared students are necessary and may be made by calling 618-692-3701.

BURSAR

The Office of the Bursar, located on the first floor of the Rendleman Building, provides a variety of services to students. Students are strongly encouraged to pay their tuition and fees, housing and other University charges by mail. Students may elect to pay a $10-per-term service charge and use the Installment Payment Plan (IPP) to make monthly payments of their tuition and fees. This charge is automatically applied to the accounts of students who have not paid their tuition and fees in full by the first day of classes. There is a 1.5% fee assessed against any unpaid past due amount.

The Bursar also disburses student loan checks, student paychecks and provides check cashing services. For further information about available services, please call 618-692-3123.

CAREER DEVELOPMENT CENTER

The Career Development Center is a comprehensive center for the development of career objectives and direction for students and alumni. The Center assists students and alumni in relating their academic majors to career fields in the implementation and enhancement of their individual career development, exploration and confirmation of career/major choices and the development of job search strategies.

This is accomplished through the integration of various career development theories, career interest inventories, personal style inventories, career guidance through personal counseling and a computerized career guidance program (SIGI PLUS) as well as AD 117 "Career Development."

Cooperative Education is also a major component of the career development process in assisting students in all majors to gain career related work experience in paid paraprofessional positions while attending SIUE.

The Alumni Sharing Knowledge program provides mentoring for interested students. Some of the many other services provided by the Center include workshops on various topics, resume referral, on-campus interviewing and a Career Resource Center with information on video tape and in books. Accessing our home page http://www.careers.siue.edu via the Internet will allow complete access to the Career Development Center. One can register with our office, view career positions as well as Co-op jobs, and sign up for on-campus interviews simply by accessing our home page. Two career fairs are held annually, the Career Network Day and the Oktober Career Fest are held for students and alumni to network with employers both locally and nationally.

For more detailed information on the Career Development Center, please call 618-692-3708 or stop by the office located in Building II, Third Floor, Room 3126 or at our website at www.careers.siue.edu.

COUNSELING SERVICES

Counseling Services provides direct service counseling to students coping with educational, personal, and/or interpersonal issues; crisis intervention for residential students; and serves as a practicum site for students enrolled in clinical psychology and other related programs. The office provides sexual assault counseling and advocacy for students and staff. The counseling staff is committed to assisting students adjust to living and learning in a university environment and to realize their worth and potential. Appointments are conducted in a private setting and all consultations are confidential. The office is located at the intersection entrance to Tower Lake. Services are also available in Health Service and at the Residence Hall. For additional information regarding Counseling Service, please call 618-692-2197.

Student Tammie Burk works out in the Student Fitness Center.

DISABILITY SUPPORT SERVICES

The coordinator for students with disabilities in the Office of Disability Support Services is responsible for implementation and coordination of many of the programs, activities, and services for persons with disabilities. The coordinator offers academic advising and registration, guidance and counseling, referrals to related offices and departments, and assistance in obtaining specialized equipment or supplies, support services, and special accommodations.

All students with disabilities are encouraged to visit the coordinator, located in Peck 1311, at their earliest convenience to discuss available services. Individuals may contact the coordinator by calling 618-692-3782 (V/T).

EARLY CHILDHOOD CENTER

Preschool education is available for children of SIUE students and University employees. The Early Childhood Center, located on North West Road off Circle Drive, is open from 7:00 a.m. to 6:00 p.m. daily. Parents may choose from all day or half-day a.m. programs. Children between the ages of two and five may be enrolled.

A school-age program is available at Tower Lake Apartments for children ages 5-11 who are enrolled in an elementary school program.

University students interested in early childhood education may utilize the Center for observation, practicum, or student teaching requirements. Students interested in pursuing this opportunity should contact their Academic Adviser and the Director of the Early Childhood Center. For more information, please call 618-692-2556.

EVENING AND WEEKEND STUDENT SERVICES

Students needing assistance in the evening and on weekends may utilize a range of services available through Evening and Weekend Student Services located in the Rendleman Building, Room 1207. This office serves as a liaison between evening and weekend students and other University offices normally open only during weekday hours. In addition to the regular University business hours, when classes are in session, the office is open from 4:30 p.m. until 8:00 p.m. Monday through Thursday and from 8:00 a.m. until 2:00 p.m. on Saturday. Saturday hours during June and July are 8:00 a.m. until 12:00 noon. During break week and other times when evening and weekend classes are not in session, special hours are posted.

Evening and Weekend Student Services can assist students with the following:

- Admission information
- Applications — Undergraduate, Graduate, Non-Degree, Visiting Student
- Catalogs — Graduate, Undergraduate
- EDUCARD information and noncredit registration
- Enrollment certification requests
- Financial aid forms and information
- Graduation application
- Information about evening and weekend campus events
- Name, address, marital status and social security number change forms
- Parking decals, parking and traffic regulations and violation appeal forms
- Pass/no credit declarations (credit change)

- Program change (dropping and adding classes)
- Reclassification of residency
- Registering for classes
- Returning books to Textbook Service (when that office is closed)
- Testing Information (for GMAT, GRE, CLEP and Placement Tests)
- Transcript requests
- Withdrawing from classes or school

Each term the office publishes a newsletter and a class schedule supplement especially for those students who are taking evening and weekend classes.

As an additional help to students who cannot be on campus during regular University business hours, various other offices, including the Bursar, Student Financial Aid, Textbook Service and Parking Services, are open with some services from 4:30 p.m. until 6:30 p.m. on Monday and Thursday evenings during the regular academic year. During the summer term, offices are open Monday evenings until 6:30 p.m. Some services, including Lovejoy Library, Academic Counseling and Advising, and the University Bookstore have extended hours Monday through Thursday evenings whenever classes are in session.

For additional information about evening and weekend services, please phone 618-692-3775 or toll free from St. Louis, MO, 314-621-5168, extension 3775.

INTERNATIONAL STUDENT SERVICES

International Student Services provides a comprehensive range of services for international students at SIUE. These services include

The University Center celebrates its 30th anniversary with a reception highlighted by the cutting of a large cake in the shape of the building.

preenrollment assistance, immigration advisement, coordination of community hospitality programs, and general support and referral assistance. The International Student Advisor serves as a liaison with foreign governments and scholarship agencies, assists with foreign currency exchange and the processing of tuition deposits when necessary. The office is located in Room 2006 of the University Center.

ORIENTATION

An orientation tailored to the needs of international students is offered prior to each academic term. International Student Services cooperates with other University offices in offering a comprehensive orientation. Mathematics and English placement testing, academic advising, library and campus tours, registration, and temporary housing assistance (on a limited basis) are among the services offered.

IMMIGRATION ADVISEMENT

The office provides assistance for students and University employees with United States immigration regulations and procedures, work eligibility clearance, and visa information. In addition, the office is responsible for University compliance with immigration record keeping and reporting requirements.

GENERAL SUPPORT SERVICES

The office provides various workshops and cross-cultural counseling. The International Advisor maintains contact with University departments and community resources and makes referrals as appropriate.

COMMUNITY INTERACTION

The International Hospitality Program, a community volunteer organization, works closely with the office to welcome international students. Its activities include an active host family program and international wives club. In addition, the Hospitality Program sponsors numerous social activities. For more information, please call 618-692-3785.

UNIVERSITY HOUSING

University Housing can accommodate approximately 1,800 residents in apartment and residence hall style housing. All single student resident rooms are fully furnished and air conditioned; local telephone service and basic cable service are provided. Washer and dryer facilities are close at hand. Trained staff reside in each living area, and hundreds of activities and events are sponsored every year for the benefit of residents.

RESIDENCE HALL LIVING

Reserved for traditional freshmen (single 18, 19, or 20 year olds), the 502-bed residence hall is organized into four-person clusters of two double rooms and one bath. Residents may choose to live on coed, single gender, or quiet wings. A central entrance area, alarmed and exterior-surveillanced, provides around-the-clock security.

RESIDENCE HALL FEATURES

- A social lounge in each wing, with game table, TV and kitchenette equipped with a microwave
- Computer data lines to the University mainframe from each room
- Faculty/staff mentors
- A study lounge in each wing
- A 24-hour computer laboratory
- An in-house movie channel
- 24-hour security
- Wall-to-wall carpet
- Individual mailboxes
- Support programs to help freshmen adjust to college life
- Nearby public transportation to Edwardsville, surrounding communities and MetroLink

TOWER LAKE APARTMENTS

Offering style and comfort, Tower Lake Apartments are just a short walk or shuttle ride from the classroom buildings. Also nearby is the Tower Lake Recreation Area and the many leisure opportunities it offers, such as swimming, hiking, or just relaxing by the lakeside.

Tower Lake Apartments are fully furnished with a range, refrigerator, garbage disposal, dining table and

chairs, desks, dressers, drapes, sofa, end tables, chairs and beds. Single students may share an apartment with one, two, or three other students and may request to share a bedroom, request a designated private bedroom or for additional space and privacy (when space is available), convert a shared bedroom to a deluxe private (for an additional charge).

Over 160 married couples with and without children, and single parents, also make Tower Lake Apartments their home. Family residents may choose furnished or unfurnished two or three bedroom apartments. Special features for families include: a children's playground, bus service to local schools, family activities, and available child care provided by the SIUE Early Childhood Center.

TOWER LAKE APARTMENT FEATURES

The activity center at Tower Lake is the Commons Building, featuring a lounge with a wide-screen TV, the Commons Grill and Convenience Store, a computer lab, a laundry, outdoor tennis courts, a basketball court, a multi-purpose room and staff offices.

Special Tower Lake Apartment features include:

- Programs that enhance community building
- Free bus service to the academic core
- Public transportation to Edwardsville, surrounding communities and MetroLink
- Locked mailboxes
- Designated quiet, graduate student and substance-free buildings
- Storage closet assigned to each apartment
- An in-house movie channel

FOOD SERVICE

The University's Food Service offers meal plans for both Residence Hall and Tower Lake residents which can be used at the Commons Grill at Tower Lake, at the University Center's Cougar Den, Center Court, University Restaurant or Union Station. The meal plan provides flexibility, convenience and savings. There is no need to carry cash. All meal plans utilize a computerized meal card that can be used in 12 different areas to satisfy personal tastes. Residence Hall residents are required to purchase one of three meal plans. Because Tower Lake Apartments are furnished with kitchens, Tower Lake residents have the option of purchasing a meal plan.

APPLICATION

Application for University Housing requires a $25.00 non-refundable application fee from all applicants, a $75.00 deposit from single students and a $150.00 deposit from families. Single student housing applicants are also required to submit an advance payment of $100.00 which is applied towards the room charges. Penalties are assessed for cancellation of the housing contract.

For additional information regarding University Housing, write the University Housing Office, Box 1056, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1056, or call 618-692-3931, tty-ttd 800-526-0844. Messages may be left after hours, on holidays, and on weekends. Additional information can be found at http:/www.siue.edu/housing

OFF-CAMPUS HOUSING

University Housing offers information on available off-campus facilities to assist students, faculty and staff in locating available accommodations. Owners of off-campus facilities may use the University's contact form for student rental housing. The University reserves the right to deny the privilege of listing off-campus accommodations with University Housing 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 area in order to seek desirable living accommodations.

SIUE CAMPUS NETWORK

The SIUE campus network interconnects all the main buildings and many remote buildings on the Edwardsville campus, Alton Dental School campus, and East St. Louis Center. The network provides more than 2,800 direct connections to the SIUE campus network and also a modem pool for dial-in users. The network consists of over 7.5 miles of fiber-optic cable and over 95 miles of high-speed copper cable. The Office of Information Technology manages the campus network servers which provide account, Web, USENET and mail services.

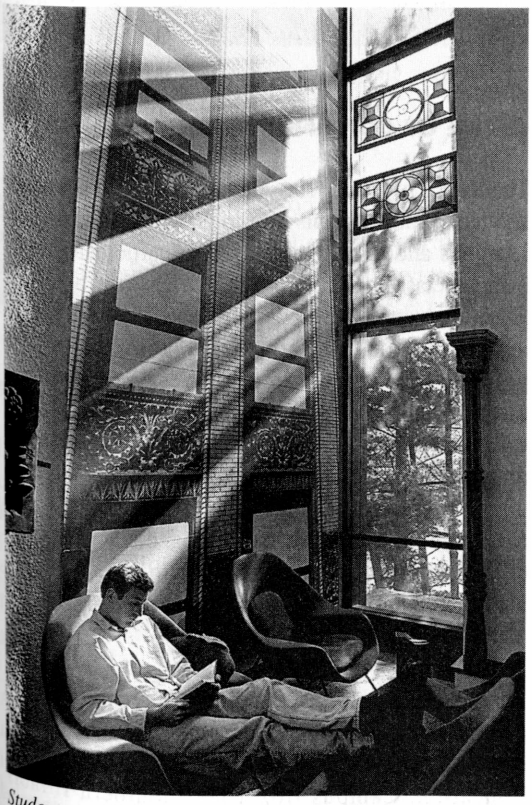
INTERNET E-MAIL ACCOUNTS

All students are provided a campus network account as soon as they are financially cleared in the Student Information System. Students are required to present an SIUE Student ID to confirm financial status and activate a campus network account. Campus e-mail addresses are in the form <username>@siue.edu. Personal Web pages can be accessed with a URL in the form http:/www/siue.edu/ <username>. The disk space allocated to each student for storing e-mail and Web pages is limited.

Additional information about campus network services can be obtained on the Web at http://www.siue.edu/HELPDESK/.

LIBRARY AND INFORMATION SERVICES (LIS)

Library and Information Services provides information resources and services to support instruction, scholarship, and service activities of the University. Library and Information Services acquires and maintains information resources, provides services to assist users in developing information literacy skills, and provides facilities to house material, equipment, and laboratories.



Students in all disciplines take advantage of the resources available through Lovejoy Library.

LIS - LOVEJOY LIBRARY

Lovejoy Library maintains a collection of more than 1,000,000 volumes and subscribes to more than 6,500 serials and periodicals. The Library's collection includes 1,300,000 microform items, 540,000 U.S. government documents, 150,000 maps, 43,000 audiovisual titles, and thousands of special research items.

Lovejoy Library offers assistance to students, faculty, and staff, and acquaints users with procedures for locating information and resources for papers, theses, or other research projects. The Library's resource-sharing agreements make it possible for University students to use other academic, public, and special libraries in the St. Louis area. Electronic access is also provided to the collections of 800 other libraries in Illinois and 10,000 libraries worldwide. Materials from these collections may be obtained through interlibrary loan service.

LIS - AUDIO VISUAL SERVICES

Audio Visual Services provides complete audio-visual assistance, including the development of new media using up-to-date technology to meet the needs of University faculty, staff, and students. Audio Visual Services maintains a collection of more than 2,900 items including films, CD-ROMs, laserdiscs, and videotapes.

The Self-Help Laboratory is available to students who wish to produce their own instructional materials for classroom presentations. A staff member is available for technical assistance; there is a minimal charge for materials.

The Self-Instruction Laboratory provides equipment for using materials in the media collection. A small room is available for group viewing. Staff are available to provide assistance with hardware and software.

LIS - ACADEMIC COMPUTING

Academic Computing manages both open-access and special-purpose computer laboratories and classrooms. Hardware and software for curriculum

support are purchased in consultation with multi-departmental cluster committees. The campus computer laboratories are organized into five clusters. Staff are available in the computer laboratories to provide assistance.

The Education, Nursing, and Social Sciences Cluster includes two computerized classrooms, a specialized Macintosh laboratory, and other open-access laboratories in Building III. In addition to database, spreadsheet, statistical analysis, and graphics software, these computing facilities provide faculty and students with specialized multimedia and authoring software.

The Science, Engineering, and Information Systems Cluster includes workstations which support instruction in programming languages, computer graphics, computation, software engineering, and database design and implementation. The cluster includes two computerized classrooms in the Science Building and an electrical engineering laboratory at University Park.

The Arts and Communications Cluster provides four laboratories, including the Music Laboratory and the Mass Communications Computerized Classroom in the Communications Building and the art and design and electronic imaging laboratories in the Art and Design Building. These facilities provide software supporting multimedia, computer animation, electronic composition, color graphics, and desktop publishing.

The English, Foreign Language and Instructional Services Cluster in the Peck Building provides students with an open-access computer laboratory supporting word processing, statistical analysis, and desktop publishing applications, two English computerized classrooms, and a foreign language laboratory.

The Business Cluster Laboratories and Computerized Classrooms in Building II offer specialized software for spreadsheet, database, statistical analysis, presentation graphics, forecasting, financial modeling, and project management. Two computerized classrooms and an open-access laboratory support instruction in a variety of business disciplines.

General purpose open-access microcomputer laboratories are located in Lovejoy Library, the Student Residence Hall, and the Tower Lake Commons Building.

NEW STUDENT ORIENTATION

Immediately prior to the first day of classes for the fall term, the University sponsors a program designed to acquaint students with the University, including its academic programs and related requirements, and student life programs. The program provides opportunities for new students to meet other students, faculty, and staff members.

Students who wish to gain a more thorough understanding of the University are encouraged to enroll in University 112, The University Experience, a two-credit orientation course offered each term. The course, which normally meets twice each week, is taught by University professors and staff who take a special interest in new students. Class size is restricted so that students may become well acquainted with their professors and with other students.

University 112 is also designed to assist students in choosing a major, planning for a career, orienting them to the University and higher education, helping them understand their roles within the University, and developing a meaningful sense of community.

For additional information about orientation to SIUE, please call 618-692-2020.

OFFICE OF CONTINUING EDUCATION

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

SIUE, through a consortial arrangement with other community colleges and universities in southern Illinois, hosts courses delivered to SIUE via technology-mediated instruction.

For schedules of classes being offered off campus and for information about enrolling in these classes, students may contact the Office of Continuing Education, Campus Box 1084, Southern Illinois University at Edwardsville, Edwardsville, Illinois

As part of the University's community policing program, officers patrol the campus on bicycles.

62026-1084, or phone 618-692-3210. Information about classes in the Belleville area may also be obtained directly from the SIUE/BAC Service Office at Belleville Area College, 618-235-2700, ext. 335.

PARKING

SIUE parking is based on color-coded lots with corresponding decals. ALL VEHICLES MUST BE REGISTERED AND DISPLAY A CURRENT DECAL. Student decals may be obtained at Parking Services located on the first floor of the Rendleman Building. Motorcycle decals may be purchased at the same location.

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

Evening students have the option of purchasing evening decals, which are issued on a term basis. These decals permit parking in lots closer to the classroom buildings after 4 p.m. Sales are limited to 1500 decals on a first come, first-served basis. For more information, please call 618-692-3680.

PARKING FOR PERSONS WITH DISABILITIES

Spaces have been designated for parking for persons with disabilities. These spaces are marked with the international handicapped symbol. Any vehicle parked in these signed spaces must be identified with either handicapped license plates or other accepted

handicapped decals. Students who are disabled are also required to purchase a University handicapped decal. Any vehicle not bearing such identification is subject to either a University or State of Illinois citation and towing. These regulations are rigorously enforced. Information on obtaining handicapped decals is available from Parking Services. For more information, please call 618-692-3680.

POST OFFICE

The SIUE Branch Post Office, located on the lower level of the Rendleman Building, is open from 7:30 a.m. to 4:30 p.m., Monday through Friday. Mail is dispatched daily twice in the morning and once in the afternoon. The services offered by the Post Office include domestic and international mail; express mail; parcel post; stamps; postal money orders (domestic) registered mail (accepted up to 3:00 p.m. daily); certified mail; insured mail; federal income tax forms; and rental of postal lock boxes. For more information, please call 618-692-2028.

PRE-ENTRY ADVISEMENT AND REGISTRATION

All new students are invited to attend a Pre-entry Advisement and Registration Program. During such programs, with the assistance of an adviser, students have the opportunity to discuss their general education and major requirements.

Pre-entry advisement and registration for new students is offered during the summer for the following fall term and for a few weeks before the beginning of the spring and summer terms.

SPECIAL SERVICES PROGRAM

The Special Services Program is funded by the United States Department of Education and Southern Illinois University at Edwardsville. The objective of the program is to retain and graduate the students served by the program. The Special Services Program is open to students who meet specific criteria established by the Federal Government.

Services offered through the program are academic counseling and advising, tutorial assistance, supplemental instructional support, monthly meetings with the assigned adviser, and cultural opportunities. Students who meet the above criteria and have a need for an academic support system are encouraged to apply to the program.

For more information about the Special Services Program, please call 618-692-3790 or stop by the Peck Building, Room 1313.

STUDENT IDENTIFICATION CARDS

Students receive an identification card which bears their image and identifies them as enrolled students at Southern Illinois University at Edwardsville. The identification card also allows access to services, activities, and programs throughout campus and is utilized for campus dining plans. The identification card is a legal document. Students who loan, borrow, use a card other than their own, or alter an identification card are subject to disciplinary action; in addition, such action may be considered a criminal offense. The identification card should be carried at all times in order to use a multitude of campus services. For additional information, contact the ID Card Center at 618-692-2740.

UNIVERSITY BOOK SERVICES

The University, through a nominal rental fee, supplies basic texts for undergraduate courses (including 400-level courses) through Textbook Service, located in the basement of Lovejoy Library. In order to obtain rental textbooks from Textbook Service, students must have paid their fees or made arrangements for fee payment through a deferment and have a student ID card. Supplemental texts are sometimes required for undergraduate courses; they may be purchased from the University Bookstore, located on the first floor of the University Center. Newly entering students are advised that they may need to purchase texts though most will be available as part of the textbook rental plan. Graduate students enrolled in undergraduate classes must purchase texts from Textbook Service. Textbook Service has regular business hours of 8:00 a.m. to 4:30 p.m., Tuesday, Wednesday, Friday and 8:00 a.m. to 6:30 p.m. on Monday and Thursday. There are extended hours of service during issue and return weeks.

The University Bookstore provides textbooks for graduate classes as well as supplemental and recommended texts for undergraduate classes. The Bookstore also provides a wide range of school

supplies, gifts, general stock books, and welcomes special orders for books not in stock. Regular business hours are 8:00 a.m. to 6:30 p.m. on Monday through Thursday, and from 8:00 a.m. to 4:30 p.m. on Friday and 10:00 a.m. to 2:00 p.m. on Saturday (Fall and Spring semesters). Extended evening and weekend hours are scheduled during the first two weeks of a semester. The University Center Bookstore is located on the first floor of University Center.

UNIVERSITY CENTER

The University Center is the focal point of the campus community. Its many services and activities augment the academic endeavors of students and faculty members. During the day and evening, the University Center is a hub of diverse activities: students engaged in a multitude of conversations; an audience watching a performance or listening to an address; students, faculty, and others eating lunch or checking out new book titles in the bookstore; students reading or relaxing in the quiet Opapi Lounge; organizations planning activities; people pondering over a painting in a new art exhibition; or students and faculty attending a Student Leadership module.

The University Center is also an important bridge between the University, southwestern Illinois, and the St. Louis metropolitan community. Many area groups use its Conference Center facilities for meetings, conferences, and dinner engagements. The University Center Information Office assists persons visiting the campus. The Bookstore is an important source for books, periodicals, and other items for area high school teachers and students, as well as other residents.

The Goshen Lounge is frequently the forum for noon-hour debates, special events, exhibits, and entertainers. Most students and staff pass the lounge on their way to other points in the building: Center Court, University Club Restaurant, bookstore, art gallery, recreation center, television lounge, TheBank Center, Print and Design Shop, meeting rooms, or the barber and beauty shop.

A variety of options are available with DINING SERVICES. Renovated in 1994, the Center Court located on the lower level, offers hot breakfast, lunch, and dinner menus. The Center Court features gourmet coffees, nutritious items such as crisp salads, hot entrees, and made to order submarine sandwiches as well as a Pizza Hut Express and a Taco Bell Express. After dinner, students may enjoy a fresh made dessert from Sweet Surprises, or if they find that they are in a hurry, they can stop by the Grab'n Go and pick up a soda or a snack. The Cougar Den (updated in 1996), located next to the Center Court, offers hamburgers, french fries, shakes, pies, and salads. The University Restaurant, located on the second floor, offers complete table service in a relaxed atmosphere with a variety of menus at modest prices. Students are encouraged to enjoy the restaurant's daily fare including salad and entree bar.

Bowling, billiards, pinball and video games as well as air hockey and foosball can be found in UNIVERSITY CENTER RECREATION located on the lower level of the University Center. The recreation area remodeled in 1993 is a 17,300 square foot facility which features many recreational opportunities well below that one would pay off campus.

University Center PRINT AND DESIGN offers specialized printing services to students, faculty, and staff. Photocopying, posters, buttons, resume services, and rental darkroom facilities are offered at Print and Design.

UNION STATION, located on the first floor of the University Center, sells tickets for on-campus sponsored activities including lectures, athletic events, and dance, music and theater performances. Tickets to major St. Louis area events are available. Along with a wide variety of other services including check cashing, newspapers, athletic game schedules, and calendars of campus events. In addition, a wide variety of sandwiches, snack items, candies, and beverages are available.

THE BOOKSTORE, renovated in 1993, offers a wide selection of school supplies, computer software, magazines, current books as well as memorabilia, sweatshirts, hats, and other clothing items. The Bookstore also sells textbooks and manuals for graduate students and above.

Located on the lower level of the University Center, a recently updated UNIVERSITY HAIR offers complete hair styling services to both men and women. For appointments call 692-2299.

TheBANK Center located across from Union Station on the first floor of the University Center offers automated banking services. The service is provided through TheBank of Edwardsville. For information, please call 619-656-0057.

UNIVERSITY MUSEUM/GALLERY

It was the intention of the founders of this university that works of art should be a part of everyone's daily experience on campus and it is a goal of the Museum to make this dream a reality. The University Museum is responsible for the care and display of SIUE's extensive collection of cultural objects. These are presented throughout the campus in a series of permanent and temporary exhibitions designed to reflect the creative diversity of the people and cultures of the world. Included in the collections are objects from Pre-Columbian, Native American, African, Oceanic, Oriental, Greek, Roman, and Egyptian cultures as well as works by contemporary artists.

Among the most interesting collections is the Louis H. Sullivan Architectural Ornament Collection which includes fragments from many of the best buildings by this noted American architect as well as objects from buildings by many of his contemporaries and students including Frank Lloyd Wright. These pieces are displayed primarily in the gallery on the second floor of Lovejoy Library in the southeast corner and in the basement hallway of Building III.

In addition to the objects presented throughout the campus, the Museum, in cooperation with the University Center, presents an annual series of temporary exhibitions in the Art Gallery on the second floor of the University Center. The Museum also makes objects from the collections available for classroom use by University faculty members and for use by area school teachers and educators.

UNIVERSITY POLICE

University Police at Southern Illinois University at Edwardsville is a law enforcement agency responsible for the protection of life and property. Officers are sworn police personnel under the authority granted by Illinois law and have power to make arrests. Law enforcement services are provided to the Edwardsville campus, the School of Dental Medicine in Alton, and the East St. Louis Center.

University Police are located in the Supporting Services Building and provide services 24 hours per day, 365 days per year. Emergency 911 calls are directed to University Police, which is responsible for dispatching appropriate police, fire, or ambulance services. Other services provided include assistance in retrieving keys from locked vehicles and loaning jumper cables and tools to engrave items for prevention of theft. University Police also provide an "escort service," accompanying members of the University community from one campus location to another as a means of safety and crime prevention for students and employees.

The University Police operates under a Community Oriented Policing philosophy which sets the foundation for providing quality service based on high ethical standards. It includes being responsive and responsible to the community by building partnerships with students, faculty and staff. University Police are highly visible through bike patrols, foot patrols and vehicular means.

The Police Department offers numerous programs including McGruff the Crime Dog, Sexual Assault Prevention programs, Campus Watch program, Operation Identification, and Friends of McGruff Club.

An Annual Security Report of campus security policies and crime statistics is published each fall and is available from University Police upon request.

Non-Emergency Telephone Number: 692-3324
Emergency: 911

A satellite office is located on the first floor of the University Center.

VETERANS SERVICE

The Office of Veterans Certification is located in Room 1207, Rendleman Building. The office provides general information regarding veterans' benefits and VA regulations.

NONCREDIT PROGRAMS AND SERVICES

OFFICE OF CONTINUING EDUCATION

The Office of Continuing Education sponsors a wide variety of noncredit and public service activities. These activities are designed to meet the personal and professional continuing education needs of area residents and to extend the resources of the University to the people of southwestern Illinois.

For more information about the programs and services described below, write to the Office of Continuing Education, Campus Box 1084, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1084, call 618-692-3210 or send electronic mail to coned@siue.edu

EDUCARD

Educard is a special program which enables persons not currently enrolled at SIUE to attend selected credit classes on a space-available basis at a modest fee. No credit is earned and no official University record is kept of EDUCARD participation, but EDUCARD learners do receive a student parking decal and a courtesy library card and may borrow undergraduate textbooks for the term they attend. To receive a schedule of classes, a list of EDUCARD approved classes, information about EDUCARD policies, and for information about registering for EDUCARD classes, contact the Office of Continuing Education at 618-692-3210.

CONTINUING EDUCATION UNITS

Continuing Education Units (CEUs) provide recognition of participation in approved continuing education activities. The Office of Continuing Education processes all requests to offer CEU activities and maintains master files of all CEU approved activities as well as participant records. For information about CEUs or to request a transcript for CEU participation, write to the Office of Continuing Education, Campus Box 1084, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1084 or call 618-692-3210.

OLDER ADULTS' ACTIVITIES

The Office of Continuing Education sponsors a variety of activities for older adults. These include the Southwestern Illinois Regional Senior Olympics, Great Decisions lectures, Senior Academy, and Dialogue for Senior Citizens. For details about these programs, contact the Office of Continuing Education at 618-692-3210. Additional University programs for older adults are sponsored by the Gerontology Program, 618-692-3454.

CONFERENCES AND INSTITUTES

The Conferences and Institutes unit of the Office of Continuing Education provides specialized program planning services and meeting arrangements for private business, professional organizations, government agencies, and community groups as well as for University students, faculty, and staff. The attractive, convenient, well-equipped facilities of the University campus provide an excellent setting for all types of meetings, seminars, workshops, and special events. For additional information, interested persons may call Conferences and Institutes at 618-692-2660.

CONTINUING PROFESSIONAL EDUCATION (ACCOUNTING)

The Office of Continuing Education maintains records of Continuing Professional Education (CPE) units earned at the University by Certified Public Accountants under state of Illinois requirements regulating continuing education for CPAs. To receive a semester listing and schedule of accounting classes approved for CPE credit or to request a CPE transcript, write to the Office of Continuing Education, Campus Box 1084, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1084 or call 618-692-3210.

INTENSIVE ENGLISH PROGRAM

The Intensive English Program (IEP) at SIUE offers noncredit English language study for international students whose TOEFL scores are below the 550 required for regular admission into the University,

Michelle Estaque, Director of the Intensive English Program, works with Hee Sook Oh.

but who otherwise are academically qualified to enter an undergraduate or graduate degree program. Admission into the IEP is determined on the strength of the most recent TOEFL score and does not guarantee access to credit bearing courses at the University.

To complete the IEP, students must receive a score of 550 or higher on the Institutional TOEFL exit exam. Upon completion, students may enroll in credit-bearing courses. The Institutional TOEFL exit exam is given during the final week of each semester.

For additional IEP information, call 618/692-2060, send a TELEFAX to 618/692-3509, or send electronic mail to IEP@siue.edu

REAL ESTATE CLASSES

The Office of Continuing Education offers the Salesman (Real Estate Transactions) course required for preparation for the state real estate licensure examinations in Illinois. To receive a schedule of classes or to request a transcript, contact the Office of Continuing Education, Campus Box 1084, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1084 or call 618-692-3210.

NONCREDIT CLASSES

A wide variety of noncredit classes are offered for the leisure enjoyment and personal development of residents of area communities. Noncredit classes include computers, music, dance and exercise, consumer issues, topics for women, and other special interest areas. To receive a schedule of noncredit classes or to register for noncredit classes, contact the Office of Continuing Education at 618-692-3210.

NON-TRADITIONAL CREDIT PROGRAMS AND SERVICES

NON-TRADITIONAL CREDIT PROGRAMS AND SERVICES
SIUE/BAC SERVICE OFFICE

The SIUE/BAC Service Office located at Belleville Area College is open weekdays as well as some evenings and weekends and offers residents in the Belleville and O'Fallon area a wide range of services including information about University programs, periodic on-site academic advisement, extended office hours during registration, liaison with campus departments, a direct phone line to Edwardsville campus offices, University publications, information about transferring to SIUE, and applications for admission to SIUE. Office staff also provide support services for students enrolled in off-campus courses at BAC. To contact the SIUE/BAC Service Office, call 618-235-2700 ext. 335, or 618-692-2630.

OFF-CAMPUS BACHELOR OF SCIENCE IN NURSING DEGREE COMPLETION PROGRAM

SIUE's School of Nursing offers its Bachelor of Science in Nursing degree completion program off-campus at several sites in southern Illinois. Recent sites include Rend Lake College, Shawnee College, Olney Central College, and Effingham.

The BSN degree completion program is designed for students who are Registered Nurses and who wish to complete a Bachelor's degree in nursing. The off-campus BSN degree completion program allows Registered Nurses in several areas in southern Illinois to complete the Bachelor's degree in nursing close to home while remaining employed. For information about academic requirements of the program and admission to the program, contact the School of Nursing Adviser at 618-692-3956 or 800-234-4844. For course schedule and registration information, contact the Office of Continuing Education at 618-692-3210.

OFF-CAMPUS CLASSES

Selected credit courses and degree programs, identical to on-campus programs in academic content and degree requirements, are offered at various off-campus locations. Numerous University credit courses are also offered at off-campus sites in response to specific requests in order to meet particular educational needs in area communities. Recent class offerings have included business, education and nursing. Sites used have included local schools, community colleges, hospitals, and government facilities.

The Office of Continuing Education provides support services to departments offering classes at off-campus locations and assists students who participate in off-campus classes. Staff from the Office of Continuing Education attend the opening classes to assist students with admission, registration, fee payment, financial aid inquiries, and textbook distribution. Faculty and students may contact this office for help with matters related to off-campus classes. Continuing Education serves as a liaison between off-campus students and on-campus University offices, personally pursuing answers or solutions to students' questions or problems and following up directly with students by telephone.

Institutions, agencies, or organizations interested in off-campus courses, should contact the Coordinator of Credit Activities in the Office of Continuing Education, Campus Box 1084, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1084, or phone 618-692-3210.

DISTANCE LEARNING COURSES

SIUE, through a consortial arrangement with other community colleges and universities in southern Illinois, hosts courses delivered to SIUE via technology-mediated instruction. For more information about these courses please call the Office of Continuing Education at 618-692-3210.

ENVIRONMENTAL RESOURCES TRAINING CENTER

In 1977, the Environmental Resources Training Center (ERTC) was designated by the Illinois Environmental Protection Agency as the Illinois center for the continuing education of personnel involved in the operation, maintenance, and management of drinking water and wastewater treatment systems.

ERTC courses are designed to assist both entry level personnel who are preparing for a career in drinking water and wastewater treatment systems and persons already employed in such systems who desire additional education to upgrade job skills and prepare for more responsible positions. Also, the ERTC offers courses for licensed plumbers in cross connection control.

Persons who complete ERTC courses are awarded continuing education units (CEUs) by the University and receive education credits applicable to official certification as drinking water or wastewater treatment system operators or in cross connection control under requirements administered by the Illinois Environmental Protection Agency.

CONTINUING EDUCATION COURSES

Each year the ERTC presents about 40 continuing education courses. These courses have an average annual enrollment of about 800 persons and about 300 persons enroll in ERTC administered correspondence courses annually. They are for operators and managers of drinking water and wastewater treatment systems and for licensed plumbers in the area of cross connection control.

These courses assist in upgrading job skills and in preparation for state certification exams administered by the Illinois Environmental Protection Agency. They include evening courses at the ERTC facility and in the Chicago area and daytime workshops and seminars offered throughout Illinois.

Persons interested in enrolling in these courses should contact the ERTC at 618-692-2030.

CAREER OPPORTUNITIES

The demand for safe drinking water and recreational waters of good quality is continually increasing. As a result, the need for skilled operators of drinking water and wastewater treatment systems can be expected to increase. Persons interested in becoming a skilled operator should consider enrollment in the ERTC Water Quality Control Operations Certificate Program.

WATER QUALITY CONTROL OPERATIONS CERTIFICATE PROGRAM

The ERTC Water Quality Control Operations program is a one year, 35-40 hours per week program of study leading to a Certificate of Completion. Upon completing the program, a student is eligible to take the Illinois certification exams to become certified as a beginning level public water supply operator and wastewater treatment system operator.

During the years from 1981 to 1996, 266 persons graduated from this program and 228 graduates have been employed in the drinking water and/or wastewater treatment systems career field.

This represents an 86% employment rate for program graduates. About 64% of the employed graduates are employed in Illinois and the remainder are employed in sixteen other states. For the graduates employed in other states, 70% are employed in the St. Louis area of Missouri.

ADMISSION AND RETENTION

ERTC considers individual potential when granting admission to the program. ERTC prefers to admit only those students who are high school graduates or who have earned a G.E.D. certificate. However, ERTC does make provision for admission of students, 18 or older, who are not high school graduates.

ERTC requires that the applicants submit a written self evaluation and two personal references. Students

must remain in good academic standing by maintaining a cumulative 2.00 (on a scale of 4.00) grade point average to be retained in the program, or to be eligible for an internship.

CLASS ENROLLMENT

Enrollment is limited to 35 students per academic year. Entry into the program is in the Fall semester only.

APPLICATION FOR ADMISSION

Applications for admission to the ERTC program should be made directly to the ERTC. Additional information and application forms may be obtained by writing to the Career Program Coordinator, Environmental Resources Training Center, Campus Box 1075, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1075, or by telephone at 618-692-2030.

CURRICULUM

The program stresses practical training during 35-40 contact hours per week. The theoretical aspects of drinking water and wastewater treatment presented in lecture sessions are supplemented by actual experience in laboratories, shops, pilot plants, and actual treatment plants. A ten-week supervised work-study internship is an integral part of the program.

All students enroll in an internship in an actual public water supply and/or wastewater treatment system. The courses taken each term are as follows:

FALL SEMESTER

	Lecture	Lab	Total
ERTC 101 Wastewater Operations I	4	4	8
ERTC 102 Water Supply Operations I	4	4	8
ERTC 103 Water Quality Laboratory I	2	6	8
ERTC 105 Mechanical Maintenance	3	4	7
ERTC 106 Water Quality Math and Science	4	0	4
	17	18	35

SPRING SEMESTER

ERTC 201 Wastewater Operations II	4	4	8
ERTC 202 Water Supply Operations II	4	4	8
ERTC 203 Water Quality Laboratory II	2	4	6
ERTC 205 Electrical/Instrumentation Maintenance	2	4	6
ERTC 207 Water Quality Communications	1	1	2
ERTC 208 System Maintenance	2	3	5
	15	20	35

SUMMER SEMESTER

ERTC 300
Supervised Work Study
40 hours per week for ten weeks

COURSES

ERTC 101 WASTEWATER OPERATIONS I
An introduction to physical, chemical, and biological treatment processes for wastewater is provided. The treatment processes covered include preliminary, primary, fixed film, stabilization ponds, and activated sludge. Additional topics covered include rules and regulations related to wastewater treatment operator certification, sources, characteristics, and public health aspects of wastewater. The ERTC pilot plant is used to obtain practical experience related to the operation and maintenance of actual wastewater treatment plants.

ERTC 102 WATER SUPPLY OPERATIONS I
Surface water treatment procedures for the production of safe and acceptable drinking water from lakes and rivers are provided. Specific topics covered include preliminary treatment, clarification, filtration, disinfection, taste and odor control and corrosion control. Field trips to actual surface water treatment systems are provided. The ERTC pilot plant is used to obtain practical experience related to the operation and maintenance of actual drinking water treatment systems.

ERTC 103 WATER QUALITY LABORATORY I
This is a basic introduction to chemistry and microbiology for the analysis of drinking water and wastewater. Topics include the proper care and use of glassware, equipment and chemicals; laboratory safety; laboratory techniques; and specific analytical

techniques for selected drinking water and wastewater parameters.

ERTC 105 MECHANICAL MAINTENANCE
An introduction to the operation and maintenance of mechanical equipment in drinking water and wastewater treatment systems is provided. This equipment includes centrifugal and positive displacement pumps, blowers, air compressors, motors, and speed reducers. Topics include lubrication, valves, bearings, connections, safety, the proper use of tools and equipment, and maintenance file systems.

ERTC 106 WATER QUALITY MATHEMATICS AND SCIENCE
This course provides a review of basic mathematics and an introduction to drinking water and wastewater treatment system process control calculations to include chemical feed calculations. An introduction to chemistry, water quality, and microbiology applications for drinking water and wastewater treatment systems is provided.

ERTC 201 WASTEWATER OPERATIONS II
The wastewater treatment processes covered include advanced activated sludge, aerobic and anaerobic digestion, sludge handling, sludge disposal methods, physical-chemical treatment, and tertiary and industrial treatment systems. Field trips to actual wastewater treatment plants are provided. The ERTC pilot plant is used to obtain practical experience related to the operation and maintenance of actual wastewater treatment plants.

ERTC 202 WATER SUPPLY OPERATIONS II
Ground water treatment procedures for the production of safe and acceptable drinking water from wells are provided. Specific topics covered include iron and manganese control, operation and maintenance of wells, softening, fluoridation, process waste disposal, reverse osmosis, and ozonation. Field trips to actual ground water treatment plants are provided. The ERTC pilot plant is used to obtain practical experience related to the operation and maintenance of actual water treatment plants.

ERTC 203 WATER QUALITY LABORATORY II
This course is a continuation of ERTC 103 with additional applications of chemistry and microbiology for the analysis of drinking water and wastewater. Topics include laboratory management, quality control, record keeping, and specific analytical techniques for selected drinking water and wastewater parameters.

ERTC 205 ELECTRICAL/INSTRUMENTATION MAINTENANCE
An introduction to the operation and maintenance of electrical and instrumentation equipment in drinking water and wastewater treatment systems is provided. This equipment includes motors and their control systems, flow measurement systems, and water level indication systems. Topics include safety, proper use of electrical testing equipment, troubleshooting, calibrating procedures, and the use of electrical schematics and wiring diagrams. Site visits to actual electrical and instrumentation systems is provided.

ERTC 207 WATER QUALITY COMMUNICATIONS
This course provides an introduction to microcomputer applications to include word processing, file systems, and spreadsheets. Other topics include job interview skills, employment survival skills, public relations, public notices, personal improvement, and resume preparation.

ERTC 208 SYSTEM MAINTENANCE
An introduction to the operation and maintenance of wastewater collection and drinking water distribution systems is provided. Topics include safety, construction, inspection, cleaning, service connections, water main disinfection, records, public notices, sampling procedures, flushing hydrants, meters, cross connection control, and water storage. Field trips are used to demonstrate current practices.

ERTC 300 SUPERVISED WORK STUDY
This course is a ten week work experience in actual drinking water and wastewater treatment systems. This work experience is coordinated by an ERTC staff member and is directly supervised by personnel employed at each treatment plant. A daily log, written report, and oral report describing this experience are prepared and presented to the ERTC staff at the conclusion of the work experience.

COMMUNITY SERVICES

ARTS & ISSUES

Arts & Issues is a series of distinguished speakers and performers which supports the academic mission of the University. Students meet and discuss issues with renowned performers and speakers in workshops, dinners, receptions and classes. The Arts & Issues series also provides opportunities for students to gain experience in arts production and administration. Students, faculty, and staff are encouraged to suggest names of speakers and performers so that the series may provide both diversity and educational value for all members of the University.

OFFICE OF MANAGEMENT STUDIES

The Office of Management Studies provides a broad array of training and consulting services to individuals and organizations within the community. These services include one to three day seminars on a range of business topics: the Family Business Forum (a membership program for principals of family businesses), tailored in-house training and development programs, and applied consulting activities.

Persons interested in obtaining information may contact H. Richard Lumma, Director, at 618-692-2668.

LABOR AND MANAGEMENT PROGRAMS

The Labor and Management Programs promotes labor and management cooperation in southwestern Illinois. This is done through research studies and grants, instruction and training, and technical services to the labor and management communities. Labor and Management Programs utilizes faculty from various University departments to serve client needs. Labor and human resource management specialists, organizational behavioralists, industrial psychologists, legal experts, sociologists, political scientists and educational theorists work on projects to respond to needs of the area.

Selected examples of Labor And Management projects include:

- Developing new employment selection tests, conducting validity studies of existing employment selection tests,
- Sponsoring educational seminars, providing advice to an area-wide labor/management committee,
- Conducting attitude/opinion surveys, and
- Surveying human resource managers or union officials on current workplace issues.

Individuals and businesses interested in these services may contact Dr. Edward J. Harrick, Director, at 618-692-2135.

SMALL BUSINESS INSTITUTE

The Small Business Institute provides managerial counseling to small businesses and valuable practical experience to students. Working under the supervision of a faculty member, seniors and graduate students consult with an area small business and advise its management. Often, this advice takes the form of a new or revised business plan. Small businesses wishing to participate in this program are encouraged to contact the Director of the Small Business Institute at 618-692-2750.

SMALL BUSINESS DEVELOPMENT CENTER

The Small Business Development Center at SIUE is part of a national consortium of college and University-affiliated Small Business Development Centers which provide assistance to small businesses. The Center is a collaborative arrangement between the U.S. Small Business Administration, the Illinois Department of Commerce and Community Affairs, and the SIUE School of Business, as a service to Illinois small businesses.

The Center provides a full range of services and programs for start-ups, expanding and existing businesses. Owners and managers of small businesses, as well as individuals wanting to start or purchase a business or franchise, are potential clients. Services provided include: business seminars and entrepreneurial training courses, confidential counseling, general business planning assistance, and capital sourcing.

Individuals and businesses interested in these services may contact the Center at 618-692-2929. Counseling is free but there are fees associated with training courses and seminars.

THE OFFICE OF TECHNOLOGY AND COMMERCE

The Office of Technology and Commerce combines industry, University, and state resources to promote economic revitalization of manufacturing in Illinois, particularly in southwestern Illinois.

Through the office, industry and business may utilize faculty resources at SIUE in the research and development of new ideas in manufacturing and production.The office also assists in the application of technology to specific manufacturing and production processes. The office helps traditional industry to modernize, to increase productivity, to increase employment, and to develop human resources. The office encourages new business ventures, provides assistance for cooperative research and development, innovation, technology transfer, prototype development, testing, marketing and business plans, development of new manufacturing techniques, and training symposia and workshops. The office can also provide services to technology based service firms. Manufacturing and technology based service firms may call 618-692-2166 for more information.

INTERNATIONAL TRADE CENTER

The International Trade Center works directly with manufacturing and service businesses in southern Illinois helping them to increase sales through exporting. The Center offers assistance in assessing client readiness for international sales, in guiding clients though the many requirements necessary to enter into foreign sales, in obtaining trade leads, in market research, and in arranging student projects related to international business. The Center accomplishes these objectives through one-on-one counseling, training seminars, and workshops. The Center works closely with other export assistance programs offered by the state and federal governments and by private organizations. The Center is supported by a Small Business Administration-funded grant from the Illinois Department of Commerce and Community Affairs as well as University resources and services. Interested parties should contact the International Trade Center at 618-692-2452.

CONTRACT ARCHAEOLOGY PROGRAM

Members of the staff of the Contract Archaeology Program undertake basic and applied archaeological and environmental research through grants received from public agencies and private firms. Projects involve field investigations, processing and analysis of recovered materials and data, and the production of professional reports that are reviewed by State and/or Federal agencies. Subsequent to and concurrent with project execution, staff members report on the significance of findings through papers delivered at professional meetings, in various publications, and in public presentations. Although the focus of research is on prior settlement in the southwestern Illinois region, individual research projects have included topics concerning the greater United States, Europe, and Latin America. Staff members teach courses in the Department of Geography, provide state-of-the-art training through numerous internships, and offer workshops at the Cahokia Mounds State Historic Site each summer through the Departments of Geography, Curriculum and Instruction, and the Office of Continuing Education.

For information, please call 618-692-3641.

REGIONAL RESEARCH AND DEVELOPMENT SERVICES

Regional Research and Development Services (RRDS) is a public service unit of the College of Arts and Sciences. While providing work experience for SIUE students, RRDS serves as a link to the expertise and resources available at SIUE for local governments, not-for-profit agencies, and the public. The primary services of Regional Research and Development Services are the following:

It serves as a state data center for the United States Census Bureau and the State of Illinois. RRDS provides data acquisition, referral, and processing services and assists state and local governments, communities, businesses, private organizations, and the University in interpreting census and other administrative record material.

It provides geographic information system services which include spatial and attribute database development, custom map production, image processing, certified professional training, electrostatic plotting, and contract digitizing services.

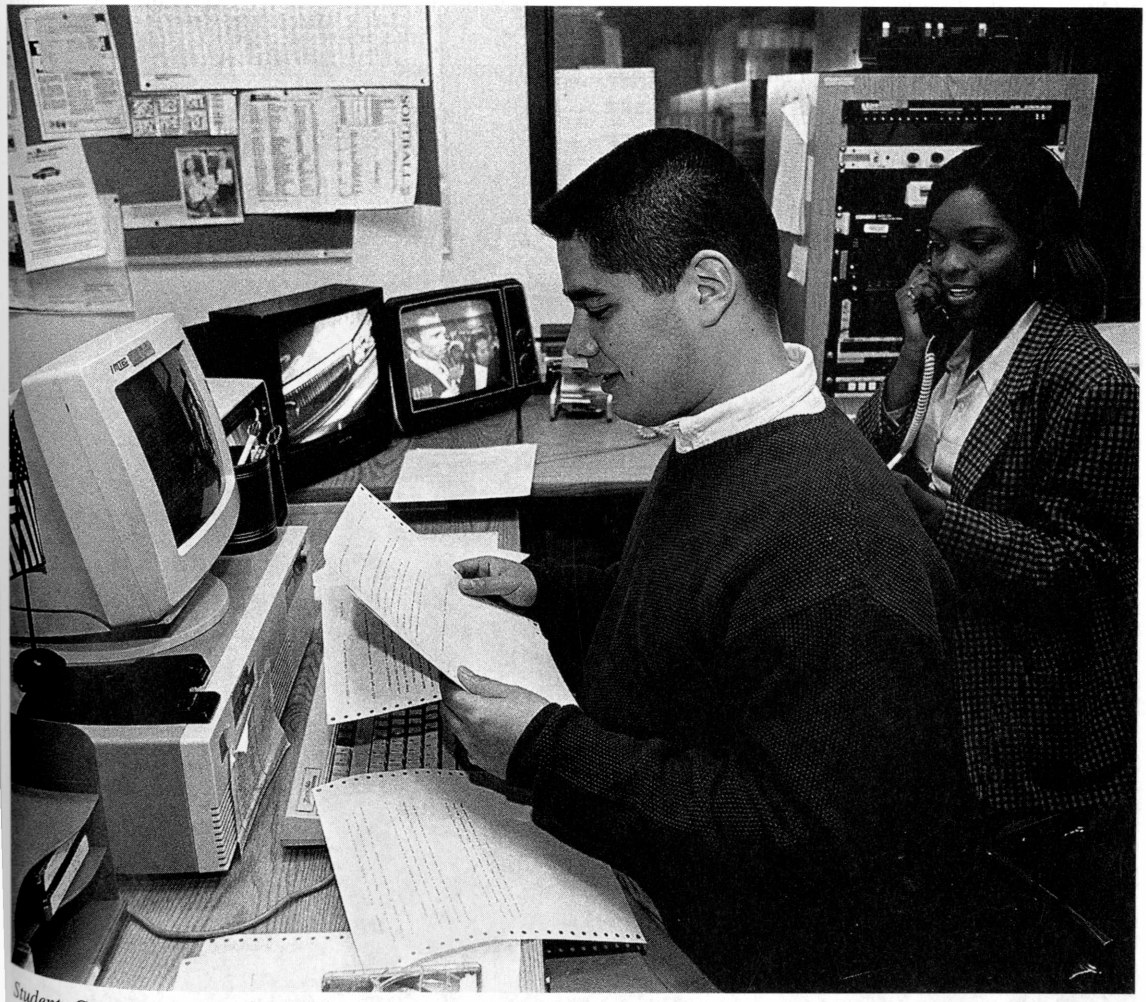
It conducts survey research including public opinion polls, needs assessments, and quality of life studies. The unit also provides assistance in human resource management and organization development by offering expertise in job classification and compensation, employee training, performance appraisal systems, local government executive recruitment, and strategic planning. A certified PERFORMAX consultant is available for organizational team building and conflict management.

It offers graphics design and cartographic services, maps, visual aids, and original artwork for brochures or marketing documents.

For information or assistance, please call 618-692-3500.

RADIO STATION

WSIE-FM is the 50,000 watt public radio station operated by Southern Illinois University at Edwardsville. Broadcasting at 88.7 FM 24 hours a day, 365 days a year from studios and offices in the Communications Building, WSIE-FM provides a quality non-commercial broadcast service to Southwest Illinois and St. Louis. WSIE-FM is staffed by five full-time professionals and student volunteers and employees. Students receive hands-on training in all areas of radio broadcasting. WSIE-FM specializes in jazz music, with local news and sports reports and public affairs programming. The station is affiliated with National Public Radio, Public Radio International and the Associated Press, and is a member of Illinois Public Radio.



Students George Dwyer and Jacqueline Rogers prepare a newscast for campus radio station WSIE.

EAST ST. LOUIS CENTER

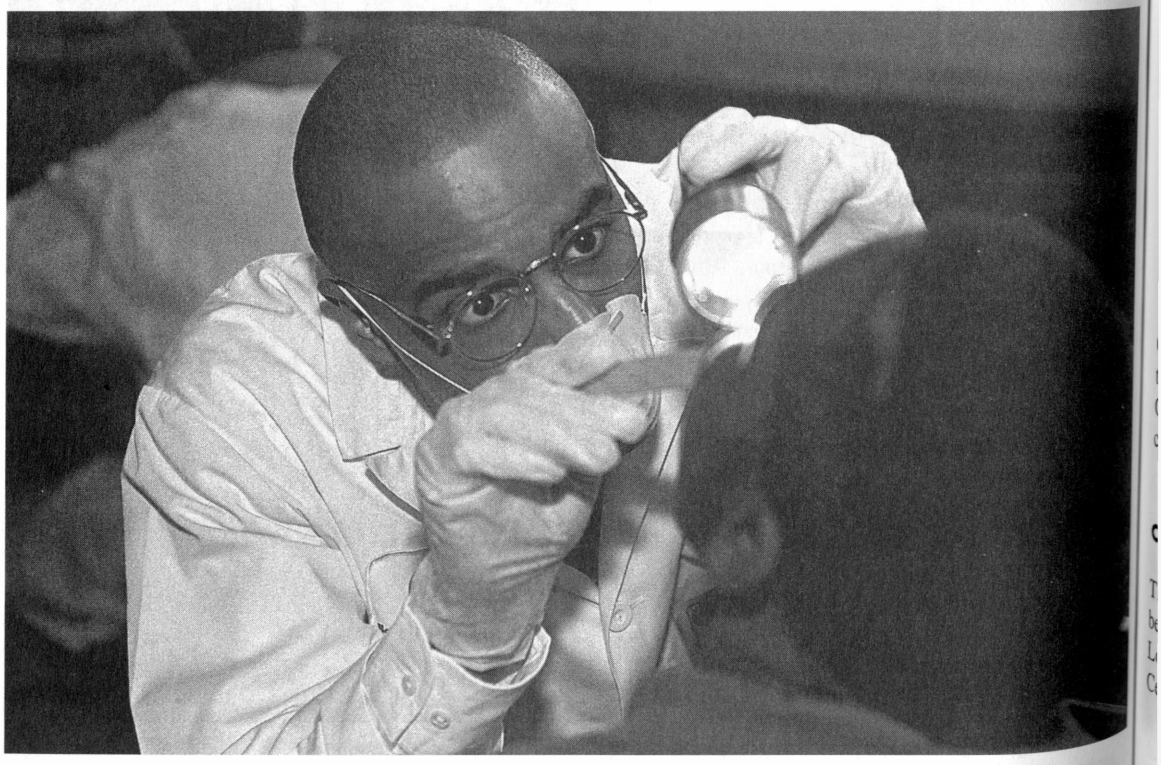
The East St. Louis Center's mission is the provision of academic as well as non-academic services for persons of all ages and backgrounds within the University's service region, particularly the city of East St. Louis and surrounding communities. Located at 411 East Broadway in East St. Louis, the Center's classrooms and laboratories support the offering of University upper division and graduate credit courses in selected programs as determined by community needs. The Center also provides rooms and other facilities for community meetings, workshops, and seminars, many of which are planned and coordinated by University faculty and other personnel as part of the University's commitment to community and public service in southwestern Illinois.

Additionally, the East St. Louis Center is the site of community service programs and activities that address a variety of public school and preschool age children's needs. The Center also encourages and assists potential college students, seeks to enhance the cultural and aesthetic values of those within the community, and fosters community involvement. Notable among the Center's public service efforts are the Upward Bound/Science Awareness Project and the Katherine Dunham Center for the Performing Arts.

Also located at the Center are three health care facilities that provide services for citizens of metropolitan East St. Louis, and Missouri. They are the Dental Clinic, supported by the School of Dental Medicine; Community Nursing Services, supported by the School of Nursing; and the Optometry Clinic, supported by the University of Missouri at St. Louis School of Optometry in conjunction with SIUE.

DENTAL CLINIC FACILITIES

The School of Dental Medicine maintains clinic facilities in Alton and in East St. Louis. The Satellite Dental Clinic (East St. Louis), consists of dental treatment and support areas. The Alton Dental Clinic consists of the full range of facilities available at the School of Dental Medicine. Both clinic facilities provide patients with comprehensive dental care programs. Students in the School of Dental Medicine rotate through the clinics during the last two years of



School of Dental Medicine student Douglas Kerr examines a young patient at an East St. Louis elementary school.

the curriculum. Persons interested in care at the East St. Louis Satellite Dental Clinic may call 618-482-6980 between the hours of 8:00 a.m. and 4:30 p.m. Monday through Friday. Patient treatment is available 9:00 a.m. to 4:30 p.m. daily except Wednesday. Persons interested in care at the Alton Clinic may call 618-474-7000 between the hours of 8:00 a.m. and 4:30 p.m. Monday through Friday. Patient treatment is available 8:30 a.m. to 4:30 p.m. Monday through Friday.

COMMUNITY NURSING SERVICES

Community Nursing Services, sponsored by the SIUE School of Nursing, is a nurse-managed health care facility that provides comprehensive nursing services designed to promote, maintain, and restore the physical, emotional, and social well-being of its clients. The professional nursing staff is committed to improving the health of community residents by:

- providing quality health care services serving as consultants to local agencies and health care providers in the areas of health education, health care delivery, and health care management
- working with residents, health care providers and agencies to identify and develop plans to meet the health needs of local communities participating in the education of students in professional nursing and other health careers.

In addition to the office in the East St. Louis Center building, services are provided at other nurse-managed health care facilities, schools, day care centers, senior citizen centers, homes, and churches. Nursing students enrolled in the SIUE School of Nursing gain invaluable experience by fulfilling certain course requirements under the supervision of the Community Nursing Service staff.

Office hours are 8:00 a.m. - 4:30 p.m. Monday through Friday. Additional information regarding Community Nursing Services can be obtained by calling 618-482-6959.

OPTOMETRY CLINIC

The Optometry Clinic, a cooperative arrangement between SIUE and the University of Missouri at St. Louis, provides services from the East St. Louis Center location .

As with the Dental Clinic and Community Nursing Services, the Optometry Clinic provides a full range of preventive and corrective eye-care services for persons in metropolitan East St. Louis to include St. Louis. Frames and lenses are also available at the Clinic.

More information is available at 618-482-8355.

THE KATHERINE DUNHAM CENTER FOR THE PERFORMING ARTS

The Katherine Dunham Center for the Performing Arts encourages youth and adults (pre-schoolers through senior citizens) of southwestern Illinois to develop aesthetic values and performance skills by participating in noncredit community arts classes. Classes offered by the Katherine Dunham Center, which are open to all area residents, include dance, drama, and aerobics/body conditioning. Students from both campuses participate, although University enrollment is not required for participation. School age youth demonstrate their artistic training through end-of-the-term performances.

In addition to noncredit classes offered at the East St. Louis Center, a full complement of community arts classes is conducted during the day in local elementary and junior high schools. A natural product of the community arts effort for youth has been the evolution of youth dance and theater performing companies. Both companies have distinguished themselves locally, regionally, and nationally.

Each semester, selected KDCPA professional staff members teach credit courses on the Edwardsville Campus under the auspices of the University's Department of Theater and Dance. Also, the professional staffs of both KDCPA and Theater and Dance combine their talents to present major concerts and productions.

PRE-SCHOOL PROGRAMS

HEAD START, a national program, provides comprehensive child development services for over 1,300 pre-school children and their families from St. Clair County.

CHILD DEVELOPMENT provides day care services for 168 pre-school children of low income parents who are enrolled in school or who are employed.

PUBLIC SCHOOL PROGRAMS

THE UPWARD BOUND/SCIENCE AWARENESS PROJECT, funded by the United States Office of Education, is an alternative high school program for selected tenth, eleventh, and twelfth grade students. The program assists students in entering and succeeding in science-based baccalaureate fields of study. Students take their academic classes at the centrally located East St. Louis Center, but they may participate in social and extra-curricular activities at their home schools which accept Project credits toward the high school diploma. Some courses carry University credit, which is assigned upon matriculation. The objective of the Science Awareness Project is to increase the number of minority persons engaged in professions and careers in the sciences. The format of the Science Awareness Project has been accepted by the United States Office of Education and the National Council of Educational Opportunity Association as a model to be disseminated nationally for implementation by post secondary schools in urban areas.

PROJECT SUCCESS provides after school tutoring, health and hygiene training, cultural arts exposure, and a variety of regularly scheduled recreational activities for 110 protected youth whose ages range from 6- 13.

LATCHKEY PROGRAM provides before and after school child care services, in the schools, for 90 children ages 6-12 whose parents work or are enrolled in school full time.

The UPWARD BOUND MATH AND SCIENCE CENTER serves 40 ninth grade students from the East St. Louis, Cahokia, and Lovejoy School Districts by providing a comprehensive enrichment program designed to enhance home-school academic performance in mathematics, science, English, foreign language, and computer courses.

PROJECT COMPU-TECH equips 20 high school seniors from School District 189 with skills and tools necessary to be successful in school and search for jobs upon graduation by providing basic academic skills enhancement; resume preparation, job interviewing, and application completion skills; and skills in assembling and repairing computers. Upon graduation, each student is awarded his/her assembled computer system to take home.

JOBS FOR ILLINOIS GRADUATES helps selected seniors at East St. Louis Senior High School graduate and prepare for the workplace through a comprehensive program with 30 established competencies that promote person and employability skills.

PROJECT SUCCESS-ILLINOIS enhances children's in-school learning by improving health and human service delivery through the building of a network between parents, teachers, and school administrators and state health agencies and local health service providers. Major areas of concentration include health care, nutrition, social activities, and family stability.

OTHER PROGRAMS AND ACTIVITIES

THE EDUCATIONAL OPPORTUNITY CENTER identifies, encourages, and assists clients 19 years of age and above to pursue post secondary education by providing career, admission, and financial aid counseling.

THE SCHEDULING OFFICE receives and processes space requests from individuals, groups, civic and social organizations, government agencies, and other approved entities that wish to meet at the East St. Louis Center.

THE COMPUTER LABORATORY provides students enrolled in computer courses at the University an opportunity to perform out-of-class assignments at the East St. Louis Center.

THE DISTANCE LEARNING CLASSROOM, through remote-site television, allows for the mutual exchange of academic courses and related information between institutions.

Further information about all East St. Louis Center Programs and Activities may be obtained by calling 618-482-6900.

COMMUNITY INVOLVEMENT

The University, through its East St. Louis Center, is very active in community affairs in the city and surrounding communities. Center faculty and staff render many hours of service through membership on highly significant public and private sector boards, commissions, and committees. Faculty and staff provide an important communication link between the University and various national, state, and local agencies.

SCHOOL OF DENTAL MEDICINE

The SIU School of Dental Medicine campus is located in Alton, Illinois and offers a four-year academic program which results in the awarding of the Doctor of Dental Medicine (DMD) degree. The primary goal of the school is to prepare graduates to become competent general practitioners of dentistry. In addition to classroom, clinical, and research facilities, the school has scanning and transmission electron microscopy facilities and other sophisticated equipment with which to conduct biomedical research. Patient care is provided in state-of-the-art clinical facilities at the Alton campus and at the East St. Louis Center.

The dental curriculum is a structured program that requires all students to participate in a specified course of study. However, elective courses are available as well as programs specifically designed for students with special research interests. During the first two academic years, the educational offerings center around the basic sciences such as anatomy, microbiology, physiology and pathology, and preclinical dental sciences such as prosthodontics, pediatric dentistry, and community health. Courses consist of a mixture of didactic, laboratory, and clinical offerings. The third and fourth years of the curriculum focus on the relationship of basic, medical, and social sciences to the treatment of dental disease. During the third and fourth years, the students devote the majority of time to the provision of comprehensive clinical outpatient care.

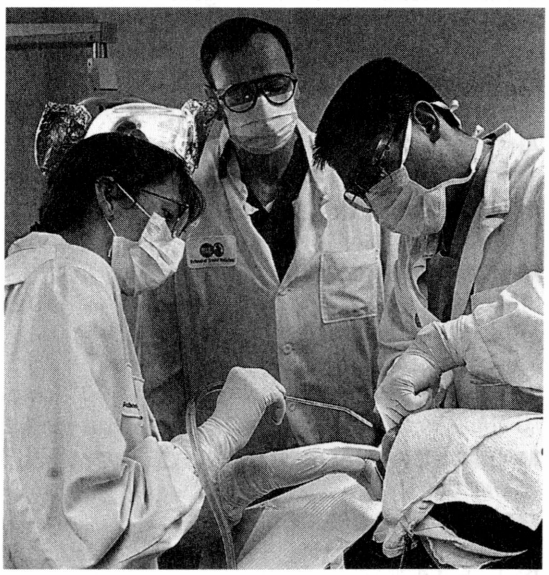
The School of Dental Medicine also offers Advanced Education in General Dentistry, a two-year certificate program designed to enhance patient care skills acquired during the predoctoral education process. The program includes experiences with special patient populations, patient care in the hospital setting, and training in the newest techniques in dental implants.

Additionally, advanced dental education opportunities include a Masters of Science in Endodontics granted by Saint St. Louis University Graduate School. This unique twenty-four month program combines the resources of the School of Dental Medicine and Saint Louis University to educationally qualify the resident for specialty practice in endodontics. Training is conducted at both campuses.

The School of Dental Medicine offers an Implant Fellowship as part of its postdoctoral training program. The fellowship is a one year, non-certificate program which provides intensive training in implant dentistry within a comprehensive patient care environment. Clinical teaching and research experiences are stressed throughout the program.

Admission to the dental educational program is based upon completion of specific undergraduate academic requirements, satisfactory achievement on the Dental Aptitude Test, and successful review of the students' credentials by the school's Admissions Committee. Students admitted to the School of Dental Medicine at the end of their junior year at SIUE may transfer appropriate credits to complete the requirements for the Bachelor of Arts or Bachelor of Sciences degree, Biological Sciences with a specialization in Medical Science or a Bachelor of Arts degree in Chemistry with a specialization in Medical Science. These programs are discussed in the School of Sciences section of this catalog.

Students interested in the dental program should write to the Office of Admissions and Records, Southern Illinois University School of Dental Medicine, 2800 College Avenue, Alton, Illinois 62002 or phone 618-474-7170.



Students Becca Scheub and James Lin work with a patient at one of the School of Dental Medicine clinics as Dr. James High watches their progress.

GRADUATE SCHOOL

The Graduate School, which offers programs in 32 disciplines leading to 10 Master's degrees and 2 Specialist degrees, enrolls twenty-one percent of all the students at the University. Degrees, majors, and specializations are listed below. For information on admission to the Graduate School, students should contact Graduate Admissions, Rendleman Building 1207.

MASTER OF ARTS

Art Therapy
Biological Sciences
Economics
English/American and English Literature
English/Teaching English as a Second Language
English/Teaching of Writing
Geographical Studies
History
Psychology/Clinical-Adult
Psychology/General-Academic
Psychology/Industrial-Organizational
Sociology
Speech/Speech Communication

MASTER OF BUSINESS ADMINISTRATION

Business Administration
Business Administration/Management Information Systems

MASTER OF FINE ARTS

Art Studio

MASTER OF MARKETING RESEARCH

MASTER OF MUSIC

Music/Music Education
Music/Music Performance

MASTER OF PUBLIC ADMINISTRATION

MASTER OF SCIENCE

Biological Sciences
Chemistry
Civil Engineering
Computing and Information Systems
Economics
Electrical Engineering
Environmental Studies/General
Environmental Studies/Science
Geographical Studies
Mass Communications
Mathematics
Nurse Practitioner
Nursing/Anesthesia
Nursing/Community Health
Nursing/Medical-Surgical
Nursing/Psychiatric-Mental Health
Physics
Psychology/Community-School
Speech/Speech Pathology

MASTER OF SCIENCE IN ACCOUNTANCY

MASTER OF SCIENCE IN EDUCATION

Educational Administration
Elementary Education
Instructional Technology
Physical Education
Secondary Education with teaching fields in:
- Art
- Biology
- Business
- Chemistry
- English
- Foreign Languages
- Geography
- History
- Mathematics
- Physics
- Political Science
- Reading
- Science
- Speech

Special Education

MASTER OF SOCIAL WORK

SPECIALIST

Educational Administration
School Psychology

UNIVERSITY FACILITIES

The buildings on the central campus of the University, arranged around the Delyte W. Morris Quadrangle, are convenient to one another. Designed as an integral unit, all have common architectural features — courts, terraces, balconies — but each is planned for specific uses.

ART & DESIGN BUILDING

The new art & design building houses ultra-modern facilities for studio arts including sculpture, ceramics, jewelry, glassblowing, printmaking, painting, drawing, design, weaving, papermaking, graphic design and computer graphics, imaging and animation. A central atrium lobby features contemporary gallery and exhibition spaces, department offices, and an art supply store.

CLASSROOM BUILDINGS II AND III

Classroom Buildings II and III are located to the north of the Peck Building. The two buildings form a single complex connected by tunnel and skywalk. Faculty for the Schools of Business, Education and Nursing and the College of Arts and Sciences share the buildings, which contain lecture halls, instructional laboratories, and conference rooms.

COMMUNICATIONS BUILDING

The glass front of this building wraps around the two-story lobby of the University Theater, where television cameras have filmed student and faculty productions. The structure houses the Mass Communication, Music and Theater and Dance departments and the broadcasting studios of WSIE-FM. In 1995 an addition was opened to house the Music department. The University's central computer installation and Information Technology Offices are also located in this building.

ENGINEERING BUILDING

In winter 1997, funds were approved by the Illinois Legislature and Governor to construct a new building north of the Art and Design Building to house School of Engineering programs. The building is expected to be available for use in 2001, and will include laboratories, classrooms and faculty and department offices.

EARLY CHILDHOOD CENTER

The Early Childhood Center is located on the northwestern edge of the central academic core of campus and was opened for use in April 1986. The facility is designed to provide early childhood education for the pre-school children of members of the SIUE community. The Early Childhood Center also provides school age child care programs at the Tower Lake Apartments.

LOVEJOY LIBRARY

The Lovejoy Library building houses most of the University's print, microform, audio visual and online materials and features extensive study areas for patrons. The University's textbook rental service is located on the facilities lower level. A small auditorium which is used for musical performances, movies and lectures, is also located on the lower level.

JAMES F. METCALF STUDENT EXPERIMENTAL THEATER

This facility named for a former Budget Director at the University, is located just northwest of the main core. The building includes dressing rooms, storage, and a main stage area with a seating capacity of up to 200 people.

PECK CLASSROOM BUILDING

The first building opened on campus is named for John Mason Peck, an early pioneer and educator in this region. Peck founded Shurtleff College in Alton, Illinois, now the site of the School of Dental Medicine. The Peck Building is home for the College of Arts and Sciences, the Anthropology Teaching Museum, the Communication Laboratory, a micro computer laboratory, and laboratories for foreign

language instruction. The Office of Academic Counseling and Advising, Instructional Services, and the Special Services Program are also located in this building. Two of the wings, opening from a center court, are used for classrooms; the remaining one is used for faculty offices.

RELIGIOUS CENTER

Just southwest of the academic core, a visually arresting geodesic dome structure designed by R. Buckminster Fuller, houses the interdenominational Religious Center. The Center was constructed through private donations.

JOHN S. RENDLEMAN BUILDING

The administration building, named for the University's first President, contains offices of the University administration. The Chancellor, the Provost and Vice Chancellor for Academic Affairs, the Vice Chancellor for Administration and Vice Chancellor for Student Affairs, the Admissions and Records Office, the Bursar, Student Financial Aid, Continuing Education, the Evening and Weekend Student Services, University Housing Contract Office and Parking Services are located in the Rendleman Building. Health Service, Fast Copy service, and a branch of the United States Postal Service are located on the lower level of the building.

SCIENCE LABORATORY BUILDING

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

STUDENT FITNESS CENTER

The Student Fitness Center was opened for use in the spring of 1993. The facility, which is totally dedicated to student recreational use, includes four multipurpose courts, an elevated jogging track, weight training room facilities, an aerobics room, and a wellness center designed to provide health and fitness assessment and prescription.

STUDENT RESIDENCE HALL

The Student Residence Hall, located south of the central academic core, is designed to house 500 first-year students. Student residential areas have been developed in clusters with two student rooms sharing a common bath. The facility includes an open access computer laboratory, study areas, meeting rooms, laundry facilities, and recreational and activity space.

UNIVERSITY CENTER

The University Center serves as the home of many activities and services. The Information Center, located in this building, assists persons who have questions about the University. The Center provides food service for students, faculty, and guests; it also offers recreational facilities, including a sixteen-lane bowling alley, table tennis facilities, billiards room, and a card and game lounge. Other amenities include the bookstore, the barber and beauty shop, television room, video room, conference rooms, and an art gallery. Dances, movies, various entertainment programs, and other functions are held in the grand ballroom.

SAM M. VADALABENE CENTER FOR HEALTH, RECREATION, AND PHYSICAL EDUCATION

The University's multi-purpose facility for campus-wide recreation and sports, both intramural and intercollegiate, is located on the north edge of the central academic core. The building includes a swimming pool, racquetball courts, a 33,000 sq. ft. multipurpose room, locker and shower facilities, and rooms for gymnastics, dance, combative, and weight lifting sports. Several laboratories and classrooms are included, as well as offices for the Athletics staff and for the Department of Health, Recreation, and Physical Education.

OTHER FACILITIES

Additional facilities such as the Counseling Center, the School of Engineering Administrative Offices and Electrical Engineering Department in the 200 University Park Building, the Supporting Services Building, the Clifford H. Fore Environmental Resources Training Center, the School of Dental Medicine at Alton, and the East St. Louis Center are located away from the academic core.

UNIVERSITY POLICIES

FAIR PRACTICE

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

Information regarding fair practices may be obtained from the Offices of the Provost and Vice Chancellor for Academic Affairs, the Vice Chancellor for Student Affairs, and the Equal Opportunity Programs Office.

EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION

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

The University complies in letter and spirit with federal and state legislation, which includes but is not limited to, Titles VI and VII of the Civil Rights Act of 1964, Executive Order 11246, the Equal Pay Act, the Age Discrimination in Employment Act, Title IX of the Education Amendments Act of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, the Vietnam Era Veterans' Readjustment Assistance Act, Titles VII and VIII of the Public Health Service Act, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, and the Illinois Human Rights Act and related state laws. Inquiries regarding equal opportunity and affirmative action should be directed to the Assistant to the Chancellor for Equal Opportunity Programs.

RIGHT TO PRIVACY AND NONDISCLOSURE

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

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

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

Further, in accordance with the Privacy Act of 1974, applicants and students are advised that the requested disclosure of their social security number is voluntary. The social security number generally is used as the student identification number to avoid the assignment of a similar but University-originated number. Students retain the social security number or the University-originated number for the duration of their affiliation with the University. Social security numbers or University-originated numbers will be

used to identify the permanent records of students, such as registration, program changes, transcript requests, and certification requests. Students applying for Pell Grants or Guaranteed Student Loans are required to provide their social security numbers to the appropriate federal agencies; students applying for other Title IV federal student aid programs also are requested to submit their social security numbers. Social security numbers may be used to determine eligibility for financial assistance, student status and school attendance.

STUDENT CONDUCT AND STUDENT GRIEVANCES: RIGHTS AND RESPONSIBILITIES

Students enrolling in the University assume responsibility for conduct compatible with the learning environment of the University. Students are expected to be familiar with *Student Conduct and Student Grievances: Rights and Responsibilities.* This policy describes the University's expectations for student conduct, sanctions imposed for violations of the standards, and procedures which students may follow in filing grievances.

The University gives high priority to matters of academic ethics and abhors all types of cheating, including plagiarism. Plagiarism is the act of representing the work of another as one's own and may consist of copying, paraphrasing, or otherwise using written or oral work of another without proper acknowledgement of the source or presenting oral or written material prepared by another as one's own. Instructors may impose sanctions for academic cheating in accordance with *Student Conduct and Student Grievances: Rights and Responsibilities.* The minimum penalty for academic misconduct beyond failure for an assignment and/or for a course is disciplinary probation.

Students who wish to understand matters relative to academic ethics and plagiarism should consult their advisers or instructors.

Copies of the policy are available in the Office of the Vice Chancellor for Student Affairs, the Office of the Provost and Vice Chancellor for Academic Affairs, the Graduate School, the Office of Admissions and Records, and in the Office of the Dean, School of Dental Medicine.

COMPUTER POLICY

All individuals using computing facilities are notified that the Illinois Computer Crime Prevention Law (720 ILCS 5/16D-1 et. seq.) makes unauthorized computer use a criminal offense.

There are three offense categories defined by the law.

1. Computer Tampering. An individual may be prosecuted for this offense when access is gained to a computer, a program, or data, without permission from the owner. Unauthorized access, by itself, is a misdemeanor. Obtaining data or services is a misdemeanor for the first offense and a felony for subsequent offenses. Altering, damaging, destroying, or removing a computer, a program, or data, is a felony. (These latter offenses include the use or attempted use of what commonly is referred to as a "computer virus".)
2. Aggravated Computer Tampering. This offense occurs when Computer Tampering has the intended effect of: (a) disruption of or interference with vital services or operations of State or local government or a public utility, or (b) creating a strong probability of death or great bodily harm to other individuals. These offenses are punishable as felonies.
3. Computer Fraud. This offense occurs when access to or use of a computer, program or data is gained as part of a scheme to deceive or defraud. This includes the use of a computer to gain control over money, services or property. In addition to its ordinary meaning, "property" in this context includes: electronic impulses, electronically produced data, confidential or copyrighted material, billing information, and software in any form. These offenses are punishable as felonies.

A copy of the complete text of the *Computer Crime Prevention Law* is available for examination in the Office of Information Technology or in the Office of the General Counsel.

CAMPUS SECURITY

Southern Illinois University at Edwardsville complies with the Student Right to Know and Campus Security Act. Pursuant to the Act, the University annually publishes a report informing prospective and current students and employees about security policies, the responsibility for and means of reporting crimes, security of facilities, drug and alcohol assistance

programs, security-related information, and crimes reported and arrests at the University in prior years.

ALCOHOL AND DRUG POLICIES

In accord with the Drug-Free Schools and Communities Act of 1989, each year SIUE advises students and employees of its policies requiring compliance with local, state, and federal laws governing illegal drugs and controlled substances and alcoholic beverages. Information is provided about the health effects of drug and alcohol use, penalties for violating applicable laws and University policy, and assistance, education, and referral programs provided by the University.

Members of the SIUE softball team celebrate after scoring a run in spring action.

OFFICERS AND FACULTY OF THE UNIVERSITY

SOUTHERN ILLINOIS UNIVERSITY BOARD OF TRUSTEES

	HOME TOWN	TERM EXPIRATION
A.D. VanMeter, Jr., Chairperson	Springfield	1999
Molly D'Esposito, Vice Chairperson	Winnetka	2001
George T. Wilkins, Jr., Secretary	Edwardsville	1997
John Brewster	Marion	1997
William R. Norwood	Carbondale	2001
Harris Rowe	Jacksonville	2001
Celeste M. Stiehl	Belleville	1999
Sean Pohl, Student Trustee	Edwardsville	1996
Eric Bottom, Student Trustee	Carbondale	1996
Sharon Holmes, Executive Secretary to the Board		

OFFICERS OF ADMINISTRATION SOUTHERN ILLINOIS UNIVERSITY OFFICE OF THE PRESIDENT

Ted Sanders, President
John S. Haller, Jr., Vice President for Academic Services
Elaine Hyden, Vice President for Planning and Budget Services
Donald W. Wilson, Vice President for University Services and Board Treasurer

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE

Nancy Belck, Chancellor
David J. Werner, Provost and Vice Chancellor for Academic Affairs
James R. Buck, Vice Chancellor for Development and Public Affairs
Kenneth Neher, Vice Chancellor for Administration
Narbeth Emmanuel, Vice Chancellor for Student Affairs

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE FACULTY

ABRAHAM, Ronald D., Music, M.M., 1987, University of Wisconsin-Milwaukee
AHLBRAND, William P., Curriculum and Instruction, Ph.D., 1968, Washington University
AHMED, Marcus Milton., Educational Leadership,Ph.D., 1992, Loyola University
ALKIN, Oktay, Electrical Engineering, Ph.D., 1986, University of Alabama
ANDERSON, Daniel J., Art & Design, M.F.A., 1970, Cranbrook Academy of Art
ANDERSON, Thomas P., Mechanical and Industrial Engineering, Ph.D., 1961, Northwestern University
ANDRIS, James F., Educational Leadership, Ph.D., 1974, Indiana University
ANTHONY, Paul, Lovejoy Library, M.B.A., 1983, University of Missouri, St. Louis
ARDIS, Colby V., School of Engineering, Ph.D., 1972, University of Wisconsin
AUBUCHON, Betty L., School of Nursing, Ph.D., 1990, University of Texas
AULT, David E., Economics, Ph.D., 1969, University of Illinois
AXTELL, Ralph William, Biological Sciences, Ph.D., 1958, University of Texas
BACCUS, Gynelle, School of Nursing, Ph.D., 1992, Southern Illinois University at Carbondale

BADEN, Donald James, Curriculum and Instruction, Ed.D., 1973, University of Houston

BAICH, Annette, Biological Sciences, Ph.D., 1960, University of Oregon

BAIER, Marjorie, School of Nursing, Ph.D., 1995, Saint Louis University

BAILEY, Martha B., Political Science, Ph.D., 1992, University of Maryland

BAKER, Nora, Mass Communications, M.S., 1983, Southern Illinois University at Edwardsville

BAKER, John A.W., Health Recreation & Physical Education, Ph.D., 1979, University of Iowa

BARKER, John A., Philosophical Studies, Ph.D., 1967, Tulane University

BARLOW, Hugh D., Sociology, Ph.D., 1973, University of Texas at Austin

BARROW, Jane A., Art and Design, M.F.A., 1990, Indiana University-Bloomington

BARTELS, Lynn, Psychology, Ph.D., 1991, University of Akron

BEAMAN, Margaret, School of Nursing, Ph.D., 1987, University of Illinois, Chicago

BECKETT, Julia A., Public Administration & Policy Analysis, M.P.A., 1992, University of Colorado

BEHM, Kathlyn Faye, Lovejoy Library, M.L.S., 1991, University of Missouri, Columbia

BELCK, Nancy G., Educational Leadership, Ph.D., 1972, Michigan State University

BELL, Doris E., School of Nursing, Ph.D., 1979, Saint Louis University

BELL, John, Music, Ed.D., 1986, University of Illinois

BENDER, Lewis G., Regional Research and Development Services, Ph.D., 1977, University of Georgia

BENGTSON, Harlan H., Civil Engineering, Ph.D., 1971, University of Colorado

BERNAIX,Laura, School of Nursing, Ph.D., 1995, Saint Louis University

BHARATI, Rakesh, Finance, Ph.D., 1991, Indiana University, Bloomington

BIGHAM, Eldon M., Health, Recreation and Physical Education, M.S., 1969, Southern Illinois University at Edwardsville

BLAIN, Robert R., Sociology, Ph.D., 1967, University of Massachusetts

BOCK, Douglas B., Management Information Systems, Ph.D., 1987, Indiana University

BODAPATI, S. Narayan, Construction, Ph.D., 1969, Manchester University England

BOEDEKER, Richard R., Physics, Ph.D., 1959, Saint Louis University

BOLLINI, Raghupathy, Electrical Engineering, Ph.D., 1971, Purdue University

BOLYARD, Mark, Biological Sciences, Ph.D., 1989, University of North Carolina, Chapel Hill

BORGIA, Eileen T., Curriculum & Instruction, Ph.D., 1994, University of Illinois, Urbana

BORSA, John, Educational Leadership, Ph.D., 1974, Saint Louis University

BOSSE, Roberta B., English Language and Literature, Ph.D., 1971, Saint Louis University

BOYD, Mary Ann, School of Nursing, Ph.D., 1977, Saint Louis University; D.N.S., 1986, Indiana University

BOYLE, Joseph, Special Education, Ph.D., 1993, University of Kansas

BRAUNDMEIER, Arthur J., Physics, Ph.D., 1970, University of Tennessee

BRIMER, Richard W., Special Education, Ph.D., 1978, University of Missouri

BROWN, Robin, Art and Design, M.F.A., 1973, Rochester Institute of Technology

BROWN, Stephen, M., Music, M.Mus., 1970, Southern Illinois University at Edwardsville

BROWN, Venessa, Social Work, Ph.D., 1994, Clark Atlanta University

BROWNE, Dallas, Anthropology, Ph.D., 1983, University of Illinois, Champaign

BRUGAM, Richard B., Biological Sciences, Ph.D., 1975, Yale University

BRYAN, Virginia R., Chemistry, Ph.D., 1968, University of Minnesota

BUENO, Julian L., Foreign Languages and Literature, Ph.D., 1979, Texas Technical University

BUENO, Kathleen A., Foreign Languages and Literature, Ph.D., 1991, Saint Louis University

BUKALSKI, Peter J., Mass Communications and Theater and Dance, Ph.D., 1975, Ohio State University

BUSH, Richard D., Public Administration and Policy Analysis, Ph.D., 1983, University of Illinois

BUTLER, David L., English Language and Literature, Ph.D., 1972, Saint Louis University

CALCAGNO, Philip M., Lovejoy Library, M.L.S., 1969, University of Illinois

CARLISLE, Linda V., Lovejoy Library, M.S., 1985, University of Illinois

CARR, T.R., Public Administration and Policy Analysis, Ph.D., 1980, University of Oklahoma, Norman

CARSTENS-WICKHAM, S. Belinda, Foreign Languages & Literature, Ph.D., 1980, University of North Carolina

CARVER, M. Robert Jr., Accounting, Ph.D., 1980, University of Missouri, Columbia

CATALDI, Suzanne, Philosophical Studies, Ph.D., 1991, Rutgers University

CHA-JUA, Sundiata, Historical Studies, Ph.D., 1993, University of Illinois, Champaign

CHANGAR, Jerilynn, Art and Design, Ph.D., 1987, Washington University

CHEESEBORO, Anthony, Historical Studies, Ph.D., 1993, Michigan State University

CHEN, Ching-Chih, Historical Studies, Ph.D., 1973, Harvard University

CHEN, Jen Shiun, Electrical Engineering, Ph.D., 1983, Ohio State University

CHOW, Hau Cheung, Physics, Ph.D., 1977, University of British Columbia

CINGOLANI, Judith, Social Work, Ph.D., 1991, Saint Louis University

CLEMENT, Jacquelyn M., School of Nursing, Ph.D., 1983, The University of Texas at Austin

CLEMENTS, Donald W., Geography, Ph.D., 1975, Southern Illinois University at Carbondale

COAN, Darryl, Music, Ed.D., 1992, University of Illinois

COCUZZA, Peter, Theater and Dance, M.F.A., 1986, Ohio University

COHEN, Felissa L., School of Nursing, Ph.D., 1973, Illinois State University

COOPER, Cynthia, Mass Communications, Ph.D., 1995, University of Tennessee, Knoxville

COOPER, Mary A., Mathematics and Statistics, D.Sc., 1970, Washington University

CORR, Charles Anthony, Philosophical Studies, Ph.D., 1966, Saint Louis University

COSTIGAN, Michael, Accounting, Ph.D., 1985, Saint Louis University

COVINGTON, Nelda Kay, Health, Recreation, and Physical Education, Ph.D., 1986, Texas Woman's University

CROOKS, Steven, Educational Leadership, Ph.D., 1995, Arizona State University

CROSS, William B., Civil Engineering, M.S.E., 1991, John Hopkins University

CUSTER, Marcia S., School of Nursing, Ph.D., 1991, St. Louis University

DANLEY, John R., Philosophical Studies, Ph.D., 1977, University of Rochester

DAUS, Catherine S., Psychology, Ph.D., 1994, Purdue University

DAVIS, Don F., Art and Design, M.A., 1955, Ohio University

DECOTEAU, Pamela, Art and Design, Ph.D., 1975, University of Wisconsin

DEMENESES, Mary R., School of Nursing, Ed.D., 1982, Northern Illinois University

DENBY, Robert V., English Language and Literature, Ph.D., 1974, University of Illinois

DENNY, Sidney G., Anthropology, Ph.D., 1972, Southern Illinois University at Carbondale

DENUE, Gary N., Lovejoy Library, M.S.L.S., 1968, Suny College at Geneseo

DETOYE, Lela, Curriculum and Instruction, Ed.D., 1989, Southern Illinois University at Edwardsville

DICKMAN, Therese Z., Lovejoy Library, M.A.L.S., 1984, University of Michigan

DIXON, Robert, Chemistry, Ph.D., 1993, University of Pittsburgh

DONNELLY, Brian, Public Administration and Policy Analysis, Ph.D., 1978, University of Georgia

DRAPER, Violet N., School of Nursing, Ph.D., 1991, Southern Illinois University at Carbondale

DRESANG, Paul A., Art and Design, M.F.A., 1975, University of Minnesota

DRUCKER, Mark L., Public Administration and Policy Analysis, M.B.A., 1971, Harvard University

DUPIGNY-GIROUX, Lesley-Ann, Geography, Ph.D., 1996, McGill University

EATON, Renee L., Music, Ph.D., 1994, University of Florida

EDER, Douglas J., Biological Sciences, Ph.D., 1973, Florida State University

EDMONDS, Radcliffe G. Jr., Economics, Ph.D., 1979, University of Michigan

EFFROS, Bonnie, Historical Studies, Ph.D., 1994, University of California,Los Angeles

EHRLICH, Martha J., Art and Design, Ph.D., 1981, Indiana University

EILERS, James E., Chemistry, Ph.D., 1971, Case Western Reserve University

ELLIOTT, Donald S. Jr., Economics, Ph.D., 1976, University of Minnesota

ENEYO, Emmanuel S., Mechanical and Industrial Engineering, Ph.D., 1991, Purdue University, West Lafayette, Indiana

ENGEL, George L., Electrical Engineering, D.Sc., 1990, Washington University

ENGELMAN, Dixie A., Speech Pathology and Audiology, M.A., 1973, Southern Illinois University at Edwardsville

FARLEY, John E., Sociology, Ph.D., 1977, University of Michigan

FARRELL, John V., Political Science, Ph.D., 1975, University of Iowa

FEARING, Arleen D., School of Nursing, Ed.D., 1995, Illinois State University

FEENEY, Martha J., Lovejoy Library, M.L.S., 1967, Pratt Institute

FEENEY, William R., Political Science, Ph.D., 1970, Johns Hopkins University

FERGUSON, Eva D., Psychology, Ph.D., 1956, Northwestern University

FERNANDO, Rex W., University Services to East Saint Louis, Ph.D., 1976, Saint Louis University

FIELDS, Gregory P., Philosophical Studies, Ph.D., 1994, University of Hawaii at Manoa

FINKELSTEIN, Marvin, Sociology, Ph.D., 1984, Michigan State University

FONSECA, Elizabeth, Foreign Languages and Literature, Ph.D., 1982, University of Iowa

FONTENEAU, D. Yvonne, English Language and Literature, Ph.D., 1988, University of Illinois

FRICK, Carole C., Historical Studies, Ph.D., 1995, University of California, Los Angeles

FRISBIE, Charlotte J., Anthropology, Ph.D., 1970, University of New Mexico

FRISBIE, Theodore R., Anthropology, Ph.D., 1971, Southern Illinois University at Carbondale

FULCHER-SMITH, L., School of Nursing, Ed.D., 1991, University of Southern California

FUNK, Allison, English Language and Literature, M.F.A., 1978, Columbia University

FUNKHOUSER, Linda, English Language and Literature, Ph.D., 1978, Saint Louis University

GALLAGHER, William, Curriculum and Instruction, Ph.D., 1989, University of California, Los Angeles

GIACOBBE, Ralph, Marketing, Ph.D., 1991, Arizona State University

GIPE, Thomas D., Art and Design, M.F.A., 1972, Southern Illinois University at Edwardsville

GLOSSOP, Ronald J., Philosophical Studies, Ph.D., 1960, Washington University

GODHWANI, Arjun, Electrical Engineering, Ph.D., 1972, University of Arkansas

GOLDSMITH, Malcolm D., Health, Recreation, and Physical Education, Ph.D., 1978, Southern Illinois University at Carbondale

GRANT, Samuel B. Jr., Historical Studies, Ph.D., 1968, University of Michigan

GRICE, James, Psychology, Ph.D., 1995, University of New Mexico

GRIFFEN, Toby D., Foreign Languages and Literature, Ph.D., 1975, University of Florida

GRIVNA, William J., Theater and Dance, M.F.A., 1978, University of Minnesota

GU, Keqin, Mechanical and Industrial Engineering, Ph.D., 1988, Georgia Institute of Technology

HAFER, Rik W., Economics, Ph.D., 1979, Virginia Polytechnic Institute and State University

HAHS, Sharon K., Chemistry, Ph.D., 1974, University of New Mexico

HAKEEM, M.A., Physics, Ph.D., 1960, Louisiana State University

HAMER, Jennifer, Sociology, Ph.D., 1995, University of Texas at Austin

HAMRICK, William S., Philosophical Studies, Ph.D., 1971, Vanderbilt University

HANDEL, Warren H., Sociology, Ph.D., 1972, University of California, Santa Barbara

HANNA, Steven J., School of Engineering, Ph.D., 1968, Purdue University

HANSEN, Julia, Lovejoy Library, M.A.L.S., 1973, Rosary College

HANSEN, Stephen L., Ph.D., 1978, University of Illinois, Chicago

HARRICK, Edward J., Management, Ph.D., 1974, Saint Louis University

HARRISON, Jean M., Speech Pathology and Audiology, Ed.D., 1996, Southern Illinois University at Edwardsville

HASTY, Marilyn L., Mathematics and Statistics, Ph.D., 1986, Southern Illinois University at Carbondale

HATTEMER, Jimmie R., Computer Science, Ph.D., 1964, Washington University

HAVIS, Barbara J., Curriculum and Instruction, M.Ed., 1966, University of Missouri

HAYDON, Ricky, Music, M.Mus., 1987, Southern Illinois University at Edwardsville

HENDERSON, George A., Physics, Ph.D., 1970, Georgetown University

HENDRICKSON, Howard, Chemistry, Ph.D., 1996, University of Arkansas

HILDEBRAND, Robert F., Educational Leadership, Ph.D., 1970, University of Pittsburgh

HILL, Roger C., Physics, Ph.D., 1969, California Institute of Technology

HINSON, James M., Music, D.M., 1995, Florida State University

HIRSCH, Maurice L. Jr., Accounting, Ph.D., 1977, Washington University

HO, Allan B., Music, Ph.D., 1984, University of Kentucky

HO, Chung wu, Mathematics and Statistics, Ph.D., 1970, Massachusetts Institute of Technology

HOGE, Debra Reichert, Speech Pathology and Audiology, Ed.D., 1985, Southern Illinois University at Edwardsville

HOLDEN, Lyman S., Mathematics and Statistics, Ph.D., 1966, Ohio State University

HOSTETLER, Dennis W., Public Administration and Policy Analysis, Ph.D., 1974, University of Iowa

HOUPIS, James L.J., Biological Sciences, Ph.D., 1989, University of California, Berkeley

HULL, Gary L., Educational Leadership, Ph.D., 1972, Michigan State University

HUNSLEY, James, Chemistry, Ph.D., 1970, Michigan State University

ISAACSON, Joel D., Computer Science, Ph.D., 1963, Michigan State University

JACKSON, James, Special Education, Ph.D., 1991, Southern Illinois University at Carbondale

JACOBITTI, Edmund E., Historical Studies, Ph.D., 1972, University of Wisconsin

JACOBITTI, Suzanne, Political Science, Ph.D., 1967, University of Wisconsin

JAROSZ, Krzysztof M., Mathematics and Statistics, Ph.D., 1982, Warsaw University

JARRELL, J. Calvin, Theater and Dance, M.F.A., 1980, University of Oklahoma

JEWETT, Thomas O., Curriculum and Instruction, Ph.D., 1985, Saint Louis University

JOHNSON, Charlotte, Lovejoy Library, M.A., 1975, University of Wisconsin

JOPLIN, Janice R., Management, Ph.D., 1994, University of Texas

KAIKATI, Jack G., Marketing, Ph.D., 1976, Florida State University

KANG, Ik-Ju, Physics, Ph.D., 1962, Northwestern University

KARACAL, Seref C., Mechanical and Industrial Engineering, Ph.D., 1991, Oklahoma State University

KARIMPOUR, Rahim G., Mathematics and Statistics, Ph.D., 1977, University of Oregon

KAY, Dianne H., Construction, M.S. in Engr., 1987, Southern Illinois University at Edwardsville

KECK, Pamela J., Chemistry, Ph.D., 1988, Pennsylvania State University

KEENE, Carol A., Philosophical Studies, Ph.D., 1969, Saint Louis University

KHAZAELI, Sadegh, Chemistry, Ph.D., 1982, Michigan State University

KIM, Sang-Ki, Philosophical Studies, Ph.D., 1973, State University of New York

KIMBALL, Stanley B., Historical Studies, Ph.D., 1960, Colùmbia University

KING, Thomas E., Accounting, Ph.D., 1973, University of California at Los Angeles

KISSMAN, Kris, Social Work, Ph.D., 1986, University of Texas, Arlington

KITZ, Dennis J., Biological Sciences, Ph.D., 1980, University of Iowa

KLEIN, Nicole, Health, Recreation and Physical Education, Ph.D., 1995, University of Texas

KLEINMAN, Kenneth M., Psychology, Ph.D., 1967, Washington University

KLEPPER, Robert, Management Information Systems, Ph.D., 1973, University of Chicago

KLORER, Patricia, Art and Design, Ph.D., 1996, Union Institute

KOEHNECKE, Dianne, Curriculum & Instruction, Ph.D., 1992, Saint Louis University

KOHFELD, David L., Psychology, Ph.D., 1966, University of Illinois

KORAK, John, Music, M.M., 1993, University of North Texas

KRAJNIAK, Kevin G., Biological Sciences, Ph.D., 1990, University of Florida, GA

KRISHNAN, Kuppana, University Services to East St. Louis, Ph.D., 1978, Saint Louis University

KRISTOFF, Larry D., Health, Recreation, and Physical Education, M.A., 1969, Southern Illinois University at Carbondale

KROHN, Emily J., Psychology, Ph.D., 1980, Saint Louis University

KROPP, Lloyd E., English Language and Literature, M.A., 1961, University of Pittsburgh

KULFINSKI, Frank B., Biological Sciences, Ph.D., 1957, Iowa State University

KUTAN, Ali, Economics, Ph.D., 1990, Arizona State University

LAGARCE, Raymond F., Marketing, Ph.D., 1971, University of Missouri, Columbia

LAMBERT, Sharon, School of Nursing, D.S.N., 1991, University of California, San Francisco

LAMOTHE, Alison, Foreign Languages and Literature, Ph.D., 1995, University of Massachusetts

LAMP, Robert E., Psychology, Ph.D., 1966, Washington University

LAWRENCE, Edwin G., Philosophical Studies, Ph.D., 1972, University of Wisconsin

LEDZEWICZ, Urszula, Mathematics and Statistics, Ph.D., 1984, University of Lodz-Poland

LEE, Heungsoon F., Mechanical and Industrial Engineering, Ph.D., 19X9, University of Michigan

LEVIN, Stanford L., Economics, Ph.D., 1974, University of Michigan

LIN, An-Yhi, Economics, Ph.D., 1967, Iowa State University

LIN, Chiang, Civil Engineering, Ph.D., 1984, University of Kentucky

LIVINGSTON, Marilynn, Computer Science, Ph.D., 1966, University of Alberta

LOVATA, Linda M., Accounting, Ph.D., 1983, Indiana University

LOX, Curt L., Heath, Recreation and Physical Education, Ph.D., 1994, University of Illinois

LU, Chunqing, Mathematics and Statistics, Ph.D., 1986, State University of New York, Buffalo

LUEDKE, George C. Jr., Health, Recreation, and Physical Education, D.P.Ed., 1982, Indiana University

LUTZ, Nancy M., Anthropology, Ph.D., 1986, University of California, Berkeley

LYNCH, James M., Marketing, Ph.D., 1984, University of Texas, Austin

MABUNDA-TEMPLE, Gladys, School of Nursing, Ph.D., 1996, Saint Louis University

MACKIE, Wade C., Theater and Dance, Ph.D., 1972, Indiana University

MALONE, Robert R., Art and Design, M.F.A., 1958, University of Chicago

MANN, J. Debbie, Foreign Languages and Literature, Ph.D., 1987, University of Florida

MARKOWITZ, Linda, Sociology, Ph.D., 1995, University of Arizona

MARTELL, Kathryn, Management, Ph.D., 1989, University of Maryland, College Park

MARTIN, Barbara C., School of Nursing, Ed.D., 1987, Southern Illinois University at Edwardsville

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REINER, John R., Emeritus Associate Professor, Ph.D., 1969, Southern Illinois University at Carbondale

RICHARDSON, John A., Emeritus Professor, Ed. D., 1958, Teachers College, Columbia University

RIDDLEBERGER, Patrick, Emeritus Professor, Ph.D., 1953, University of California

RIDER, John R., Emeritus Professor, Ph.D., 1963, Michigan State University

ROCHESTER, Dean E., Emeritus Professor, Ed.D., 1965, Florida State University

ROMANI, L. Dan, Emeritus Associate Professor, M.A., 1953, University of Illinois

RUFFNER, Ralph W., Emeritus Vice President, Ed.D., 1948, George Washington University

RUNKLE, Gerald J.T., Emeritus Professor, Ph.D., 1951, Yale University

RUSSELL, Ivan L., Emeritus Professor, Ph.D., 1955, University of Michigan

RUSSO, Joseph R., Emeritus Professor, Ed.D., 1963, Pennsylvania State University

RUTLEDGE, Robert B., Emeritus Professor, Ph.D., 1962, Saint Louis University

RYDBERG, Richard J., Emeritus Associate Professor, D.D.S., 1961, Saint Louis University

ST. ONGE, Keith, Emeritus Professor, Ph.D., 1952, University of Wisconsin

SAPPINGTON, V. Ellen, Emerita Associate Professor, Ph.D., 1976, University of Iowa

SCHIEBER, Robert W., Emeritus Professor, M.Ed., 1956, Indiana University

SCHNABEL, John H., Emeritus Professor, Ed.D., 1955, Indiana University

SCHUSKY, Ernest L., Emeritus Professor, Ph.D., 1960, University of Chicago

SCHUSKY, Mary Sue, Emerita Assistant Professor, Ph.D., 1960, University of Chicago

SCHWIER, Ann S., Emerita Professor, Ph.D., 1952, Saint Louis University

SCOTT, Janet, Emerita Professor, M.M., 1976, Washington University

SCOTT, Ralston D., Emeritus Professor, Ph.D., 1951, New York University

SHAFFER, V. Faye, Emerita Professor, Ed.D., 1966, University of Illinois

SHAHEEN, Jack G. Jr., Emeritus Professor, Ph.D., 1969, University of Missouri

SHEA, Thomas M., Emeritus Professor, Ed.D., 1967, Boston University

SHOWERS, Norman E., Emeritus Professor, Ed.D., 1966, University of Southern California

SIM, Joseph M., Emeritus Professor, D.D.S., 1957, University of Washington

SMITH, Joseph Sr., Emeritus Associate Professor, M.S., 1956, Indiana State University

SMITH, Mary Belle, Emerita Professor, M.A., 1935, State University of Tennessee

SMITH, Michael Joseph, Emeritus Professor, M.F.A., 1961, Indiana University

SPAHN, Raymond J., Emeritus Professor, Ph.D., 1938, Northwestern University

STAHNKE, Arthur, Emeritus Professor, Ph.D., 1966, University of Iowa

STARR, Dartha F., Emerita Professor, Ph.D., 1971, Saint Louis University

STATLER, Luther D., Emeritus Assistant Professor, Ph.D., 1977, Saint Louis University

STECKLING, Ronald, Emeritus Associate Professor, Ph.D., 1964, University of Wisconsin

STEFFEN, Hans H., Emeritus Professor, Ph.D., 1960, University of Nebraska

STURLEY, Eric A., Emeritus Professor, Ed.D., 1953, Columbia University

SULTAN, Paul E., Emeritus Professor, Ph.D., 1950, Cornell University

SWAINE, Richard L., Emeritus Professor, Ph.D., 1971, Washington University

TALIANA, Lawrence, Emeritus Professor, Ph.D., 1958, Purdue University

TARWATER, William H., Emeritus Professor, Ph.D., 1958, Peabody College

TAYLOR, Joyce S., Emerita Professor, Ph.D., 1969, University of Missouri

TULLOSS, Dorothy E., Emerita Professor, D.Mus.A., 1964, Boston University

TURNER, Charles, Emeritus Associate Professor, Ed.D., 1954, Columbia University

VAN SYOC, W. Bryce, Emeritus Professor, Ph.D., 1959, University of Michigan

VASILEFF, Vasil, Emeritus Professor, D.D.S., 1950, Saint Louis University

VILHAUER, William W., Emeritus Professor, Ph.D., 1965, University of Iowa

VINCENT, Vern H., Emeritus Professor, Ph.D., 1957, University of Michigan

VOGET, Fred W., Emeritus Professor, Ph.D., 1948, Yale University

WAIT, William B., Emeritus Professor, Ph.D., 1952, Cornell University

WALKER, Betty B., Emerita Assistant Professor, Ph.D., 1986, Saint Louis University

WALLACE, Mona Ruddy, Emerita Associate Professor, Ed.D., 1983, University of Missouri, St. Louis

WARD, William G., Emeritus Professor, M.S., 1958, Mankato State College

WARREN, Edwin, Emeritus Professor, Ph.D., 1976, University of Michigan

WEHLING, Leslie J., Emeritus Professor, Ed.D., 1964, Washington University

WEISS, Stuart L., Emeritus Professor, Ph.D., 1961, University of Chicago

WHITE, Hollis L., Emeritus Professor, Ph.D., 1951, University of Missouri

WHITE, J. Edmund, Emeritus Professor, Ph.D., 1958, Indiana University

WHITESIDE, William, Emeritus Professor, Ph.D., 1969, Southern Illinois University, Carbondale

WILBRAHAM, Antony C., Emeritus Professor, Ph.D., 1965, Royal Institute of Chemistry

WILEY, W. Deane, Emeritus Professor, Ph.D., 1966, Claremont Graduate School

WILLIAMS, Ollie Mae, Emerita Professor, B.L.S., 1942, Emory University

WILLIAMSON, Ramon N., Emeritus Professor, Ed.D., 1963, Columbia University

WINTER, Kamil, Emeritus Professor, Ph.D., 1963, Prague University

YARBOUGH, Ronald E., Emeritus Professor, Ph.D., 1972, University of Tennessee

ZAHALSKY, Arthur C., Emeritus Professor, Ph.D., 1963, New York University

ZANGER, Jules, Emeritus Professor, Ph.D., 1954, Washington University

ABBREVIATIONS USED IN COURSE DESCRIPTIONS

Some courses listed in this section of the catalog will fulfill General Education requirements. The following abbreviations, when listed with the course description, indicate how the course may be used to meet General Education requirements.

[INTRO]	Introductory Course
[SKILLS]	Skills Course
[Adv. FAH]	Advanced Fine Arts and Humanities
[Adv. NSM]	Advanced Natural Sciences and Mathematics
[Adv. SS]	Advanced Social Sciences
[IC]	International Culture
[IGR]	Intergroup Cultural Relations
[II]	International Issues
[IS]	Interdisciplinary Studies

It is possible that one course may fulfill two or more requirements in the General Education program. When this is the case, the abbreviations for the appropriate general education requirements will appear. For example, [Adv..SS,III] indicates that this course may be utilized to fulfill and advanced Social Science requirement and also meets the International Issues requirement. In some cases, different parts of a sequenced course may fulfill different requirements. For example, [Adv..SS, (a)IC, (b)II] indicates that part (a) of this sequence will fulfill the International Culture requirement while part (b) will fulfill the International Issues requirement. When a course has two or more parts and the parts are not listed singly, then both parts fulfill the requirements which are indicated.

There are some cases in which a course cannot fulfill two requirements; for example HIST 111b cannot be counted toward fulfillment of both Introductory and Advanced course requirements. Students should carefully read course descriptions in order to be aware of how particular courses will fulfill the General Education program requirements.

ACADEMIC DEVELOPMENT

065-3 MATHEMATICS AND PRE-COLLEGE ALGEBRA.
Application problems involving real numbers, fractions, percents, decimals; first degree equations and inequalities, absolute value, operations with polynomials, factoring, operations with rational expressions. Credit not to be counted for graduation. Letter grades not to be counted in grade point average. Four contact hours.

075-3 BEGINNING/INTERMEDIATE ALGEBRA.
Linear and quadratic equations and inequalities, absolute value, polynomials, factoring, rational expressions, graphing linear equations, radicals, complex numbers, systems of linear equations, conic sections, application. Credit not to be counted for graduation. Letter grades, not counted in grade point average. Five contact hours.

080-2 to 5 COLLEGE READING I.
This course, where reading is taught as an active process reliant on various techniques, broadens reading background and prepares students for success with academic coursework. Credit will be awarded as AD 080 a,b - 2,3. Credit not to be counted for graduation. Letter grades, not counted in grade point average. Five contact hours.

082-3 COLLEGE READING II.
Course focuses on strengthening reading comprehension; encourages critical reading. Evaluation of ideas is facilitated by keeping journals, participating in literature groups and practicing effective strategies. Credit not counted for graduation. Letter grades, not counted in grade point average. Four contact hours.

085-3 INTRODUCTION TO GEOMETRY.
Fundamentals of Euclidean Geometry: angles, parallel lines, polygons, circles, polyhedrons, area and volume, similarity, congruence, mathematical reasoning, proofs. Credit not counted toward graduation. Letter grades, not counted in grade point average.

090-2 to 5 BASIC WRITING I.
Focus on thinking skills and expression of ideas within organized and coherent paragraphs and short essays. Emphasis on sentence skills and college level vocabulary. Credit will be awarded as AD 090 a,b - 2,3. Credit not to be counted for graduation. Letter grades, not counted in grade point average. Five contact hours.

092-3 BASIC WRITING II.
Process writing of multi-paragraph essays reflected by metacognitive skills and the ability to work with abstract topics. Credit not to be counted for graduation. Letter grades, not counted in grade point average. Four contact hours.

095-3 INTERMEDIATE ALGEBRA.
Exponents, polynomials, factoring, linear and quadratic equations and inequalities, rational expressions, radicals, complex numbers, graphing linear equations, systems of linear equations, applications. Credit not counted toward graduation. Letter grades, not counted in grade point average. Four contact hours.

115-1 STUDY SKILLS.
Improve study behaviors and attitudes through academic goal setting, study systems, notetaking techniques, test taking strategies, time management, classroom communication and problem solving.

116-1 READING SPEED AND EFFICIENCY.
Improvement of reading rate and flexibility with emphasis on comprehension, vocabulary, concentration, and textbook reading strategies as related to reading efficiency and overall academic performance.

117-2 CAREER PLANNING AND PLACEMENT.
Career decision-making process investigates self-awareness, career exploration, career information gathering, life styles and job search strategy including development of resumes, interviewing skills and networking techniques.

ACCOUNTING

200-3 FUNDAMENTALS OF FINANCIAL ACCOUNTING.
Concepts of financial accounting and external reporting. Nature and measurement of assets, liabilities, equities, revenues, expenses. Emphasis on use and understanding of external financial statements. Prerequisites: ECON 112, MIS 108, sophomore standing.

210-3 MANAGERIAL ACCOUNTING.
Information accumulation, analysis, and use for managerial decisions. Cost-volume-profit relationships; short- and long-term decisions; standards and budgets; segment and managerial performance evaluation. Open only to nonaccounting majors. Credit not acceptable for the Bachelor of Science in Accountancy. Prerequisites: 200, MS 251.

301-3 INTERMEDIATE ACCOUNTING THEORY AND PRACTICE I.
Financial accounting concepts and procedures; measurement and reporting methods with respect to assets, liabilities, owners' equity, revenues and expenses, authoritative pronouncements. Prerequisites: 200 with grade of B or better, GBA 300 or concurrent enrollment, junior standing.

302-3 INTERMEDIATE ACCOUNTING THEORY AND PRACTICE II.
Continuation of 301. Selected complex accounting issues from a theoretical and practical viewpoint; owners' equity, pensions, leases, tax allocation, changing prices, other reporting and disclosure issues. Prerequisites: 301 with grade of C or better, GBA 300.

311-3 MANAGERIAL AND COST ACCOUNTING I.
Costs for financial accounting and managerial decision making in changing competitive, service, manufacturing environments; behavioral, quantitative, computer applications; extensive communication and analytical skills development. Prerequisites: 200 with grade of B or better, GBA 300, MS 251, junior standing.

312-3 MANAGERIAL AND COST ACCOUNTING II.
Short- and long-term decision making and operational control in changing competitive, service, manufacturing environments; behavioral, quantitative, computer applications; continuation of communication and analytical skills development. Prerequisites: 311 with grade of C or better, GBA 300.

315-3 ACCOUNTING SYSTEMS.
Accounting systems, concepts, design, information needs and flows; special emphasis on internal control. Prerequisites: 301 with grade of C or better, GBA 300.

321-3 INTRODUCTION TO TAXATION.
Survey of federal tax laws applicable to individuals, corporations, estates, trusts. Prerequisite: 302 or concurrent enrollment or consent of instructor.

340-3 BUSINESS LAW FOR ACCOUNTANTS.
Accounting and auditing implications of legal issues. Includes securities laws and Uniform Commercial Code areas of sales; commercial paper; secured transactions; partnerships; corporations; agency; bankruptcy. Prerequisites: GBA 300, junior standing.

390-1 to 3 INTERNSHIP IN ACCOUNTING.
On-the-job professional experience with public accounting firms, industrial firms, governmental agencies. By arrangement. Cases, papers. Prerequisites: 301 with grade of B or better, consent of department chairperson.

401-3 ADVANCED FINANCIAL ACCOUNTING.
Accounting principles, procedures related to special entities, including governmental units and multi-corporate entities; foreign transactions; primary emphasis on business combinations and consolidated financial statements. Prerequisites: 302, good standing in accountancy program, or consent of accountancy program director.

422-3 ADVANCED TAXATION.
Application of federal tax laws to tax planning opportunities; fundamentals of tax research. Prerequisites: 321 with grade of C or better, good standing in accountancy program, or consent of accountancy program director.

431-3 PRINCIPLES OF AUDITING.
Auditor's decision process; understanding client's business; development of working papers, audit tests, statistical sampling applications, EDP systems; preparation of audit report, current pronouncements. Prerequisites: 302, 315, good standing in accountancy program, or consent of accountancy program director.

450a-e-3 CONTEMPORARY ISSUES AND RESEARCH IN ACCOUNTING.
Issues currently of concern in accounting practice. In-depth study and research relating to specific problem areas. (a) Financial accounting; (b) Managerial accounting; (c) Auditing; (d) Taxation; (e) General Topics. Satisfies B.S.A. degree research requirement. Prerequisites: good standing in accountancy program and consent of instructor.

490-1 to 6 INDEPENDENT STUDY IN ACCOUNTING.
Topical areas in greater depth than regularly titled courses; individual or small group readings or research projects. May be repeated to a maximum of 6 hours so long as no topic is repeated. Prerequisites: consent of instructor and department chairperson, good standing in accountancy program.

ADULT EDUCATION

490-3 INTRODUCTION TO ADULT AND CONTINUING EDUCATION.
Nature of the field and major areas of professional practice, basic concepts, issues, various program areas, institutional settings.

495-1 to 6 SELECTED TOPICS.
Varied content related to adult and continuing education. Offered from time to time as need exists and as faculty interest and time permit.

AEROSPACE STUDIES

101-2 THE AIR FORCE TODAY.
Study of Air Force and ROTC; mission and organization, officership and professionalism, military customs and courtesies, officer opportunities, group leadership problems. Leadership Laboratory mandatory for AFROTC cadets. Classroom activity, two hours per week; Leadership Laboratory two hours per week, each semester.

102-2 THE AIR FORCE TODAY.
Continuation of 101.

201-2 THE AIR FORCE WAY.
Discussion of Air Force heritage, leaders, Quality Air Force, ethics and values, leadership, group leadership problems, and communication skills. Leadership Laboratory mandatory for Air Force ROTC cadets. Classroom activity, two hours per week; Leadership Laboratory two hours per week, each semester.

202-2 THE AIR FORCE WAY.
Continuation of 201.

301-3 AIR FORCE LEADERSHIP AND MANAGEMENT.
Leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics. Case studies are used to demonstrate practical application. Leadership Laboratory mandatory. Classroom activity, three hours per week; Leadership Laboratory two hours per week, each semester.

302-3 AIR FORCE LEADERSHIP AND MANAGEMENT.
Continuation of 301.

401-3 PREPARATION FOR ACTIVE DUTY.
National security process, regional studies, advanced leadership ethics, Air Force doctrine. The military as a profession, officership, military justice, civilian control of military, preparation for active duty, and current issues. Continued emphasis on communication skills. Leadership Laboratory mandatory. Classroom activity, three hours per week; Leadership Laboratory two hours per week, each semester.

402-3 PREPARATION FOR ACTIVE DUTY.
Continuation of 401. NOT FOR GRADUATE CREDIT.

ANTHROPOLOGY

111-3 INTRODUCTION TO ANTHROPOLOGY.
[INTRO, IC] Examines physical and cultural evolution and lifestyles of people around the world as a means to better understand ourselves. Uses museum materials and audiovisual resources for illustration.

301-3 LANGUAGE AND CULTURE.
[IC] Relations between language and culture; development of language and culture as human characteristics; linguistic diversity and universals; introduces sociolinguistics. Prerequisite: 111 or consent of instructor.

305-3 PEOPLE AND CULTURE OF NORTH AMERICA.
[Adv.SS, IGR] Origins of native North Americans; diversity in social, economic, political, and religious aspects of Native American cultures prior to Euroamerican domination.

306-3 PEOPLE AND CULTURE OF ASIA.
[Adv.SS, IC] Geography, history, cultural and social organization of peoples of Asia.

307-3 PEOPLE AND CULTURE OF LATIN AMERICA AND THE CARIBBEAN.
[Adv.SS, IC] Social and cultural aspects of contemporary Mexico, Central America, South America, the Caribbean in historical and environmental context.

310-3 PEOPLE AND CULTURE OF AFRICA.
[Adv.SS, IC] Cross-cultural comparisons of African tribes to illustrate general principles of anthropology; relation of tribal backgrounds to contemporary economic and political life.

311-3 CULTURE OF AFRICAN-AMERICANS.
[Adv.SS, IGR] Black family, religion, and political movements within American society. Historical experiences, social institutions and cultural developments of Black Americans, political responses to oppression.

312-3 CONTEMPORARY AMERICAN INDIANS.
[Adv.SS, IGR] Contemporary American Indians as minority groups; their unique position in the United States; economic, political, legal, religious, and other problems they face today. Prerequisite: 305.

313-3 WOMEN IN CROSS-CULTURAL PERSPECTIVE.
[Adv.SS, IGR] (Same as WMST 313) Comparisons of positions, roles, and problems of women in contemporary cultures from selected world areas and socioeconomic levels. Anthropological perspectives on issues of women's studies.

325-3 ARCHAEOLOGICAL METHOD AND THEORY.
Major historical developments in Old and New World archaeology; basic methods and current theoretical approaches to data analysis, cultural resource management.

331-3 WORLD PREHISTORY.
[Adv.SS, IC] Cultural developments of the Paleolithic through Mesolithic in the Old World and early Native American prehistory.

332-3 ORIGINS OF OLD WORLD CIVILIZATION.
[Adv.SS, IC] Comparative survey of Old World and New World Neolithic Revolution and developments of the Urban Transformation of China, Egypt, India, Mesopotamia, Mexico, Peru.

333-3 ORIGINS OF NEW WORLD CIVILIZATION.
Origins, development of New World Civilizations emphasizing Olmec, Mayan, Teotihuacanan, Toltec, Aztec, and Andean cultures. Spanish conquest of Aztecs and Incas.

350-3 ANTHROPOLOGY IN CONTEMPORARY LIFE.
[Adv.SS, II] Current issues from anthropological perspective: ethnicity and religious divisions, world hunger, concepts of health and medicine, other uses of anthropology for practical problems.

365-4 HUMAN ORIGINS.
[Adv.NSM] Basic principles of human evolution, primates and fossil records. Mechanisms of evolution and human osteology. Three hours lecture, one hour lab per week.

373-3 to 6 INTRODUCTION TO ETHNOGRAPHIC FIELD METHODS.
Research design, interviewing, participant observation, data analysis. Ethical and practical problems of ethnographic fieldwork. Directed field research in settings chosen by instructor. Prerequisite: 111 or consent of instructor.

375-3 to 6 INTRODUCTION TO ARCHAEOLOGICAL FIELD METHODS.
Students participate in site location, survey and evaluation techniques, excavation strategies and methods, recording, laboratory methods and interpretation. Emphasizes learning through participation in excavations. Prerequisite: 111 or consent of instructor.

400-3 CULTURAL ANTHROPOLOGY.
[Adv.SS, IC] Historical development of concept of culture. Current issues in studying culture, writing ethnographies, applying anthropological understandings. Cross-cultural study of selected components of culture. NOT FOR GRADUATE CREDIT. Prerequisite: 111.

401-3 ANTHROPOLOGICAL LINGUISTICS.
Advanced study of language and culture, through analysis of case studies from around the world. Recommended for students intending graduate study in anthropology. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

404-3 ANTHROPOLOGY AND THE ARTS.
[IC] Origins and evidence for art in early human history. Graphic and plastic arts, ethnomusicology, choreology, folklore among selected non-Western cultures. NOT FOR GRADUATE CREDIT. Prerequisite: 111.

407-3 PRIMATOLOGY.
[Adv.NSM] Primate evolution, behavior (ethology), physiology, ecology. Development of locomotion, other motor skills, evolution of the brain, primate communication, associated cognitive processes. NOT FOR GRADUATE CREDIT. Prerequisite: 111.

408-3 HISTORY OF ANTHROPOLOGICAL THOUGHT.
Historical development of the discipline. Major schools of thought and important shifts in theory, method, problem definition. Readings of selected classics and contemporary thought. NOT FOR GRADUATE CREDIT. Prerequisite: 400.

410-3 ANTHROPOLOGY OF RELIGION.
[IC] Religion as one aspect of culture. Historical and contemporary perspectives on religion in a variety of cultures. NOT FOR GRADUATE CREDIT. Prerequisite: 111 or consent of instructor.

411-3 URBAN ANTHROPOLOGY.
[Adv.SS, II] People in city environments. History of urban development, social and ethnic groups, networks. Comparison of urban areas in Africa, North America, other cultural settings. NOT FOR GRADUATE CREDIT. Prerequisite: 111 or consent of instructor.

420-3 MUSEUM TECHNOLOGY (MUSEOLOGY).
Historical development of museums as institutions; dynamics of shifting roles, functions, philosophies, and continuing education. Practical experience in developing and constructing exhibits. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

426-3 FAMILY AND KINSHIP IN CROSS-CULTURAL PERSPECTIVE.
[Adv.SS, IC] History and cross-cultural perspectives on kinship and family. Studies a variety of family experiences through readings, speakers, and discussions. NOT FOR GRADUATE CREDIT. Prerequisite: 111 or consent of instructor.

432a-3 THE PREHISTORY OF ILLINOIS.
[Adv.SS] Prehistoric cultural developments in Midwest between 12,000 B.C. and 1500 A.D. Events leading to climax of Mississippian culture at Cahokia. Utilizes slides, archaeological collections, and displays in Anthropology Teaching Museum. NOT FOR GRADUATE CREDIT.

432b-3 SOUTHWESTERN ARCHAEOLOGY.
[Adv.SS] Prehistoric-historic cultural developments in southwestern United States emphasizing Pueblo culture, Mogollon and Hohokam cultures, the Mesoamerican base, theory, analogy in archaeological reasoning. NOT FOR GRADUATE CREDIT. Prerequisite: 331 or consent of instructor.

452-3 POLITICAL ANTHROPOLOGY.
[Adv.SS, II] Cross-cultural comparison of political systems emphasizing non-European peoples. Functional relations between politics and society, growth of political complexity; systems of authority/leadership. NOT FOR GRADUATE CREDIT. Prerequisite: junior standing or consent of instructor.

470-3 to 9 SPECIAL TOPICS IN ANTHROPOLOGY.
Significant problems and issues not treated in other courses. Focus is restricted; content varies and is announced in advance. May be repeated to a maximum of 9 hours as long as no topic is repeated. NOT FOR GRADUATE CREDIT. Prerequisite: 111 or consent of instructor.

473-3 ADVANCED ETHNOGRAPHIC FIELD METHODS.
Advanced opportunities for supervised ethnographic fieldwork in settings chosen by instructor. Research proposal development, data analysis, interpretation, presentation. NOT FOR GRADUATE CREDIT. Prerequisite: 373 or consent of instructor.

475-3 ADVANCED ARCHAEOLOGICAL FIELD METHODS.
New techniques for data recovery. Opportunities to develop specialized capabilities in ancillary methods including photography, mapping, faunal, floral, and ceramic analysis. NOT FOR GRADUATE CREDIT. Prerequisite: 375 or consent of instructor.

483-1 to 6 INDIVIDUAL STUDY IN ANTHROPOLOGY.
Guided research on anthropological problems supervised by single faculty member chosen by student. Consult chairperson before enrolling. NOT FOR GRADUATE CREDIT.

490-1 SENIOR ASSIGNMENT.
Demonstration of proficiency in application of anthropological knowledge and General Education skills and knowledge to real world problems. Selection of Senior project problem. NOT FOR GRADUATE CREDIT. Prerequisite: Senior standing.

491-1 SENIOR PROJECT.
Demonstration of proficiency in investigation of selected problem and formal presentation of results of investigations. NOT FOR GRADUATE CREDIT. Prerequisite: 490.

ART AND DESIGN

111-3 INTRODUCTION TO ART.
[INTRO] Visual arts: painting, sculpture, architecture, related media. Intended to cultivate discrimination in viewing and understanding works of art. NOT FOR MAJOR CREDIT.

112a-d-3 each BASIC STUDIO.
(a) Drawing I: Basic approaches to drawing, introducing variety of media and subject matter; (b) Visual Organization I: Two-dimensions, color; (c) Drawing II: Further development and study of drawing techniques and media investigations, with additional emphasis on concepts and composition; (d) Visual Organization II: Three-dimensions.

113-3 AVOCATIONAL CERAMICS.
Ceramics for non-art majors. May be repeated to a maximum of 6 hours. NOT FOR MAJOR CREDIT.

202a-f-3 each FOUNDATION STUDIO.
(a) Sculpture: Welding, casting, wood construction; (b) Printmaking: Relief, intaglio. (c) Ceramics: Glazing, firing; (d) Painting: Oils; (e) Drawing: Composition, figure; (f) Weaving/Textiles: Off-loom, dying, fibers. Need not be taken in sequence. Prerequisite: sophomore standing or consent of instructor.

202g-3 INTRODUCTION TO METALSMITHING.
Introduction to aesthetic and technical pursuits of contemporary jewelry and metalsmithing at beginning level. Prerequisite: sophomore standing or consent of instructor.

225a,b-3 each THE HISTORY OF WORLD ART.
[Adv.FAH, IC] Major periods and styles. (a) From prehistory through the Renaissance; (b) From Mannerism to the present. Open to all students.

289-3 PRACTICUM IN ART EDUCATION.
Introduction to Art Education. Readings, discussions, observations, and involvement with children and adults in selected meetings. Clinical experience required. Prerequisite: second semester freshman.

300a,b-3 each ART EDUCATION IN ELEMENTARY SCHOOLS.
Objectives, theory, and practices of teaching grades K-6. (a) Study of developmental stages, emphasis on media and strategies for implementing activities K-6; (b) Emphasis on teaching art from elementary art specialist perspective; developing units of instruction and teaching methodology. Prerequisite: junior standing or consent of instructor.

301-3 STILL PHOTOGRAPHY I.
Introduction to black-and-white photography, including basic theory and practice: photographic vision, camera controls, film processing, darkroom printing.

302-3 STILL PHOTOGRAPHY II.
Black-and-white photography, including intermediate theory and practice: photographic vision, camera controls, film processing, darkroom printing. Prerequisite: 301.

305-3 to 6 CERAMICS.
Intermediate study incorporating ceramic wheel work and additional areas of aesthetic and technical development. May be repeated for a maximum of 9 hours. Consent of instructor necessary to take more than 3 hours per semester. Prerequisite: 202c.

309-3 to 6 WATERCOLOR.
Introduction to water color and other aqueous media with emphasis on traditional and modern techniques; awareness of materials available. May be repeated for a maximum of 9 hours. Prerequisites: 202-6, including 202d.

310-3 to 6 PAINTING.
Intensive study of painting as medium of expression. Individual rather than group problems engaged. May be repeated to a maximum of 9 hours. Prerequisites: 202-6, including 202d.

311-3 GRAPHIC DESIGN I.
Introduction to visual communication theory and practice: elements and principles of perception and design, typography, symbols, desktop design. Prerequisite: 112b.

312-3 GRAPHIC DESIGN II.
Intermediate desktop design and publishing; electronic typography, pagination and illustration; symbol, logo, poster and publication design; computer imaging. Prerequisite: 311.

325-3 to 6 STUDIO I.
Independent study with one or more faculty members. No more than 3 hours per semester without written approval. May be repeated for a maximum of 9 hours. Prerequisite: 6 hours of chosen medium or consent of instructor.

326-3 to 6 STUDIO II.
Studio coursework based on content not included in other art studio course offerings. No more than 3 hours per semester without written approval. May be repeated for a maximum of 9 hours. Prerequisite: consent of instructor.

331-3 to 6 ADVANCED DRAWING.
Technical and conceptual study of human figure and other subject matter with emphasis on content in development of individual compositions. May be repeated for a maximum of 9 hours. Prerequisite: 9 hours of drawing.

341-3 CARTOONING AND ILLUSTRATION.
Cartooning and development of graphic story. Lettering techniques, photomechanical processes, preparation of artwork for reproduction. Story and advertising illustration. Illustration techniques. Prerequisites: 112-12, 202b,d,e.

358-3 RELIEF PRINTING PROCESSES.
Includes traditional and experimental methods with woodcut, linocut, monoprint, various materials, color techniques. Prerequisite: 202b.

359-3 INTAGLIO PROCESSES.
Hard and soft-ground etching, lift grounds, relief etching, engraving, drypoint, aquatint, colorgraphs, color techniques. Prerequisite: 202b.

360-3 LITHOGRAPHIC PROCESSES.
Stone and plate lithography with focus on crayon, wash, transfer, and color techniques. Prerequisite: 202b.

361-3 UNIQUE PRINTS.
Various methods of printing "one-of-a-kind" prints, e.g. monotypes and monoprints. Prerequisite: 202b.

364-3 CURRICULUM DEVELOPMENT IN ELEMENTARY AND SECONDARY ART EDUCATION.
Curricular models used in art education; construction of sample art curriculum for given levels. Prerequisites: 289 and junior standing or consent of instructor.

365-3 ART EDUCATION IN THE SECONDARY SCHOOLS.
Teaching methodology for secondary art programs. Reading, discussion, planning art teaching. Emphasis on studio art and art appreciation. Clinical experience at selected secondary school. Prerequisite: 289 or consent of instructor.

384-3 to 6 FIBERS.
Techniques and aesthetic concerns in papermaking, feltmaking, dyeing, surface design, weaving, basketry. Mixed media approach emphasis. May be repeated for a maximum of 9 hours. Consent of instructor if taking more than 3 hours per semester. Prerequisite: 202f.

386-3 to 6 METALSMITHING II.
Advanced metal fabrication, forging, forming, surface embellishments, centrifical casting stone settings, bowl raising. May be repeated to a maximum of 9 hours. Prerequisite: Art 202g.

393-3 to 6 SCULPTURE.
Exploration of contemporary sculpture making with emphasis on development of techniques and ideas. May be repeated for a maximum of 9 hours. Prerequisite: 202a

401-3 to 6 RESEARCH IN PAINTING.
Advanced problems in painting. May be repeated for a maximum of 9 hours. Prerequisites: 309-9 and/or 310-9.

402-3 to 6 RESEARCH IN SCULPTURE.
Exploration of current trends in sculpture-making, with emphasis on interaction of technique and idea. May be repeated to a maximum of 12 hours. Prerequisite: 393-9.

405-1 SEMINAR.
Preparation for career as studio artist and/or artist-teacher at college level. Career analysis, portfolio presentation for graduate school and galleries. Visiting professional lecturers in art and law, grant writing, gallery relations, artist's careers, etc. Prerequisite: candidate for B.A., B.F.A., or M.F.A.

408a-c-3 each ART EDUCATION FOR ELEMENTARY TEACHERS.
(a) Art education for disabled students; (b) Development of motivational and instructional materials; (c) Advanced materials and methods for classroom teachers. Prerequisite: 300a, student teaching, or consent of instructor.

410-2 to 6 RESEARCH IN PRINTMAKING.
Advanced work in traditional or experimental methods. Portfolio development. May be repeated for a maximum of 12 hours. Prerequisite: 202b.

412-3 RESEARCH IN GRAPHIC DESIGN.
Directed practicum in advanced client-based desktop design and publishing. May be repeated for a maximum of 9 hours. Prerequisite: 312.

416-3 to 6 GLASSWORKING.
Basic methods of forming hot and cold glass. Development of creative ideas related to use of glass as art medium. May be repeated to a maximum of 12 hours. Prerequisite: consent of instructor.

418-3 to 6 BLACKSMITHING.
Traditional methods of forming metal using forge, anvil, and hammer. Emphasis on utilizing skills to create hand forged utilitarian objects and contemporary sculptural objects. May be repeated for a maximum of 9 hours. Prerequisite: 393 or consent of instructor.

420-3 to 6 ADVANCED CERAMICS.
Supervised research in specific ceramic areas of technical and aesthetic interests. May be repeated to a maximum of 9 hours. Prerequisite: 305-6, consent of instructor or graduate status.

422-3 RESEARCH IN PHOTOGRAPHY.
Advanced theory and practice in one of several topics: alternative non-silver processes; large format camera/zone system; artificial lighting. May be repeated to a maximum of 9 hours. Prerequisite: 302.

424a,b-3 each BAROQUE AND ROCOCO ART.
[Adv.FAH, IC] (a) Visual arts of Southern Europe during 17th and 18th centuries; (b) Visual arts of Northern Europe during 17th and 18th centuries. Prerequisites: 225a,b or consent of instructor.

430-3 to 6 STUDIES IN ART I.
Advanced work in any studio area or art education. May be repeated for a maximum of 9 hours. No more than 3 hours per semester without written approval. Prerequisite: 325-9.

441-3 to 6 STUDIO IN DRAWING.
Advanced research drawing experiences emphasizing individually realized content through development of compositions. May be repeated to a maximum of 12 hours. Prerequisites: senior or graduate standing, 331-9.

447a,b-3 each ANCIENT ART.
[Adv.FAH, IC] Art and architecture from prehistory through Rome. (a) Prehistoric to Greek late archaic; (b) Greek high Classic to Rome. Prerequisites: 225a,b or consent of instructor.

448a,b-3 each EARLY CHRISTIAN AND MEDIEVAL ART.
[Adv.FAH, IC] (a) Early Christian, Byzantine, and Early Medieval art up to the 10th century; (b) Romanesque and Gothic art. Prerequisites: 225a,b or consent of instructor.

449a,b-3 each RENAISSANCE ART.
[Adv.FAH, IC] (a) Architecture, sculpture, and painting of the Renaissance and Mannerist periods in Northern Europe; (b) Architecture, sculpture, and painting of the Renaissance and Mannerist periods in Italy and Southern Europe. Prerequisites: 225a,b or consent of instructor.

450-3 EARLY CHILDHOOD ART EDUCATION.
Art Education practices in early childhood art education. Methods and materials based on developmental needs. Prerequisite: 300a or consent of instructor.

452-3 ART EDUCATION FOR OLDER ADULTS.
Physical, artistic, and creative development of older adults. Development of specific instructional approaches for older learners. Prerequisite: senior status.

453-3 INTRODUCTION TO MUSEOLOGY.
Museum ethics, collections policies, security, administration and organization, public law, sources of funding, grant preparation. Prerequisite: junior standing or consent of instructor.

454-3 CURATORSHIP: EXHIBITION MANAGEMENT AND DESIGN.
Exhibition design, preparation, labeling, security, hanging and display techniques and construction, lighting, traffic flow, docent training. Prerequisite: 453.

455-3 DOCUMENTATION OF COLLECTIONS.
Accessioning and deaccessioning processes, research, collection management, use of computers, narrative, photo-documentation. Prerequisite: 453.

468a,b-3 each PRIMITIVE ART: THE AMERICAS.
[Adv.FAH, (a)IC] Arts of indigenous societies of the Americas presented in cultural and geographical sequence, ancient to 19th century. (a) Precolumbian art; (b) North American Indian art. Prerequisites: 225a,b or consent of instructor.

469a,b-3 each PRIMITIVE ART: AFRICA AND OCEANIA.
[Adv.FAH, IC] Arts of indigenous societies of sub-Saharan Africa and of Oceania: Polynesia, Micronesia, and Melanesia, presented in cultural and geographical sequence. (a) Africa; (b) Oceania. Prerequisites: 225a,b or consent of instructor.

470-3 TOPICS IN ART HISTORY.
[Adv.FAH] Topics may include: seminars on specific artist or area; investigations of branches of art historical inquiry; major trends and issues in art since 1970. May be repeated to a maximum of 9 hours as long as no topic is repeated. Prerequisites: 6 hours of art history and/or consent of instructor.

473a,b-3 each WOMEN IN ART.
[Adv.FAH, IC] (Same as WMST 473) (a) History of women artists from the Middle ages to World War II; (b) History of women artists from World War II to the present. Prerequisites: 225a,b or consent of instructor.

480a,b-3 each AMERICAN ART.
[Adv.FAH] Art and architecture of North America from early 17th century to the present. (a) From Colonial Period through the Civil War; (b) From Reconstruction to the present. Prerequisites: 225a,b or consent of instructor.

481a,b-3 each MODERN ART.
[Adv.FAH] Principal movements and theories of 19th and 20th century art. (a) Nineteenth-century art; (b) From 1901 to the present. Prerequisites: 225a,b or consent of instructor.

483-3 RESEARCH IN ART HISTORY.
Individual research in painting, sculpture, architecture, and related arts of various periods. May be repeated to a maximum of 9 hours provided no topic is repeated. Prerequisites: 225a,b and/or consent of instructor.

484-3 to 6 RESEARCH IN FIBERS.
Individual exploration of advanced fiber concerns in technique and mixed media approaches. Concepts emphasizing integration of technical and aesthetic idea. May be repeated to a maximum of 12 hours. Consent of instructor for over 3 hours per semester. Prerequisite: 384.

486-3 to 6 RESEARCH IN METALSMITHING.
Concentrated research in advanced metalsmithing techniques and concepts. May be repeated to a maximum of 12 hours. Prerequisite: 386 or consent of instructor.

498-3 to 6 INTERNSHIP IN THE ARTS.
Involvement in work, study, or research designed and supervised by selected faculty members and cooperating institutions. May be repeated for a maximum of 9 hours. Prerequisite: by permit only.

499-2 to 6 SENIOR THESIS EXHIBITION.
Nature of final thesis determined according to student's major studio area and directed by student's major adviser and committee. Consists of thesis exhibition and written statement of artistic intent. B.F.A candidates only. Prerequisite: senior standing in B.F.A. program.

BIOLOGY

111-3 CONTEMPORARY BIOLOGY.
[INTRO] Contributions of biology to understanding ourselves and our world. Development, nature and human implications of cell theory, heredity, the modern synthetic theory of evolution, population dynamics, ecology and environmental problems.

120-4 BIOLOGY I: ANIMAL SYSTEMS.
Cellular organization, metabolism, genetics, reproduction, development physiology, and evolution of animals. Three hours lecture, one laboratory per week. Prerequisites: concurrent enrollment in CHEM 121a and 125a.

121-4 BIOLOGY II: PLANT SYSTEMS.
Cellular organization, metabolism, genetics, reproduction, development, photosynthesis, physiology and evolution of plants. Three hours lecture, one laboratory per week. Prerequisites: 120 and concurrent enrollment in CHEM 121b and 125b.

203-3 HUMAN SEXUALITY AND REPRODUCTION.
[Adv.NSM] Sexual anatomy and physiology, normal and abnormal embryonic and fetal development, pregnancy and birth, birth control, sexual relationships, attitudes, behavior, sexual diseases and disorders. Prerequisite: 111 or equivalent.

205-3 HUMAN DISEASES.
[Adv.NSM] A molecular, cellular, organismic or environmental approach to the human body and its dysfunctions, disorders and diseases including their causes, treatments and recent biomedical advances. Prerequisite: 111

219-4 CELL AND MOLECULAR BIOLOGY.
Basic biological chemistry as related to cellular function. Introduction to the structure and function of macromolecule. Differentiation between eukaryotes and prokaryotes. Three lectures and one lab per week. Prerequisites: 120, 121 with grade of C or better and concurrent enrollment in or completion of organic chemistry (Chem 241a or equivalent).

220-4 GENETICS.
Mechanisms of inheritance: identification, transmission, distribution, arrangement, change and structure, function of genetic material, genetic diversity in populations. Three lectures and one laboratory per week. Prerequisites: 120, 121, and 219 with grades of C or better.

240a,b-4 each HUMAN ANATOMY AND PHYSIOLOGY.
[(b) Adv.NSM] Functional architecture of the human body. (a) Tissues, skeletal, muscular, and nervous systems; (b) Continuation of a. Endocrine, circulatory, respiratory, digestive, and urinary systems. Three hours lecture, one three-hour laboratory per week. NOT FOR MAJOR CREDIT. Prerequisites: (a)college chemistry; (b)240a.

250-3 BACTERIOLOGY.
Structure, metabolism, and genetics of bacteria; control of microbial growth; comparison of medically important bacteria and viruses; host response to infectious disease. Two hours lecture, one laboratory period per week. Prerequisites: 111, CHEM 120a or equivalent.

325-3 EMBRYOLOGY.
Gametogenesis, fertilization, cleavage, differentiation, morphogenesis in animals with emphasis on vertebrates. Three lectures per week. Prerequisites: 120, 121, 219, and 220.

327-3 EVOLUTION.
Evolutionary change as shown in heredity, population genetics, speciation, adaptation, natural selection, development, behavior, geographical distribution, the origin of life. Three lecture hours per week. Prerequisites: 120, 121, 219, and 220.

332-3 BASIC BIOCHEMISTRY.
Relation between structure and function of biologically important macromolecule. Nucleic acids, proteins, carbohydrates. Emphasis on regulation of metabolism, biosynthesis, degradation. Three lecture hours per week. Prerequisite: CHEM 241.

335-3 INTRODUCTION TO IMMUNOLOGY.
Anatomical, cellular, and biochemical aspects of the immune response. Immune mechanisms in transplantation, infectious disease, autoimmune disease. Prerequisites: 220, consent of instructor.

337-4 ANIMAL HISTOLOGY.
The structure and function of vertebrate cells tissues and organs as portrayed by major histological methods. Two hours lecture, one hour demonstration lecture, two laboratory hours per week. Prerequisites: 120, 121, 219, and 220.

340-4 PHYSIOLOGY.
Function and regulation of major organ systems in vertebrates, neural responsiveness and integration, homeostasis of body fluids, circulation, respiration, organic maintenance, hormonal control. Three hours lecture and three laboratory hours per week. Prerequisites: 120, 121, 219, and 220.

350-4 MICROBIOLOGY.
Structure, metabolism, and genetics of bacteria and bacteriophages. Role of bacteria in disease, biotechnology, and the environment. Prerequisites: 120, 121, 219, 220, and CHEM 121b.

351-4 DIAGNOSTIC MICROBIOLOGY.
Methods for isolating pathogenic bacteria and determining significant properties and immunological features. Two lectures and two-hour laboratories per week. Prerequisite: 350.

365-4 ECOLOGY.
[II] Scope of ecology, population ecology, models of population growth, competition, predation, diversity and stability of ecosystems, community structure, ecological energetics. Three hours of lecture and 1 hour laboratory per week. Prerequisites: 120, 121.

414-4 MOLECULAR BIOLOGY LABORATORY.
Enzyme activity measurements. Purification of proteins, nucleic acids, lipids, carbohydrates. Isolation and characterization of cell organelles. Centrifugation, chromatography, gel and agarose electrophoresis. Students will be expected to present written reports of their work. NOT FOR GRADUATE CREDIT. Prerequisite: 332 or 430.

415a-3 TECHNIQUES IN CELL AND TISSUE CULTURE.
Eukaryotic cell tissue culture, with consideration of growth, differentiation, metabolism and transformation of cells in culture. Introduction to theory, techniques in cell culture. One lecture and one laboratory per week. Prerequisites: junior standing, consent of instructor. Prerequisite: 219.

415b-3 LABORATORY IN CELL AND TISSUE CULTURE.
Independent supervised projects in cell culture, growth, differentiation, metabolism and transformation of cells in culture. Methods, applications, tissue culture, eukaryotic cell techniques. Two laboratories per week. Prerequisites: 415a or concurrent enrollment, consent of instructor.

418a-3 RECOMBINANT DNA.
Basic principles of gene cloning including the methods of creating recombinant DNA molecules, transfer of genes into recipient cells, regulation following gene transfer. Three hours lecture per week. NOT FOR GRADUATE CREDIT. Prerequisites: 120, 121, 219, and 220.

418b-3 RECOMBINANT DNA LABORATORY.
Experiments in gene manipulation using bacterial genes exempt from federal guidelines concerning Recombinant DNA. Six laboratory hours per week. NOT FOR GRADUATE CREDIT. Prerequisites: 418a, consent of instructor.

421-3 HUMAN GENETICS.
Human genetics, human chromosomes; Mendelian characters in man, genetic inference, pedigrees, twins, populations-mutation-genetics of races; genetics and medicine. Prerequisites: 120, 121, 219, and 220.

430a,b-3 each BIOCHEMISTRY AND MOLECULAR BIOLOGY.
(a) Structures and functions of protein, carbohydrates and lipids; (b) Control of metabolism; structures and functions of nucleic acids in the control of protein synthesis. Must be taken in sequence. NOT FOR GRADUATE CREDIT. Prerequisites: 120, 121, 219, 220, Chemistry 241.

431-3 CELLULAR AND MOLECULAR BASES OF MEDICINE.
Causes, treatment, and detection of human diseases, as studies from cellular and molecular levels. Prerequisite: 430.

432-5 ADVANCED CELL BIOLOGY.
Analysis of advanced topics in Cell Biology. Emphasis on group laboratory projects with supporting lectures. Two lectures and two three-hour labs per week. NOT FOR GRADUATE CREDIT.

433-3 BIOMEMBRANES.
Structural organization of biological membranes. Dynamic properties as studied by biophysical techniques. Selected topics of membrane functions related to structural organization. NOT FOR GRADUATE CREDIT. Prerequisites: 332 and 430 recommended.

438-3 PROTEINS.
Physical and chemical properties of structural and enzymatic proteins, isolation, primary, secondary, tertiary and quaternary properties. Evolution of proteins. NOT FOR GRADUATE CREDIT. Prerequisite: biochemistry.

439-2 NUCLEIC ACIDS.
Physical, chemical and biological properties of nucleic acids in terms of their structure and function. Primary, secondary and tertiary structure. NOT FOR GRADUATE CREDIT. Prerequisite: biochemistry.

441-3 ADVANCED PHYSIOLOGY.
Energy procurement and balance, intermediate metabolism, temperature control, advanced topics of cardiovascular and respiratory mechanisms; body fluid regulation, and some environmental adaptations. Prerequisite: 340.

444a-3 NEUROBIOLOGY.
Mechanisms of information processing and control of behavior. Emphasis on membrane theory, synaptic pharmacology, neuroanatomy. Current mechanisms of learning, memory, drug actions, motor control. NOT FOR GRADUATE CREDIT. Prerequisites: human or animal physiology; calculus or physics.

444b-1 NEUROBIOLOGY LABORATORY.
Introduction to neurophysiological research. Demonstrations include electrical recording, drug reactions, brain dissection, stereotaxis, histology. NOT FOR GRADUATE CREDIT. Prerequisite: 444a or concurrent enrollment.

450-3 SCIENCE, GENDER AND RACE.
[IGR] (Same as WMST 450) Current social issues and historical perspectives of science, especially biology, and its medical and technical applications, as they relate to gender and race. Prerequisite: junior standing.

451-3 MICROBIAL PATHOGENESIS.
Analysis of mechanisms of pathogenesis employed by bacteria, fungi, protozoans and viruses, including discussion of transmission, invasion, colonization, virulence factors, pathology, epidemiology, and treatment. NOT FOR GRADUATE CREDIT. Prerequisite: 350.

452-3 MOLECULAR GENETICS.
Molecular basis of genetics in both prokaryotes and eukaryotes, including structure and replication of DNA, gene expression, transfer of genetic material between organisms. NOT FOR GRADUATE CREDIT. Prerequisites: 120, 121, 219, and 220.

455-3 VIROLOGY.
Biochemical and physical structure of viruses and their mode of replication in infected cells, including latency and viral oncogenesis. NOT FOR GRADUATE CREDIT. Prerequisites: biochemistry or organic chemistry; 350; 332 or 430 or CHEM 241.

461-3 PLANTS AND ENVIRONMENT.
Environmental affects on plant growth, reproduction and distribution. Adaptive responses to environmental stress examined and measured. Two lectures and one laboratory per week. NOT FOR GRADUATE CREDIT. Prerequisites: 472, consent of instructor.

462-3 BIOGEOGRAPHY.
Past and present spatial relationship of plants and animals. Speciation, dispersal and variation are addressed. NOT FOR GRADUATE CREDIT. Prerequisite: 365.

464-3 APPLIED ECOLOGY.
Topics relevant to man's interaction with his environment including nutrient cycles, water pollution, food resources, biotic diversity, population dynamics. Prerequisite: 365.

465-3 AQUATIC ECOSYSTEMS.
(Same as ENVS 465) Biogeochemistry of, community structure of, man's impact on aquatic systems throughout the world, including lakes, streams, oceans. Laboratory: local freshwater communities. Two lectures, one three-hour laboratory per week. Weekend field trips may be required. Prerequisites: 220, 365 or consent of instructor.

466-3 TERRESTRIAL ECOSYSTEMS.
(Same as ENVS 466) Community structure, biogeochemistry and historical development of terrestrial ecosystems. Two lectures, one three-hour laboratory per week. Weekend field trips may be required. Prerequisite: 220.

470-4 FIELD BIOLOGY.
Taxonomy, natural history, distribution of local plants or animals. Students collect from the field, identify, classify and preserve specimens. Two lectures and 2 laboratories per week. Fee required for field trips. Prerequisites: 120, 121.

472-4 TOPICS IN PLANT PHYSIOLOGY.
Topics include photosynthesis, mineral nutrition, water as related to plants, growth and movement of plants. Two lectures and 2 laboratories per week. Prerequisites: 120, 121.

483a-2 b,c-1 each (a) ENTOMOLOGY, (b) INSECT MORPHOLOGY LABORATORY, (c) INSECT COLLECTION LABORATORY.
(a) Structure, function, development, evolution and ecology of insects. Two lectures per week. Prerequisites: 120, 121; (b) required with (a). Dissection of representatives of major insect orders and introduction to insect collecting. One three-hour laboratory per week; (c, optional) Field collection, identification and pinning of insects. One three-hour laboratory per week. NOT FOR GRADUATE CREDIT. Prerequisite: Concurrent enrollment in 483a & b or consent of instructor.

485-4 ICHTHYOLOGY.
Relationships, ecology, distribution, behavior, anatomy of fishes. Emphasis on local fauna. Two lectures and 2 laboratories per week. Saturday field trips required. Prerequisites: 120, 121 or consent of instructor.

486-4 HERPETOLOGY.
Living and fossil amphibians and reptiles, evolution, relationships, morphology, behavior. Two lectures and 2 laboratories per week. Saturday field trips required. Prerequisites: 120, 121 or consent of instructor.

488-4 MAMMALOGY.
Morphology, systematics, natural history, taxonomy, evolution of living and fossil mammals. Two lectures and 2 laboratories per week. Prerequisites: 120 , 121, or consent of instructor.

491a-u-1 to 4 READINGS IN BIOLOGY.
(a) Anatomy; (b) Behavior, (c) Biochemistry; (d) Botany; (e) Cell biology; (f) Developmental biology; (g) Ecology; (h) Endocrinology; (i) Entomology; (j) Evolution; (k) Genetics; (l) Immunology; (m) Microbiology; (n) Parasitology; (o) Physiology; (p) Research methods; (q) Ultrastructure; (r) Zoology; (s) Virology; (t) History of biology; (u) Biology and human welfare. Supervised readings in specialized areas. No credit toward minor in biology. May be repeated to a maximum 4 hours credit. 491a-u are graded pass/no credit. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

492a,b-1 each COLLOQUIUM IN ECOLOGY, EVOLUTION AND ENVIRONMENT.
Seminar will consider recent advances. 492a & b are graded pass/no credit. NOT FOR GRADUATE CREDIT. Prerequisite: junior standing.

492c,d-1 each COLLOQUIUM IN CELL AND MOLECULAR BIOLOGY.
Seminar will consider recent advances. 492c,d are graded pass/no credit. NOT FOR GRADUATE CREDIT. Prerequisite: junior standing.

493a-w-2 to 8 RESEARCH IN BIOLOGY.
(a) Anatomy; (b) Behavior; (c) Biochemistry; (d) Botany; (e) Cell biology; (f) Developmental biology; (g) Ecology; (h) Endocrinology; (i) Entomology; (j) Evolution; (k) Genetics; (l) Immunology; (m) Microbiology; (n) Parasitology; (o) Physiology; (p) Research methods; (q) Ultrastructure; (r) Zoology; (s) Virology; (t) History of biology; (u) Biology and human welfare; (v) Ichthyology; (w) Fishery biology. 493a-w are graded pass/no credit. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

494-3 METHODS OF TEACHING BIOLOGY IN THE SECONDARY SCHOOL.
Methods in biology secondary education. Planning and presenting lectures and laboratories, education software, pertinent teaching materials, and discussion of controversial topics in the classroom. NOT FOR GRADUATE CREDIT. Prerequisites: junior or senior standing, 2.5 G.P.A. in biology, and consent of instructor.

495a-f-1 to 12 CLINICAL TOPICS IN MEDICAL TECHNOLOGY.
Hospital based lecture at an accredited and affiliated school of medical technology. (a) Clinical Biochemistry; (b) Clinical Microbiology; (c) Clinical Hematology/Coagulation; (d) Clinical Immunology/Serology/Immunohematology; (e) Urinalysis/Clinical Microscopy; (f) Special Topics in Medical Technology. May be repeated to a maximum total of 36 hours. NOT FOR GRADUATE CREDIT. Prerequisite: acceptance for clinical education into an affiliated school of medical technology.

495g-n-1 to 12 CLINICAL TOPICS IN CYTOTECHNOLOGY.
Hospital based lecture at an accredited and affiliated school of cytotechnology. (g) Introduction to Cytology; (h) Neoplasis; (i) Processing Laboratory; (j) Respiratory and Oral Cytology; (k) Effusion and CSF Cytology; (l) GI, GU, Breast and FNA Cytology; (m) Scientific Method and Literature; (n) Advanced Practices in Cytology. May be repeated to a maximum total of 36 hours. NOT FOR GRADUATE CREDIT. Prerequisite: acceptance for clinical education into an affiliated school of cytotechnology.

496-2 to 4 TOPICS IN BIOLOGY.
In-depth examination of an area of Biological Sciences. May be repeated to a maximum of 4 hours so long as no topic nor professor is repeated. NOT FOR GRADUATE CREDIT. Prerequisite: 220.

497-2 SENIOR ASSIGNMENT.
Demonstration of proficiency in biological sciences. NOT FOR GRADUATE CREDIT. Prerequisite: senior standing.

BUSINESS EDUCATION

250-3 CONSUMER INCOME MANAGEMENT.
Personal financial management including credit, investments, government services, insurance, budgeting, and consumer/government agencies. The role of the consumer in the marketplace is emphasized.

300-1 KEYING/TYPING PROFICIENCY.
Demonstration of keying skills for data entry and typewriting with concepts for correspondence, tables, manuscripts. Pass/Fail grade assigned. Prerequisite: typing skill of at least 40 wpm.

305-3 BUSINESS WRITING.
(Same as ENG 491) Technical communications, professional correspondence, reports, proposals, descriptions, and evaluations; word processing and graphics software. Prerequisites: ENG 102, junior standing; no experience with software or computers required.

350-3 INFORMATION SYSTEMS METHODS.
Methods of teaching information systems. Cognitive and psychomotor learning theories, unit and lesson plan development, test construction, evaluating pupil performance, curriculum development, and microteaching. Prerequisites: 300, CI 200, EDUC 305 and one semester of post-secondary typing, keyboarding, or word processing; MIS 108, 342.

351-3 BASIC BUSINESS AND ACCOUNTING METHODS.
Methods of teaching basic business and accounting. Concepts, cognitive and affective learning theories, unit and lesson plan development, test construction and evaluation, microteaching, curriculum development, and integration. Prerequisites: 250, ECON 112, ACCT 210, CI 200, and EDUC 305.

400-3 OFFICE MANAGEMENT.
Administrative support areas in the office environment with emphasis on current technology and support functions. APPROVED FOR GRADUATE CREDIT. Prerequisites: MGMT 340, MIS 342.

414-3 ORGANIZATION AND ADMINISTRATION OF VOCATIONAL EDUCATION PROGRAMS.
Program philosophy and objectives plus student selection and evaluation, job analysis, curriculum, advisory committees, instructional systems, especially individualized methods.

415-3 SUPERVISED WORK EXPERIENCE.
Principles and problems in identifying and evaluating career-related work experiences in vocational education. NOT FOR GRADUATE CREDIT. Prerequisites: 414, consent of instructor and program director.

416-3 COOPERATIVE COORDINATION TECHNIQUES.
Development of techniques for initiation, implementation, and operation of cooperative work coordination program, including student diagnosis and evaluation, community relations and program evaluation. Prerequisites: 414, consent of instructor and program director.

490a-1 to 3 INDEPENDENT STUDY IN BUSINESS EDUCATION.
Research, readings, and advanced work in business subject content with relationship to teaching that content. May be repeated to a maximum of 6 hours. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor and program director.

490b-3 ADVANCED SHORTHAND TOPICS.
Research and reading in advanced shorthand topics. NOT FOR GRADUATE CREDIT. Prerequisites: 1 year of shorthand, consent of instructor, chairperson, and program director.

CHEMISTRY

111-3 CONTEMPORARY CHEMISTRY.
[INTRO] Non-mathematical introduction to chemical principles, atomic and molecular nature of matter, pervasive role of chemical knowledge and technology in today's world. Three lecture hours per week.

113-3 INTRODUCTION TO CHEMISTRY.
Preparation for university chemistry. Mathematical techniques, problem solving, chemical terms, concepts, laws. For students with inadequate preparation in high school chemistry. May not be applied to major or minor in chemistry. Three lecture hours and one problem session per week. Prerequisite: MATH 095 or equivalent.

120a,b-3 each GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY.
[(a) INTRO, (b) Adv.NSM] Not for chemistry majors. Primarily for students planning careers in nursing and allied health professions. (a) General and organic chemistry; (b) Organic and biological chemistry. Three lecture hours per week. Must be taken in sequence. Prerequisites: (a) concurrent enrollment in 124a. (b) 120a: concurrent enrollment in 124b.

121a,b-4 each GENERAL CHEMISTRY.
[(a) INTRO or Adv.NSM, (b) Adv.NSM] University-level modern chemistry for science and engineering students, atomic structure, molecular bonding, structure, stoichiometry, chemical change, equilibrium, qualitative analysis. Four lecture hours per week. Must be taken in sequence. Prerequisites: (a) high school chemistry or 113; high school algebra; (b) 121a.

124a,b-1 each GENERAL ORGANIC, AND BIOLOGICAL CHEMISTRY LABORATORY.
[(a) INTRO, (b) Adv.NSM] Not for chemistry majors. Safety practices and basic techniques. Topics complement CHEM 120. (a) General and organic chemistry. (b) Organic and biological chemistry. One three-hour laboratory per week. Must be taken in sequence. Prerequisites: (a) concurrent enrollment in 120a. (b) 124a; concurrent enrollment in 120b.

125a,b-1 each GENERAL CHEMISTRY LABORATORY.
[(a,b) Adv.NSM] Laboratory safety practices, techniques, qualitative and quantitative analysis, chemical change and equilibria. One three-hour laboratory per week. Prerequisite: concurrent enrollment in corresponding 121 lecture.

241a,b-3 each ORGANIC CHEMISTRY.
Structural types of organic compounds correlated with chemical and physical properties. Bonding, reaction dynamics, reaction types, stereochemistry, functional groups, spectroscopic methods. Three lecture hours per week. Must be taken in sequence. Prerequisites: (a) 121b; (b) 241a.

245-2 ORGANIC CHEMISTRY LABORATORY.
Organic synthesis; techniques for determining physical and chemical properties of organic systems. Two three-hour laboratory periods per week. Prerequisites: 241a, concurrent enrollment in 241b.

331-3 QUANTITATIVE ANALYTICAL CHEMISTRY.
Theory and methods of chemical analysis. Three lecture hours per week. Prerequisites: 121b, concurrent enrollment in 335.

335-1 QUANTITATIVE ANALYTICAL CHEMISTRY LABORATORY.
Laboratory experience in gravimetric, volumetric, chromatographic, instrumental analytical techniques. One three-hour laboratory per week. Prerequisites: 125b, concurrent enrollment in 331.

345-2 ADVANCED ORGANIC CHEMISTRY LABORATORY.
Identification of organic compounds, advanced synthetic techniques. Two laboratory periods per week. Prerequisites: 241b, 245.

361a,b-3 each PHYSICAL CHEMISTRY.
Mathematical models of chemical behavior and its underlying causes; experimental foundations of models, thermodynamics, statistical mechanics, kinetics, quantum mechanics, spectroscopy, with applications. Three lecture hours per week. Prerequisites: (a) 121b, PHYS 211b or PHYS 206b, MATH 151; (b) 361a.

365a-2,b-1 PHYSICAL CHEMISTRY LABORATORY.
Investigations of physical chemical phenomena. Emphasis on computer-aided data analysis, rigorous preparation of written reports, introduction to chemical literature. One four-hour laboratory period per week. Prerequisite: concurrent enrollment in corresponding 361 lecture.

396-2 INTRODUCTION TO RESEARCH.
Investigation of relatively simple research problems in chemistry directed by faculty member. Students required to submit written report at end of the semester. Prerequisites: C average in chemistry courses, prior arrangement with faculty member.

411-3 INORGANIC CHEMISTRY.
Modern inorganic chemistry including bonding theory, symmetry and group theory, stereochemistry of complex ions, reaction mechanisms, main group chemistry, transition metal chemistry, organometallic chemistry. Three lecture hours per week. NOT FOR GRADUATE CREDIT. Prerequisite: 361a.

415-2 INORGANIC CHEMISTRY LABORATORY.
Synthesis of inorganic compounds; vacuum and controlled atmosphere techniques. Two laboratory periods per week. NOT FOR GRADUATE CREDIT. Prerequisite: 411.

419-1 to 3 SPECIAL TOPICS IN INORGANIC CHEMISTRY.
Selected advanced topics. May be repeated to a maximum of 6 hours as long as no topic is repeated. Prerequisites: 361a, consent of instructor.

431-3 INSTRUMENTAL ANALYSIS.
Theory and methods of modern instrumental analytical techniques and instrumentation. Three lecture hours per week. Prerequisite: 361a.

435-1 INSTRUMENTAL ANALYSIS LABORATORY.
Laboratory practice in spectroscopic and other instrumental techniques. One four-hour laboratory per week. Prerequisites: 361a, concurrent enrollment in 431.

439-1 to 3 ADVANCED TOPICS IN ANALYTICAL CHEMISTRY.
Selected advanced topics. May be repeated to a maximum of 6 hours as long as no topic is repeated. Prerequisites: 331, 335, 361a, consent of instructor.

441-3 PHYSICAL ORGANIC CHEMISTRY.
Chemical equilibria, kinetics, structure-reactivity relationships as methods for determining mechanisms of organic reactions. Three lecture hours per week. Prerequisites: 241b, 361a.

444-3 ORGANIC REACTIONS.
Emphasis on monofunctional compounds. Topics not covered in elementary courses. Three lecture hours per week. Prerequisite: 241b.

449-1 to 3 SPECIAL TOPICS IN ORGANIC CHEMISTRY.
Selected advanced topics. May be repeated to a maximum of 6 hours as long as no topic is repeated. Prerequisites: 241b, 361a, consent of instructor.

451a,b-3 each BIOCHEMISTRY.
Life processes at molecular level. (a) Enzymes and proteins; (b) Intermediary metabolism, transmission of hereditary information. Prerequisite: 241b.

455-2 EXPERIMENTAL METHODS IN BIOCHEMISTRY.
Current practices in enzyme isolation, their function and physical structure. Microcomputer-assisted data treatment, graphics, statistical methods, data acquisition. Two laboratory periods per week. Prerequisites: 245b, concurrent enrollment in 451a.

459-1 to 3 SPECIAL TOPICS IN BIOCHEMISTRY.
Selected advanced topics. May be repeated to a maximum of 6 hours as long as no topic is repeated. Prerequisites: 361a, consent of instructor.

469-1 to 3 SPECIAL TOPICS IN PHYSICAL CHEMISTRY.
Selected advanced topics. May be repeated to a maximum of 6 hours as long as no topic is repeated. Prerequisites: 361b, consent of instructor.

471-3 PRINCIPLES OF TOXICOLOGY.
Injurious effects of chemicals that enter biologic species, factors that influence effects. Detection of hazardous conditions, treatment of effects. Prerequisite: senior standing.

479-1 to 3 SPECIAL TOPICS IN ENVIRONMENTAL CHEMISTRY.
Selected advanced topics. May be repeated to a maximum of 6 hours as long as no topic is repeated. Prerequisites: 241b, consent of instructor.

494-3 METHODS OF TEACHING CHEMISTRY IN THE SECONDARY SCHOOL.
Current teaching and resource materials. Ways to teach different chemical topics, problem solving techniques, and societal issues. Preparing for laboratory activities. Safety concerns. NOT FOR GRADUATE CREDIT.

496-2 to 4 CHEMICAL PROBLEMS.
Research problems directed by faculty member. May be repeated to a maximum of 6 hours. Students required to submit written report at end of each semester in which they are enrolled. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing, major in chemistry with B average.

499-0 SENIOR ASSIGNMENT.
Poster presentation and 10-15 minutes oral presentation of an approved topic; required for graduation. NOT FOR GRADUATE CREDIT. Prerequisite: 365a.

CIVIL ENGINEERING

199-0 ENGINEERING COOPERATIVE EDUCATION I.
Supervised work experience with agency, firm, or organization which employs engineers. First work period of five year academic/work experience program. Prerequisite: consent of engineering co-op adviser.

204-2 ENGINEERING GRAPHICS & CAD.
Hand and computer-assisted drawing. Geometric constructions, orthographic projections and sketching, section views, auxiliary views, descriptive geometry. CAD concepts and applications.

206-2 ENGINEERING MEASUREMENTS.
Introduction to use of microcomputers and measurement devices: oscilloscope, multi-meter, frequency counter, spectrum analyzer, recorder, transducer, potentiometer, surveying equipment. Principles of surveying. Prerequisite: 204 or consent of instructor.

206L-1 ENGINEERING MEASUREMENTS LABORATORY.
Laboratory and field projects to accompany 206. Prerequisite: concurrent enrollment in 206 or consent of instructor.

240-3 STATICS.
Static equilibrium conditions for external and internal force and moment systems. First and second moments of lines and areas. Friction. Prerequisite: PHYS 211a.

242-3 MECHANICS OF SOLIDS.
Elastic deformations and stresses in two dimensional structural elements caused by axial, bending, shear, and torsion loads; stress-strain relationships, Mohr's Circle. Elementary design concepts. Prerequisite: 240.

299-0 ENGINEERING COOPERATIVE EDUCATION II.
Supervised work experience with agency, firm, or organization which employs engineers. Second work period of five year academic/work experience program. Prerequisite: consent of engineering co-op adviser.

315-3 FLUID MECHANICS. (Same as ME 315)
Basic principles of conservation of mass, momentum and energy in fluid systems; dimensional analysis; compressible and incompressible flow; boundary layers. Prerequisites: Upper division standing in civil or mechanical engineering, CE 242 or concurrent enrollment, ME 310 or concurrent enrollment, ME 262 or concurrent enrollment, or consent of instructor.

330-2 ENGINEERING MATERIALS.
Physical and chemical properties of engineering materials (metals, woods, asphalt, and cement concrete). Prerequisites: upper-division civil engineering standing, 242, or consent of instructor.

330L-1 ENGINEERING MATERIALS LABORATORY.
Laboratory determination of material properties and mixing design of concrete. Prerequisite: concurrent enrollment in 330 or consent of instructor.

340-3 STRUCTURAL ANALYSIS I.
Beams, trusses and frames. Influence lines, energy methods, flexibility method, displacement method. Prerequisites: upper-division civil engineering standing, 242 or consent of instructor.

354-3 INTRODUCTION TO GEOTECHNICAL ENGINEERING.
Introduction to Geotechnical Engineering. Basic geological principles for engineering design; soil classification, water in soils, effective stress, shear strength and soil compressibility. Prerequisites: Upper-division civil engineering standing, 242, 315 or consent of instructor.

354L-1 SOIL MECHANICS LABORATORY.
Laboratory and field experiments in soil mechanics. Prerequisite: concurrent enrollment in 354 or consent of instructor.

376-3 TRANSPORTATION ENGINEERING.
Planning and design of air, highway, rail, water, and pipeline transportation facilities (geometric and structural). Prerequisite: upper-division civil engineering standing, 354 or concurrent enrollment, or consent of instructor.

380-3 INTRODUCTION TO ENVIRONMENTAL SCIENCE AND ENGINEERING.
Application of principles of chemistry, physics, biology, mathematics to engineered systems for water purification, wastewater treatment, air pollution control, solid waste management. Prerequisites: upper-division civil engineering standing, 315, or consent of instructor.

392-1 to 5 READINGS IN CIVIL ENGINEERING.
Supervised reading in selected subjects in civil engineering. Prerequisites: upper-division civil engineering standing and consent of department chairperson.

399-0 ENGINEERING COOPERATIVE EDUCATION III.
Supervised work experience with agency, firm, or organization which employs engineers. Third work period of five year academic/work experience program. Prerequisites: consent of engineering co-op adviser.

404-3 CAD APPLICATIONS.
Production, editing and management of two- and three-dimensional computer generated drawings. Solids modeling techniques and applications. NOT FOR GRADUATE CREDIT. Prerequisite: upper-division civil engineering standing or consent of instructor.

412-3 GROUNDWATER HYDROLOGY.
(Same as GEOG 412 and ENVS 412)

415L-1 APPLIED FLUID MECHANICS LABORATORY.
Laboratory experiments involving flow of water in pipes, open channels, and other water resources and environmental engineering systems. NOT FOR GRADUATE CREDIT. Prerequisites: upper-division civil engineering standing, 380, or consent of instructor.

416-3 ENGINEERING HYDROLOGY.
Hydrological processes and their relationship to water resources, rainfall-runoff relationships, probability and frequency analysis, surface and groundwater hydrology. NOT FOR GRADUATE CREDIT. Prerequisites: upper-division civil engineering standing, 315, 354 or concurrent enrollment, STAT 380, or consent of instructor.

435-3 PAVEMENT DESIGN.
Analysis and design for highways and airports; factors affecting pavement performance and code requirements. Prerequisites: upper-division civil engineering standing, 330, 354, 442, or concurrent enrollment, or consent of instructor.

440-3 STEEL DESIGN.
Fundamentals of structural steel design. Familiarization with steel design codes. NOT FOR GRADUATE CREDIT. Prerequisites: upper-division civil engineering standing, 330 or concurrent enrollment, 340, or consent of instructor.

441-3 TIMBER AND MASONRY DESIGN.
Analysis and design of timber and masonry structural elements, properties of materials and composite sections, code design requirements. Prerequisites: Upper-division civil engineering standing, 340, 440, 442 or concurrent enrollment, or consent of instructor.

442-3 CONCRETE STRUCTURES.
Introduction to design of reinforced concrete structural elements with emphasis on strength design, code requirements. NOT FOR GRADUATE CREDIT. Prerequisites: upper-division civil engineering standing, 330 or concurrent enrollment, 340.

444-3 ADVANCED MECHANICS OF DEFORMABLE BODIES.
Energy principles and their application, problems in plane stress and strain; beams on elastic foundations; theories of failure, plates and shells. Prerequisite: upper-division civil engineering standing or consent of instructor.

445-3 STRUCTURAL ANALYSIS II.
Analysis of indeterminate two- and three-dimensional trusses and frames, with emphasis on matrix methods, computer techniques. Prerequisite: 340 or consent of instructor.

446-3 ADVANCED CONCRETE DESIGN.
Advanced topics in reinforced concrete design, design of prestressed concrete beams, code design requirements. Prerequisites: upper-division civil engineering standing, 442, 445, or consent of instructor.

452-3 VIBRATIONS.
(Same as ME 452) Vibration of single and multi-degree of freedom systems; natural frequencies and modes; vibration isolation; structural response to ground excitation. Prerequisites: ME 262, MATH 305.

455-3 FOUNDATION ENGINEERING.
Analysis and design of foundations, retaining walls, cofferdams, earth embankments. Estimates of bearing capacity, settlements, slope stability values. Prerequisites: upper-division civil engineering standing, 354, or consent of instructor.

470-3 STRESS ANALYSIS AND DESIGN.
(Same as ME 470) Three dimensional torsion and bending; stress and strain transformations; yield criteria and plasticity theory; finite element method; case studies and engineering design. Prerequisites: 242; ME 370 or equivalent.

470L-1 STRESS LABORATORY.
(Same as ME 470L) Determination of stress and strain using strain gauging and optical methods; measurement of fracture toughness, combined loading. Prerequisite: 242 or consent of instructor.

473-3 TRANSPORTATION SITE SELECTION.
Engineering techniques for transportation site selection, route surveying, photogrammetry, geometric design criteria, engineering controls and constraints. Laboratory included. Prerequisites: upper-division civil engineering standing, 354, 376, or consent of instructor.

475-3 URBAN TRANSPORTATION.
Systems engineering and determinate models for traffic generation, distribution assignment; analysis and traffic engineering procedures as applied to urban transportation planning and design. Prerequisites: upper-division civil engineering standing, 376, or consent of instructor.

478-3 TRANSPORTATION ENGINEERING - FACILITIES DESIGN.
Transportation facilities geometric design and structural design of load-carrying elements. Human factors as related to physical design criteria. Prerequisites: upper-division civil engineering standing, 473, or consent of instructor.

480-3 ENVIRONMENTAL ANALYSIS.
Analytical methods for examining water, soil, and air. Source of parameters, laboratory methods and limitations, data analysis, correlation of parameters with environmental effects. Two one-hour lectures and a one-hour laboratory per week. Prerequisites: upper-division civil engineering standing, 380, or consent of instructor.

486-3 ENVIRONMENTAL ENGINEERING DESIGN I.
Unit operations (excluding solids handling) for water and wastewater treatment. Design of physical, chemical, and biological processes. Two one-hour lectures and a one-hour laboratory per week. Prerequisites: upper-division civil engineering standing, 380, or consent of instructor.

487-3 ENVIRONMENTAL ENGINEERING DESIGN II.
Design of advanced wastewater treatment, sludge disposal, natural treatment, small wastewater treatment, wastewater reclamation and reuse systems. Two one-hour lectures and a one-hour laboratory per week. Prerequisites: upper-division civil engineering standing, 380, 486, or consent of instructor.

491-1 to 4 CIVIL ENGINEERING PROJECT.
Individual investigation of a topic in Civil Engineering to be agreed upon with the instructor. May be repeated for a maximum of 6 hours provided that no topic is repeated. Prerequisites: upper-division civil engineering standing and consent of the instructor.

492-1 to 5 TOPICS IN CIVIL ENGINEERING.
Selected topics of special interest. May be repeated to a maximum of 6 hours provided no topic is repeated. Prerequisite: consent of instructor.

493-3 ENGINEERING DESIGN.
Team/individual design projects requiring application of engineering principles to formulation of design problem statements and specifications; development of alternative solutions for open-ended design problems. NOT FOR GRADUATE CREDIT. Prerequisites: upper-division civil engineering standing, 354, 376, 380 and either 440 or 442, or consent of instructor.

497-3 KNOWLEDGE-BASED SYSTEMS.
(Same as IE 497, EE 487) Engineering-oriented perspective on artificial intelligence (AI) technology. General AI concepts, specifically knowledge-based (expert) systems applied to engineering problem-solving. Prerequisites: CS 140 or CS 141 or equivalent, senior standing, or consent of instructor.

COMPUTER SCIENCE

108-3 APPLIED COMPUTER CONCEPTS.
[SKILLS] Computer skills course which assumes no prior experience with computers. Introduces computer concepts and word processing, spreadsheets and database software; examines societal issues. Graduation credit may be earned for CS 108 or MIS 108, but not for both. Prerequisite: two years of college preparatory mathematics in high school.

140-3 INTRODUCTION TO C++.
Programming course which assumes no prior experience with computers. Introduces C++ language and use of MS-DOS and UNIX. Two lecture hours and two laboratory hours per week. Prerequisite: MATH 120 or 3 years of college preparatory mathematics in high school.

141-3 INTRODUCTION TO FORTRAN.
Programming course which assumes no prior experience with computers. Introduces FORTRAN language and use of UNIX. Prerequisite: MATH 151 or concurrent enrollment.

150-3 INTRODUCTION TO COMPUTING I.
Introduces algorithmic problem solving with a modern programming language (C++). History, social context of computing; language syntax; basic design methods; abstraction. Two lecture hours and two laboratory hours per week. Prerequisite: 140 or 141.

151-3 INTRODUCTION TO COMPUTING II.
Basic software engineering concepts, elementary data structures and algorithms, numerical computing, system user interfaces, societal issues. Two lecture hours and two laboratory hours per week. Prerequisites: 150, MATH 223 or concurrent enrollment.

250-3 ALGORITHMS AND DATA STRUCTURES.
Considers appropriate choice of data structures, comparisons of algorithms, recursive algorithms, complexity, introduction to parallel algorithms. Two lecture hours and two laboratory hours per week. Prerequisites: 151, MATH 150.

312-3 INTRODUCTION TO COMPUTER ORGANIZATION AND ARCHITECTURE.
Processor, memory and I/0 structure of computer systems; register-level architecture of typical processor; data representations; common I/O devices; loaders, linkers, assemblers, compilers. Two lecture hours and two laboratory hours per week. Prerequisite: 151.

314-3 OPERATING SYSTEMS.
Application program interface; structure and implementation of simple operating system; file systems, concurrent processes, I/O management, memory management, virtual memory. Two lectures hours and two laboratory hours per week. Prerequisites: 312, 320.

320-4 SOFTWARE SYSTEMS.
Problem solving strategies and concepts applied to design of software systems. Levels of abstraction in modeling, storage structures and user interfaces. Three lecture hours and two laboratory hours per week. Prerequisite: 250.

325-3 SOFTWARE ENGINEERING.
Design of large software systems. Emphasis on problem solving concepts in context of software life cycle, requirements, specifications, verification, validation issues. Ethical issues considered. Prerequisite: 320.

330-3 PROGRAMMING LANGUAGES.
Design, appropriateness, and linguistics issues associated with different programming languages and programming paradigms. Covers syntax and semantics of languages, including BNF notation. Two lecture hours and two laboratory hours per week. Prerequisites: 312, 320.

390-3 TOPICS IN COMPUTER SCIENCE.
Selected topics in computer science. May be repeated to a maximum of 6 hours for different topics. Prerequisite: by permit only.

402-3 C++ PROGRAMMING.
Introduction to C++ language for experienced programmers; C-like features of C++, classes as means of implementing abstract data types. Two lecture hours and two laboratory hours per week. Prerequisites: knowledge of at least one programming language; programming experience.

403-3 PROGRAMMING TECHNIQUES.
Fundamental data structures and algorithms and their use in effective programming, numerical computing, system user interfaces, societal issues. Two lecture hours and two laboratory hours per week. Prerequisite: 402 or 150.

404-3 SCIENTIFIC COMPUTATION.
Survey of computer system hardware and software with focus on scientific computation issues, architecture, data communications, operating systems, software development practices. Two lecture hours and two laboratory hours per week. Prerequisites: 151, 403 or consent of instructor.

406-3 SCIENTIFIC VISUALIZATION.
Computer graphics techniques for understanding and interpreting results of computations which involve large data sets. Assumes no prior experience with computer graphics. Two lecture hours and two laboratory hours per week. Prerequisites: 404, MATH 135, MATH 250, or consent of instructor.

407-3 ADA.
In-depth introduction to ADA with emphasis on features which make language unique, e.g. packages, exception handling, generics, tasking. Prerequisite: 250 or consent of instructor.

416-3 HIGH-PERFORMANCE COMPUTER SYSTEMS.
Overview of scientific supercomputing, floating point arithmetic issues, high-performance architectures, software engineering tools for scientific computing, code optimization, benchmarking, support for visualization. Prerequisite: 314 or consent of instructor.

423-3 COMPILER CONSTRUCTION.
Basic ideas of translation of programming languages. Emphasis on techniques used in construction of compilers, including lexical analysis, syntactical analysis, type checking, code generation. Prerequisite: 330 or consent of instructor.

425-3 SOFTWARE PROJECT DEVELOPMENT.
Team development of a software product. Selected topics in software development will be studied to complement team projects. Prerequisite: 325 or consent of instructor.

434-3 DATABASE MANAGEMENT SYSTEMS.
Survey of database management system concepts, models, languages. Data models including entity and relationship, network, hierarchical, relational; relational design; specific examples. Prerequisite: 320 or consent of instructor.

438-3 ARTIFICIAL INTELLIGENCE.
History and survey of field. Topics include heuristic search, natural language, knowledge representation, machine learning, expert systems, neural networks, use of logic. Prerequisite: 250 or consent of instructor.

444-3 PARALLEL COMPUTING.
Fundamental issues such as architectural classifications and models of parallel computation; algorithm design, analysis, and implementation on currently available parallel computers. Prerequisites: 312 and 320 or consent of instructor.

447-3 DISTRIBUTED SYSTEMS.
Survey of networks, distributed computation, and distributed data concepts; system structure, communication protocols, distributed computation coordination, distributed data management. Two lecture hours and two laboratory hours per week. Prerequisite: 314 or consent of instructor.

454-3 THEORY OF COMPUTATION.
Theoretical foundations of computer science including theory of automata, pushdown automata, Turing machines, formal languages. Prerequisite: 250 or consent of instructor.

456-3 ALGORITHMS AND COMPLEXITY.
Considers more complex algorithms and data structures with introduction to complexity theory and approximation algorithms for NP-complete problems. Prerequisite: 250 or consent of instructor.

482-3 COMPUTER GRAPHICS.
Review of basic graphics material; mathematics for modeling curves and surfaces, and performing transformations; algorithms for scan-conversion, clipping, hidden component removal, rendering. Prerequisites: 312, 320, MATH 135 and 151; or consent of instructor.

490-3 TOPICS IN COMPUTER SCIENCE.
Selected topics in computer science. May be repeated to a maximum of 6 hours for different topics. Prerequisite: permit required.

495-3 INDEPENDENT STUDY.
Reading and research in specific areas of computer science. May be repeated to a maximum of 6 hours. Prerequisites: consent of instructor and department chair.

498-1 SENIOR PROJECT PREPARATION.
Basic techniques of planning, research and project presentation. Students develop and present proposal to department faculty. NOT FOR GRADUATE CREDIT. Usually, student enrolls in this course one semester before enrolling in 499. Prerequisite: 325.

499-3 SENIOR PROJECT.
Student executes project planned in 498. Completed project presented to department faculty. NOT FOR GRADUATE CREDIT. Prerequisites: approval of project in 498, consent of department chair, senior standing, completion of general education skills and introductory courses, and completion of one of 314 or 330 as well as two computing elective courses.

CONSTRUCTION

120-1 INTRODUCTION TO CONSTRUCTION.
Survey of construction industry; typical employment opportunities; history; current development.

201-3 CONSTRUCTION MATERIALS.
Introduction to typical materials including asphalt, concrete, plastic, wood, steel, glass. Examination of molecular structure and factors affecting strength. Prerequisite: CHEM 120a.

202-3 CONSTRUCTION METHODS.
Methods and equipment for handling and storage of materials. Construction procedures used with these materials. Prerequisites: 120, MATH 125.

264-4 LAYOUT AND MEASUREMENT.
Surveying techniques for construction ground control and facility layout during construction. Both vertical and horizontal controls. Prerequisite: Math 125.

301-4 SOILS.
Physical properties and behavior of soils; classification and testing, basic hydraulic and hydrological concepts. Effect of water on construction. Prerequisite: CE 242.

321-3 ELECTRICAL SYSTEMS.
Basic electrical theory; electrical systems and distribution for facilities and during construction, safety, wiring, and energy consumption. Prerequisite: PHYS 211a.

332-3 MECHANICAL SYSTEMS/HVAC.
Mechanical heating, air conditioning, ventilation systems. Requirements during construction; construction installation; for completed facility. Prerequisite: PHYS 211a.

341-3 PLANS AND SPECIFICATIONS.
Reading and interpreting plans and specifications. Standard construction specifications and standard procedures. Take-off method from plans and specifications. Prerequisites: 202, 264, CE 242, and concurrent enrollment in 201.

351-3 CONCRETE AND FORMWORK.
Analysis of statically determinate structures. Design considerations for structural concrete, design codes. Formwork analysis and design. Prerequisite: CE 242.

352-3 INTRODUCTION TO STEEL STRUCTURES.
Design of structural steel elements, design codes. Emphasis on connections and erection techniques. Prerequisite: CE 242.

403-4 PLANNING AND SCHEDULING.
Planning and scheduling construction projects including resource and manpower allocation. CPM and PERT methods; progress reports and records. NOT FOR GRADUATE CREDIT. Prerequisites: 341, CE 242, MIS 108, Senior standing or consent of instructor.

411-3 CONSTRUCTION CONTRACTS.
Legal aspects of contracts and bidding; types of construction contracts and documents including bonds; OSHA, local, state, federal regulations. NOT FOR GRADUATE CREDIT. Prerequisite: 341.

441-3 SITE INVESTIGATION.
Introduction to Engineering Geology. Use of existing documents and maps in investigation. Geophysical surveying. NOT FOR GRADUATE CREDIT. Prerequisite: 301.

451-4 ESTIMATING AND BIDDING.
Methods and procedures for estimating and bidding construction projects. Use of take-off quantities, productivity, and material costs. NOT FOR GRADUATE CREDIT. Prerequisites: 341, CE 242, senior standing or consent of instructor.

452-4 CONSTRUCTION MANAGEMENT.
Professional aspects of construction management. Management techniques, quality control, safety, time and cost management. NOT FOR GRADUATE CREDIT. Prerequisites: 403, 451.

461-3 MATERIALS SAMPLING AND TESTING.
Procedures and methods for evaluating material and procedures of construction. NOT FOR GRADUATE CREDIT. Prerequisite: senior standing or consent of instructor.

462-3 CONSTRUCTION EQUIPMENT.
Types of construction equipment with methods for selection and evaluation of performance. Basic principles to determine size and energy requirements. NOT FOR GRADUATE CREDIT. Prerequisite: senior standing or consent of instructor.

463-3 CONCRETE PROPERTIES.
Relationships between microstructure and macroproperties. Mechanism of fracture, shrinkage and creep, concretes; effects of environment and mixtures. Individual project required. NOT FOR GRADUATE CREDIT. Prerequisite: senior standing or consent of instructor.

464-3 CONSTRUCTION MONITORING AND CONTROL.
Job inspection, quality assurance, quality control; time and motion studies, time lapse photographs, progress reports, records, employee relations. NOT FOR GRADUATE CREDIT. Prerequisite: 341.

475-3 SENIOR SEMINAR.
Labor relationship, structure of construction companies, permits, bonding, safety advanced topics. Guest lectures from construction industries and allied fields. NOT FOR GRADUATE CREDIT. Prerequisites: 403, 451.

495-2 to 9 TOPICS IN CONSTRUCTION.
Selected topics of special interest in construction. Topics selected jointly by student and faculty. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing and consent of department chairperson.

CURRICULUM AND INSTRUCTION

200-2 INTRODUCTION TO EDUCATION.
Assessment of teaching as a career through personal observations and discussion of schools, teacher's roles, teaching as a profession. Off-campus visits to schools required outside class time. Prerequisites: student must have accumulated 30 semester hours and have 2.5 GPA.

201-3 UNDERSTANDING THE PRE-PRIMARY CHILD.
Characteristics of infants, toddlers, and young children (birth through six); study and observation in formal and informal settings.

314-3 ELEMENTARY SCHOOL METHODS.
Current educational theory and practice; processes and underpinnings of teaching and learning in elementary education. Prerequisite: Admission to the elementary education program.

315a-2 METHODS OF TEACHING IN SECONDARY SCHOOLS.
Teaching skills for secondary students focusing on effective teaching research and its application to the secondary classroom. Prerequisites: 200, consent of adviser, admission to program, EDUC 305; EDFD 380; and EDUC 381 are pre- or corequisites.

315b-2 METHODS OF TEACHING IN SECONDARY SCHOOLS.
Teaching skills for secondary students focusing on participate observation skills, model teaching, discipline techniques, content teaching. Prerequisite: 315a or HED 460.

317-3 PRE-KINDERGARTEN METHODS.
Instructional strategies appropriate for preschool children, with emphasis on interrelatedness of sensorimotor, conceptual, and social development. Prerequisite: 201.

337-3 READING IN THE ELEMENTARY SCHOOLS.
Factors that condition reading; grade placement of aims and materials; diagnostic and remedial treatment, methodology. Field experiences in public schools required. Prerequisites: 314, 413, admission to elementary education program and concurrent enrollment in other field 1 courses.

338-3 CORRECTIVE PROCEDURES IN READING.
Techniques and materials for diagnosing and correcting reading disabilities; meeting instructional needs of each individual. Field experiences in public schools required. Prerequisites: 314, 337, completion of field experience 1, concurrent enrollment in other field 2 courses.

343-3 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.
Organization of materials; techniques of presentation and evaluation; use of audio, visual and computer aids for Social Studies instruction. Field experiences in public schools required. Prerequisites: 314, admission to program and concurrent enrollment in field 1 courses.

352a-t-5 to 12 STUDENT TEACHING-SECONDARY.
Practice teaching in the secondary schools. Prerequisite: 200. Registration by permit only.

407-3 THE MIDDLE AND JUNIOR HIGH SCHOOL.
Theoretical background and evolving trends in middle and junior high education; curriculum review; learning theories and methods of practice and management techniques.

410-3 PRINCIPLES OF EARLY CHILDHOOD EDUCATION.
Examination of national and local programs in Early Childhood Education with overview of issues, trends, and research.

412-3 EARLY CHILDHOOD CURRICULUM.
Theory, design, organization, interpretation, and evaluation of early childhood curriculum. Prerequisite: 317 or 530 or consent of instructor.

413-3 CHILDREN'S LITERATURE.
Types of literature, analysis of literary qualities, selection and presentation of literature for children. Prerequisites: 200, admission to program or graduate standing.

415-3 TEACHING MATHEMATICS IN THE ELEMENTARY SCHOOL.
Strategies for promoting children's mathematical growth; methodology and materials including the use of the computer; strategies for evaluating and encouraging achievement and thinking skills. Prerequisites: 314, completion of field 1 courses, concurrent enrollment in field 2.

416-3 INFANT AND TODDLER DEVELOPMENT AND EDUCATION.
Study of current theories, knowledge, and practice concerning the growth and development of infants and toddlers. Prerequisite: Nine hours of early childhood course work that includes CI 201 or 410 or consent of instructor.

420-3 DEVELOPMENT AND TRENDS IN EARLY CHILDHOOD EDUCATION.
History, philosophy, and current trends underlying strategies for teaching the young child. Prerequisite: 201 or 410.

421-3 CHILD, FAMILY AND COMMUNITY RELATIONSHIPS.
Parent involvement strategies; insights from community agency personnel pertaining to goals of early childhood; elementary and secondary programs. Prerequisites: 201, 410.

422-3 HEALTH AND NUTRITION FOR THE YOUNG CHILD.
Nutrition principles related to development of the young child; food service selection; integration of nutrition concepts into early childhood curriculum. Prerequisites: 201, 410.

423-3 LITERACY DEVELOPMENT IN THE EARLY YEARS.
Literacy development in the early years, age 3 through 8, with emphasis on designing developmentally appropriate reading and writing curriculum. Prerequisites: 201, 410.

425-3 READING AND WRITING METHODS FOR MIDDLE AND UPPER GRADES.
Adjusting instruction and materials to developmental needs; integrating reading and writing with content instruction; assessing learners' progress. Prerequisite: 337 or 440 or 505.

433a-m-3 SELECTED TOPICS IN CURRICULUM AND INSTRUCTION.
(a) Curriculum; (b) Language Arts; (c) Science; (d) Reading; (e) Social Studies; (f) Mathematics; (g) Early Childhood Education; (h) Elementary Education; (i) Middle School Education; (j) Secondary Education; (k) Community College; (l) Adult Education; (m) Environmental. Each segment carries 3 credit hours and each segment may be repeated to a maximum of 9 hours. Prerequisite: consent of instructor.

440-3 TEACHING READING IN THE SECONDARY SCHOOL.
Methodology for junior and senior high schools; developmental and corrective reading programs; appraisal of reading abilities; methods and materials of instruction.

442-3 SCIENCE IN THE ELEMENTARY SCHOOL.
Content and methods for teaching elementary school science. Field experiences in public schools required. Prerequisites: completion of Field Experience 1, concurrent enrollment in field 2. Registration by permit only.

445-3 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL.
Theory, practice, development, and evaluation of materials in teaching language arts other than reading. Field experiences in public schools required. Prerequisites: 314, concurrent enrollment in field 1 courses. Registration by permit only.

447-3 READING FOR SPEECH LANGUAGE PATHOLOGISTS.
Theories and models of reading as related to instruction; connections between reading and speech difficulties; ways to help children overcome difficulties.

450-3 to 12 EARLY CHILDHOOD STUDENT TEACHING.
Practice of teaching at early childhood level. NOT FOR GRADUATE CREDIT. Prerequisite: 12 hours of early childhood course work including 317 or 530. Registration by permit only.

451a-3 to 10 ELEMENTARY STUDENT TEACHING.
Application of theory to practice of teaching. NOT FOR GRADUATE CREDIT. Prerequisite: Completion of field 2. Registration by permit only.

451b-3 to 6 ELEMENTARY STUDENT TEACHING: ART.
Practice of teaching art in elementary school. NOT FOR GRADUATE CREDIT. Registration by permit only.

451c-3 to 6 ELEMENTARY STUDENT TEACHING: MUSIC.
Practice of teaching music in elementary school. NOT FOR GRADUATE CREDIT. Registration by permit only.

451d-3 to 12 ELEMENTARY STUDENT TEACHING: PHYSICAL EDUCATION.
Practice of teaching physical education in elementary school. NOT FOR GRADUATE CREDIT. Registration by permit only.

452-2 CURRICULUM INTEGRATION AND CHANGE.
A synthesis and application of coursework and change theory to school settings. Study of the relationship between career development and school reform. NOT FOR GRADUATE CREDIT. Prerequisites: completion of field experience 1 and 2; concurrent enrollment in 12 hours of 450 or 451a. Registration by permit only.

471-3 TEACHING IN THE MULTICULTURAL CLASSROOM.
Concepts and strategies for developing positive attitudes; increasing knowledge and selecting appropriate materials for teaching children from culturally diverse backgrounds.

481-3 DRUG USE AND ABUSE.
Approaches to drug and alcohol prevention education focusing on identifying the problems of alcohol and drug misuse and abuse in school settings.

490a-n-1 to 6 INDEPENDENT PROJECTS: INDEPENDENT READINGS AND PROJECTS IN CURRICULUM AND INSTRUCTION.
(a) Curriculum; (b) Language Arts; (c) Science; (d) Reading; (e) Social Studies; (f) Mathematics; (g) Early Childhood Education; (h) Elementary Education; (i) Middle School Education; (j) Secondary School Education; (k) Community College; (l) Adult Education; (m) Environmental Education; (n) Organization.

495-1 to 6 SELECTED TOPICS.
Varied content; offered as need exists and as faculty interest and time permit. Prerequisite: consent of instructor.

DANCE

114-3 MOVEMENT FUNDAMENTALS.
Basic movement skills using Bartenieff Movement Fundamentals (basic exercises that integrate and facilitate the neuromuscular connections within the body). Understanding structure and function of human body while developing strength, flexibility, and coordination. May be repeated to a maximum of 9 hours.

210a,b-2 each BEGINNING MODERN DANCE TECHNIQUE.
Movement course. Modern dance theories; techniques. Prerequisites: 114 and consent of instructor.

211a,b-2 each BEGINNING BALLET.
Technique class. Fundamentals of classical ballet through barre and center floor work.

212a,b-1 each JAZZ DANCE.
Technique class. Using body through percussive (Matt Mattox) and lyrical (Luigi) jazz dance techniques. May be repeated to a maximum of 4 hours.

213-1 BEGINNING TAP DANCE.
Basic tap steps and vocabulary. Tap choreography. May be repeated to a maximum of 3 hours.

214-1 DANCE IMPROVISATION.
Developing skills in perception and rapid translation of ideas into dance. Prerequisites: 110 and consent of instructor.

250-1 to 2 UNIVERSITY DANCE COMPANY.
Dance repertory and performance class. Emphasis on technical and choreographic skills for performance. Participation in preparation and presentation of concerts required. Prerequisite: by audition only.

310a,b-2 each INTERMEDIATE MODERN DANCE TECHNIQUE.
Techniques designed for strength, flexibility, coordination. Dynamics of movement and its relationship to space, time, weight, energy flow. May be repeated to a maximum of 6 hours. Prerequisites: 210a,b and consent of instructor.

311a,b-2 each INTERMEDIATE BALLET TECHNIQUES.
Additional ballet vocabulary through barre and center work of increased difficulty. May be repeated to a maximum of 6 hours. Prerequisite: 211 or consent of instructor.

320-2 RHYTHMIC STRUCTURE AND ANALYSIS.
Analysis and use of rhythms and compositional forms of music for dance. Prerequisites: 110, 210 and consent of instructor.

410a,b-2 each ADVANCED MODERN DANCE TECHNIQUE.
Theory and technique. Developing advanced skills in dance movement. Preparing kinetic and artistic abilities for performance. NOT FOR GRADUATE CREDIT. May be taken up to 8 credits. Prerequisites: 310a,b,c or consent of instructor.

411a,b-2 each ADVANCED BALLET.
Mastery of ballet vocabulary through advanced barre and center floor work. NOT FOR GRADUATE CREDIT. May be repeated to a maximum of 8 hours. Prerequisites: 311a,b,c or consent of instructor.

420a-2 DANCE COMPOSITION I.
Movement studies for solo figure based on exploration of fundamental ingredients of dance (space, time, weight, and energy flow) and how to organize them into compositional forms. NOT FOR GRADUATE CREDIT. Prerequisites: 110, 210 and consent of instructor.

420b-2 DANCE COMPOSITION II.
In-depth development of movement themes for duet, trio, and larger groups. NOT FOR GRADUATE CREDIT. Prerequisite: 420a.

430-2 INTRODUCTION TO LABAN MOVEMENT ANALYSIS.
Theoretical and physical applications of Laban Movement Analysis: Effort/Shape Notation (notation system recording changes in movement qualities with respect to time, weight, space, and energy flow), Space/Harmony (system that describes human movement in relation to space). NOT FOR GRADUATE CREDIT. Prerequisites: 110, 210, 310 and consent of instructor.

431-2 DANCE FOR CHILDREN.
Methods and material for teaching creative movement and dance technique to children. NOT FOR GRADUATE CREDIT. Prerequisites: 110, 214, 320 and consent of instructor.

432-2 DANCE PEDAGOGY AND METHODOLOGY.
Principles and methodologies of dance instruction. NOT FOR GRADUATE CREDIT. Prerequisites: 110, 214, 320 and consent of instructor.

440-3 HISTORY OF DANCE.
[Adv.FAH] Development of dance prior to and during the 20th century. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

450-3 SENIOR PROJECT.
Choreographic project involving complete development and presentation of dance idea or research project in dance theory or history. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

460-1 to 2 PERFORMANCE/CHOREOGRAPHY.
Credit given for performing in and/or choreographing for regular scheduled dance concerts. Rehearsal time is required. Admission by audition only. May be repeated for a maximum of 4 hours provided that no topic is repeated. NOT FOR GRADUATE CREDIT.

470-1 to 2 INDEPENDENT STUDY IN DANCE.
Supervised study for upper level students in dance, choreography, or performance. May be repeated to a maximum of 8 hours. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

DEANS' SCHOLARS

120-1 to 9 DEANS' SCHOLARS HONORS HOURS.
Independent research, focused in-depth study of specific topics, honors projects, honors experiences, participatory seminars, presentations. May be repeated for up to 9 hours. Prerequisite: approval of the appropriate College or School Deans' Scholars Coordinator.

220-1 to 9 DEANS' SCHOLARS HONORS HOURS.
Independent research, focused in-depth study of specific topics, honors projects, honors experiences, participatory seminars, presentations. May be repeated for up to 9 hours. Prerequisite: approval of the appropriate College or School Deans' Scholars Coordinator.

320-1 to 9 DEANS' SCHOLARS HONORS HOURS.
Independent research, focused in-depth study of specific topics, honors projects, honors experiences, participatory seminars, presentations. May be repeated for up to 9 hours. Prerequisite: approval of the appropriate College or School Deans' Scholars Coordinator.

420-1 to 9 DEANS' SCHOLARS HONORS HOURS.
Independent research, focused in-depth study of specific topics, honors projects, honors experiences, participatory seminars, presentations. May be repeated for up to 9 hours. NOT FOR GRADUATE CREDIT. Prerequisite: approval of the appropriate College or School Deans' Scholars Coordinator.

EARTH SCIENCE

111-3 INTRODUCTION TO PHYSICAL GEOLOGY AND GEOGRAPHY.
[INTRO] Physical geology and geography of the solid Earth. Hydrologic system, weathering, soils, landforms, sedimentary rocks. Tectonic system, magmatism, igneous rocks, crustal deformation, metamorphism.

ECONOMICS

111-3 PRINCIPLES OF MACROECONOMICS.
[INTRO] Measurement and determination of national economic activity including production, income, employment, prices; role of government policy in U.S. macroeconomy. Prerequisite: two years of college preparatory mathematics or equivalent.

112-3 PRINCIPLES OF MICROECONOMICS.
[Adv.SS] Principles and characteristics of the market economy: supply, demand, market equilibrium; household demand, firm cost and supply; market structure, government regulation and deregulation; factor markets. Prerequisite: 111.

221-3 ECONOMIC HISTORY OF THE UNITED STATES.
[Adv.SS] Colonial background; industrialization, 1790-1865; agricultural to industrial economy, 1865-1920; Great Depression, New Deal; challenges of post war economy. Prerequisites: 111, 112.

241-3 CONTEMPORARY ECONOMIC ISSUES.
[Adv.SS] Application of principles to contemporary policy issues such as inflation, unemployment, international trade, the environment, government regulation. Topics to vary with instructor. May be repeated with approval of Economics Chairperson to a maximum of 6 hours. Prerequisites: 111, 112.

301-3 INTERMEDIATE MICROECONOMIC THEORY.
[Adv.SS] Determination of prices and quantities in markets for goods and services. Theories of consumer behavior, cost structures, factor payments. Firm behavior in alternative markets. Prerequisites: 111, 112.

302-3 INTERMEDIATE MACROECONOMIC THEORY.
[Adv.SS] Methodology of macroeconomic models used to explain the determination of national income, product, employment, and prices; U.S. policy and performance. Prerequisites: 111, 112.

327-3 SOCIAL ECONOMICS: ISSUES IN INCOME, EMPLOYMENT AND SOCIAL POLICY.
[Adv.SS, IGR] Economic aspects of social problems such as poverty, discrimination, and unemployment; economic analysis of social policies such as social insurance, welfare programs, employment legislation, taxation. Prerequisite: 111.

331-3 LABOR ECONOMICS.
[Adv.SS] An analysis of labor force participation, employment, wage determination, economic stability; investment in human capital; trade unionism; collective bargaining; public policy. Prerequisites: 111, 112.

343-3 MONEY AND BANKING.
[Adv.SS] Structure and role of financial market institutions; relationships among money, prices and economic activity; interest rate determination; monetary policy and the Federal Reserve; international aspects. Prerequisites: 111 and 112 or consent of instructor.

345-3 ECONOMICS OF THE PUBLIC SECTOR: NATIONAL.
[Adv.SS] Role of government in U.S. economy; federal expenditures, revenue, and debt; evaluation of government policy including analysis of taxes, grants, public services. Prerequisites: 111, 112.

361-3 INTRODUCTION TO INTERNATIONAL ECONOMICS.
[Adv.SS, II] Survey of causes and composition of trade between nations; barriers to trade; balance of payments; foreign exchange markets; international monetary markets and policy. Prerequisites: 111, 112.

400-3 QUANTITATIVE METHODS FOR ECONOMICS AND BUSINESS ANALYSIS.
Applications of mathematical tools to economic analysis; emphasis on using calculus and linear algebra in economic and business models. Prerequisites: 111, 112.

415-3 ECONOMETRICS I.
Hypothesis testing and prediction with OLS regression. Estimation with violations of classical assumptions. Problems of multicollinearity; dummy variables; model specification. Introduction to simultaneous equations. Prerequisite: MS 251 or MS 502 or consent of instructor.

417-3 ECONOMIC FORECASTING.
Methods used in macroeconomic forecasting and business forecasts for firms, industries, sectors, or regions. Techniques include econometrics, time-series, indicators, surveys, input-output, judgmental analysis. Satisfies research requirement for business programs. Prerequisites: 302 or 518; MS 251 or MS 502; or consent of instructor.

423-3 HISTORY OF ECONOMIC THOUGHT.
[Adv.SS] Economic ideas and their influence on contemporary economic theory and policy from ancient philosophers to neoclassicism. Prerequisites: 111, 112.

425-3 ECONOMIC SYSTEMS.
[Adv.SS] An analysis of relationship between relative scarcity of resources and property rights; reward structure and allocation of resources; government's role. Prerequisites: 111, 112.

431-3 LABOR AND PUBLIC POLICY.
[Adv.SS] Market's failure to promote labor's welfare; government's role in achieving society's goals in labor market via regulation and legislation; public policy. Prerequisite: 301 or 331 or consent of instructor.

435-3 COMPETITION AND PUBLIC POLICY.
[Adv.SS] Economic implications of alternative market structures. Investigation of impact of concentration, economies of scale, advertising, and conglomerates on business and society. Prerequisite: 301 or 518 or consent of instructor.

437-3 HEALTH ECONOMICS.
[Adv.SS] Economic concepts and methods are applied to the analysis of markets for health care and health insurance and to alternative health care systems. Prerequisite: 112 or equivalent.

445-3 ECONOMICS OF THE PUBLIC SECTOR: STATE AND LOCAL.
[Adv.SS] Public expenditure and taxation; intergovernmental fiscal relations; budgeting; grants; public choice. Prerequisites: 111, 112 or consent of instructor.

461-3 INTERNATIONAL TRADE THEORY AND POLICY.
[Adv.SS, II] Theory of causes and composition of trade; comparative advantage, tariff and nontariff barriers to trade, economic integration, commercial policy. Prerequisite: 301 or 518 or consent of instructor.

462-3 INTERNATIONAL MONETARY ECONOMICS.
[Adv.SS, II] Balance of payments, foreign exchange markets, and links with a nation's macroeconomy. Monetary, fiscal, and exchange-rate policy in an open economy with international capital mobility. Prerequisite: 302 or consent of instructor.

463-3 INTRODUCTION TO ECONOMIC DEVELOPMENT AND GROWTH.
[Adv.SS, II] Problems and policies of economic development and growth of countries or regions. Balanced and unbalanced growth; forward and backward linkages; international trade; foreign investment. Prerequisites: 111, 112.

490-1 to 6 INDEPENDENT STUDY IN ECONOMICS.
Investigation of topic areas. Individual or small group readings under supervision of faculty member. Prerequisites: consent of instructor and department chairperson.

491-1 SENIOR PROJECT.
Writing assignment to fulfill senior assignment. Economics majors must take 491 or 492. Graded; grade of C or higher required for major. NOT FOR GRADUATE CREDIT. Prerequisite: senior standing.

492-3 SENIOR HONORS THESIS.
Senior honors thesis to fulfill senior assignment. Economics majors must take 491 or 492. Graded; grade of C or higher required for major. NOT FOR GRADUATE CREDIT. Prerequisites: GPA of 3.3 in Economics, GPA of 3.0 overall, senior standing, permission of chairperson and thesis adviser.

EDUCATIONAL LEADERSHIP

305-3 EDUCATIONAL PSYCHOLOGY.
Human learning and development as applied to school environment. Emphasis on cognitive processes; cognitive development; behavior; classroom evaluation.

381-1 EDUCATION IN A MULTICULTURAL SOCIETY.
Introduction to pluralism in America and the multicultural educational programs that will enhance cultural relationships in schools. Concurrent enrollment in EDFD 380 required.

ELECTRICAL ENGINEERING

199-0 ELECTRICAL ENGINEERING COOPERATIVE EDUCATION I.
Supervised work experience with agency, firm, or organization which uses engineers. First work period of five year academic/work experience program. Prerequisites: sophomore standing in electrical engineering and consent of engineering co-op adviser.

210-3 INTRODUCTION TO ELECTRICAL CIRCUITS.
DC and AC steady-state circuit analysis. Loop and nodal analysis, network theorems, phasors, complex power, single-phase and three-phase circuits. Prerequisites: PHYS 211a, MATH 250 or concurrent enrollment.

211-4 CIRCUIT ANALYSIS II.
Time-domain transient analysis, complex frequency, frequency response, two-port networks, Laplace Transform techniques, impulse response and convolution. Three hours lecture and one 3-hour laboratory per week.

299-0 ELECTRICAL ENGINEERING COOPERATIVE EDUCATION II.
Supervised work experience with agency, firm, or organization which uses engineers. Second work period of five year academic/work experience program. Prerequisites: sophomore or junior standing in electrical engineering and consent of engineering co-op adviser.

326-4 ELECTRONIC CIRCUITS I.
Introduction to semiconductors; diode, transistor and FET; small and large signal analysis; logic gate families and design. Three hours lecture and one 3-hour laboratory per week. Prerequisite: 211 (or equivalent) with minimum grade of C.

327-4 ELECTRONIC CIRCUITS II.
Small signal analysis and frequency response; operational amplifier design; feedback system analysis, stability and compensation; oscillators; A/D and D/A converters. Three hours lecture and one 3-hour laboratory per week. Prerequisite: 326 or consent of instructor.

340-3 ENGINEERING ELECTROMAGNETICS.
Introduction to engineering electromagnetics. Includes vector analysis, electrostatics, magnetostatics, time-harmonic fields, electromagnetic wave propagation, transmission lines, waveguides, antennas. Prerequisite: 211 (or equivalent) with a grade of C or better.

341-4 PRINCIPLES OF ELECTRO-MECHANICAL ENERGY CONVERSION.
Basic electromagnetic concepts, energy-based torque and force and calculations, transformers, induction machines, synchronous machines, DC machines. Three lecture hours and one 3-hour laboratory per week.

351-3 SIGNALS AND SYSTEMS.
Basics of continuous and discrete signals and systems. Convolution, Fourier analysis, filtering, modulation and sampling, Z-transforms. Prerequisite: 211 (or equivalent) with grade of C or better.

352-3 STOCHASTIC PROCESSES.
Probability, random variables, stochastic processes; power spectrum of stationary random signals, noise spectrum. Response of linear systems to random inputs. Optimum filtering. Prerequisite: 351 or consent of instructor.

365-3 CONTROL SYSTEMS.
Feedback control systems analysis and applications. Signal flow graphs, state variable approach, modeling, root-locus, Bode plots and steady state errors, Nyquist plots. Prerequisite: 351 or consent of instructor.

375-3 INTRODUCTION TO COMMUNICATIONS.
Fourier analysis, filtering and signal distortion, spectral density and correlation, digital coding and analog waveforms, intersymbol interference, amplitude modulation, frequency modulation, and digital modulation. Prerequisite: 351.

382-4 DIGITAL SYSTEMS DESIGN.
Concepts and design of digital and computer circuitry; binary number systems; study of microprocessors and assembly language programming. Laboratory exercises involve circuit implementation and programming. Three lecture hours and one 3-hour lab per week. Prerequisite: 326 or consent of instructor.

399-0 ELECTRICAL ENGINEERING COOPERATIVE EDUCATION III.
Supervised work experience with agency, firm, or organization which uses engineers. Third work period of five year academic/work experience program. Prerequisites: junior or senior standing in electrical engineering and consent of engineering co-op adviser.

404-3 ELECTRICAL ENGINEERING DESIGN.
Several paper designs and seminars selected from various areas in electrical engineering. Paper design of student selected senior project. NOT FOR GRADUATE CREDIT. Prerequisite: completion of all 300 level electrical engineering courses or consent of instructor.

405-2 ELECTRICAL ENGINEERING DESIGN LABORATORY.
Realization of senior project designed in 404, including construction, computer simulation, debug, test as required by project to obtain functional prototype. NOT FOR GRADUATE CREDIT. Prerequisite: 404 or consent of instructor.

428-3 ANALOG FILTER DESIGN.
Fundamentals of active filter synthesis; first and second order circuit synthesis; standard low pass filters: Butterworth, Chebyshev, Inverse Chebyshev, Cauer, Bessel; frequency transformations; sensitivity analysis. NOT FOR GRADUATE CREDIT. Prerequisites: 327 and 365 or consent of instructor.

433-3 FUZZY LOGIC AND APPLICATIONS.
Fundamentals of fuzzy sets, basic operations, fuzzy arithmetic, and fuzzy systems. Examples of applications in various fields of engineering and science. Prerequisite: 352.

436-3 DIGITAL SIGNAL PROCESSING.
Discrete-time signals and systems; sampling; z-transforms; discrete Fourier transform; design and implementation of digital filters. Two hours lecture and one laboratory session per week. Prerequisite: 351 or consent of instructor.

437-3 DSP DESIGN PROJECTS.
DSP design concepts. DSP processors and development platforms. TMS320C30 architecture and instruction set. Design and implementation of digital filters. Sample applications. Prerequisite: 351.

438-3 DIGITAL IMAGE PROCESSING.
Fundamentals of human perception; sampling and quantization; image transforms, enhancement, restoration, and coding. Two hours lecture and one laboratory session per week. Prerequisite: 351 or consent of instructor.

439-3 COMPUTER VISION.
Image formation, geometrical and topological properties of binary images, image filtering, boundary detection, image segmentation, introduction to pattern recognition. Two hours lecture and one laboratory session per week. Prerequisite: 351 or consent of instructor.

445-3 POWER DISTRIBUTION SYSTEM.
Distribution system planning, load characteristics, application of distribution transformers, design of distribution system, voltage-drop and power-loss calculations, voltage regulation, protection and reliability. Prerequisite: 341 or consent of instructor.

446-3 POWER SYSTEM ANALYSIS.
Synchonous Machines, Power Transformers, Transmission Lines, System Modeling, Load-Flow Study, Economic Operation of Power Systems, Symmetrical Components, Symmetrical and Unsymmetrical Faults, Power System Stability. Prerequisite: 341 or consent of instructor.

447-3 RADAR SYSTEMS.
Introduction to radar systems, including antenna fundamentals, radar equation, radar signals and systems, CW radar, FM-CW radar, pulse radar, tracking radar. Prerequisites: 340, 351 or consent of instructor.

455-3 SYSTEM MODELING AND OPTIMIZATION.
Mathematical modeling of engineering systems; dynamic response of electrical and mechanical systems; optimization models in electrical engineering. Prerequisite: 351.

465-3 CONTROL SYSTEMS DESIGN.
Root-locus analysis; frequency-response analysis; design and compensation technique; describing-function analysis of nonlinear control systems; analysis and design by state-space methods. Prerequisites: electrical engineering major, 365, or consent of instructor.

466-3 DIGITAL CONTROL.
Topics include finite difference equations, z-transforms, state variable representation, analysis and synthesis of linear sampled-data control systems using classical and modern control theory. Prerequisite: 365 or consent of instructor.

467-3 ROBOTICS-DYNAMICS AND CONTROL.
(Same as ME 454) Robotics, robot kinematics and inverse kinematics, trajectory planning, differential motion and virtual work principle, dynamics and control. Prerequisite: consent of instructor.

475-3 COMMUNICATION SYSTEMS.
Noise effects in communication systems. Review of random processes. Noise modeling. Noise effects in amplitude, angle, pulse-code and delta modulations. Baseband and passband pulse transmissions. Prerequisites: 375 or consent of instructor.

481-3 MICROCONTROLLERS.
Microcontroller use in variety of real-time data transduction and control applications. Students build hardware interfaced to computer using programs they write. Two hours lecture and two 3 hour lab sessions per week. Prerequisite: 382 or consent of instructor.

482-3 MICROPROCESSOR SYSTEMS.
Design of microprocessor systems using VLSI building blocks. Several microprocessors and peripheral ICs studied. Laboratory experiments with microprocessor systems using logic analyzers. Three hours lecture and one laboratory session per week. Prerequisite: 382 or consent of instructor.

483-3 COMPUTER DESIGN.
Computer architecture concepts. Implementation of arithmetic processing and control units. Introduction to parallel processing. Two hours lecture and one laboratory session per week. Prerequisite: 382 or consent of instructor.

484-3 VLSI/CAD DESIGN.
Discussion of CMOS circuits, MOS transistor theory, CMOS processing technology, circuit characterization and CMOS circuit and logic design. Prerequisites: 326, 483.

487-3 KNOWLEDGE-BASED SYSTEMS
(Same as CE/IE 497) Engineering-oriented perspective on artificial intelligence (AI) technology. General AI concepts specifically knowledge-based (expert) systems applied to engineering problem-solving. Prerequisites: CS 140 or 141 or equivalent, senior standing, consent of instructor.

491-1 to 4 ELECTRICAL ENGINEERING PROJECT.
Individual investigation of a topic in Electrical Engineering to be agreed upon with the instructor. May be repeated for a maximum of 6 hours provided that no topic is repeated. Prerequisites: upper-division Electrical Engineering standing and consent of instructor.

492-2 to 6 TOPICS IN ELECTRICAL ENGINEERING.
Selected topics of special interest; course schedule will include name of topic. May be repeated to maximum of 6 hours so long as no topic is repeated. Prerequisites: electrical engineering major and consent of instructor.

ENGLISH

100-1 WRITING LAB.
Self-instructional materials for improvement of writing skills; tutorial assistance in composing papers, reports, or theses. Word processors available. Not for English major or minor credit. May be repeated for a total of 2 credit hours.

101-3 ENGLISH COMPOSITION.
[SKILLS] Instruction and practice in expository writing, including the paragraph and short essay.

101n-3 ENGLISH COMPOSITION: NON-NATIVE SPEAKERS.
[SKILLS] Instruction and practice in expository writing, including the paragraph and short essay. NOTE: Admission only by permit from foreign student adviser or instructor.

102-3 ENGLISH COMPOSITION.
[SKILLS] Instruction and practice in expository writing, including the essay and research paper. Prerequisite: 101.

102n-3 ENGLISH COMPOSITION: NON-NATIVE SPEAKERS.
[SKILLS] Instruction and practice in expository writing, including the essay and research paper. NOTE: Admission only by permit from foreign student adviser or instructor. Prerequisite: 101.

111-3 INTRODUCTION TO LITERATURE.
[INTRO] Representative works in world drama, fiction, and poetry. Development of appreciation of literature by understanding themes, purposes, techniques, history. Prerequisite: 101.

201-3 INTERMEDIATE COMPOSITION.
Practice in clear, direct, error-free writing of expository themes; emphasis on organization, rhetorical strategies, and audience. Prerequisite: 102.

202-3 STUDIES IN DRAMA.
[Adv.FAH] Reading and discussion of classic examples of ancient and modern drama with attention to themes, techniques, and cultural significance.

203-3 STUDIES IN POETRY.
[Adv.FAH] Reading and discussion of selected examples of British and American poetry, recent and traditional.

204-3 STUDIES IN FICTION.
[Adv.FAH] Reading and discussion of selected major examples of modern fiction, the short story to the novel. Attention to themes and techniques.

205-3 AFRICAN-AMERICAN LITERATURE.
[Adv.FAH, IGR] From 1700's to present: slave narratives, classic political speeches and sermons, poetry, fiction, drama.

207-3 LANGUAGE AWARENESS.
[Adv.FAH] Introductory course in the nature of language. Focus on English language: what language is and how people use it.

208-3 SURVEY OF BRITISH LITERATURE: BEGINNINGS TO 1789.
[Adv.FAH] Major works and authors such as Beowulf, Chaucer, Spenser, Shakespeare, Milton, Donne, Jonson, Dryden, Pope, Swift, and Johnson.

209-3 SURVEY OF BRITISH LITERATURE: 1789 TO PRESENT.
[Adv.FAH] Major works and authors such as Blake, Wordsworth, Mill, Dickens, the Brownings, Shaw, Lawrence, Stoppard, and Lessing.

211-3 SURVEY OF AMERICAN LITERATURE FROM COLONIAL TIMES TO THE CIVIL WAR.
[Adv.FAH] Major and minor works and authors from the Colonial, Revolutionary, and Romantic periods, including writers such as Bradstreet, Poe, Melville, Hawthorne, and Whitman.

212-3 SURVEY OF AMERICAN LITERATURE FROM THE CIVIL WAR TO MODERN TIMES.
[Adv.FAH] Major and minor works and authors since the later nineteenth century, including writers such as Dickinson, Frost, O'Neill, Porter, Wright, and Cather.

301-3 BASIC LITERARY CRITICISM AND SCHOLARSHIP.
[Adv.FAH] Terminology, theories, and practice of literary criticism. Application of elementary research methods in criticism.

303-3 LITERARY MASTERPIECES: ANCIENT AND MEDIEVAL.
[Adv.FAH] Selected major works (read in English) beginning with the Greek and Roman traditions and concluding with the Middle Ages.

304-3 LITERARY MASTERPIECES: RENAISSANCE THROUGH MODERN.
[Adv.FAH, IC] Selected major works (read in English) of European literature from the 14th century to the present.

306-3 INTRODUCTION TO THE BIBLE.
[Adv.FAH] Reading and discussion of selected books from the Old and New Testaments and Apocrypha in translation, with attention to their literary, historical, and theological contexts.

307-3 INTRODUCTION TO SHAKESPEARE.
[Adv.FAH] Shakespeare's life; the Elizabethan theater; representative plays and poems.

308-3 DETECTIVE FICTION.
[Adv.FAH] Development of detective short story and novel from nineteenth-century beginnings to the present.

309-3 POPULAR LITERATURE.
[Adv.FAH] Development of literary sub-genres which have influenced popular culture. Topics vary. Prerequisites: 101, 102.

310-3 CLASSICAL MYTHOLOGY AND ITS INFLUENCE.
[Adv.FAH] Major Greek and Roman myths: origin, nature, interpretations, and use in the modern world.

340-3 LITERATURE OF THE THIRD WORLD.
[Adv.FAH, IC] Third World literature from antiquity to present; social, political, historical, and philosophical problems reflected in literature.

341-3 THE AFRICAN-AMERICAN WOMAN IN AMERICAN LITERATURE.
[Adv.FAH, IGR] (Same as WMST 341) Poems, novels, short stories, essays, dramas, biographies, and appropriate historical documents, portraying roles of African-American women in America.

342-3 AFRICAN-AMERICAN FICTION.
[Adv.FAH, IGR] Study of representative major African-American fiction by authors such as Baldwin, Ellison, Walker, and Wright.

369-3 GRAMMATICAL ANALYSIS.
Grammatical analysis of formal spoken and written English sentences. Prerequisite: junior standing.

370-3 FUNDAMENTALS OF THE ENGLISH LANGUAGE: SOUND PATTERNS AND WORD CONSTRUCTION.
[Adv.FAH] Production of English sounds, intonation patterns, and word formations; dialectal variations; relationship of sounds to spelling. For language, speech, education majors, and all foreign students. Prerequisite: junior standing.

392-3 FICTION WRITING.
[Adv.FAH] Short story writing, with special emphasis on plot, point of view, description, dialogue, other elements in the rhetoric of fiction. Workshop format. Prerequisites: 101 or 102; sophomore standing.

393-3 POETRY WRITING.
[Adv.FAH] Writing of poetry and study of poetic fundamentals, including form, imagery, figurative language, and speaker. Workshop setting for critiques of student work. Prerequisites: 101 or 102; sophomore standing.

400-3 PRINCIPLES OF LINGUISTICS.
[Adv.FAH] Principles and techniques of linguistic analysis illustrated through survey of major structural components of language. Recommended for anthropology students, linguistics students, and those preparing to teach English. Prerequisite: junior standing or consent of instructor.

402-3 LINGUISTICS AND LITERATURE.
[Adv.FAH] Ways in which linguistic analysis (such as sounds, grammatical and syntactic structures, and meaning) illuminate literary texts. Recommended for interested students in any discipline. Prerequisite: junior standing or consent of instructor.

403-3 HISTORY OF THE ENGLISH LANGUAGE.
[Adv.FAH] Historical survey of major phonological and grammatical changes in English language from its Indo-European antecedents to the present. Prerequisite: junior standing or consent of instructor.

404-3 CHAUCER: CANTERBURY TALES.
[Adv.FAH] *The Canterbury Tales* read in Middle English. Prerequisite: junior standing or consent of instructor.

406-3 OLD ENGLISH LANGUAGE.
[Adv.FAH] Sounds, grammar, and vocabulary of the Old English Language, including readings in Old English poetry and prose. Prerequisite: junior standing or consent of instructor.

408-3 PHONOLOGICAL ANALYSIS.
[Adv.FAH] Principles of linguistic analysis and interpretation as applied to sound systems of language. Prerequisites: 400 recommended; junior standing or consent of instructor.

409-3 SYNTACTIC ANALYSIS.
[Adv.FAH] Principles of syntactic analysis and interpretation as applied to clause and sentence level structures. Prerequisite: junior standing or consent of instructor.

413-3 SPENSER.
[Adv.FAH] Reading and analysis of *The Faerie Queene, The Shepheardes Calendar, Amoretti,* and other poems. Prerequisite: junior standing or consent of instructor.

418-3 DISCOURSE ANALYSIS.
[Adv.FAH] Aspects of text meaning as reflection of relationships between sentences and their discourse context. Prerequisite: junior standing or consent of instructor.

421-3 POETRY AND PROSE OF THE MEDIEVAL PERIOD.
[Adv.FAH] Verse romances, lyric poetry, drama, various English prose and poetic works from 1066-1500. Works of Chaucer excluded. Prerequisite: junior standing or consent of instructor.

422-3 POETRY AND PROSE OF THE RENAISSANCE.
[Adv.FAH] Early Modern English (1500-1600); works by Skelton, Wyatt, Surrey, More, Gascoigne, Spenser, Sidney. Dramatic works of Marlowe and Shakespeare excluded. Prerequisite: junior standing or consent of instructor.

423-3 POETRY AND PROSE OF THE 17TH CENTURY.
[Adv.FAH] Literature 1600-1660, including Donne, Jonson, Bacon, Burton, Browne, Milton. Dramatic works of Shakespeare excluded. Prerequisite: junior standing or consent of instructor.

424-3 POETRY AND PROSE OF THE AUGUSTAN AGE.
[Adv.FAH] Literature 1660-1740, including Dryden, Pope, Swift, Addison, Steele. Prerequisite: junior standing or consent of instructor.

425-3 POETRY AND PROSE OF THE AGE OF JOHNSON.
[Adv.FAH] Literature 1740-1798, including Boswell, Johnson, Gray, Goldsmith, Blake, Burns. Prerequisite: junior standing or consent of instructor.

426-3 POETRY AND PROSE OF THE ROMANTIC PERIOD.
[Adv.FAH] Literature and its revolutionary socio-historical context 1780-1832: Blake, the Wordsworths, Coleridge, Byron, the Shelleys, Keats, Lamb, other prose writers. Prerequisites: junior standing and one prior 200-400 level literature course.

427-3 POETRY AND PROSE OF THE VICTORIAN ERA.
[Adv.FAH] Representative poetry and prose (excluding novels) by authors such as Tennyson, the Brownings, Arnold, Carlyle, Ruskin, the Pre-Raphaelites. Prerequisite: junior standing or consent of instructor.

428-3 BRITISH POETRY AND PROSE OF THE MODERN ERA.
[Adv.FAH] Representative poetry and short prose by authors such as Hardy, Housman, Hopkins, Yeats, Woolf, Sitwell, World War I poets, Auden, Larkin, Hughes. Prerequisite: junior standing or consent of instructor.

431-3 MAJOR AMERICAN WRITERS OF THE 19TH CENTURY.
[Adv.FAH] Short prose by such authors as Emerson, Melville, Hawthorne, Poe, Crane, and Twain. Prerequisite: junior standing or consent of the instructor.

432-3 MAJOR AMERICAN WRITERS OF THE 20TH CENTURY.
[Adv.FAH] Short prose by authors such as James, Cather, Faulkner, O'Connor, Hemingway, Fitzgerald, and Wright. Prerequisite: junior standing or consent of instructor.

434-3 AMERICAN POETRY TO 1900.
[Adv.FAH] Works by colonial and 19th century American poets; includes the Puritans, Longfellow, Bryant, Poe, Emerson, Whitman, Dickinson. Prerequisite: junior standing or consent of instructor.

435-3 AMERICAN POETRY SINCE 1900.
[Adv.FAH] Major trends and schools in modern poetry. Poems by authors such as Robinson, Frost, Pound, Eliot, Moore, cummings, H.D., Stevens, Roethke, Lowell, Bishop, Wilbur. Prerequisite: junior standing or consent of instructor.

437-3 AMERICAN DRAMA.
[Adv.FAH] Selected texts from the emergence of the American theatre to the present. Prerequisite: junior standing or consent of instructor.

439-3 AMERICAN NOVEL TO EARLY 20TH CENTURY.
[Adv.FAH] Emergence of native themes, characters, styles. Representative authors including Tyler, Brown, Cooper, Hawthorne, Melville, Stowe, James, Crane, Twain, Wharton, Howells, Dreiser. Prerequisite: junior standing or consent of instructor.

440-3 AMERICAN NOVELS FROM EARLY 20TH CENTURY TO PRESENT.
[Adv.FAH] Trends and techniques in novels; includes Lewis, Hemingway, Faulkner, Steinbeck, Porter, Wright, Ellison, Bellow, Updike, Malamud, Oates. Prerequisite: junior standing or consent of instructor.

454-3 18TH CENTURY NOVEL.
[Adv.FAH] Representative novelists such as Defoe, Richardson, Fielding, Smollett, Sterne, Austen. Prerequisite: junior standing or consent of instructor.

455-3 VICTORIAN NOVEL.
[Adv.FAH] Representative romantic and realistic novels including works by authors such as Dickens, Thackeray, Eliot, the Brontes, Trollope, Hardy. Prerequisite: junior standing or consent of instructor.

456-3 20TH CENTURY BRITISH NOVEL.
[Adv.FAH] Survey of major British novelists from 1900 to present: Joyce, Lawrence, Conrad, selected contemporary authors. Prerequisite: junior standing or consent of instructor.

460-3 ELIZABETHAN AND JACOBEAN DRAMA.
[Adv.FAH] Renaissance England, including Marlowe, Jonson, and others such as Beaumont and Fletcher, Middleton, Tourneur, and Webster (excluding Shakespeare). Prerequisite: junior standing or consent of instructor.

461-3 RESTORATION AND 18TH CENTURY DRAMA.
[Adv.FAH] Representative plays from 1660 to 1800 by Etherege, Wycherley, Congreve, Dryden, Goldsmith, Sheridan. Prerequisite: junior standing or consent of instructor.

462-3 MODERN BRITISH AND CONTINENTAL DRAMA.
[Adv.FAH, IC] European drama since 1870; includes Ibsen, Chekhov, Wilde, Shaw, Brecht, Pirandello. Prerequisite: junior standing or consent of instructor.

468-3 SECOND LANGUAGE ACQUISITION.
Examination of issues and theories applicable to understanding process of second language development. Prerequisites: 400, junior standing or consent of instructor.

471a,b-3 each SHAKESPEARE.
[Adv.FAH] (a) Comedies and histories, Comedies such as *A Midsummer Night's Dream, Merchant of Venice, Twelfth Night;* histories such as *Richard III, Richard II, Henry IV (Part I), Henry V.* (b) Tragedies and non-dramatic works, Tragedies such as *Romeo and Juliet, Hamlet, Othello, King Lear, Macbeth, Antony and Cleopatra;* non-dramatic poetry including *The Rape of Lucrece* and sonnets. Prerequisite: junior standing or consent of instructor.

473-3 MILTON.
[Adv.FAH] *Paradise Lost* and other works such as *Samson Agonistes, Paradise Regained, Lycidas, Comus,* and selected prose. Prerequisite: junior standing or consent of instructor.

475-3 LITERATURE FOR ADOLESCENTS.
Extensive critical study of the young adult novel. Prerequisite: junior standing or consent of instructor.

478-3 STUDIES IN WOMEN, LANGUAGE, AND LITERATURE.
[IGR] (Same as WMST 478) Relationships among society, gender, language, and literature: ways women are affected by and depicted in language and literature; literature written by women; feminist criticism. Topic varies; may be repeated to a maximum of 6 hours so long as topic is not repeated. Prerequisite: junior standing or consent of instructor.

485-3 METHODS OF TEACHING ENGLISH.
Objectives, methods, materials, tests, and programs of English instruction in middle, junior, and senior high schools. Course normally prior to CI 315a,b and CI 352. Prerequisite: junior standing or consent of instructor.

490-3 ADVANCED COMPOSITION.
Writing sophisticated expository prose. Review of grammatical matters as needed; emphasis on clarity, organization, effectiveness, and flexibility. May be repeated once for credit with permission. Prerequisite: junior standing or consent of instructor.

491-3 TECHNICAL AND BUSINESS WRITING.
Technical communication, professional correspondence, reports, proposals, descriptions, and evaluations; word processing and graphics software. For students in English, business, engineering, nursing, the sciences, and the social sciences. Prerequisites: 102, junior standing; no experience with software or computers is required.

492-3 ADVANCED FICTION WRITING.
Advanced seminar in short story writing. Includes readings in fiction and a study of the psychology of creativity, fiction markets, experimental fiction. Workshop format. Prerequisite: 392 or consent of instructor.

493-3 ADVANCED POETRY WRITING.
Advanced workshop in writing poetry. Includes readings in contemporary poetry. Prerequisite: 393 or consent of instructor.

494-3 LITERARY EDITING.
Principles of literary editing, primarily of fiction and poetry. Prerequisites: 101, 102; junior standing or consent of instructor.

495-3 HISTORY OF CRITICAL THEORY.
[Adv.FAH] Major critical theories from Plato to the present, including practice in writing criticism. Prerequisite: junior standing.

496-3 SCHOLARLY AND CRITICAL EDITING.
Editorial preparation of copy for scholarly and critical journals in English language and literature. Prerequisites: 101, 102, and junior standing.

497-3 SENIOR SCHOLAR PROJECT.
Required Senior Assignment for English Majors. Individualized research project conducted with assistance from a faculty mentor. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing, major in English.

498-3 TUTORIAL IN CREATIVE WRITING.
Independent study designed primarily for students who have taken 300 or 400-level courses in creative writing. May be repeated once for credit. NOT FOR GRADUATE CREDIT. Prerequisites: 101 or 102; consent of instructor.

499-1 to 3 READINGS IN ENGLISH.
Independent study in specific area of interest. Extensive reading. For English students only; may be repeated to a maximum of 6 hours. Prerequisite: adviser's approval.

ENVIRONMENTAL STUDIES

404-3 REGIONAL ENVIRONMENT PLANNING.
(Same as GEOG 404) Interrelationships between regions, environments, and planning. Prerequisite: senior standing or consent of instructor.

411-3 HYDROLOGY.
(Same as GEOG 411) Hydrologic cycle, major stream systems, and uses of water resources and their relationships to quality and future supplies. Prerequisite: GEOG 111 or consent of instructor.

412-3 GROUNDWATER HYDROLOGY.
(Same as CE 412 and GEOG 412) Study of groundwater: occurrence, physical and chemical properties, flow and flow system modeling, relation to rock structure and lithology, contamination of groundwater resources. Prerequisites: GEOG 310, CHEM 113 or equivalents or consent of instructor.

426-3 ENVIRONMENTAL GEOCHEMISTRY.
Study of exogenic environment as a geochemical system, natural circulation of water, sediment, carbon, sulfur, nitrogen, and phosphorus; assessment of human activities on these cycles. Prerequisites: GEOG 310, CHEM 113 or equivalents or consent of instructor.

465-3 AQUATIC ECOSYSTEMS.
Biogeochemistry of, community structure of, man's impact on aquatic systems throughout the world, including lakes, streams, oceans. Laboratory: local freshwater communities. Two lectures, one three-hour laboratory per week. Weekend field trips may be required. Prerequisite: BIOL 220.

466-3 TERRESTRIAL ECOSYSTEMS.
Community structure, biogeochemistry and historical development of terrestrial ecosystems. Two lectures, one three-hour laboratory per week. Weekend field trips may be required. Prerequisite: BIOL 220.

473-3 OCCUPATIONAL HEALTH.
Concepts and details regarding occupational health. Prerequisite: at least one year of College chemistry.

475-3 CHEMICAL SAFETY MANAGEMENT.
Concepts and details regarding safe use and handling of chemicals as recommended by safety professionals. Prerequisite: at least one year of College chemistry.

480-3 PRINCIPLES OF INSTRUMENTAL ANALYSIS.
Theory and use of appropriate instrumentation in qualitative and quantitative analysis of chemical environmental factors. Prerequisite: at least one year of College chemistry.

FINANCE

320-3 FINANCIAL MANAGEMENT AND DECISION MAKING.
Introduction to financial decisions; tools; models. Valuation; capital budgeting; capital structure. Operating decisions and other long and short-term applications. Prerequisites: GBA 300 (or concurrent enrollment), ACCT 210, MS 251.

420-3 PROBLEMS IN CORPORATE FINANCE.
In-depth development of analytical decision models; basic and advanced corporate financial theory and application to business and industrial settings. Prerequisite: 320 or ACCT 312.

430-3 INVESTMENTS.
Investment practices, portfolio theory and management; instrument selection; stocks, bonds, options, futures and risk management; investment strategies. Not a personal investment course. Prerequisite: 320.

435-3 REAL ESTATE FINANCE AND INVESTMENT.
Fundamental concepts, investigation and evaluation of real (estate) assets. Single residence; multiple dwellings; commercial properties. Applications based on financial theory and methodology. Prerequisite: 320.

440-3 FINANCIAL INSTITUTIONS.
Financial management of financial institutions; commercial banks, S&L's, insurance companies; other financial institutions. Asset and liability management. Prerequisite: 320.

445-3 FINANCIAL MARKETS.
Functions and practices of domestic and international money and capital markets; recent structural changes, asset securitization, relations across financial markets. Prerequisite: 320.

450-3 INTERNATIONAL FINANCE.
[II] International financial markets and determinants of exchange rates; balance of payments under alternative systems. Investments and financing decisions of MNCs. Prerequisite: 320.

490-1 INDEPENDENT STUDY IN FINANCE.
Individual, in-depth investigation of topics of interest to student. Readings or research completed under faculty supervision. Prerequisites: consent of instructor and department chairperson.

FINE ARTS AND COMMUNICATIONS

350-1 to 4 SPECIAL TOPICS IN FINE ARTS AND COMMUNICATIONS.
Topics in areas not offered in departmental curricula with emphasis on interdisciplinary studies. Varied content. May be repeated to a maximum of 12 hours. Prerequisite: consent of instructor.

450-1 to 4 SPECIAL TOPICS IN FINE ARTS AND COMMUNICATIONS.
Topics in areas not offered in departmental curricula with emphasis on interdisciplinary studies. Varied content. May be repeated to a maximum of 12 hours. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

495-1 to 12 INTERNSHIP IN FINE ARTS AND COMMUNICATIONS.
Study, observation, and professional experience with fine art or communication unit or organization; emphasizing interdisciplinary activities not available for credit from any department in the College of Arts and Sciences. NOT FOR GRADUATE CREDIT. Prerequisites: junior or senior status, consent of faculty sponsor.

FOREIGN LANGUAGES

111-a-3 INTRODUCTION TO FOREIGN STUDIES.
[INTRO, IC] Overview of language, development of literature, cultural institutions of French. Only one FL 111 course may be applied toward the General Education requirement. Foreign language majors may count one FL 111 course in a language other than the major toward General Education.

111-b-3 INTRODUCTION TO FOREIGN STUDIES.
[INTRO, IC] Overview of language, development of literature, cultural institutions of German. Only one FL 111 course may be applied toward the General Education requirement. Foreign language majors may count one FL 111 course in a language other than the major toward General Education.

111-c-3 INTRODUCTION TO FOREIGN STUDIES.
(Spanish) [INTRO, IC] Overview of language, development of literature, cultural institutions of the Hispanic world. Includes a study of social, political and cultural development.

121-3 LEARNING ANOTHER LANGUAGE.
Systematic methods for learning foreign language presented through lectures and practical exercises.

141-3 BUILDING VOCABULARY THROUGH LATIN AND GREEK WORD ELEMENTS.
Practical exercises; learning to expand vocabularies through system of prefix-root-suffix word building which English has borrowed from Latin and Greek.

230-3 FOUNDATIONS OF CELTIC CULTURE.
[IC] Overview of ancient Celtic culture from its beginnings to its decline.

330-3 CELTIC CULTURE: MYTHOLOGY AND RELIGION.
[IC] Ancient Celtic divinities and mythology, Druidism, and Christianity.

345-3 to 9 LITERATURE IN TRANSLATION.
[IC] Works of major authors. For major or minor credit in FL; term paper required in target language. May be repeated to a maximum of 9 hours provided that no topic is repeated.

390-3 READINGS.
Selected works of representative authors in student's field of interest. Offered in French, German, Italian, Russian, Spanish, Latin, Greek. Primarily for students with no foreign language concentration, but may be taken for credit in foreign language concentration with consent of instructor. Prerequisites: 202 in appropriate language offered on campus, consent of instructor.

401-3 COMPARATIVE LATIN AND GREEK GRAMMAR.
Structural similarities and differences between Latin and Greek as they developed from Primitive Indo-European and as they relate to other Indo-European languages. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

486-3 LANGUAGE LEARNING AND THE TEACHING OF FOREIGN LANGUAGES.
Practical study of second language acquisition, cognitive variations, instructional methodologies, student testing in foreign language classroom. Required for state certification of all majors intending to teach foreign languages in secondary schools. Prerequisite: 301 or consent of instructor.

491-3 to 6 CULTURAL AND LANGUAGE WORKSHOP.
[IC] Comparative or contrastive linguistics, advanced methodology and techniques. In-depth study of foreign cultures, travel-study abroad. Supervised projects in foreign studies. May be repeated to a maximum of 6 hours provided that no topic is repeated. Prerequisite: advanced or graduate standing.

FOUNDATIONS OF EDUCATION

355-3 PHILOSOPHY OF EDUCATION.
Examination of function of education in connection with principles of justice, equity, freedom.

380-2 FOUNDATIONS OF EDUCATION.
Function of schooling in social context with emphasis on issues related to gender, social class, ethnicity. Prerequisite: junior standing or above, or admission to a major program. Concurrent enrollment in EDUC 381 required.

451-3 GENDER AND EDUCATION.
[IGR] (Same as WMST 451) Policies and practices related to sex-role stereotyping, teacher expectations and gender, curricular bias, discrimination, personnel policies, strategies for change.

490-3 INTERCULTURAL STUDIES IN EDUCATION.
Selected aspects of cultural and educational patterns in their social matrix; field studies, conferences, lectures, or seminars. May be repeated to a maximum of 6 hours so long as target culture for study is not repeated.

FRENCH

101-4 ELEMENTARY FRENCH.
[SKILLS] Listening, speaking, reading, and writing. Culture of French-speaking countries. Lab included.

102-4 ELEMENTARY FRENCH.
[SKILLS, IC] Continuation of 101. Lab included. Prerequisite: 101 or placement testing.

104-8 ELEMENTARY FRENCH.
[SKILLS, IC] Intensive instruction in listening, speaking, reading, and writing. Culture of French-speaking countries. Lab included. Equivalent to 101 and 102. Must enroll for all 8 hours credit. Check with department chairperson to determine if course will be offered.

201-4 INTERMEDIATE FRENCH.
[Adv.FAH] Continued practice in listening, speaking, reading, and writing. Grammar review. Cultural and literary readings, compositions. Lab included. Prerequisite: 102 or 104 or placement testing.

202-4 INTERMEDIATE FRENCH.
[Adv.FAH] Continuation of 201. Lab included. Prerequisite: 201 or placement testing.

220-3 INTERMEDIATE FRENCH CONVERSATION.
Practice intermediate-level conversation. Focus on pronunciation and fluency. Prerequisite: 102 or placement testing.

301-4 ADVANCED FRENCH.
In-depth grammar review. Composition and conversation. Lab included. Prerequisite: 202 or consent of instructor.

302-4 ADVANCED FRENCH.
Selected topics in grammar, readings, and composition. Lab included. Prerequisite: 301 or consent of instructor.

304-3 INTERPRETATION.
Oral translation of selected passages, alternating between English and French; development of precision and clarity in both languages. Prerequisite: 202 or consent of instructor.

305-3 TRANSLATION.
Written translation of selected passages, alternating between English and French; development of precision and clarity in both languages. Prerequisite: 202 or consent of instructor.

308-3 FRENCH PHONETICS.
Articulatory exercises to acquire correct pronunciation; difficulties encountered by speakers of American English. Prerequisite: 202 or consent of instructor.

311-3 CONTEMPORARY FRANCE.
[Adv.FAH, IC] Significant aspects of French culture. Prerequisite: 202 or consent of instructor.

351-3 SURVEY OF FRENCH LITERATURE: MIDDLE AGES THROUGH CLASSICISM.
[Adv.FAH, IC] Representative prose, poetry, drama; 11th through 17th centuries. Prerequisite: 202 or consent of instructor.

352-3 SURVEY OF FRENCH LITERATURE: ENLIGHTENMENT TO THE PRESENT.
[Adv.FAH, IC] Representative prose, poetry, drama; 18th through 20th centuries. Prerequisite: 202 or consent of instructor.

353-3 SURVEY OF THE FRENCH NOVEL.
[Adv.FAH, IC] Selected readings; literary and cultural background. Prerequisite: 202 or consent of instructor.

400a,b-2 each SENIOR ESSAY IN FRENCH.
Supervised (a) research; (b) preparation of an extensive scholarly paper in French. NOT FOR GRADUATE CREDIT. Prerequisite: 202.

402-3 BUSINESS FRENCH.
Oral and written business expression; specialized terminology and idioms. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

451-3 STUDIES IN FRENCH LITERATURE: MIDDLE AGES THROUGH RENAISSANCE.
[Adv.FAH, IC] Literary analysis of prose, poetry, drama; 11th through 16th centuries. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

452-3 STUDIES IN FRENCH LITERATURE: CLASSICISM THROUGH ENLIGHTENMENT.
[Adv.FAH, IC] Literary analysis of prose, poetry, drama; 17th and 18th centuries. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

453-3 STUDIES IN FRENCH LITERATURE: ROMANTICISM TO PRESENT.
[Adv.FAH, IC] Literary analysis of prose, poetry, drama; 19th and 20th centuries. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

454-3 to 6 SEMINAR.
Selected topics in literature or literary criticism. May be repeated to a maximum of 6 hours provided that no topic is repeated.

455-3 FRENCH DRAMA.
Major and typical works.

456-3 SEMINAR ON WOMEN WRITERS.
[IC] (Same as WMST 456) Fiction, nonfiction, drama, and poetry. Taught in English. For credit in FL, term paper written in French.

457-3 AFRICAN AND CARIBBEAN LITERATURE OF FRENCH EXPRESSION.
[IC] Literature of various French-speaking nations. Taught in English. For credit in FL, term paper written in French.

461-3 FRENCH STYLISTICS.
Writing style: application of stylistics to development of skill in written expression. Advanced work in principles of grammar and composition. Prerequisite: 6 hours of 300-level courses.

499-3 READINGS IN FRENCH.
Selected areas of language, literature, and culture. Individual work or small groups supervised by one or more members of French faculty. Prerequisites: senior standing and consent of instructor.

GENERAL BUSINESS ADMINISTRATION

300-3 FOUNDATIONS OF BUSINESS KNOWLEDGE.
[IS] Importance of liberal arts and sciences perspectives to understanding business issues demonstrated through readings and case analyses; overview of business curriculum; reinforcement of essential skills. Prerequisites: completion of 42 hours, including: ENG 101 AND 102, SPC 104 OR 105, MIS 108, PHIL 106, ECON 112, POLS 112 and one of the

following: HIST 111B, HIST 112B, HIST 352b, HIST 354b, HIST 356b, HIST 358, HIST 360b, HIST 413, HIST 415, HIST 416, HIST 460, or HIST 461. Business minors must have completed ECON 112 and the Constitution and General Education requirements.

398-0 to 9 BUSINESS INTERNSHIP.
Faculty supervised and evaluated work activity with agency, firm or organization, providing a learning environment in which theoretical models are implemented in various business disciplines. Students will receive a grade of pass or no credit.

399-0 to 9 BUSINESS COOPERATIVE EDUCATION.
Supervised work experience with agency, firm, or organization which uses business skills. Students will receive a grade of pass or no credit.

400-3 BUSINESS AND SOCIETY.
External social, legal, economic, political, and ethical environments of modern business and their implications for organizations and individuals. NOT FOR GRADUATE CREDIT. Prerequisites: 300, international requirements for business program, and at least 82 complete hours of course work.

489-1 to 15 STUDY ABROAD.
Participation in School's exchange programs. Credit earned by completion of an approved plan of study at an exchange institution. May be repeated for a maximum of 30 hours. Prerequisites: GBA 300, appropriate language competency, and approval by Director of Exchange Programs.

490-2 ANALYTICAL THINKING AND WRITING.
Student to demonstrate senior-level analytical thinking and writing skills through submission of assigned work. Grade of C or better in all assignments required to graduate from School of Business. NOT FOR GRADUATE CREDIT. Prerequisites: 300, senior standing.

495-1 to 3 LEADERSHIP EXPERIENCE PROJECT.
Apply leadership skills by initiating, planning, and implementing solutions to campus and community problems. NOT FOR GRADUATE CREDIT. Prerequisite: MGMT 341.

GEOGRAPHY

111-3 INTRODUCTION TO HUMAN GEOGRAPHY.
[INTRO, IC] Geographic principles underlying the location and distribution of people and their activities in relation to the environment.

200-3 ECONOMIC GEOGRAPHY.
[Adv.SS, II] Spatial patterns and distribution of economic activities, interaction processes, location theory.

201-3 CULTURAL GEOGRAPHY.
[Adv.SS, IC] Survey of major world areas in terms of population, settlement, and related human occupance patterns.

202-3 RESOURCE USE AND MANAGEMENT.
Fundamentals of basic physical resource utilization; application of environmental conservation and preservation principles.

210-3 PHYSICAL GEOGRAPHY.
[Adv.NSM] Distribution and interrelation of Earth's physical elements. Selected topics include geodesy, climatology/meteorology, landforms.

211-3 METEOROLOGY.
[Adv.NSM] Introduction to weather controls and elements, their relationship to human activities; analysis and use of weather maps and forecasts.

212-3 GEOLOGY AND GEOGRAPHY OF NATIONAL PARKS.
Survey of National Park System; development of its geologic and geographic features.

230-3 REGIONAL GEOGRAPHY OF NORTH AMERICA.
[Adv.SS] Examination of physical settings and geographic patterns of human activities in the United States and Canada; descriptions of particular regions stressing human and environmental relationships.

300-3 GEOGRAPHY OF WORLD POPULATION.
[II] Analysis of distribution, density, and migration of people; related demographic theories dealing with environment and various socio-economic aspects.

310-3 PHYSICAL GEOLOGY.
[Adv.NSM] Composition and structure of the Earth; physical and chemical processes responsible for modifying the Earth and its surface. Laboratory.

311-3 MINERALOGY.
Scientific study of minerals, internal atomic structures, internal and external geometrics, chemical compositions, physical properties. Laboratory. Prerequisites: 310, CHEM 121a, 125a, or consent of instructor.

312-3 PETROLOGY.
Description, classification, origin, and occurrence of igneous, sedimentary, metamorphic rocks. Field trip required. Laboratory. Prerequisite: 311 or consent of instructor.

313-3 STRUCTURAL GEOLOGY.
Description and classification of geologic structures, including folds, faults, joints, unconformities, rock deformation, geotectonics, including global plate tectonics. Field trip required. Laboratory. Prerequisites: 310, MATH 125 or equivalent, or consent of instructor.

314-3 CLIMATOLOGY.
[Adv.NSM] Survey of climatic controls and elements, classification systems, and distribution of resultant climatic regions. Relationships between climatic elements and landforms. Prerequisite: GEOG 211 or consent of instructor.

315-3 GEOMORPHOLOGY.
Processes and structures influencing the shape of the Earth's surface. Prerequisite: ESCI 111.

320-3 CARTOGRAPHY.
Introduction to the making of maps, properties, design, and production; use of topographic maps. Prerequisite: one year of high school algebra and one year of geometry, or consent of instructor.

322-3 AIR PHOTO INTERPRETATION.
Methods and techniques used in interpreting aerial photographs for research in physical and social sciences. Prerequisite: 320 or consent of instructor.

330-3 GEOGRAPHY OF EUROPE.
[Adv.SS, IC] Physical settings and geographic patterns of human activities with area descriptions of European countries and particular regions stressing human and environmental relationships.

331-3 GEOGRAPHY OF THE COMMONWEALTH OF INDEPENDENT STATES
[Adv.SS, IC] Physical settings and geographic patterns of human activities with area descriptions of particular Soviet regions stressing human and environmental relationships.

332-3 GEOGRAPHY OF AFRICA.
[Adv.SS, IC] Physical settings and geographic patterns of human activities with area descriptions of African countries and particular regions stressing human and environmental relationships.

333-3 GEOGRAPHY OF ASIA.
[Adv.SS, IC] Physical settings and geographic patterns of human activities with area descriptions of Asian countries and particular regions stressing human and environmental relationships.

334-3 GEOGRAPHY OF LATIN AMERICA.
[Adv.SS, IC] Physical settings and geographic patterns of human activities with area descriptions of Latin American countries and particular regions stressing human and environmental relationships.

400-3 URBAN GEOGRAPHY.
Cultural and physical factors related to distribution, interrelations, and internal spatial organization of cities. Prerequisite: 200.

401-3 AREA ECONOMIC DEVELOPMENT.
[II] Analysis of development in world regions including More Developed Countries and Less Developed Countries. Emphasize theories of development and issues associated with various levels of development. Prerequisite: 111 or consent of instructor.

402-3 THE HISTORICAL LANDSCAPE.
Concepts and methods used in reconstructing past patterns of human occupance based on analysis of selected areas and sites. Field trip. Prerequisite: 200 or consent of instructor.

403-3 LAND USE DEVELOPMENT AND CONTROLS.
Policies, laws and regulations, and administration of community development. Emphasis on subdivision/zoning controls. Prerequisite: 400 or consent of instructor.

404-3 REGIONAL ENVIRONMENT PLANNING.
Interrelationships between regions, environments, and planning. Prerequisite: senior standing or consent of instructor.

410-3 SOILS.
Formation processes, classification, distribution, use, problems associated with earth surface materials. Field trip. Prerequisite: ESCI 111 or consent of instructor.

411-3 HYDROLOGY.
Hydrologic cycle, major stream systems, uses of water resources and their relationships to quality and future supplies. Prerequisite: ESCI 111 or consent of instructor.

412-3 GROUNDWATER HYDROLOGY.
(Same as CE 412 and ENVS 425) Study of groundwater: occurrence, physical and chemical properties, flow and flow system modeling, relation to rock structure and lithology, contamination of groundwater resources. Prerequisites: 310, CHEM 113 or equivalents or consent of instructor.

413-3 ENVIRONMENTAL GEOCHEMISTRY.
(Same as ENVS 426) Study of exogenic environment as a geochemical system, natural circulation of water, sediment, carbon, sulfur, nitrogen, and phosphorus; assessment of human activities on these cycles. Prerequisites: 310, CHEM 113 or equivalents or consent of instructor.

418-3 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS).
Concepts and principles of GIS methods and techniques (vector and raster systems).

420-3 QUANTITATIVE TECHNIQUES.
Quantitative and mathematical measures used in solving geographical problems. Emphasis on spatial applications of inferential and multivariate statistics. Prerequisite: college algebra.

421-3 QUANTITATIVE APPLICATIONS IN SPATIAL ANALYSIS.
Specialized statistical and mathematical methods and techniques used in investigating urban and environmental land use and development issues. Prerequisite: 420 or consent of instructor.

422-3 REMOTE SENSING.
Measurement and identification of physical and cultural objects from a distance. Includes processing and analysis of data. Emphasis on satellite imagery. Prerequisite: ESCI 111 or equivalent.

423-3 COMPUTER AND STATISTICAL MAPPING.
Cartographic design techniques related to computer aided conversion, analysis, and presentation of data. Includes symbol perception and map design. Prerequisite: 320.

424-3 VECTOR BASED GEOGRAPHIC INFORMATION SYSTEMS (GIS).
Examination of vector topology, digital map transformation, manipulation, analysis, and composition. Prerequisites: 320, 418.

425-3 RASTER BASED GEOGRAPHIC INFORMATION SYSTEMS (GIS).
Overview of raster coordinate systems and technologies, digital processing remote sensing images and air photos. Prerequisites: 320, and MATH 120 or 125, or consent of instructor.

426-3 FIELD STUDY.
Field investigation of physical and cultural features of the environment. Prerequisite: advanced standing or consent of instructor.

427-1 to 9 INTERNSHIP.
Work experiences in public or private agencies. May be repeated to a maximum of 9 hours. Prerequisite: major with senior standing or consent of instructor.

428-1 to 9 TRAVEL STUDY COURSE.
Enrichment through travel, supervised study, and readings on areas visited. May be repeated to a maximum of 9 hours.

430-3 to 9 TOPICS IN REGIONAL GEOGRAPHY.
Physical settings and geographic patterns of human activities with area descriptions of a specific region stressing analysis and synthesis of human and environmental relationships. Prerequisite: major with senior standing or consent of instructor.

440-3 TEACHING OF GEOGRAPHY.
Methods and techniques of teaching geography in primary and secondary classroom situations. Emphasis on teaching devices, illustrative materials, literature. Prerequisite: junior standing.

441-3 TEACHING OF PHYSICAL GEOGRAPHY.
Methods and techniques of teaching physical aspects of geography in primary and secondary classroom situations. Emphasis on teaching devices, illustrative materials, literature. Prerequisite: junior standing.

450-3 to 9 TOPICS IN GEOGRAPHY.
Specific topics based upon faculty expertise. May be repeated to a maximum of 9 hours. Prerequisites: major with senior standing in the geography program and consent of instructor.

490-1 to 3 TUTORIAL IN GEOGRAPHY.
Individual and small group conferences with faculty to examine geographic topics. May be repeated to a maximum of 6 hours. Prerequisite: consent of adviser and instructor.

GERMAN

101-4 ELEMENTARY GERMAN.
[SKILLS] Listening, speaking, reading, and writing. Culture of German-speaking countries. Lab included.

102-4 ELEMENTARY GERMAN.
[SKILLS, IC] Continuation of 101. Lab included. Prerequisite: 101 or placement testing.

104-8 ELEMENTARY GERMAN.
[SKILLS, IC] Intensive instruction in listening, speaking, reading, and writing. Culture of German-speaking countries. Lab included. Equivalent to 101 and 102. Must enroll for all 8 hours credit. Check with department chairperson to determine when course will be offered.

201-4 INTERMEDIATE GERMAN.
[Adv.FAH] Continued practice in listening, speaking, reading, and writing. Grammar review. Cultural and literary readings, compositions. Lab included. Prerequisite: 102 or 104 or placement testing.

202-4 INTERMEDIATE GERMAN.
[Adv.FAH] Continuation of 201. Lab included. Prerequisite: 201 or placement testing.

220-3 INTERMEDIATE GERMAN CONVERSATION.
Practice in intermediate-level conversation. Focus on pronunciation and fluency. Prerequisite: 102 or placement testing.

301-4 ADVANCED GERMAN.
In-depth grammar review. Composition and conversation. Lab included. Prerequisite: 202 or placement testing.

302-4 ADVANCED GERMAN.
Selected topics in grammar, readings, and composition. Lab included. Prerequisite: 301 or consent of instructor.

303-3 GERMAN LANGUAGE STRUCTURE.
Technical aspects of German language. Prerequisite: 202 or consent of instructor.

304-3 GERMAN IN COMMERCE AND GOVERNMENT.
Selections from publications related to German commerce and government. Prerequisite: 202 or consent of instructor.

305-3 TECHNICAL GERMAN.
Contrastive analysis; reading skills in scientific and other technical fields. Prerequisite: 202 or consent of instructor.

311-3 GERMAN CULTURE.
[Adv.FAH, IC] Significant aspects of German culture; their development and manifestation in contemporary Germany. Prerequisite: 202 or consent of instructor.

351-3 SURVEY OF GERMAN LITERATURE: MIDDLE AGES THROUGH ROMANTICISM.
[Adv.FAH, IC] Selected readings, literary and cultural background. Prerequisite: 202 or consent of instructor.

352-3 SURVEY OF GERMAN LITERATURE: REALISM TO THE PRESENT.
[Adv.FAH, IC] Selected readings, literary and cultural background. Prerequisite: 202 or consent of instructor.

353a-c-3 each SURVEY OF A GERMAN GENRE.
[Adv.FAH, IC] (a) Poetry; (b) Novelle; (c) Drama. Selected readings; literary and cultural background. Prerequisite: 202 or consent of instructor.

400a,b-2 each SENIOR ESSAY IN GERMAN.
Supervised (a) research; (b) preparation of an extensive scholarly paper in German. NOT FOR GRADUATE CREDIT. Prerequisite: 202.

401-3 DEVELOPMENT OF GERMAN STRUCTURE.
[Adv.FAH] Historical development of German language; how modern German structure came into being in standard and main dialects. NOT FOR GRADUATE CREDIT. Prerequisite: 202 or consent of instructor.

402-3 BUSINESS GERMAN.
[Adv.FAH] Everyday business practices in Germany. Specialized vocabulary, correspondence, cultural background. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

411-3 GERMAN CIVILIZATION.
[Adv.FAH, IC] German-speaking areas of the world; anthropological and social aspects of various cultures. Prerequisite: senior standing in German.

452-3 FAUST.
[Adv.FAH, IC] Goethe's masterpiece, its background, meaning, and impact on world literature; life and times of Goethe. Prerequisite: 301 or consent of instructor.

453-3 SEMINAR IN GERMAN LITERATURE.
[Adv.FAH, IC] Selected German literary masterpieces organized by theme, historical period, literary movement, or other criteria. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

454-2 to 4 SEMINAR.
[Adv.FAH] Critical and analytical study of selected topics of German literature or literary criticism. May be repeated to a maximum of 4 hours provided that no topic is repeated.

499-3 READINGS IN GERMAN.
Selected areas of German language, literature, and culture. Individual work or small groups supervised by one or more members of German faculty. Prerequisites: senior standing and consent of instructor.

GREEK

101-4 INTRODUCTION TO GREEK.
[SKILLS] Grammar and vocabulary of ancient Greek within context of Greek culture. Reading knowledge through texts adapted from classical authors. Lab included.

102-4 INTRODUCTION TO GREEK.
[SKILLS, IC] Continuation of 101. Lab included. Prerequisite: 101.

201-4 INTERMEDIATE GREEK.
[Adv.FAH] Development of reading facility. Reading of selected masterpieces in history, poetry, and philosophy. Lab included. Prerequisite: 102 or equivalent.

202-4 INTERMEDIATE GREEK.
[Adv.FAH] Continuation of 201. Lab included. Prerequisite: 102 or equivalent.

499a-f-4 each READINGS IN ANCIENT GREEK.
(a) Development of lexical and structural competence; (b) Continuation of a; (c) Selected masterpieces of literature; (d) History; (e) Poetry; (f) Philosophy. A,b,c must be taken in sequence and are prerequisites to d,e, or f which may be taken out of sequence with consent of instructor. Individual segments may not be repeated for credit. Prerequisite: for a,b,c, consent of instructor.

GUIDANCE

400-3 EDUCATIONAL MEASUREMENTS.
Philosophy and techniques with emphasis in statistical foundations; test construction; use of teacher-made tests and standardized tests. NOT FOR GRADUATE CREDIT.

HEALTH EDUCATION

201-3 HEALTHFUL LIVING.
Personal and community health; scientific health information as a basis for developing wholesome health attitudes and practices.

205-3 PRINCIPLES AND FOUNDATIONS OF HEALTH EDUCATION.
History and philosophy of health education; theory and practice of health education programs; role of the professional in various health promotion settings.

250-3 MOOD MODIFIERS.
Drug and non-drug alternatives that modify mood and behavior; factors influencing use, psychological effects, legal control, and teaching strategies. Prerequisite: 201 or consent of instructor.

302-3 DRIVER EDUCATION AND TRAINING.
Preparation for teaching driver education and training in secondary school. Not open to those wanting to learn to drive. Prerequisite: valid driver's license.

313-3 PRINCIPLES OF ACCIDENT PREVENTION.
Accident causation and related safety procedures including home, school, occupations, and recreational. Methods of safety education.

334-2 FIRST AID.
American National Red Cross Advanced First Aid course. Leads to Advanced First Aid and Cardio-Pulmonary Resuscitation (CPR) certification.

350-3 HEALTH EDUCATION IN THE ELEMENTARY SCHOOL.
Teacher's role in all phases of school health program; appraisal and screening, referral, safety, health planning, curriculum integration, teaching strategies. Prerequisite: 201 or consent of instructor.

355-3 COMMUNITY HEALTH.
Role of community agencies and organizations in health promotion. Relationships of local, state and national health agencies; examination of health educators's role. Prerequisite: 201 or consent of instructor.

360-3 NUTRITION, EXERCISE, AND WEIGHT CONTROL.
Relationship among nutritional needs, exercise, and weight control as preventative measures toward obesity, diabetes, heart disease, cancer, and other health problems. Teaching concerns and approaches. Prerequisite: 201 or consent of instructor.

390-3 THEORY OF PRACTICE IN COMMUNITY HEALTH EDUCATION.
Explores basic community organization, educational and theoretical concepts and methodologies of professional practice in community health education. Prerequisites: 205 and 355, or consent of instructor.

391-3 PROGRAM PLANNING AND EVALUATION IN HEALTH EDUCATION.
Principles and approaches to planning; implementing and evaluating health education programs. Identification and utilization of selected models and assessment strategies. Prerequisite: 390.

400-3 THE HIGH RISK CHILD.
Assessment, intervention and prevention programs for high risk children and adolescents. Role of schools and communities in promoting and maintaining child health. NOT FOR GRADUATE CREDIT.

405-3 HEALTH BEHAVIOR AND COUNSELING.
Theories of health behavior and behavior change. Exploration of helping role as it relates to health behavior, health assessment analysis, decision making, problem solving, referral skills. NOT FOR GRADUATE CREDIT. Prerequisite: 205 or consent of instructor.

410-3 ENVIRONMENTAL HEALTH EDUCATION.
People's relationship with their environment; impact relationship has on status of one's health; individual and community roles in promotion of environmental health. NOT FOR GRADUATE CREDIT. Prerequisite: 201 or consent of instructor.

415-3 WORKSHOP IN DRIVER EDUCATION AND TRAFFIC SAFETY.
Safety regulations, demonstration, field trips, supervised research in special areas related to driver education and traffic safety. NOT FOR GRADUATE CREDIT. Prerequisite: 302 or consent of instructor.

443-3 METHODS AND MATERIALS IN DRIVER EDUCATION.
Strategies for teaching, discussion or research; accident statistics; secondary school programs; testing and demonstrations in the car. NOT FOR GRADUATE CREDIT. Prerequisite: 302 or consent of instructor.

445-1 DRIVER SIMULATION.
Laboratory method; programmed group instructional system requiring student reaction with filmed driving situations. NOT FOR GRADUATE CREDIT. Prerequisite: 302 or consent of instructor.

455-3 INTRODUCTION TO EPIDEMIOLOGY AND BIOSTATISTICS.
Causes, prevention, control of communicable, chronic and degenerative diseases in various community settings. Examination of statistical measures and methods for organizing vital statistics. NOT FOR GRADUATE CREDIT. Prerequisites: 201 and 355, or consent of instructor.

460-3 METHODS AND MATERIALS IN SECONDARY SCHOOL HEALTH EDUCATION.
Fundamental processes in teaching health education at secondary level. NOT FOR GRADUATE CREDIT. Prerequisites: 201, 205, and junior status or consent of instructor.

462-1 to 3 SPECIAL TOPICS IN HEALTH EDUCATION.
Relevant health issues; topic and credit hours announced. May be repeated to a maximum of 6 hours so long as no topic is repeated. Prerequisite: 201 or consent of instructor.

463-3 CONSUMER HEALTH.
Consumer health issues related to individual, community, and society. NOT FOR GRADUATE CREDIT.

464-3 DEATH EDUCATION.
Methods, resources and professional concerns. Strategies for dealing with the ethical, social and psychological dimensions of teaching about death and dying. NOT FOR GRADUATE CREDIT. Prerequisites: 201 or consent of instructor, Interdisciplinary Studies 342 is recommended.

465-3 CURRICULUM DEVELOPMENT IN HEALTH EDUCATION.
Organizational strategies, needs assessment, appraisal of current curriculum approaches; utilization of resources, objectives, content, implementation, evaluation techniques in simulated school setting. NOT FOR GRADUATE CREDIT. Prerequisites: 201, 205 and junior standing; or consent of instructor.

470-3 SEXUALITY EDUCATION.
Individual, family, school, and community concerns and approaches. Physiological, psychosocial and environmental factors affecting sexuality as related to learning experience. NOT FOR GRADUATE CREDIT. Prerequisite: 201 or consent of instructor.

471-3 THE SCHOOL HEALTH PROGRAM.
Principles of organization, administration, and evaluation. Role of health educator regarding health services, environment, and instruction. NOT FOR GRADUATE CREDIT. Prerequisites: 201, 205 and junior standing; or consent of instructor.

480-1 to 3 ADVANCED CONCEPTS OF SAFETY.
Special topics course focusing on one or more elements of home, school, occupational, recreational, or community safety. Can be repeated to a maximum of 6 hours. NOT FOR GRADUATE CREDIT. Prerequisite: 313 or consent of instructor.

485-3 CURRICULUM DEVELOPMENT IN DRIVER EDUCATION.
Structure, content, and approaches of curriculum development as applied to traffic safety based upon Highway Transportation System Operation Task Analysis. NOT FOR GRADUATE CREDIT. Prerequisite: 302 or consent of instructor.

489-1 to 3 INDEPENDENT STUDY IN HEALTH EDUCATION.
Independent projects or readings under the supervision of a health education faculty member. May be repeated to a maximum of 6 hours. NOT FOR GRADUATE CREDIT. Prerequisite: Consent of instructor.

499-3 to 12 FIELD STUDY IN HEALTH EDUCATION.
Supervised experiences in health agencies, clinics, government agencies and other professional settings. May be repeated to a total of 15 hours. NOT FOR GRADUATE CREDIT. Prerequisite: Consent of instructor and Program Coordinator.

HISTORY

111a,b-3 each INTRODUCTION TO THE HISTORY OF WESTERN CIVILIZATION.
[INTRO, Adv.SS, (a)IC, (b)II] (a) The western world from the Renaissance to the Age of Napoleon; (b) The western world from the Age of Napoleon to the present. Any course taken in the History 111 a-b sequence may fulfill either an Introductory or an Advanced Social Science requirement in General Education. No single course in the sequence can fulfill both Introductory and Advanced course requirements.

112a,b-3 each WORLD HISTORY.
[Adv.SS, (a)IC, (b)II] (a) Topics in world civilization before 1500; (b) Topics in world civilization 1500 to the present.

113-3 SURVEY OF ANCIENT HISTORY.
[Adv.SS, IC] Western civilization from its origins to 285 A.D. Includes history of Ancient Near East, Greece and Rome.

114-3 SURVEY OF MEDIEVAL HISTORY.
[Adv.SS, IC] The Middle Ages from 285 A.D. to 1500 A.D. History of Medieval Europe, its civilization and interaction with the non-European world.

130-3 HISTORY OF BLACK AMERICA.
[Adv.SS, IGR] Social, economic, and political experience from colonial era to present; African antecedents.

200-3 UNITED STATES HISTORY AND CONSTITUTION: TO 1877.
[Adv.SS] Political, social, economic and constitutional development. Meets Constitution requirement.

201-3 UNITED STATES HISTORY AND CONSTITUTION: 1877-PRESENT.
[Adv.SS] Political, social, economic and constitutional development. Meets Constitution requirement.

300-1 to 2 SPECIAL TOPICS.
[Adv.SS] Single topic from areas of political, economic and social history. May be repeated to a maximum of 6 hours provided no topic is repeated.

301-3 HISTORICAL METHODS.
[Adv.SS] Introduction to historiography, philosophy of history, historical methodology. Required of all undergraduate students with major in history. Prerequisite: junior standing.

303-3 HISTORY OF THE ANCIENT NEAR EAST.
[Adv.SS, IC] Ancient Near East to 330 B.C.

304-3 HISTORY OF GREECE.
[Adv.SS, IC] From origins of ancient Greece to 30 B.C.

306a,b-3 each HISTORY OF ROME.
[Adv.SS, (a,b)IC] (a) Republic from origins to 30 B.C.; (b) Principate, 30 B.C.- 476 A.D.

308a,b-3 each MEDIEVAL HISTORY.
[Adv.SS, (a,b)IC] (a) Middle Ages to 1100 A.D.; (b) Middle Ages, 1100-1500.

313-3 WITCHCRAFT, MAGIC AND THE OCCULT.
[Adv.SS] General theory of magic; history of magic and witchcraft in the western world.

315-3 HISTORY OF RELIGION IN EUROPE.
[Adv.SS, IC] Religious institutions, ideas and practices in European history from antiquity to the present.

318a,b-3 each HISTORY OF RUSSIA.
[Adv.SS, (a)IC, (b)II] (a) 1800-1914: Late Empire.; (b) Russia since 1914.

320-3 THE RENAISSANCE IN EUROPE.
[Adv.SS] Origins and growth of the Renaissance after 1350 in the Italian city-states. Its subsequent spread to Northern Europe.

321-3 REFORMATION EUROPE, 1500-1648.
[Adv.SS] History of sixteenth-century Europe; social, political and cultural dimensions of Protestant and Catholic Reformations, Witch-hunts, Scientific Revolution and Wars of Religion.

322-3 HISTORY OF ITALY.
[Adv.SS, IC] People, movements, and ideas leading to formation of Italian nation; Italy in the world wars and thereafter.

330-3 HISTORY OF ILLINOIS.
[Adv.SS] Political, social, economic and cultural history from earliest times to present.

334a,b-3 each THE WESTWARD MOVEMENT IN AMERICAN HISTORY.
[Adv.SS] Immigration, settlements, exploitation of American land since European conquest; influence on national, economic, political, cultural and social policies. (a) To 1845; (b) Since 1845.

338-3 THE CIVIL WAR AND RECONSTRUCTION.
[Adv.SS] Narrative and interpretation of the era 1850-1877; causes of the war, major military campaigns and Reconstruction.

340-3 BLACK FREEDOM MOVEMENT, 1955-75.
[Adv.SS, IGR] Civil Rights and Black Power Movements' dismantling of the old structure of American apartheid. Its transformation into advanced racism. Prerequisite: 130 or junior standing.

342-3 HISTORY OF RELIGION IN AMERICA.
[Adv.SS] Religious institutions, ideas and practices in American history.

344a,b-3 each HISTORY OF AMERICAN DIPLOMACY.
[Adv.SS] Problems and trends in U.S. diplomatic history. Foreign and domestic pressures affecting policy making. (a) To 1919; (b) Since 1919. Prerequisites: (a) 200, (b) 201; or consent of instructor.

345a,b-3 each HISTORY OF AMERICAN BUSINESS.
[Adv.SS] Development of capitalism, corporations, stock markets, agriculture, banks, unions and international trade. (a) To Civil War; (b) 1860s to present.

352a,b-3 each HISTORY OF AFRICA.
[Adv.SS, (a)IC, (b)II] (a) Africa south of the Sahara, prehistoric to colonial times; (b) Africa south of the Sahara, colonial times to present.

354a,b-3 each HISTORY OF THE ARAB WORLD.
[Adv.SS, (a)IC, (b)II] (a) Early Islamic civilization, 570-1500; (b) The Islamic Middle East from 1500 to modern times.

356a,b-3 each HISTORY OF CHINA.
[Adv.SS, (a)IC, (b)II] (a) Ancient times to 1644. (b) Modern China: 1644 to present.

358-3 HISTORY OF JAPAN.
[Adv.SS, II] Ancient times to present. Emphasis on feudal traditions, response to Western impact, modern transformation.

360a,b-3 each HISTORY OF LATIN AMERICA.
[Adv.SS, (a)IC, (b)II] Emphasis on history of Mexico, Brazil, Argentina, Chile, Peru, and Colombia. (a) From pre-Columbian civilizations to the mid-19th century; (b) From mid-19th century until the present.

400-3 TOPICS IN HISTORY.
[Adv.SS] Selected topics such as biography of a major figure; recent themes in world history; etc. May be repeated to a maximum of 9 hours provided no topic is repeated.

401-2 HISTORICAL RESEARCH.
Rules of historical research applied to a selected topic. Required of all undergraduate students with major in history. Prerequisite: 301.

404a,b-3 each TOPICS IN MEDIEVAL SOCIAL, RELIGIOUS AND INTELLECTUAL HISTORY.
[Adv.SS, (a,b)IC] Historiographical problems in the evaluation of medieval society, culture and ritual: (a) 400-1000 C.E.; (b) 1000-1500 C.E.

406-3 AGE OF ABSOLUTISM AND ENLIGHTENMENT.
[Adv.SS, IC] Rise of the modern state and influence of the Enlightenment in France, Spain, Prussia, Austria, and Russia, 1648-1789.

408a-c-3 each HISTORY OF ENGLAND: 1509 TO PRESENT.
[Adv.SS, (c)II] (a) Reformation and Revolution, 1509-1714; (b) Birth and growth of Industrial England, 1714-1867; (c) Birth and growth of the Welfare State, 1867 to present.

410-1 to 3 DIRECTED READING.
Supervised reading for students with sufficient background. Prerequisites: minimum of 3.0 average in history, consent of instructor. NOT FOR GRADUATE CREDIT.

412-3 THE FRENCH REVOLUTION.
[Adv.SS, IC] Passing of feudalism in France; background and development of the revolutionary movement and the Napoleonic period.

413-3 HISTORY OF MODERN FRANCE.
[Adv.SS, II] Political, social, intellectual, and economic history of France from 1815 to present.

415-3 MODERN GERMAN HISTORY.
[Adv.SS, II] German history from 1871 to present, including Germany under Bismarck, World War I, the Nazi period, World War II, division and reunification. Prerequisite: 111b.

416-3 WORLD WAR I AND ITS AFTERMATH: 1914-1921.
[Adv.SS] War's origins, course, and results; military action as well as political, social, economic, and cultural effect on home fronts, war and world revolution, 1917-1921.

418-3 WORLD WAR II.
[Adv.SS] Survey of causes and multiple aspects of the Second World War, emphasis on military operations.

420a,b-3 each EUROPEAN SOCIAL, CULTURAL AND INTELLECTUAL HISTORY.
[Adv.SS, (a)IC, (b)II] (a) Renaissance to French Revolution; (b) French Revolution to present.

422a-c-3 each LATE MODERN EUROPE.
[Adv.SS, (a,b)IC, (c)II] (a) Vienna Congress to the Great War; (b) World War I through World War II; (c) Europe Since World War II. Prerequisites: (a) 111a, (b) 111b, (c) 111b; or consent of instructor.

424-3 TOPICS IN EAST EUROPEAN HISTORY.
[Adv.SS, II] Selected topics such as the rise of nationalism, World War I, the Cold War, etc..

426-3 TOPICS IN RUSSIAN AND SOVIET HISTORY.
[Adv.SS, II] Selected topics in political, cultural and economic history of Russia. May be repeated to a maximum of 6 hours provided no topic is repeated.

428-3 TOPICS IN EUROPEAN WOMEN'S HISTORY.
[Adv.SS, II] (Same as WMST 428) Selected topics in women's history since the Middle Ages. Chronological framework will vary from semester to semester. May be repeated to a maximum of 6 hours provided no topic is repeated.

430-3 AMERICAN COLONIAL HISTORY.
[Adv.SS] Founding of colonies in British America and their development to 1763.

431-3 AMERICAN REVOLUTION AND CONSTITUTION.
[Adv.SS] Conflicting forces and events that led to the American Revolution, and to the Constitution. Meets Constitution requirement.

432-3 EARLY AMERICAN REPUBLIC: 1789-1845.
[Adv.SS] Incorporating perspectives of ethnicity, gender, and social groupings; a topical approach to social, economic and political issues in the United States. Prerequisite: 200 or consent of instructor.

434a,b-3 each TWENTIETH CENTURY AMERICAN HISTORY.
[Adv.SS] Politics, culture and economics in an urban industrial society. (a) 1896-1945; (b) 1945 to present. Prerequisites: (a) 201, (b) 201; or consent of instructor.

436-3 HISTORY OF THE SOUTH.
[Adv.SS] Survey of regional themes from colonial times to present.

438a,b-3 each INTELLECTUAL HISTORY OF THE UNITED STATES.
[Adv.SS] By examining individual thinkers presenting diverse perspectives the course takes a topical approach to social thought in the United States. (a) to 1860; (b) 1860 to present. Prerequisites: (a) 200, (b) 201; or consent of instructor.

440-3 WOMEN IN AMERICAN SOCIAL HISTORY.
[Adv.SS, IGR] (Same as WMST 440). Women from various social classes, ethnic and racial groups, geographic regions. Social institutions: family, church, schools, etc. Colonial era to present.

442-3 THE BLACK URBAN EXPERIENCE.
[Adv.SS, IGR] Social, economic, and political history. Emphasizes community life and development, as well as race relations.

446a,b-3 each UNITED STATES MILITARY HISTORY.
[Adv.SS] Topics such as the role of the President as commander-in-chief, the military and foreign policy, the military on the frontier, etc. (a) History of the military from colonial period to 1900; (b) U.S. military in the 20th century.

454-3 HISTORY OF THE ARAB-ISRAELI CONFLICT.
[Adv.SS, II] Origins and development of Zionism and Palestinian Nationalism. Relations between Israel, Palestinians and the Arab States.

460-3 HISTORY OF MEXICO.
[Adv.SS, II] Mexican history from the winning of independence to present. Special attention will be devoted to relations with the U.S.

461-3 CENTRAL AMERICA AND THE CARIBBEAN IN THE 20TH CENTURY.
[Adv.SS, II] History of Haiti, Cuba, Jamaica, Panama, Nicaragua, Costa Rica, and Guatemala; emphasis on ethnic and cultural diversity and role of the U.S. in the region.

HUMANITIES

150-1 BASICS OF ESPERANTO.
Introductory vocabulary and grammar of International Language developed by Zamenhof.

310a,b-3 each ESPERANTO.
[II] Reading, writing, speaking, and understanding International Language developed by Zamenhof. Must be taken in sequence.

400-3 SYMPOSIUM IN THE HUMANITIES.
Subjects not covered by the standard curriculum. May be repeated up to 6 hours. Credit toward concentration at the discretion of the department. Prerequisite: senior standing or consent of instructor.

450-3 CHILDREN AND DEATH.
Mortality, dying, bereavement as related to childhood and adolescence; socio-cultural and developmental context; guidelines and resources for caregivers, counselors, educators, parents.

460-3 HOSPICE.
Hospice philosophy and programs of care for dying persons and their families both before and after death.

470-3 LOSS, GRIEF, AND BEREAVEMENT.
Detailed study of pre-death and post-death experiences of grief and mourning.

490-1 to 3 TOPICS IN DEATH AND DYING.
Specified topics in depth; varied content; may be repeated to a maximum of 12 hours without repetition of topic.

INDUSTRIAL ENGINEERING

199-0 INDUSTRIAL ENGINEERING CO-OPERATIVE EDUCATION I.
First period of a five year supervised academic/work experience with an agency or firm that uses engineers. Graded as satisfactory or unsatisfactory. Prerequisites: sophomore standing in industrial engineering and consent of the chairperson/program director.

299-0 INDUSTRIAL ENGINEERING CO-OPERATIVE EDUCATION II.
Second period of a five year supervised academic/work experience with an agency or firm that uses engineers. Graded as satisfactory or unsatisfactory. Prerequisites: sophomore or junior standing in industrial engineering and consent of the chairperson/program director.

335-3 INTRODUCTION TO INFORMATION PROCESSING SYSTEMS.
Systems engineering methodology applied to the design of information processing systems (operating systems, file handling, database management systems, spreadsheets, etc.) to support engineering decision making. Prerequisites: CS 140 or CS 141 or equivalent, and upper-division standing in industrial engineering or consent of instructor.

345-3 ENGINEERING ECONOMIC ANALYSIS.
Introduction to engineering cost and decision analysis. Utilizing the principles of economic analysis for choice of engineering alternatives and engineering systems. Prerequisite: Upper-division standing in engineering or consent of instructor.

365-3 QUANTITATIVE METHODS IN INDUSTRIAL ENGINEERING.
Selected topics in probability and statistical methods with their application in design and analysis of production, manufacturing, and quality control systems. Prerequisites: STAT 380 or equivalent and upper-division standing in industrial engineering.

370-3 MANUFACTURING PROCESSES.
Properties of engineering metals and alloys, heat treatment, measurement and inspection, casting, forging, metal cutting, nontraditional machining processes, cutting tools. Prerequisites: Upper-division standing in industrial engineering and consent of instructor.

392-3 to 6 READINGS IN INDUSTRIAL ENGINEERING.
Supervised reading in selected industrial engineering topics. Prerequisites: Junior standing in industrial engineering and consent of instructor.

399-0 INDUSTRIAL ENGINEERING COOPERATIVE EDUCATION III.
Third period of a five year supervised academic/work experience with an agency or firm that uses engineers. Graded as satisfactory or unsatisfactory. Prerequisites: sophomore or junior standing in industrial engineering and consent of the chairperson/program director.

415-3 OPERATIONS RESEARCH - DETERMINISTIC MODELS.
(Same as OR 440) Linear programming: problem formulation, simplex algorithm, transportation and network problems, duality theory, sensitivity theory. Prerequisites: Knowledge of FORTRAN, MATH 250 or consent of instructor.

451-3 METHODS DESIGN AND WORK MEASUREMENTS.
(2 hours lecture, 2 hours laboratory) Design of work systems. Methods and techniques employed in measuring work. Current philosophy underlying improvement in work methods and procedures used to measure work performed. NOT FOR GRADUATE CREDIT. Prerequisites: STAT 380 and upper-division standing in industrial engineering or consent of instructor.

458-3 HUMAN FACTORS ENGINEERING.
Analysis of the limitations of humans in man-machine systems to increase productivity and meet physiological needs of system participants. Principles are applied through design problems. NOT FOR GRADUATE CREDIT. Prerequisites: 451 and upper-division standing in industrial engineering or consent of instructor.

461-3 OPERATIONS RESEARCH - STOCHASTIC MODELS.
(Same as OR 441) Probability models, elementary queuing theory with single or multiple servers. Markov processes and models, decision theory. Prerequisite: STAT 380 or STAT 480.

463-3 RELIABILITY ENGINEERING.
(Same as STAT 484) Probabilistic models for the reliability of coherent systems. Statistical models for lifetimes of components and repairable systems. Reliability estimation and prediction. MIL standards. Prerequisite: 365 or STAT 480.

464-3 APPLICATIONS OF OPERATIONS RESEARCH.
Applications of operations research through use of cases. Cases are equivalent to those normally experienced by beginning professionals. NOT FOR GRADUATE CREDIT. Prerequisites: 365, 415, 468 and upper-division standing in industrial engineering.

465-3 DESIGN AND CONTROL OF QUALITY SYSTEMS.
(Same as STAT 488). Quality design by experimental design, determination of process capability, quality control using statistical control charts, acceptance sampling. MAY NOT BE USED FOR GRADUATE CREDIT IN THE SCHOOL OF ENGINEERING. Prerequisite: 365 or STAT 480.

468-3 OPERATIONS RESEARCH - SIMULATION.
(Same as OR 442) Simulation models using a high-level simulation programming language; applications in production, inventory, queuing, other models. INDUSTRIAL ENGINEERING MAJORS MUST ENROLL IN 468. Prerequisite: 365 or 461.

470-3 MANUFACTURING SYSTEMS.
Design and analysis of manufacturing systems including automated flow lines, assembly systems, material handling systems. Group technology, fundamentals of CAD/CAM/CAPP, numerical control, steady state optimal control. NOT FOR GRADUATE CREDIT. Prerequisites: 365, 370 and upper-division standing in industrial engineering or consent of instructor.

476-3 ROBOTICS AND AUTOMATED SYSTEMS.
(2 hours lecture, 2 hours laboratory) Application of robot theory integrated with automated manufacturing systems. Emphasis on design laboratory exercises. Prerequisites: 470; CS 140 or CS 141 or equivalent; and upper-division standing in industrial engineering.

483-3 PRODUCTION PLANNING AND CONTROL.
(2 hours lecture, 2 hours laboratory) Development and applications of models and techniques for designing integrated production systems to manage material, service, and information flows in response to fluctuating market demands. NOT FOR GRADUATE CREDIT. Prerequisites: 365, 415, 451, and upper-division standing in industrial engineering or consent of instructor.

484-4 FACILITIES ANALYSIS AND DESIGN.
Theory and Methods of Facilities layout and planning. Senior design project requiring the integration of available resources to achieve an effective facility design. NOT FOR GRADUATE CREDIT. Prerequisite: senior standing in industrial engineering or consent of instructor.

490-3 INDUSTRIAL ENGINEERING DESIGN.
Individual laboratory projects of a research, design, or development nature which apply to engineering systems. NOT FOR GRADUATE CREDIT. Prerequisites: Senior standing in industrial engineering and consent of instructor.

492-3 SPECIAL TOPICS IN INDUSTRIAL ENGINEERING.
Selected topics of current interest in industrial engineering and related fields. May include individual research projects for students with honors standing. NOT FOR GRADUATE CREDIT. Prerequisites: Senior standing in industrial engineering and consent of instructor.

497-3 KNOWLEDGE-BASED SYSTEMS.
(Same as CE 497, EE 487) Engineering-oriented perspective on artificial intelligence (AI) technology. General AI concepts and specifically knowledge-based (expert) systems applied to engineering problem-solving. Prerequisites: CS 140, CS 141 or equivalent, senior standing or consent of instructor.

INSTRUCTIONAL TECHNOLOGY

410-3 MEDIA IN INSTRUCTION.
Designing lessons with multi-sensory approach. Demonstrations and hands-on experiences with audio, video projection, and computer equipment. Emphasis on software evaluation and utilization.

435-3 TEACHER-MADE MATERIALS.
Development of instructional materials which integrate various media. Emphasis on teacher-made materials, visual communication, computer graphics.

442-3 MEDIA SELECTION.
Evaluative analysis and criteria for selection aids and reviewing sources. Includes principles and theory of selection, assessment and policy for media selection, and collection development.

443-3 INSTRUCTIONAL MEDIA FOR CHILDREN AND YOUNG ADULTS.
Survey of media for preschool children and young adults. Includes comparison and evaluation of major writers, artists, illustrators and designers of media and identification of established genres.

447-3 BASIC REFERENCE SOURCES.
Selection, evaluation, and application of basic reference collections for today's informational needs. Includes encyclopedias, dictionaries, atlases, subject resources, and data bases for information retrieval.

448-3 INTRODUCTION TO CATALOGING AND CLASSIFICATION.
Principles and systems used in utilization of media and library materials. Includes AACR2, Dewey Decimal classification, subject headings, filing, on-line computer technology.

450-3 USING VIDEO FOR INSTRUCTION.
Instructional television as a medium for learning. Emphasis on delivery systems, including commercial, public, and satellite programs, and on teacher-produced instructional sequences.

481-3 MICROCOMPUTERS IN EDUCATION.
Research on and effective methods for using computers in an educational setting and a systematic framework for integrating computers into the curriculum. Prerequisite: Basic computer literacy.

482-3 INSTRUCTIONAL SOFTWARE DESIGN.
Design principles for computer-based instruction, emphasizing systematic analysis; current design issues; development techniques.

485-3 COMPUTER PROGRAMMING AND INSTRUCTION.
Issues in teaching and learning computer programming: instructional techniques; cognitive outcomes related to critical thinking and problem solving; curriculum integration.

490-1 to 6 SPECIAL TOPICS.
Varied content. Topics of immediate concern in instructional technology field. May be repeated once for a total of 6 hours.

INTERDISCIPLINARY STUDIES

Prerequisite for all IS courses: junior or senior standing.

GBA 300-3 FOUNDATIONS OF BUSINESS KNOWLEDGE.
See General Business Administration (GBA) for full course description.

322-3 ETHICS, BIOLOGY, AND SOCIETY.
A critical examination of some main ethical problems raised by contemporary biological science. Examples include genetic screening and testing, in vitro fertilization, and resource allocation. (Biology/Philosophy)

324-3 PEOPLES AND CULTURES OF THE EAST.
[IC] Key organization principles, religious and philosophical norms, social customs, aesthetic tastes of China, Japan and other selected Asian nations. (History/Philosophy).

326-3 MODERN LATIN AMERICA.
[II] A multi-disciplinary, team-taught introduction to modern nations of Latin America and Caribbean emphasizing history, literature, political economy, geography, anthropology. (Anthropology/Foreign Languages/Educational Leadership/History)

328-3 HISTORY AND SCIENCE.
Development of scientific questions in historical perspectives, relation of scientific concepts to development of culture, Ancient Greece to present. May count toward fulfillment of Interdisciplinary or Advanced Natural Science and Mathematics requirement, but not both. (History/Physics).

334-3 NATURAL RESOURCES: ISSUES AND CONFLICTS.
American land resource conservation, principles, practices and problems from the perspectives of biology, geography and earth science. (Public Administration/Earth Science)

335-3 EARLY ILLINOIS: ITS LAND AND PEOPLE.
Geology and geography of prehistoric/historic Indian cultures and European settlement before 1818. Use of visual materials demonstrate relationships between people and their physical environment. (Anthropology/Geography/History).

336-3 GLOBAL PROBLEMS AND HUMAN SURVIVAL.
[II] Threats to human survival from war, over-population, pollution, resource depletion, under-development, misuse of the oceans and new technologies plus how to deal with these threats. (Anthropology/Philosophy)

340-3 THE PROBLEM OF WAR AND PEACE.
[II] Basic concepts, historical background, causes of war, perspectives of major nations; contemporary ideological, economic, military, political, and legal aspects; proposals for controlling conflict. (History/Philosophy/Political Science/Psychology)

341-3 THE IMMIGRANT IN AMERICA.
Impact of immigrant groups on American social, political, and cultural patterns; assimilation, stereotyping, generational conflict, nativism. (English/History).

342-3 DEATH AND DYING.
Individual and cultural confrontations with mortality, demographic patterns; coping with terminal illness, hospice care, bereavement, definition and determination, euthanasia, suicide, children, valuational aspects, education. (Philosophy/Health Education/Nursing)

350-3 WOMEN IN SOCIAL INSTITUTIONS: A COMPARATIVE APPROACH.
[IGR] (Same as WMST 350) Historical, cultural, and social class differences in contexts of education, family, health care, economics, religion, politics. (Anthropology/Foundations of Education/History/Women's Studies)

360-3 SURVIVAL OF THE FITTEST.
The overlap of scientific thought and literary convention in Victorian times. Their relationship is emphasized through lectures, laboratories, and discussions. Prerequisite: Junior standing.

361-3 MUSIC: ART AND SCIENCE.
Relationship between science and art in music; pitch, overtones, scales, digital recording, and mathematical ratios in art and science. (Music/Computer Science)

363-3 LIVING ECOLOGICALLY.
[II] General principles of living system sustainability applied to organic chemicals, cell symbiosis, plants, animals, human families, cities, societies, and the world ecosystem. Prerequisite: junior or senior standing. (Biology/History/Sociology)

364-3 THE ATOMIC ERA: EUROPEAN REFUGEES, AMERICAN SCIENCE, AND THE BOMB.
[II, IC] Political events leading to the emmigration of European scientists to America before World War II; development of the atomic bomb; political and social ramifications of the atomic era: Includes lab. Prerequisite: Junior standing.

377-3 THE ARTS AND THE FRENCH REVOLUTION.
[IC] Brings together political, philosophical, and social history with cultural world of art, music and drama. Center of focus is the French Revolution of 1789. (History/Music).

380-3 SONG AND POETRY.
Survey of the creative relationship between composers' notes and poets' words. The choice of songs varies, always covering a wide range of periods and styles.

386-3 CYBERARTS: EXPLORING FINE ARTS AND COMPUTER TECHNOLOGY.
Explores relationships between the arts and computer technology. Investigates uses of technology in graphics, music, video, and literature; considers impact of the arts on technology. Computer lab work. (Theater and Dance/Computer Science). Prerequisites: CS 108, MIS 108, or equivalent, and junior standing.

388-3 ART AND POLITICS IN 19TH CENTURY FRANCE.
[II] 19th century France is shattered by industrialization, urbanization, commercialization. Course describes way art and politics put world back together or escape from it.

400-3 HISTORY, CULTURE AND LANGUAGE OF CHINA.
[IC] A travel study course in Chinese language, history, and culture offered in China. (Foreign Languages/History).

LATIN

101-4 INTRODUCTION TO LATIN.
[SKILLS] Grammar and vocabulary of classical Latin within context of Roman culture; reading knowledge through texts adapted from classical authors. Lab included.

102-4 INTRODUCTION TO LATIN.
[SKILLS, IC] Continuation of 101. Lab included. Prerequisite: 101.

201-4 INTERMEDIATE LATIN.
[Adv.FAH] Basic principles; reading selections from classical, medieval, and renaissance periods. Lab included. Prerequisite: 102 or equivalent.

202-4 INTERMEDIATE LATIN.
[Adv. FAH] Continuation of 201. Lab included. Prerequisite: 102 or equivalent.

499a-f-4 each READINGS IN LATIN.
(a) Learning language through selections from classical, medieval, and renaissance Latin; (b) Continuation of a; (c) Continuation of b; (d-f) Second-year level. Content varies with instructor. A,b,c must be taken in sequence and are prerequisite to d,e, or f which may be taken out of sequence with consent of instructor. Individual segments may not be repeated for credit. Prerequisite: for a,b,c, consent of instructor.

LIBERAL STUDIES

199-0 LIBERAL STUDIES COOPERATIVE EDUCATION.
Supervised work activity with agency, firm or organization, providing a learning environment in which theoretical models are implemented in the student's career area of interest. Students will receive a grade of pass or no credit. Prerequisite: consent of the dean.

299-0 LIBERAL STUDIES COOPERATIVE EDUCATION.
Supervised work activity with agency, firm or organization, providing a learning environment in which theoretical models are implemented in the student's career area of interest. Students will receive a grade of pass or no credit. Prerequisite: consent of the dean.

300-1 to 3 STUDENT COLLOQUIUM.
Student initiated, student developed, student conducted colloquium. Innovative and experimental participating course on approved topics not otherwise available. Prerequisites: sophomore standing, approval by the Dean of the College of Arts and Sciences.

399-0 LIBERAL STUDIES COOPERATIVE EDUCATION.
Supervised work activity with agency, firm or organization, providing a learning environment in which theoretical models are implemented in the student's career area of interest. Students will receive a grade of pass or no credit. Prerequisite: consent of the dean.

400-1 to 6 SENIOR PROJECT IN LIBERAL STUDIES.
Individually designed and supervised project, such as an internship, research/creative project, comprehensive exam, participatory seminars, etc. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing, consent of instructor, adviser, and program director.

MANAGEMENT

242-3 CONTRACTS AND AGENCY LAW.
Fundamentals of contract formation. Agency or employment law; relationship between employer and employee; OSHA and EEOC matters. Prerequisite: sophomore standing.

340-3 PRINCIPLES OF MANAGEMENT.
Introduction to management process. Importance of management to success of organizations; history of management; organizations as systems; decision-making; planning systems; organizational structure/design; control systems; managing human resources. Prerequisites: GBA 300 (or concurrent enrollment), ACCT 200.

341-3 ORGANIZATIONAL BEHAVIOR AND INTERPERSONAL SKILLS.
Knowledge and skill in application of behavioral science concepts to interpersonal; small group; intergroup; organizational-system issues. Prerequisite: 340.

430-3 HUMAN RESOURCE MANAGEMENT.
Knowledge of the fundamentals of human resource management. Focus on theory, practice and trends in development and effective utilization of human resources in organizations. Prerequisite: 341 or consent of instructor.

438-3 PROFESSIONAL SEMINAR IN HUMAN RESOURCE MANAGEMENT.
Advanced seminar in human resource management. Focus on contemporary issues in the area of personnel and human resource management. Prerequisite: 430 or consent of instructor.

439-3 HUMAN RESOURCE SELECTION AND COMPENSATION MANAGEMENT.
Theory and practice of recruitment; placement; planning; selection. Development and administration of compensation and benefits programs. Special attention given to current issues. Prerequisite: 430 or consent of instructor.

441-3 STRATEGIC MANAGEMENT.
Capstone course using top management perspective to develop comprehensive, integrative analysis of organizations and environments as basis for development, implementation, evaluation, control of overall strategy. Prerequisites: completion of BSBA core requirements or concurrent enrollment in final core requirements and consent of instructor.

451-3 MANAGING ORGANIZATIONAL CHANGE AND INNOVATION.
Knowledge of organizational change with emphasis on diagnostic skills necessary for effective management of planned organizational change. Individual and group leadership approaches to increase effectiveness. Prerequisite: 341 or consent of instructor.

461-3 MANAGING IN THE GLOBAL ECONOMY/INTERNATIONAL MANAGEMENT.
[II] Management of business in other countries and in global economy. Interaction of political, cultural, social, legal and economic forces in international business context. Prerequisite: 341 or consent of instructor.

475-3 ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT.
Formation of new enterprises and management of small business. Focus on identifying opportunities; starting a new enterprise; operational and organizational aspects of small business management. Prerequisite: 341 or consent of instructor.

476-3 ENTREPRENEURSHIP PRACTICUM.
Practicum in small business management. Application of knowledge from 475 to actual small business problems. Students work with local small businesses under faculty direction. NOT FOR GRADUATE CREDIT. Prerequisite: 475.

485-3 MANAGING QUALITY AND PERFORMANCE.
Current topics in management, with special emphasis on designs, programs and techniques for managing quality and performance improvements. Advanced readings and cases on innovative business practices. Prerequisite: 341 or consent of instructor.

490-1 to 3 INDEPENDENT STUDY IN MANAGEMENT.
Topical areas of concentrated study under faculty direction. Allows for advanced, more in-depth exploration of management issue than in regular courses. NOT FOR GRADUATE CREDIT. Prerequisites: 341 and detailed proposal approved by supervising faculty member and chairperson.

495-3 SPECIAL TOPICS IN MANAGEMENT.
Advanced and specialized topics of current concern to field of management. Depending on topic of course, chairperson can approve course as a substitute for a BSBA specialization course. Prerequisites: 341 and consent of instructor.

MANAGEMENT INFORMATION SYSTEMS

108-3 APPLIED COMPUTER CONCEPTS.
[SKILLS] Computer technology's impact on individuals and our world. Finding and accessing worldwide sources of information; presenting ideas orally, graphically, and in writing.

260-3 BUSINESS COMPUTER PROGRAMMING.
Business-oriented computer programming using listings, computations, comparisons, tables/arrays, files. Students apply logical methods to the design of programs. Prerequisite: CS 140 or a previous course in computer programming.

270-3 STRUCTURED SYSTEMS ANALYSIS.
Structured tools and techniques are used in business systems analysis and design. Prerequisite: 108.

342-3 INFORMATION SYSTEMS FOR BUSINESS.
Information system principles applied to business. Analysis of how computer-based information systems support operational, tactical, and planning decisions. Prerequisites: 108, GBA 300 or concurrent enrollment.

450-3 DATA BASE DESIGN.
Basic concepts/terminology of non-relational, relational models with emphasis on current technology and business applications. Prerequisites: CS 140 or 150 or a previous course in computer programming and MIS 270 or concurrent enrollment in MIS 270.

460-3 ADVANCED PROGRAMMING.
Advanced programming/design for file processing to include the design writing, debugging, and processing of COBOL programs. NOT FOR GRADUATE CREDIT. Prerequisite: 260.

464-3 APPLIED OPERATING SYSTEMS.
Operating systems and attendant control languages from user's viewpoint with emphasis on sophistication levels and hardware support configurations. Prerequisite: 260.

468-3 DESIGN OF DISTRIBUTED SYSTEMS.
Concepts and terminology dealing with data communication and distributed systems with emphasis on business applications. May be taken for graduate credit. Prerequisite: 450.

470-3 STRUCTURED SYSTEMS DESIGN.
Structured systems design methodologies, including process-oriented, data structure oriented, information-oriented techniques. NOT FOR GRADUATE CREDIT. Prerequisites: 270, 450.

472-3 END USER SYSTEMS DEVELOPMENT.
Use of decision support tools to design and implement user-developed systems. Prerequisite: 342.

474-3 EDP AUDITING CONTROLS AND CONCEPTS.
Procedures, controls, standards, and audit trails necessary for information systems operation with design of audit trails within systems. Prerequisites: 342, ACCT 202.

488-3 to 6 MIS INTERNSHIP.
Application of tools from information systems program to an organization under supervision with written report of experiences. May be repeated to a maximum of 9 hours. Prerequisites: consent of instructor and internship company.

490-3 to 6 INDEPENDENT STUDY IN MANAGEMENT INFORMATION SYSTEMS.
Investigation of topical MIS area resulting in deliverable unit. May be repeated to a maximum of 6 hours. Prerequisites: consent of instructor, chairperson, and program director.

495-3 to 6 SEMINAR: MANAGEMENT INFORMATION SYSTEMS.
Current issues related to business aspects dealing with information systems. May be repeated to a maximum of 9 hours if topics differ. Prerequisite: consent of instructor.

MANAGEMENT SCIENCE

251-4 STATISTICAL ANALYSIS FOR BUSINESS DECISIONS.
Descriptive statistics. Probability. Inferential statistics. Estimation and hypothesis testing of means and proportions. Simple and multiple regression, analysis of variance, and contingency table analysis. Prerequisite: MATH 120 or College Algebra.

312-3 STATISTICAL ANALYSIS OF BUSINESS PROBLEMS.
Business applications of intermediate statistical techniques, including multivariate regression; emphasizes sample design, data collection and analysis; uses computer software. Prerequisite: 251. Satisfies research requirement for business programs.

490-1 to 3 INDEPENDENT STUDY IN MANAGEMENT SCIENCE.
Investigation of topical areas in greater depth than regularly scheduled courses permit. Individual readings or research projects. May be repeated by permission to a maximum of 6 hours. Prerequisites: consent of instructor and department chairperson.

MARKETING

300-3 PRINCIPLES OF MARKETING.
Marketing in economic systems and society. External influences on marketing objectives, outcomes. Marketing as functional area within organizations. Emphasis on product; pricing; distribution; promotion decisions. Prerequisite: GBA 300 (or concurrent enrollment).

377-3 MARKETING RESEARCH.
Concepts necessary for understanding/performing applied marketing/business research. Research process: problem identification; design; sampling; data sources; collection. Experimental designs; measurement; statistical analysis. Prerequisites: 300, MS 251.

471-3 ADVERTISING POLICY AND MANAGEMENT.
Strategic role of persuasive communication. Concepts and methods necessary to develop advertising programs. Advertising planning and budgeting in the context of achieving marketing objectives. Prerequisite: 377.

472-3 SALES POLICY AND MANAGEMENT.
Organization and operational functions of salespeople and sales managers. Selling skills, forecasting, recruiting, selection, training, territory design and assignment, supervision, compensation, motivation, performance appraisal. Prerequisite: 377.

474-3 RETAIL POLICY AND MANAGEMENT.
Functions, organization, management of retail enterprises. Impact of recent and contemporary forces. Systems for merchandising and promotional activities. Retailing careers and appropriate preparation. Prerequisite: 377.

475-3 CONSUMER BEHAVIOR.
Consumer motivation, buying behavior, cultural forces, information processing, product diffusion. Explanatory theories and product development. Prerequisite: 377.

476-3 INTERNATIONAL MARKETING.
[II] Impact of tariffs, cultural/social restrictions, economic political environments, legal restrictions. International distribution pricing; multinational product planning; communications decisions; international marketing research. Prerequisite: 300.

478-3 INTERMEDIATE MARKETING RESEARCH.
Advanced consideration of statistical research techniques for analyzing marketing research data and developing marketing models. Use of major statistical software packages for data analysis projects. Prerequisite: 377.

479-3 SPECIAL TOPICS IN MARKETING.
Contemporary issues/problems in marketing. Topic varies when offered. Examples: service marketing; industrial marketing; non-profit marketing; other significant topics. May repeat as topic varies. Prerequisites: 377 and consent of instructor.

480-3 ADVANCED MARKETING MANAGEMENT.
Market structure and behavior. Research and select marketing opportunities. Develop marketing strategies. Plan marketing tactics. Implementation and control of marketing efforts. Final marketing course. Prerequisites: 377 or equivalent, senior standing.

490-1 to 3 INDEPENDENT STUDY IN MARKETING.
Topical areas in greater depth or unavailable in regular courses. Individual or small group readings and/or research projects. May repeat by permission to a maximum of 3 hours. Prerequisites: consent of instructor and department chairperson.

MASS COMMUNICATIONS

150-3 PROCESS AND EFFECTS OF MASS MEDIA.
[Adv.FAH] Development of the mass media and their effect on our society. Focus on growth, structure, and impact of these industries on the United States and other world cultures.

201-3 MEDIA SYSTEMS.
Analysis of mass media focusing on technological, economic, governmental, and societal impact.

202-3 WRITING FOR THE MEDIA.
First experiences reporting, writing and rewriting news, information, opinion, entertainment for various media: print, promotional, advertising, public relations, electronic.

203-3 AUDIO PRODUCTION FOR THE MEDIA.
Holistic approach to the planning and criticism of audio programs. Development of technical skills, creative scriptwriting, and the professional execution of scripted and live audio work. Prerequisite: 202 or concurrent registration.

204-3 VISUAL PRODUCTION FOR THE MEDIA.
Aesthetics and communicative power of visual images. Overview of the production and utilization of still images, small format video, and studio-based image systems. Prerequisite: 203.

321-3 SPECIALIZED AND CREATIVE WRITING FOR PUBLICATION.
Feature writing. Advanced experience reporting and writing for newspapers, magazines, public relations, and corporate and institutional publications. Observational, experiential techniques. Prerequisite: 202.

322-3 LANGUAGE AND STYLE OF WRITING FOR THE MEDIA.
Style, language, structure, and special writing techniques; philosophy of writing, with object to broaden student's understanding of professional writing in all forms of mass communications.

323-3 THE EDITING AND PUBLISHING FUNCTION.
Computerized and manual editing, page layout, publication design, and production for newspapers, magazines, advertisements, corporate and institutional publications. Prerequisite: 202.

324-3 PUBLIC AFFAIRS REPORTING.
Reporting for print and electronic media about local and state government, politics, law enforcement, courts, education, state and federal agencies. Field trips, conferences. News ethics. Prerequisite: 202.

325-3 PRINCIPLES OF ADVERTISING AND INSTITUTIONAL MEDIA.
Advertising publicity, media relations in relation to modern business and the private sector.

331-3 ELECTRONIC MEDIA PERFORMANCE.
Extensive practice in all forms of broadcast performance. Students prepare material for studio presentation and taping. Research paper on an industry professional required. Prerequisite: consent of instructor.

332-3 ELECTRONIC MEDIA NEWS.
Extensive practice in writing, editing videography of news for electronic media. Laboratory in preparation and simulation of broadcasts of radio and television news programs. Prerequisite: 204.

333-3 ADVANCED VIDEO WRITING AND PRODUCTION.
Students write and produce features utilizing film and documentary techniques; design sets, produce newscasts, budget projects, and view pertinent productions. Prerequisite: 204.

334-3 ELECTRONIC MEDIA ADVERTISING.
Radio and TV as advertising media. Planning and executing campaign. Agency relationships, research, cost factors, preparation of commercial materials, production, merchandising and promotions included. Prerequisites: 204 and/or consent of instructor.

335-3 EVOLUTION OF ENTERTAINMENT TELEVISION.
[Adv.FAH] Economic and technological factors in the history of entertainment television in the United States; changing social and political values as reflected in prime time programming.

336-3 VOICE AND DICTION FOR THE MEDIA.
Development of vocal techniques for use in the media. Application of vocal techniques within various media formats.

341-3 VISUAL MEDIA ANALYSIS.
Evaluation of illustration and photography for publication and for motion imagery (film-video). Values, language, philosophy, style and standards based on artistic vision, audience expectations, and distribution constraints.

342-3 DIGITAL IMAGERY AND PHOTOJOURNALISM.
Production, analysis of news and feature photographs, 35mm cameras, film processing, digital conversion, image processing. Visualization, editing, studio and field experiences in black and white. Prerequisite: 204.

351-3 WOMEN IN MASS COMMUNICATIONS.
[IGR] (Same as WMST 351) Early women journalists' struggles. Social, political, technological contexts. Media as tools of social change. Historical patterns. Positive and negative male influences. Prerequisite: junior standing.

353-3 HISTORY OF MASS COMMUNICATIONS.
Development of American mass media. Struggle for freedom. Outstanding communicators, institutions. Social, political, technological influences.

401-3 MEDIA LAW AND POLICY.
U.S. Constitution, federal, state law related to mass media. Congress and public policy. Prerequisite: Senior standing.

402-3 MEDIA ADMINISTRATION.
Management responsibilities, challenges, and expectations in the professional environment, i.e. promotions, rating, programming. Research paper required. Prerequisites: senior standing mass communications major and/or consent of instructor.

403-3 MEDIA CRITICAL THEORY.
Functions, performance of print and electronic media in information and entertainment; development and application of standards for evaluation; ethical concerns. Prerequisite: upperclass standing in mass communications or consent of instructor.

421-3 ADVERTISING LAYOUT AND DESIGN.
Processes and practices in preparation of copy and layouts in production of advertising. NOT FOR GRADUATE CREDIT.

422-3 WRITING FOR THE CORPORATE AND INSTITUTIONAL MARKET.
Reporting, writing, editing information, opinion, other presentations for publicity, publications, annual reports, public relations in general. Desktop publishing. Study of corporate publications. NOT FOR GRADUATE CREDIT.

423a,b-3 each ADVANCED TOPICS IN WRITING FOR THE MEDIA.
Advanced theory and practice of writing for the print and visual media. a) Dramatic Writing, b) Other Topics.

424-3 THE LITERATURE OF JOURNALISM.
Study of magazine articles, nonfiction books by Crane, Hemingway, Agee, New Journalists, Herr, others. Study of history to determine journalism's contributions to literature. NOT FOR GRADUATE CREDIT.

431-3 CORPORATE AND NONBROADCAST VIDEO.
Communication skills in writing for video, videography, producing, editing, and administration. Students produce video projects, treatments, scripts, release forms, shot sheets. NOT FOR GRADUATE CREDIT. Prerequisites: 204 and/or consent of instructor.

441-3 MULTIMEDIA USE IN MASS MEDIA.
Study and production of media and contextual integration of audio, video, illustration, photography and text for a variety of distribution modes, settings and audience expectations. NOT FOR GRADUATE CREDIT.

442-3 SPECIAL STUDIES IN VISUAL COMMUNICATION.
Special independent study in visual communications combining theory and practice. NOT FOR GRADUATE CREDIT.

451-3 RESEARCH METHODS IN MASS MEDIA.
Examination of traditional and emerging concepts of research. Extensive use of survey instruments, computer evaluation, special applications to mass media. Individual research projects. Prerequisites: senior standing and/or consent of instructor.

452-3 MEDIA TECHNOLOGY IN THE USA.
Technological changes in the mass media. New media forms, audience fragmentation, economic, regulatory, and social issues. Patterns of adoption and diffusion. Prerequisite: senior standing.

453-3 TRANSNATIONAL MEDIA.
[II] Study of world media systems in industrialized and emerging nations, open vs. closed societies, use and impact of new technology in international communication systems.

471-3 SPECIAL TOPICS IN MASS MEDIA.
Special and advanced topics in the mass media. Topics to be announced. May be repeated to a maximum of 6 hours provided no topic is repeated. NOT FOR GRADUATE CREDIT.

481-3 INTERNSHIP/SENIOR ASSESSMENT.
Professional experience with local media under joint supervision of members of the faculty and media professionals. NOT FOR GRADUATE CREDIT. Prerequisites: mass communications major, senior standing.

482-3 INTERNSHIP.
Professional experience with local media under joint supervision of faculty and professional media personnel. NOT FOR GRADUATE CREDIT. Prerequisite: senior standing.

491-3 ADVANCED PRACTICES.
Advanced work in areas which student has completed all formal course work. Included are studies in news, advertising, writing, announcing, production-direction. May be repeated to a maximum of 6 hours. Prerequisite: consent of instructor.

495-1 to 4 READINGS IN MASS MEDIA.
Selected readings in depth with member of faculty. Contemporary books and periodicals. May be repeated to a maximum of 4 hours. Prerequisites: senior standing and consent of instructor.

499-1 to 3 INDEPENDENT STUDY.
Special projects, research, and independent study under guidance of faculty supervisor. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

MATHEMATICS

106-3 DEDUCTIVE REASONING AND PROBLEM SOLVING.
[SKILLS] Theory and practice of reasoning, formal logic, elements of scientific method. Graduation credit may be earned for MATH 106 or PHIL 106, but not for both. Prerequisite: two years of high school mathematics.

111-3 THE NATURE OF MATHEMATICS I.
[INTRO] Broad view of mathematics: problem solving, sets, systems of numeration, real number system, algebra, computers. Prerequisites: one and one-half years of high school algebra and one year of geometry, or equivalent.

112-3 THE NATURE OF MATHEMATICS II.
Continuation of 111: consumer mathematics, mathematical systems, geometry, probability, statistics. Prerequisite: 111 or consent of instructor.

120-3 COLLEGE ALGEBRA.
Cartesian coordinates, graphing, lines, parabolas, functions, inverses, rational functions, exponential and logarithmic functions, roots of polynomials, systems, matrices, determinants, counting rules, induction, binomial theorem. Prerequisites: one and one-half years of high school algebra or 095 with grades of C or better; and one year of high school geometry or 085 with grades of C or better.

125-3 PRE-CALCULUS WITH TRIGONOMETRY.
Trigonometric functions and their applications, inverse trigonometric functions, trigonometric identities and equations, laws of sines and cosines, complex numbers and deMoivre's theorem. Prerequisite: 6 semesters of high school mathematics or 120 with a C or better.

130-4 INTRODUCTION TO CALCULUS.
Fundamental concepts of differential/integral calculus: partial derivatives, Lagrange multipliers. Emphasis on computations/ applications. May not be taken for credit by students in Science or Engineering. Prerequisites: 6 semesters of high school mathematics or 120 with grade of C or higher.

135-1 ELEMENTARY VECTOR ALGEBRA.
Systems of linear equations, row reduction, determinants, Cramer's rule, vectors in planes and spaces, dot and cross products, lines and planes in three-dimensional space. This course may not be taken for credit by students who have completed MATH 152 with a D or better.

150-5 CALCULUS I.
[Adv.NSM] Fundamental concepts of calculus: limits, continuity, derivatives. Mean Value Theorem, applications. Integrals, Fundamental Theorem of Calculus, integration techniques, applications. Prerequisites: 7 semesters of high school mathematics or 120 and 125 with grades of C or higher.

152-5 CALCULUS II.
[Adv.NSM] Systems of linear equations, row deduction, determinants. Cramer's rule, vector in planes and spaces, dot and cross products, lines and planes in three-dimensional space. Transcendental functions, techniques of integration, improper integrals, sequences and series, Taylor's theorem. Prerequisite: 150 with a grade of C or higher.

223-3 LOGIC AND MATHEMATICAL REASONING.
[Adv.NSM] Concepts and techniques essential to mathematics and computer science: logic, methods of proof, sets, relations, induction and recursion, simple counting techniques. Prerequisite: CS 140 or 141.

250-4 CALCULUS III.
Vector-valued functions. Calculus of several variables: partial derivatives, total differential, gradient, extrema. Multiple and iterated integrals. Theorems of Green, Stokes, and Gauss. Prerequisite: 152.

305-3 DIFFERENTIAL EQUATIONS I.
[Adv.NSM] First order ordinary differential equations, linear ordinary differential equations of higher order, systems of first order linear equations, applications. Prerequisites: 250, PHYS 211a.

311-3 THE TEACHING OF SECONDARY MATHEMATICS.
Constructing instructional objectives; formulating, utilizing and evaluating strategies for teaching mathematical concepts and skills; diagnosis and remediation of students' learning difficulties. Does not count toward non-teaching degree or minor in mathematics. Prerequisite: completion of mathematics core.

315-3 NUMBER THEORY.
[Adv.NSM] Divisibility, primes, numerical functions, congruences, introduction to coding theory, continued fractions, rational approximations. Prerequisite: 125.

320-3 INTRODUCTION TO ALGEBRAIC STRUCTURES.
Basic definitions, examples, and properties of algebraic structures: properties of numbers, modular arithmetic; introduction to groups, rings, and fields. Prerequisite: 223.

321-3 LINEAR ALGEBRA I.
[Adv.NSM] Systems of linear equations matrices and determinants; Vector spaces and linear transformations. Eigenvalues, eigenvectors, diagonalization of a symmetric matrix. Prerequisite: 152.

340-3 THEORY OF INTEREST.
Measures of interest, annuities, yield rates, amortization schedules and sinking funds, economic rationale for interest, stochastic approaches to interest. Prerequisite: 152.

350-3 INTRODUCTION TO ANALYSIS.
Logic, set theory, real numbers. Topology on the real line. Cardinality. Sequences and series of real numbers; limits and continuity; sequences and series of functions. Prerequisites: 250, 223.

400-3 DEVELOPMENT OF MODERN MATHEMATICS.
The development of mathematics since the discovery of calculus. Prerequisites: 152, 223.

416a-i-2 each MATHEMATICS TOPICS FOR TEACHERS.
(a) Analysis; (b) Algebra; (c) Number theory; (d) Probability and statistics; (e) Mathematical concepts; (f) Geometry; (g) History of mathematics; (h) Applied mathematics; (i) Logic and foundations. May be repeated to a maximum of 12 hours so long as no topic is repeated. May not count toward a concentration or minor in mathematics. Prerequisite: consent of instructor.

420-3 ABSTRACT ALGEBRA.
Basic algebraic structures and properties. Groups: subgroups, normality and quotients, isomorphism theorems, special groups. Rings: ideals, quotient rings, special rings. Fields: extensions, finite fields, geometric constructions. Prerequisite: 320 or consent of instructor.

421-3 LINEAR ALGEBRA II.
Advanced study of vector spaces: Cayley-Hamilton Theorem, minimal and characteristic polynomials, eigenspaces, canonical forms, Lagrange-Sylvester Theorem, applications. Prerequisite: 321 or consent of instructor.

423-3 COMBINATORICS AND GRAPH THEORY.
[Adv.NSM] Methods of solving problems which are discrete in nature. Counting, combinatorial reasoning and modeling, generating functions, recurrence relations. Graphs: definitions, examples, basic properties, applications, algorithms. Prerequisites: 223, some knowledge of programming is recommended.

435-3 FOUNDATIONS FOR EUCLIDEAN AND NON-EUCLIDEAN GEOMETRY.
Points, lines, planes, space, separations, congruence, parallelism and similarity, non-Euclidean geometries, independence of the parallel axiom. Riemannian and Bolyai-Lobachevskian geometries. Prerequisites: 250, 321, and either 320 or 350, or consent of instructor.

437-3 DIFFERENTIAL GEOMETRY.
Curve theory, surfaces in 3-dimensional space, fundamental quadratic forms of a surface, Riemannian geometry, differential manifolds. Prerequisite: 250.

450a,b-3 each REAL ANALYSIS.
(a) Euclidean and metric spaces, sequences and functions in Euclidean spaces, differentiation of functions of several variables; (b) Riemann and Lebesgue integrals, measure and probability. Fourier series, differential forms, Stoke's Theorem. Prerequisites: (a) 250, 321, 350. (b) 450a.

451-3 INTRODUCTION TO COMPLEX ANALYSIS.
Analytic functions, Cauchy-Riemann equations, harmonic functions, elements of conformal mapping, line integrals, Cauchy-Goursat theorem, Cauchy integral formula, power series, the residue theorem and applications. Prerequisites: 250, 350.

461-3 ENGINEERING MATHEMATICS I.
Review of ordinary differential equations. Laplace transforms, difference equations, z-transform, Fourier series and transform, discrete transform, fast Fourier transform. Prerequisite: 305 or consent of instructor.

462-3 ENGINEERING MATHEMATICS II.
Review of matrix algebra, systems of linear equations, determinants, eigenvalues, eigenvectors. Numerical methods for linear algebra. Numerical differentiation and integration. Interpolation and approximation. Numerical methods for differential equations. Prerequisite: 305 or 461 or consent of instructor.

464-3 DIFFERENTIAL EQUATIONS II.
Introduction to partial differential equations, first order linear equations, Fourier series and integrals, wave equation, heat equation, Laplace equation, Sturm-Liouville theory. Prerequisites: 250, 305.

465-3 NUMERICAL ANALYSIS.
Error analysis, solution of nonlinear equations, interpolation, numerical differentiation and integration, numerical solution of ordinary differential equations, solution of linear systems of equations. Prerequisites: 250, 305, CS 140 or 141.

466-3 NUMERICAL LINEAR ALGEBRA WITH APPLICATIONS.
Direct and iterative methods for linear systems, approximation of eigenvalues, solution of nonlinear systems, numerical solution of ODE and PDE boundary value problems, function approximation. Prerequisites: 250, 305, 321, CS 140 or 141.

495a-g-3 each INDEPENDENT STUDY.
Research and reading in specified area of interest. (a) Algebra; (b) Geometry; (c) Analysis; (d) Mathematics Education; (e) Logic and foundations; (f) Topology; (g) Numerical analysis. May be repeated to a maximum of 9 hours so long as no topic is repeated and not more than 3 hours are accumulated in a single segment nor more than 6 in one semester. NOT FOR GRADUATE CREDIT. Prerequisite: written consent of adviser and instructor.

498-2 SENIOR SEMINAR.
The nature of mathematics. The writing and presenting of mathematical ideas. Preparation for senior project. Prerequisite: completion of the mathematics core.

499-2 SENIOR PROJECT.
Directed study toward completing the senior assignment. Student completes a written project and gives an oral presentation. Prerequisite: 498.

MECHANICAL ENGINEERING

199-0 MECHANICAL ENGINEERING COOPERATIVE EDUCATION I.
Supervised work experience with agency, firm or organization which uses engineers. First work period of five-year academic/work experience program. Prerequisites: sophomore standing in mechanical engineering and consent of engineering co-op adviser.

244-4 ENGINEERING MECHANICS
(Same as CE 244). Static equilibrium conditions for external and internal force and moment systems. Dynamics of rigid-body planar motion. Prerequisite: PHYS 211a.

262-3 DYNAMICS.
Differentiation and rotation of vector valued functions; dynamics of particles; Newton's laws, momentum and energy; relative motion; dynamics of rigid body plane motion. Prerequisite: CE 240.

299-0 MECHANICAL ENGINEERING COOPERATIVE EDUCATION II.
Supervised work experience with agency, firm or organization which uses engineers. Second work period of five-year academic/work experience program. Prerequisites: sophomore standing in mechanical engineering and consent of engineering co-op adviser.

310-3 THERMODYNAMICS.
Classical thermodynamics: properties of pure substances, ideal gas law, work and heat, first and second laws, entropy, Rankine cycle; introduction to heat transfer. Prerequisite: junior standing in engineering.

312-3 ADVANCED THERMODYNAMICS.
Some power and refrigeration cycles; mixtures and solutions; chemical reactions and chemical equilibrium; irreversibility and availability; thermodynamic relations. Prerequisite: 310.

312L-1 THERMAL SCIENCE LABORATORY.
Applications of Thermodynamics and Fluid Mechanics laws; pipe flow measurements, Bernoulli experiment wind tunnel measurements, refrigeration cycle; compressor and pump experiments; steam generator. Prerequisites: 330 and concurrent enrollment in 312.

315-4 FLUID MECHANICS.
(Same as CE 315) Basic principles of conservation of mass, momentum and energy in fluid systems; dimensional analysis, compressible and incompressible flow, boundary layers. Prerequisites: upper-division standing in mechanical or civil engineering, CE 242 or concurrent enrollment, ME 310 or concurrent enrollment, ME 262 or concurrent enrollment, or consent of instructor.

350-3 DYNAMICS OF MACHINES.
Kinematic analysis and synthesis of four bar linkages, cams, gears and other mechanisms; D'Alembert principle, dynamic force analysis, balancing, gyroscopic effects. Prerequisite: 262.

350L-1 DYNAMICS LABORATORY.
Use of transducers and instruments for dynamical signals; testing and measurement techniques for dynamics and vibrations of mechanical systems. Prerequisite: 350 or concurrent enrollment.

370-3 MATERIALS ENGINEERING.
Atomic, molecular and crystalline structures; effect of micro- and macro-structure on properties; equilibrium and non equilibrium multiphase systems; metallic, ceramic and polymeric materials. Prerequisites: 310, CE 242.

380-4 DESIGN OF MACHINE ELEMENTS.
Stress and deformation; buckling; failure theory for static and fatigue loads; design of bearings, gears, shafts and other machine elements. Prerequisite: CE 242.

399-0 MECHANICAL ENGINEERING COOPERATIVE EDUCATION III.
Supervised work experience with agency, firm or organization which uses engineers. Third work period of five-year academic/work experience program. Prerequisites: junior standing in mechanical engineering and consent of engineering co-op adviser.

410-3 HEAT TRANSFER.
Steady and unsteady conduction, transient numerical method; principles of convection; empirical relations for forced-convection heat transfer, radiation heat transfer, heat exchangers. Design project. NOT FOR GRADUATE CREDIT. Prerequisites: 312, 315.

412-3 ENERGY CONVERSION SYSTEMS.
Theory, analysis and design of static and dynamic energy conversion devices; including thermoelectrics, magnetohydrodynamics, electrohydrodynamics, fuel cells. NOT FOR GRADUATE CREDIT. Prerequisites: 312, 315.

414-3 GAS DYNAMICS.
Basic equations of compressible flow, isentropic flow of perfect gas; normal shock waves, oblique shock waves; flow with friction and heat loss, applications. NOT FOR GRADUATE CREDIT. Prerequisites: 310, 330.

416-3 THERMAL SCIENCE DESIGN.
Selected topics such as heat exchangers, steam generators, combustion and two phase flow systems considered for design projects. Application of design emphasized. NOT FOR GRADUATE CREDIT. Prerequisite: 410.

438-3 to 6 MECHANICAL ENGINEERING PROJECT.
Individual laboratory projects of research, design, or developmental nature to study principles of engineering systems or components. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing in mechanical engineering and consent of department chairperson.

450-3 AUTOMATIC CONTROL.
Modeling of dynamical systems, linearizations, stability and feedback control; Routh-Hurwitz Criteria, time domain and frequency domain response, Root Locus, feedback compensator design. NOT FOR GRADUATE CREDIT. Prerequisites: 262, 310, MATH 305, EE 210.

452-3 VIBRATIONS.
(Same as CE 452) Vibration of single and multi-degree of freedom systems; natural frequencies and natural modes; vibration isolation. Structural response to ground excitation. Prerequisites: 262, CE 242, MATH 305.

454-3 ROBOTICS - DYNAMICS AND CONTROL.
(Same as EE 467) Robotics, robot kinematics and inverse kinematics, trajectory planning, differential motion and virtual work principle, dynamics and control. Prerequisite: consent of instructor.

470-3 STRESS ANALYSIS AND DESIGN.
(Same as CE 470). Three dimensional torsion and bending; stress and strain transformations; yield criteria and plasticity theory; finite element method; case studies and engineering design. Prerequisites: 370 or equivalent; CE 242.

470L-1 STRESS LABORATORY.
(Same as CE 470L). Determination of stress and strain using strain gauging and optical methods; measurement of fracture toughness; combined loading. Prerequisites: 370, CE 242.

472-3 ENGINEERING FRACTURE MECHANICS.
Mechanisms of fracture and crack growth; the elastic and plastic crack-tip stress fields; case studies and design analysis. NOT FOR GRADUATE CREDIT. Prerequisites: 370, CE 242.

474-3 MECHANICS OF COMPOSITE MATERIALS.
Micro- and macro-mechanical behaviors of lamina; micro- and macro-mechanical behaviors of laminate, laminated plates; case studies and design. NOT FOR GRADUATE CREDIT. Prerequisites: 370, CE 242.

480-3 MECHANICAL ENGINEERING DESIGN I.
Problem solving methodology used in design, analysis and synthesis of mechanical and thermal systems; concepts of optimization and computer simulation of systems. NOT FOR GRADUATE CREDIT. Prerequisite: 380 and corequisite 350.

482-3 MECHANICAL ENGINEERING DESIGN II.
Project oriented continuation of 480. NOT FOR GRADUATE CREDIT. Prerequisite: 480.

492-3 to 6 TOPICS IN MECHANICAL ENGINEERING.
Selected topics of special interest in mechanical engineering. May be repeated to a maximum of 6 hours so long as no topic is repeated. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing in mechanical engineering and consent of department chair.

MILITARY SCIENCE

120-2 INTRODUCTION TO MILITARY SCIENCE.
Introduction to contemporary military issues and the role of the U.S. Army in national defense systems. Review of time management, goal setting, and motivational leadership.

121-2 INTRODUCTION TO MILITARY OPERATIONS.
Study of the modern battlefield and its relationship to leadership, team building, and stress management. Individual communication skills and group dynamics are stressed.

220-3 APPLIED MILITARY SKILLS.
Detailed instruction and practical exercises in military writing, briefing, and decision-making. Extensive instruction and practice in the reading and use of maps and compasses.

221-3 SMALL UNIT LEADERSHIP.
Basic background in first aid and individual field movement skills. Instruction in use of analytical aids in planning, organizing, and controlling a changing environment.

320-3 ADVANCED LEADERSHIP AND MANAGEMENT.
Review of skills, techniques and concepts required by the small-unit combat leader: troop leading procedures, land navigation skills, tactical organization, and offensive tactics.

321-3 SMALL-UNIT TACTICS.
Review of skills, techniques, and concepts required by the small-unit combat leader: troop-leading procedures, fire-control skills, tactical analysis, and defensive tactics.

420-3 MILITARY ADMINISTRATION.
Examination of organization, responsibilities, administration, and management of the military unit staff. Explores practical aspects of military law and how it influences leadership. NOT FOR GRADUATE CREDIT.

421-3 ETHICS AND THE MILITARY PROFESSION.
Development of interpersonal skills required for effective management with particular emphasis on the military environment. Reviews various roles of the newly commissioned Army officer. NOT FOR GRADUATE CREDIT.

MUSIC

111-3 INTRODUCTION TO MUSIC HISTORY/LITERATURE.
[INTRO] Elements of music. Important composers, periods, styles and forms of music.

112a,b-1 each CLASS APPLIED WOODWINDS.
Introductory methods for teaching these instruments in elementary and secondary schools. (a) Saxophone, clarinet; (b) Flute, oboe, bassoon. Must be taken in sequence.

113-1 CLASS APPLIED BRASS.
Introductory methods for teaching these instruments in elementary and secondary schools.

114-1 CLASS APPLIED PERCUSSION.
Introductory methods for teaching these instruments in elementary and secondary schools.

115a,b-1 each CLASS APPLIED VOICE.
Training in singing, diction, and teaching voice students. Introductory. Must be taken in sequence.

116a,b-1 each CLASS APPLIED STRINGS.
Introductory techniques and methods for teaching these instruments in elementary and secondary schools. (a) Violin, viola; (b) cello, bass.

121a,b-1 each CLASS APPLIED PIANO.
Practical instruction for passing proficiency examination in piano which is required for all music concentrations. Must be taken in sequence.

124-3 FOUNDATIONS OF MUSIC.
Overview of the principles and procedures applicable to reading, writing, and perception of music including, rhythm, pitch, notation, scales, keys, intervals, chord structures; symbols and performance terms with reference to application to musical form and design.

125a,b-4 each THEORY OF MUSIC.
Fundamentals of music through sight singing, dictation, written and keyboard harmony. Must be taken in sequence. Prerequisite: piano proficiency or concurrent enrollment in 121.

139a,b-2 each DICTION FOR SINGERS.
Knowledge of diction through use of the International Phonetic Alphabet and its application to song literature. (a) English, Italian, German; (b) German and French. Must be taken in sequence. Prerequisites: admission to 140q, permit required.

140, 240, 340, 440a-x-2 or 4 each PRIVATE APPLIED MUSIC.
Offered at five levels in areas listed. Credit is given at 2 or 4 hours at each level. Consult with adviser for details of credit requirements. May be repeated for two semesters at each level. Students with concentration in Performance usually take 4 hours. Concentrations in Music Education and all secondary concentrations usually take 2 hours. Performance class required. Prerequisites: for 140, music concentration or secondary concentration or consent of music faculty; for higher levels, 2 semesters at previous level on same instrument or permit required.

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

141, 241, 341d-u-2 or 4 each PRIVATE APPLIED MUSIC: JAZZ.
Individual instruction in performance of various jazz styles. Offered at four levels in areas listed. Credit is given at 2 or 4 hours on each level. Students majoring in performance usually take 4 hours. Prerequisites: for 141, admission as a Music major and audition; for higher levels, two semesters at previous level on same instrument or permit required.

d. Jazz Bass
i. Jazz Saxophone
j. Jazz Percussion
k. Jazz Piano
n. Jazz Trombone
q. Jazz Voice
u. Jazz Guitar

144-1 UNIVERSITY SINGERS.
University singers perform music suitable for chamber choir and large chorus (they often collaborate with other university choral organizations). May be repeated. Open to all students.

146-1 GOSPEL CHOIR.
Rehearsal and performance of gospel style music. This course provides a curricular experience for students who wish to develop their skills and expand their knowledge in this type of art form. May be repeated.

165a,b-1 each PIANO PRACTICUM.
Keyboard harmony, sight reading, transposition, improvisation, technique, ensemble skills. Must be taken in sequence. Required for all keyboard majors.

221a,b-1 each CLASS APPLIED PIANO.
Practical instruction for passing piano proficiency required of all music concentrations. Must be taken in sequence. Prerequisite: 121b or permit required.

222-1 UNIVERSITY BAND.
Wind/Percussion ensemble. No audition required.

225a,b-4 each THEORY OF MUSIC.
Advanced harmonic techniques, modulation, altered chords, chromatic harmony, counterpoint, introduction to contemporary harmonic principles. Must be taken in sequence. Prerequisite: 125b.

231a,b-1 each JAZZ KEYBOARD THEORY.
Jazz harmonic structures, using piano as means of expression and standard jazz tunes as practice materials. Must be taken in sequence.

233-1 JAZZ GUITAR ENSEMBLE.
May be repeated. Prerequisite: permit required.

240-2 or 4 PRIVATE APPLIED MUSIC.
See 140.

241-2 or 4 PRIVATE APPLIED MUSIC: JAZZ.
See 141.

244-1 COMMUNITY CHORAL SOCIETY.
Performs literature from all eras. Emphasis on oratorio repertoire. Open to all students. May be repeated.

300-3 MUSIC IN THE ELEMENTARY CLASSROOM.
Music methods for the elementary classroom teacher. Not for music education major: (see 301a).

301a-c-2 each MUSIC EDUCATION.
Teaching music: (a) Elementary; (b) Mid-level; (c) Senior high. May be taken in any sequence. For music concentration only. Prerequisite: 225b.

309a,b,c-3 each ORCHESTRATION.
Writing for orchestral instruments. Must be taken in sequence. Prerequisite: 225b or permit required.

312a,b,c-3 each COMPOSITION.
Original composition. Prerequisite: 225 or permit required.

318a,b-2 each CONDUCTING.
(a) General fundamental conducting techniques, conducting experience, score analysis; (b) Choral and instrumental conducting experience; rehearsal techniques; score analysis. Must be taken in sequence. Prerequisites: 225b, 318a.

322-1 SYMPHONIC BAND.
May be repeated. Prerequisite: by audition.

326a,b,c-3 each ANALYSIS.
Important musical forms and styles. Must be taken in sequence. Prerequisite: 225b.

330a,b-3 each JAZZ IMPROVISATION.
Theory and techniques, functional harmony, melodic form, special scales, tune studies, ear training, development of style. Prerequisite: permit required.

331a,b-2 each JAZZ KEYBOARD THEORY.
Jazz harmonic structures, utilizing piano as means of expression and standard jazz tunes as practice materials. Must be taken in sequence. Prerequisite: 231b or permit required.

333-1 JAZZ COMBO.
Small Jazz ensemble performance experiences which stress improvisation. Jazz styles ranging from swing to contemporary jazz/rock fusion. Difficulty levels vary according to the abilities of students. May be repeated. Prerequisite: by audition.

337-2 EVOLUTION OF JAZZ STYLES.
For music majors. Historical research and analysis of particular styles of jazz innovators.

338-3 JAZZ.
[Adv.FAH] Jazz forms and styles: development, illustrations, performance.

340-2 or 4 PRIVATE APPLIED MUSIC.
See 140.

341-2 or 4 PRIVATE APPLIED MUSIC: JAZZ.
See 141.

342-1 MUSICAL THEATER ENSEMBLE.
Participation in a musical theater production under the auspices of the theater and/or music departments. May be repeated. Prerequisite: admission by audition.

355a-d-1 each CHAMBER MUSIC ENSEMBLES.
(a) Brass; (b) Woodwinds; (c) Strings; (d) Percussion. May be taken in any sequence. Any part may be repeated for 8 semesters. Prerequisite: permit required.

357a,b-3 each HISTORY OF WESTERN MUSIC.
[Adv.FAH] (a) Antiquity through Mozart (b) Beethoven to present. Must be taken in sequence. Prerequisite: 125b or permit required.

365-1 PIANO ENSEMBLE.
Vocal and instrumental accompanying, chamber music and duo-piano literature. May be repeated for credit at discretion of instructor. Prerequisite: consent of instructor.

377-1 UNIVERSITY SYMPHONY ORCHESTRA.
May be repeated. Prerequisite: by audition.

395a,b-3 each MUSIC MERCHANDISING.
Survey of Music Industry through study of music publishing, copyright, licensing, artist management, record production and merchandising, concert promotion, arts administration, advertising and music in retail. Prerequisite: junior standing.

401-2 PSYCHO-PHYSIOLOGY OF MUSIC.
Human capacities, their relationship to musical potentials and development. Acoustical foundations of music. Prerequisite: permit required.

409a,b-2 each JAZZ ARRANGING.
Basic skills of arranging/composing/sequencing for small and large jazz ensemble. Writing project required for each course section. NOT FOR GRADUATE CREDIT. Prerequisites: 225b, 231b, or permit required.

411a-e-2 each MUSIC LITERATURE.
[Adv.FAH] (a) Symphonic; (b) Choral; (c) Chamber; (d) Opera; (e) Special Areas. Study of period, composer, style or medium. May be repeated so long as topic is different. Prerequisite: 357b or permit required.

412a,b,c-3 each COMPOSITION.
Original composition. Must be taken in sequence. Prerequisite 312b or permit required.

413a,b-2 each PIANO LITERATURE.
(a) Baroque to early Romantic; (b) Romantic and Contemporary. Prerequisite: 357b or permit required.

420-1 MUSIC EDUCATION PRACTICUM.
Shop laboratory course. Selection adjustments, maintenance, and repair of musical instruments.

422-1 WIND ENSEMBLE.
May be repeated. NOT FOR GRADUATE CREDIT. Prerequisites: by audition, concurrent enrollment in 222 or 322.

430-2 ADVANCED IMPROVISATION.
Variety of jazz structures. Real-time composition and analysis. Students should know principles of note selection, time-feel, phrasing and articulation as developed in 330. NOT FOR GRADUATE CREDIT. Prerequisites: 225b and 330b or equivalent.

433-1 CONCERT JAZZ BAND.
May be repeated. NOT FOR GRADUATE CREDIT. Prerequisite: by audition.

436-2 JAZZ EDUCATION.
Teaching jazz at elementary, secondary, and college levels, both group and individual instruction. Prerequisite: 225b or permit required.

439-2 RECORDING TECHNIQUES.
Technical understanding of equipment used in basic analog and digital recording studios: microphones, equalization, MIDI and computer assisted recording and mixing. Hands-on training using 4 and 16 track recording formats. Prerequisite: permit required.

440-2 or 4 PRIVATE APPLIED MUSIC.
See 140. Prerequisite: 225b.

441d-u-2 or 4 PRIVATE APPLIED MUSIC: JAZZ.
Individual instruction in performance of various jazz styles. Offered at four levels in areas listed. Credit is given at 2 or 4 hours on each level. Students majoring in performance usually take 4 hours. Prerequisite: two semesters of 341 on the same instrument or consent of instructor.

d. Jazz Bass
i. Jazz Saxophone
j. Jazz percussion
k. Jazz Piano
n. Jazz Trombone
q. Jazz Voice
u. Jazz Guitar

442a,b,c-3 each COUNTERPOINT.
Eighteenth century counterpoint Sebastian Bach's inventions and well tempered clavichord and their influence on subsequent musical styles. Prerequisite: 225b or permit required.

444-1 CONCERT CHORALE.
Emphasis on unaccompanied literature and larger choral works. Touring choir. May be repeated. NOT FOR GRADUATE CREDIT. Prerequisite: by audition.

460a,b-2 each OPERA WORKSHOP.
Skills, techniques, and literature used in performance and production of operatic scenes, operas, operettas. May be repeated for a maximum of 4 hours. Prerequisite: permit required.

461a,b-3 each TEACHING TECHNIQUES AND MATERIALS.
First and second year piano students. Intermediate through advanced levels. Problems of private studio teaching and college-level teaching. Prerequisite: Music 340k or permit required.

465-2 DEVELOPMENT AND TEACHING OF STRINGS.
String education in elementary and secondary schools. Techniques of heterogeneous and homogeneous string teaching resource aids. May be repeated for total of 6 hours credit. Prerequisite: senior standing.

477-1 SIUE CAMERATA.
May be repeated. NOT FOR GRADUATE CREDIT. Prerequisite: by audition.

481-1 to 3 READINGS IN MUSIC THEORY.
May be repeated to 6 credits. Prerequisite: permit required.

482-1 to 3 READINGS IN MUSIC HISTORY/LITERATURE.
May be repeated to 6 credits. Prerequisite: permit required.

483-1 to 3 READINGS IN MUSIC EDUCATION.
May be repeated to 6 credits. Prerequisite: permit required.

487-2 COMPUTER MUSIC WORKSHOP FOR TEACHERS.
Designed for in-service teachers of music wishing to explore hardware and software currently available for use in schools. A hands on, project oriented approach is utilized. Limited enrollment. Prerequisite: permit required.

495-12 SUPERVISED INTERNSHIP IN MUSIC MERCHANDISING.
Involves at least 15 weeks of full-time work experience with music industry under supervision of faculty and/or person in music industry. NOT FOR GRADUATE CREDIT. Prerequisite: Music 395(6).

499-1 to 3 INDEPENDENT STUDY.
Independent research under the supervision of a faculty specialist. May be repeated to 6 credits. Prerequisite: permit required.

NURSING

112-2 EMPOWERING THE NURSING STUDENT.
Elective introduction to nursing profession and university community. Encourages a sense of empowerment among students by developing their abilities to actively take charge of collegiate experiences. Prerequisite: academic advisement in School of Nursing.

203-3 LIFE SPAN DEVELOPMENTAL CONCEPTS.
Developmental study of the person from conception to senescence. Physiological, psychological, and social development emphasized. Prerequisite: general psychology or consent of the instructor.

204-3 INTRODUCTORY CONCEPTS OF PROFESSIONAL NURSING PRACTICE.
Introduction to the art and science of nursing and the health care delivery system. Focuses on the concepts of protective mechanisms, metabolism, perception. Prerequisites: admission to School of Nursing; concurrent enrollment in or completion of 214.

214-4 PROFESSIONAL NURSING PROCESSES I: NURSING PROCESS AND HEALTH ASSESSMENT.
Emphasizes process of assessing, diagnosing, planning, implementing, and evaluating as a framework for providing care; skills necessary to perform basic assessment of individual clients presented. Prerequisites: admission to School of Nursing; concurrent enrollment in or completion of 204.

300-3 NURSING MANAGEMENT OF DRUG THERAPY.
Explores pharmacologic classifications, kinetics, effects, interactions, side effects. Includes introduction to nursing care aspects related to drug therapy. Prerequisites: completion of BIOL 240b; concurrent enrollment in or completion of 305, 350, 351.

305-4 CONCEPTUAL BASIS I: STRATEGIES FOR PROMOTING AND RESTORING HEALTH IN THE ADULT CLIENT.
Strategies for promoting and restoring health in the adult client. Includes the concepts of mobility, metabolism, regulatory and protective mechanisms, fluid dynamics, oxygenation. Prerequisites: completion of Semester 4 nursing courses.

306-3 CONCEPTUAL BASIS II: STRATEGIES FOR PROMOTING AND RESTORING HEALTH OF CHILD-BEARING FAMILIES.
Strategies related to the care of the childbearing family. Discusses women's health care and the concept of sexuality. Prerequisites: completion of Semester 5 nursing courses.

308-1 to 8 SPECIAL TOPICS IN NURSING.
Selected topics of special interest, such as complex physiologic/psychologic concepts, transcultural nursing, nursing history, policy formation, legal aspects of nursing practice, gerontological nursing. Prerequisites: completion of semester 5 nursing courses.

309-3 COMPUTER APPLICATIONS IN NURSING.
Elective. Emphasis on microcomputers to support nursing information-processing tasks. Prerequisite: Introductory computer course or equivalent experience or consent of instructor.

315-3 PROFESSIONAL NURSING PROCESSES II: TEACHING/LEARNING, MANAGEMENT, RESEARCH, AND THE NURSING PROCESS.
Introduces the professional nursing processes of teaching/learning, research, and management. Includes selected nursing theorists' views of the nursing process. Prerequisites: completion of Semester 4 nursing courses or RN licensure.

316-2 PROFESSIONAL NURSING PROCESSES III: ISSUES IN PROFESSIONAL NURSING.
Discusses legal, ethical, economic, political, and social factors as they relate to the professional nursing processes. Prerequisites: completion of PHIL 320, semester 5 nursing courses; RN students must have completed PHIL 320, 315, 335.

326-3 CONCEPTUAL BASIS III: STRATEGIES FOR PROMOTING AND RESTORING MENTAL HEALTH.
Strategies related to clients along the mental health/mental illness continuum. Includes the concept of perception, crisis theory, therapeutic group process. Prerequisites: completion of Semester 5 nursing courses.

335-3 PROFESSIONAL NURSING PROCESSES I: NURSING PROCESS AND HEALTH ASSESSMENT.
Emphasizes process of assessing, diagnosing, planning, implementing, and evaluating as a framework for providing care; skills necessary to perform advanced assessment of individual clients presented. Prerequisites: FOR REGISTERED NURSES ONLY; admission to the School of Nursing; completion of Introductory General Education courses and School of Nursing prerequisites.

350-3 NURSING PRACTICUM I: APPLICATION OF STRATEGIES FOR PROMOTING AND RESTORING HEALTH IN THE ADULT CLIENT.
Application of strategies for promoting and restoring health in the adult client. Concepts of mobility, metabolism, fluid dynamics, oxygenation, regulatory and protective mechanisms are considered. Prerequisites: completion of Semester 4 nursing courses; concurrent enrollment in 351 and concurrent enrollment in or completion of 305, 315.

351-2 PSYCHOMOTOR NURSING SKILLS I.
Practice and performance of nursing skills in simulated settings. Focuses on protective mechanisms, mobility, oxygenation, fluid dynamics, metabolism. Prerequisites: completion of Semester 4 nursing courses; concurrent enrollment in 350 and concurrent enrollment in or completion of 305, 315.

360-2 NURSING PRACTICUM II: APPLICATION OF STRATEGIES FOR PROMOTING AND RESTORING HEALTH OF CHILD-BEARING FAMILIES.
Application of strategies related to the child-bearing family. Includes nursing actions associated with women's health care and the concept of sexuality. Prerequisites: completion of Semester 5 nursing courses; concurrent enrollment in or completion of 306.

362-2 NURSING PRACTICUM III: APPLICATION OF STRATEGIES FOR PROMOTING AND RESTORING MENTAL HEALTH.
Application of therapeutic strategies with clients at various stages of the mental health/mental illness continuum. Prerequisites: completion of Semester 5 nursing courses; concurrent enrollment in or completion of 326.

407-4 CONCEPTUAL BASIS IV: STRATEGIES FOR PROMOTING AND RESTORING HEALTH ACROSS THE LIFESPAN.
Strategies for promoting and restoring health in adult/child client. Includes concepts of regulatory and protective mechanisms, oxygenation, metabolism, fluid dynamics, mobility. NOT FOR REGISTERED NURSES. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Semester 6 nursing courses.

408-4 CONCEPTUAL BASIS V: STRATEGIES FOR PROMOTING HEALTH IN THE COMMUNITY.
Focuses on health promotion of families, groups and communities. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Semester 7 nursing courses.

417-3 PROFESSIONAL NURSING PROCESSES IV: NURSING RESEARCH AND THEORY.
Emphasizes research process and relationship of research to nursing theory and practice. Includes in-depth discussion of selected nursing theorists. NOT FOR GRADUATE CREDIT. Prerequisites: undergraduate statistics, 214 or 335, 315.

418-3 PROFESSIONAL NURSING PROCESSES V: MANAGEMENT AND ROLE TRANSITION IN NURSING.
Assists in transition to the professional nursing role. Theories of organization, management, leadership, change. NOT FOR REGISTERED NURSES. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Semester 7 nursing courses.

428-2 SEMINAR: SYNTHESIS OF NURSING KNOWLEDGE.
Critical and analytical study of selected topics related to nursing knowledge and practice. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Semester 7 nursing courses; concurrent enrollment in or completion of other Semester 8 nursing courses.

437-3 PROFESSIONAL NURSING PROCESSES V: MANAGEMENT AND DIMENSIONS OF ROLE CHANGE IN NURSING.
Concepts and theories of organization, management, leadership, change, group process, role change. NOT FOR GRADUATE CREDIT. Prerequisites: FOR REGISTERED NURSES ONLY; completion of Semester 6 nursing courses.

451-3 ADVANCED HEALTH ASSESSMENT.
Advanced knowledge and skills in preparing client databases for health maintenance and restoration. Beginning differential diagnostic skills will be utilized in the clinical setting. Prerequisites: 214 or 335 or equivalent; senior or graduate standing or consent of instructor.

452-3 COMPUTER APPLICATIONS IN NURSING.
Computers in nursing with emphasis on microcomputer to support various information-processing tasks. Prerequisites: senior or graduate standing, introductory course in computers or equivalent experience, or consent of instructor.

455-3 NUTRITIONAL HEALTH IN SCHOOLS.
Nutritional needs of school-aged children and adolescents, including obesity and diabetes. Positive nutritional health interventions in school and community by school nurse and other health professionals. Prerequisite: consent of instructor.

457-3 CRITICAL CARE NURSING: HEMATOLOGIC, ENDOCRINOLOGIC AND CARDIOPULMONARY CONCEPTS.
Hematologic, endocrinologic and cardiopulmonary problems of critically ill patients, including pathophysiology, care, relevant medical/nursing research findings, selected technological and ethical issues. Prerequisites: completion of semester 7 or graduate standing.

458-3 CRITICAL CARE NURSING: METABOLISM, IMMUNITY, FLUID AND ELECTROLYTE DYNAMICS, AND NEUROLOGICAL CARE.
Metabolic, immunologic, neurologic, and fluid and electrolyte disturbances encountered in critically ill patients, including pathophysiology, care, relevant nursing/medical research findings, selected technological and ethical issues. Prerequisites: completion of semester 7 or graduate standing.

470-4 NURSING PRACTICUM IV: APPLICATION OF STRATEGIES FOR RESTORING HEALTH ACROSS THE LIFESPAN.
Applications of strategies for restoring health in the adult/child client. Concepts of regulatory and protective mechanisms, fluid dynamics, metabolism, oxygenation, mobility. NOT FOR REGISTERED NURSES. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Semester 6 nursing courses; concurrent enrollment in or completion of 407.

471-2 PSYCHOMOTOR NURSING SKILLS II.
Practice and performance of advanced nursing skills in simulated settings. Focuses on the concepts of oxygenation, fluid dynamics, metabolism, mobility. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Semester 6 nursing courses; concurrent enrollment in 407, 470 or completion of 407.

473-3 NURSING PRACTICUM: MANAGEMENT AND ROLE CHANGE.
Application of theories of organization; management, leadership, change in a variety of settings. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Semester 6 nursing courses; concurrent enrollment in or completion of 417, 437. FOR REGISTERED NURSES ONLY.

480-4 NURSING PRACTICUM V: APPLICATION OF STRATEGIES FOR PROMOTING HEALTH IN THE COMMUNITY.
Application of nursing strategies which promote health. Focuses on health needs of families, groups, and communities in a variety of settings. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Semester 7 nursing courses; concurrent enrollment in or completion of 408.

490-8 SCHOOL NURSE INTERNSHIP.
Focuses on application of nursing process to concepts of health promotion in school settings. Prepares Registered Nurses to qualify for Type 73 School Nurse Certification through Illinois State Board of Education. NOT FOR GRADUATE CREDIT. Prerequisites: Bachelor of Science in Nursing; completion of EDUC 305, SPED 400; completion of or concurrent enrollment in Foundations of Education 380.

491-3 HOME HEALTH CARE MANAGEMENT.
Administrative and management concepts of home health care including planning and organization of services; regulatory mechanisms; evaluation; research issues. Prerequisites: 408, 417, 480, consent of instructor.

492-3 NURSING PROCESS IN THE HOME: MATERNAL-CHILD CLIENT MODELS.
Theoretical and clinical applications of the nursing process in home care of the maternal-child client. Prerequisites: 408, 417, 480, consent of instructor.

493-3 NURSING PROCESS IN THE HOME: ADULT CLIENT MODELS.
Theoretical and clinical applications of the nursing process in home care of the adult, with emphasis on elderly clients. Prerequisites: 408, 417, 480, consent of instructor.

498-1 to 6 INDEPENDENT STUDY.
Guided study in nursing topics; organized to meet objectives of individuals or small groups of undergraduate students in a particular area of interest. NOT FOR GRADUATE CREDIT. Total earned hours may not exceed 6.

OPERATIONS RESEARCH

440-3 OPERATIONS RESEARCH: DETERMINISTIC MODELS.
(Same as IE 415) Linear programming, problem formulation, simplex algorithm, transportation and network problems, duality theory, sensitivity theory. Prerequisites: knowledge of FORTRAN, MATH 250, or consent of instructor.

441-3 OPERATIONS RESEARCH: STOCHASTIC MODELS.
(Same as IE 461) Probabilistic models, elementary queuing theory with single or multiple server systems, use of queues in facility designs, elementary decision theory. Markov processes and decision-making. Prerequisite: STAT 380 or STAT 480a.

442-3 OPERATIONS RESEARCH: SIMULATION.
(Same as IE 468) Design of simulation models using a high-level simulation programming language. Applications in production, inventory, queuing, other models. Prerequisites: 441, FORTRAN programming skills.

495-3 INDEPENDENT STUDY.
Research in subjects such as mathematical programming, dynamic programming, simulation, queuing, Markov processes and production topics. May be repeated to a maximum of 9 hours. Prerequisite: written consent of adviser and instructor.

PHILOSOPHY

106-3 CRITICAL THINKING.
[SKILLS] Study and practice of critical thinking and correct problem-solving methods. Organizing information, analyzing meaning, developing correct arguments, detecting fallacies, using effective methods of investigation. Graduation credit may be earned for either PHIL 106 or MATH 106, but not for both.

111-3 INTRODUCTION TO PHILOSOPHY.
[INTRO] Eras, branches, and problems of philosophy, including metaphysics; theory of knowledge; ethics.

213-3 INTRODUCTION TO DEDUCTIVE LOGIC.
[Adv.FAH] Formal techniques for analyzing correct deductions. Propositional, syllogistic, class, and predicate logic with quantifiers: applications to philosophical problems.

233-3 PHILOSOPHIES AND DIVERSE CULTURES.
[Adv.FAH, IC] Representative thinkers, texts, and movements outside the Western philosophical tradition, e.g., from India, East Asia, Africa, Latin America and the Middle East.

300-3 ANCIENT GREEK AND ROMAN PHILOSOPHY.
[Adv.FAH, IC] Major thinkers and movements from c. 600 BCE to c. 300 BCE.

301-3 MEDIEVAL WESTERN PHILOSOPHY.
[Adv.FAH, IC] Major thinkers and movements from c. 4th century through 16th century.

302-3 CLASSICAL MODERN WESTERN PHILOSOPHY.
[Adv.FAH, IC] Major thinkers and movements from c. 17th and 18th centuries.

303-3 NINETEENTH CENTURY WESTERN PHILOSOPHY.
[Adv.FAH, IC] Major thinkers and movements of 19th century.

304-3 TWENTIETH CENTURY WESTERN PHILOSOPHY.
[Adv.FAH, IC] Major thinkers and movements of 20th century.

306-3 AMERICAN PHILOSOPHY.
[Adv.FAH] Major thinkers and movements; e.g., Puritanism, revolution and democracy, transcendentalism, pragmatism, Royce, Santayana, Whitehead, and contemporary criticism.

307-3 PRAGMATISM.
[Adv.FAH] Representative thinkers of this contemporary perspective on life, reality, and American culture, such as Pierce, James, Dewey, Mead.

308-3 TWENTIETH CENTURY EUROPEAN PHILOSOPHY.
[Adv.FAH, IC] Representative thinkers of contemporary continental philosophy, such as Husserl, Heidegger, Sartre, Beauvoir, Merleau-Ponty, Ricoeur, Derrida, Foucault, and others.

309-3 TWENTIETH CENTURY ANALYTIC PHILOSOPHY.
[Adv.FAH] Representative thinkers of analytic movement, such as Frege, Moore, Russell, Ryle, Wittengenstein, and others.

310-3 THEORIES OF KNOWLEDGE.
[Adv.FAH] Conceptions, sources, limits, and methods of knowing.

314-3 PHILOSOPHY OF SCIENCE.
[Adv.FAH] Investigation of the nature and methods of physical and social science, and their importance for individuals and society.

320-3 ETHICS.
[Adv.FAH] Theories of virtue, obligation, and value; discussions of individual and social morality.

321-3 ETHICS IN THE MEDICAL COMMUNITY.
[Adv.FAH] Ethical issues arising in health care contexts and practices.

323-3 ENGINEERING, ETHICS, AND PROFESSIONALISM.
[Adv.FAH] Issues arising in and affecting professional engineering. Safety assessment, liability, codes, employer-employee relationships, alleged special responsibilities to protect the public. Prerequisite: junior standing.

325-3 PHILOSOPHY OF ART.
[Adv.FAH] Significance of art as human activity; nature and standards as evidenced in problems of criticism; relation of art to theory and knowledge.

326-3 THE AESTHETICS OF FILM.
[Adv.FAH] Film theory, criticism, and major genres of film.

330-3 METAPHYSICS.
[Adv.FAH] Problems such as personal identity, mind-body relationship, causality, nature of reality.

333-3 PHILOSOPHY OF RELIGION.
[Adv.FAH] Problems in epistemology, metaphysics, psychology, and sociology of religion. Questions about divine existence, mystical experience, human suffering, immortality.

334-3 WORLD RELIGIONS.
[Adv.FAH, IC] Historical and comparative study, particular attention to such non-Christian faiths as Hinduism, Buddhism, Confucianism, Taoism, and Islam.

335-3 CHINESE PHILOSOPHY.
[Adv.FAH, IC] Historical development from Confucius and Lao Tzu to Mao Zedong.

340-3 SOCIAL AND POLITICAL PHILOSOPHY.
[Adv.FAH] Philosophical problems of social and political theory and conduct.

343-3 PHILOSOPHY OF LAW.
[Adv.FAH] Basic theories of law and discussion of legal problems in contemporary society, such as rights, justice, responsibility, punishment.

344-3 SOCIALISM AND SOCIAL DEMOCRACY.
[Adv.FAH, II] Classical theories of socialism, such as those of Marx, Engels, Lenin, and Trotsky, and theories of Social Democracy.

345-3 PHILOSOPHICAL CONCEPTIONS OF WOMEN.
[Adv.FAH] (Same as WMST 345) Theories of the nature and role of women as expounded by philosophers past and present.

346-3 SOCIAL PHILOSOPHIES OF THE WOMEN'S MOVEMENT.
[Adv.FAH, IGR] (Same as WMST 346) Social philosophy from feminist perspective. Major theoretical works of women's movement. Prerequisite: WMST 200 strongly recommended.

347-3 PHILOSOPHICAL FOUNDATIONS OF RACISM.
[Adv.FAH, IGR] Philosophical foundations of racial and racist thought in America from the fifteenth century to the present.

411-3 SYMBOLIC LOGIC.
[Adv.FAH] Symbols as tools for analysis and deduction; truth tables, Boolean expansions, propositional calculus and quantifiers, logic of relations; logistic systems.

440-3 CLASSICAL POLITICAL THEORY.
[Adv.FAH, IC] (Same as POLS 484) Works of major political thinkers from ancient times to Renaissance, including Plato, Aristotle, St. Augustine, St. Thomas, and Machiavelli. Prerequisite: junior standing or higher.

441-3 MODERN POLITICAL THEORY.
[Adv.FAH, IC] (Same as POLS 485) Works of major political thinkers from Renaissance to present, including Hobbes, Locke, Rousseau, Hegel, Marx, Mill, and Nietzsche. Prerequisite: junior standing or higher.

490-3 SPECIAL PROBLEMS.
Seminar for qualified seniors and graduate students to pursue specific topics in depth. Varied content. May be repeated to a maximum of 12 hours so long as no topic is repeated. Prerequisite: consent of instructor.

495-1 to 3 INDEPENDENT READINGS.
Independent study on tutorial basis. Undergraduate students normally limited to 3 hours; graduate students normally limited to 9 hours. Prerequisites: consent of instructor and department chairperson.

PHYSICAL EDUCATION

PE 112 through PE 270 open to all students regardless of major.

112-1 SELECTED SPORT AND FITNESS ACTIVITIES.
Instruction and participation in a variety of activities; activity may not be repeated.

113-1 PHYSICAL FITNESS.
Movement activities designed to achieve flexibility, strength, muscular and aerobic endurance.

114-1 RACQUETBALL.
Instruction and participation in a leisure racquet sport.

115-1 BEGINNING SWIMMING.
Water adjustment and stroke techniques for the non-swimmer through advanced beginner skill level.

116-1 ARCHERY.
Basic target shooting.

117-1 BADMINTON.
Basic skill development and game play in singles and doubles.

118-1 BOWLING.
Basic techniques and scoring for the non-bowler through advanced beginner skill level.

119-1 GOLF.
Introduction to basic swing, short irons, and putting.

120-1 TENNIS.
Basic skill development and game play in singles and doubles.

121-1 VOLLEYBALL.
Skill techniques, game play, and basic offensive and defensive patterns of play.

122-1 RECREATIONAL SPORTS.
Wide variety of leisure and family oriented activities.

123-1 AEROBIC DANCE.
Rhythmic concepts and exercise application to improve flexibility, endurance, and muscle tone.

200-2 SELECTED FITNESS ACTIVITIES.
Instruction and participation in a variety of fitness-related activities; activity or level may not be repeated.

201-2 AEROBICS LEVEL I.
Basic principles and application for cardiovascular exercise.

202-2 AEROBICS LEVEL II.
High intensity level of cardiovascular exercise and individual prescription. Prerequisite: 201 or consent of instructor.

203-2 FITNESS AND SPORT ACTIVITIES.
Components and principles of fitness applied to various activities.

204-2 JOGGING.
Aerobic running.

205-2 PERSONALIZED SHAPE UP.
Assessment and individualized program.

206-2 STRENGTH TRAINING AND FLEXIBILITY.
Strength training through a full range of movement.

207-2 WEIGHT TRAINING LEVEL I.
Free weights and exercise machines.

208-2 WEIGHT TRAINING LEVEL II.
Advanced technique of isotonic exercise. Prerequisite: 207 or consent of instructor.

209-2 TUMBLING.
Basic stunts and self-testing activities.

220-2 SELECTED SPORT ACTIVITIES.
Instruction and participation in a variety of popular sports; activity or level may not be repeated.

221-2 INTERMEDIATE BOWLING.
Advanced skills and individualized analysis of errors. Prerequisite: 118 or consent of instructor.

222-2 INTERMEDIATE GOLF.
Advanced stroke techniques and problem shots; individualized analysis of errors. Prerequisite: 119 or consent of instructor.

223-2 INTERMEDIATE TENNIS.
Advanced stroke techniques and strategy for singles and doubles. Prerequisite: 120 or consent of instructor.

224-2 INTERMEDIATE RACQUETBALL.
Advanced skills and techniques. Prerequisite: 114 or consent of instructor.

225-2 INTERMEDIATE VOLLEYBALL.
Advanced skills and strategies for power volleyball. Prerequisite: 121 or consent of instructor.

230-2 SELECTED AQUATIC ACTIVITIES.
Instruction and participation in a variety of aquatic experiences; activity or level may not be repeated.

231-2 AQUATIC EXERCISE.
Water exercises for all levels of ability.

232-2 LAP SWIMMING.
Endurance swimming. Prerequisite: 115 or consent of instructor.

233-2 WATER GAMES.
Recreation and modified aquatic sport activities.

240-2 SELECTED RECREATIONAL ACTIVITIES.
Instruction and participation in a variety of recreational games; activity or level may not be repeated.

241-2 RECREATIONAL SOFTBALL.
Softball for family fun.

242-2 RECREATIONAL VOLLEYBALL.
Volleyball for family fun.

243-2 LEISURE ACTIVITIES.
Self-directed leisure activities with emphasis on individual planning and programming for individual/dual and non-competitive activities.

250-2 SELECTED RHYTHMICAL ACTIVITIES.
Variety of experiences reflecting trends in rhythmical movement patterns; activity or level may not be repeated.

251-2 BALLROOM DANCING.
Smooth and rhythmic ballroom dance.

252-2 DANCES OF TODAY.
Contemporary social dances.

253-2 MODERN SQUARE DANCE.
Contemporary square dances.

270-3 PERSONAL WELLNESS.
Assist in developing an understanding and appreciation for personal wellness as a lifestyle through lecture and fitness activity. Does not meet teacher education Health requirement.

NOTE: 300 through 307 intended only for those students with declared major or minor in physical education, coaching minor, or major in recreation. Each course includes development of skill techniques, teaching progressions, and related concepts pertaining to activity identified in the title.

300-1 STRENGTH TRAINING AND FITNESS.

301-2 AQUATIC ACTIVITIES AND LIFETIME LEISURE PURSUITS.

302-1 EDUCATIONAL RHYTHMS.

303-2 ARCHERY, BADMINTON, AND BOWLING.

304-2 GOLF, TENNIS, AND RACQUETBALL.

305-2 TRACK AND FIELD, WRESTLING AND FIELD SPORTS.

306-1 TUMBLING AND GYMNASTICS.

307-2 BASKETBALL, SOCCER, AND VOLLEYBALL.

315-3 HOMOKINETICS I.
Structural and functional basis of human performance. Prerequisite: BIOL 111.

316-3 HOMOKINETICS II.
Mechanics applied to physical performance; analysis of specific performance skills and application to instructional process. Two hours lecture and two hour laboratory per week. Prerequisite: 315 or consent of instructor.

318-2 BASIC CONCEPTS OF PHYSICAL EDUCATION.
Guiding principles, history, and philosophy of the discipline.

320-3 MOTOR LEARNING AND DEVELOPMENT.
Exploration of cognitive and neurophysiological processes associated with skill acquisition and motor performance during the maturational sequences of the child's total development.

325-2 PSYCHOMOTOR PROGRAMMING FOR SPECIAL POPULATIONS.
Survey of various types of exceptionalities; stresses instructional strategies, curriculum design, and relevant methods of mainstreaming in psychomotor setting.

330-3 CURRICULUM AND INSTRUCTIONAL STRATEGIES FOR ELEMENTARY PHYSICAL EDUCATION.
Understanding needs and interests of children; stressing relevant modes of instruction; exploration of divergent and convergent teaching approaches.

331-2 MOTOR DEVELOPMENT OF CHILDREN.
Explores the role of movement and maturational sequence in the child's total development; emphasis on qualitative movement and movement education themes.

332-2 DEVELOPMENTAL AND SELF-TESTING ACTIVITIES.
Movement skill activities and analysis related to motor learning theories including challenge activities such as stunts, apparatus, and combatatives. Prerequisite: 330.

333-2 RHYTHMICAL ACTIVITIES FOR CHILDREN.
Developmentally appropriate rhythmical patterns including fundamental, creative, and interpretive movements and singing games. Prerequisites: 302, 330.

334-2 LOW ORGANIZED AND LEAD-UP GAMES.
Selection and planning of games involving sport skills and modified game play; includes games appropriate for indoor and outdoor settings. Prerequisite: 330.

360-2 COACHING TECHNIQUES.
Advanced theory and practice of techniques, strategies, conditioning and management of interscholastic sports. May be repeated so long as sport is not duplicated.

365-3 THEORY OF COACHING.
Principles and theories of coaching interscholastic teams including philosophy, administrative duties of coaches, team selection, training techniques, psychology of coaching.

370-2 CARE AND PREVENTION OF ATHLETIC INJURIES.
Conditioning techniques to minimize injuries. Athletic training techniques to identify and utilize appropriate treatment modalities for sport-related injuries. Prerequisite: 315.

375-1 to 2 COACHING PRACTICUM.
Provides an experience to observe and assist with duties of coaching a sport at junior or senior high school level. May be repeated to a maximum of 2 hours. Prerequisite: declared major in physical education or coaching minor.

420-3 PHYSIOLOGICAL EFFECTS OF MOTOR ACTIVITY.
Function and regulation of major human systems and responsiveness of these systems to activity. Two hour lecture and two hour laboratory per week. Prerequisite: 315.

430-2 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION.
Design and analyze tests for the learning domains; determination of appropriate criteria for student evaluation. Introduction to educational statistics.

435-3 CURRICULUM AND INSTRUCTIONAL STRATEGIES FOR SECONDARY PHYSICAL EDUCATION.
Design, organization and administration of the curriculum; teacher effectiveness and instructional process studied and practiced. NOT FOR GRADUATE CREDIT.

440-2 PSYCHOLOGICAL PERSPECTIVES OF PHYSICAL EDUCATION AND SPORT.
Focuses on psychological aspects of human behavior; special emphasis is on the impact of motor performance and learning of motor skills. Prerequisite: PSYC 111.

450-2 CULTURAL PERSPECTIVES OF PHYSICAL EDUCATION AND SPORT.
Basic theoretical and applied aspects of the social science of physical activity with special emphasis on American cultural considerations. Prerequisite: SOC 111.

455-0 SENIOR PROFESSIONAL SEMINAR.
In-depth consideration of selected issues related to teaching physical education. Professional expectations; ethics; legal responsibility; other key concerns included. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

460-1 to 2 INTERNSHIP IN PHYSICAL EDUCATION.
Supervised placement in professional settings appropriate to student interests. May be repeated to a maximum of 2 hours. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

461-1 FIELD EXPERIENCE IN SECONDARY PHYSICAL EDUCATION.
Provides opportunities for observing, assisting, planning, teaching, and evaluating with experienced secondary physical education teachers. May be repeated to a maximum of 2 hours. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

462-1 FIELD EXPERIENCE IN ELEMENTARY PHYSICAL EDUCATION.
Opportunities for observing, assisting, planning, teaching, and evaluating experienced elementary physical education teachers. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

480-1 to 4 INDEPENDENT STUDY.
Individual investigation of a topic to be agreed upon by the instructor. May be repeated for a maximum of 4 hours so long as topics vary. Prerequisite: consent of instructor.

490-1 to 4 SELECTED TOPICS IN APPLIED PHYSICAL EDUCATION AND SPORT.
Theory and practice in topical areas such as exercise physiology; biomechanics; skill teaching; and fitness assessment. May be repeated so long as topic is not duplicated.

499-1 to 4 INDIVIDUAL RESEARCH.
Selection, investigation, and writing of research paper under supervision of instructor. Prerequisite: consent of instructor.

PHYSICS

111-3 CONCEPTS OF PHYSICS.
[INTRO] Motion, matter, electricity, magnetism, optics, atoms. Prerequisite: satisfaction of high school math requirements for entering freshmen.

112-1 CONCEPTUAL PHYSICS LABORATORY.
[INTRO NSM] Weekly introductory laboratory dealing with mechanics, heat, electricity, sound and light. Emphasis placed on measurements and data analysis. Prerequisite: 111 or concurrent enrollment.

119-3 PREPARATION FOR COLLEGE AND UNIVERSITY PHYSICS WITH LAB.
Computation in physics, scientific notation, significant figures; units, dimensional analysis; vector algebra, scalar and vector quantities in physics. Includes laboratory, data analysis, graphing, report writing.

206a,b-5 each COLLEGE PHYSICS.
[(b) Adv.NSM] Designed to meet premedical requirements and needs of students majoring in biological sciences. (a) Mechanics; fluids; heat. (b) Waves; sound; electrostatics; circuits; magnetism; optics; modern physics. Includes weekly lab. Prerequisites: (a) MATH 120; (b) 206a.

211a,b-4 each UNIVERSITY PHYSICS.
[(b) Adv.NSM] Calculus-based course designed to meet needs of engineering and science students. (a) Kinematics; dynamics; planar motion; work and energy; momentum; rotational motion; oscillations; gravitation; fluid mechanics; heat; kinetic theory of gases; thermodynamics. (b) Electric charge; electric fields; Gauss' law; potentials; circuits; magnetic fields; waves; sound; geometrical and physical optics. Prerequisites: (a) concurrent enrollment in 212a, MATH 152 or concurrent enrollment; (b) 211a, concurrent enrollment in 212b, MATH 152.

212a,b-1 each UNIVERSITY PHYSICS LABORATORY.
[Adv.NSM] Physics measurements; data and error analysis. (a) Velocity; acceleration; energy conservation; rotational motion; oscillations. (b) thermodynamics, electrical measurements; simple circuits; electromagnetism; wave propagation; optics. Prerequisites: (a) concurrent enrollment in 211a; (b) 212a, concurrent enrollment in 211b.

302-4 MODERN PHYSICS.
[Adv.NSM] Special theory of relativity; particle-wave duality; quantum mechanics; atomic, molecular, solid state, nuclear and high-energy physics. Prerequisites: 211b, MATH 250.

303-3 THERMAL PHYSICS.
Introduction to thermodynamics; fluids; kinetic theory; statistical distribution functions; applications. Prerequisites: 211b, MATH 250.

308-4 INTRODUCTION TO CLASSICAL MECHANICS.
Newtonian mechanics including oscillations, non-inertial frames, central forces, many-particle systems, rigid bodies, Lagrangian and Hamiltonian theory. Prerequisites: 211b, MATH 250.

310-3 OPTICS.
Nature of light; photometric quantities; geometrical optics; interference and diffraction; polarization; introduction to lasers; optical properties of materials. Includes weekly two-hour lab. Prerequisites: 302, MATH 250.

312-2 INTERMEDIATE PHYSICS LABORATORY.
Experimental methods in modern physics: modern experimental techniques computer-aided data acquisition; numerical methods; detectors and sensors; data and error analysis. Prerequisite: 302 or concurrent enrollment.

318-3 THEORY AND APPLICATIONS OF ELECTRONIC MEASUREMENTS.
Principles of modern electronic measurements and computer interfacing techniques. Transistor circuits; digital electronics; op amps; sensors; digital/analog and analog/digital conversions; computer aided data acquisition. Includes weekly two-hour laboratory. Prerequisite: 212b.

320-3 SPECIAL RELATIVITY.
Michelson-Morley experiment; Lorentz transformation; relativistic concepts of space and time; relativistic kinematics and dynamics; relativistic view of electricity and magnetism. Prerequisite: 302.

350-3 ENERGY AND THE ENVIRONMENT.
[Adv.NSM] Problems and prospects of meeting national and worldwide energy demands. Scientific background, role, and environmental impact of fossil fuel, nuclear, solar, geothermal, and other technologies.

351-3 MUSIC AND ACOUSTICS.
[Adv.NSM] Vibrations; nature and propagation of sound waves; musical pitch and intervals; tone quality, analysis, and synthesis; instruments; speech; ears and hearing; psychological aspects; other topics.

352-3 PHYSICS OF MODERN SOUND REPRODUCTION.
[Adv.NSM] Equipment and principles of operation: speakers; microphones; amplifiers; tuners; magnetic and optical recording. Includes two-hour biweekly laboratory.

355-3 LIGHT AND COLOR.
[Adv.NSM] Nature of light; ray and wave optics; optical devices; the eye; color theory; lasers and holography; applications to art, photography, and other visual media.

356-3 ASTRONOMY.
[Adv.NSM] Introduction to astronomical observation; time, seasons; light; telescopes; planetary motion; solar system; stellar structure, classification, evolution; star clusters; nebulae; galaxies; cosmology. Supplemental night viewing sessions.

375-1 SEMINAR.
Selected topics in theories and applications. May be repeated to a maximum of 3 hours provided that no topic is repeated. Pass/No Credit only. Prerequisite: consent of instructor.

390-3 JUNIOR PHYSICS HONORS.
Directed by student's Physics Honors Program adviser in independent study format on topics chosen jointly by student and adviser. Prerequisites: 302, 308, admission to the Physics Honors Program.

405a,b-3 each INTRODUCTION TO ELECTROMAGNETIC FIELD THEORY.
Vector treatment of the theory. (a) Electrostatics in vacuum and in matter; steady currents. (b) Magnetism; magnetic materials; electromagnetic radiation. Prerequisites: (a) 308, MATH 305; (b) 405a.

415a,b-3 each WAVE MECHANICS AND ATOMIC PHYSICS.
(a) Foundations of quantum mechanics: wave functions; expectation values; operators; Schroedinger equation; simple applications including step potentials and harmonic oscillator; perturbation theory. (b) Topics pertinent to atomic and molecular systems: angular momentum; hydrogen atom; electron spin; atomic transitions and spectra; exclusion principle; multi-electron atoms; molecular structure. Prerequisites: (a) 302, MATH 305; (b) 415a.

417-3 NUCLEAR PHYSICS.
Applications of wave mechanics to the study of the atomic nucleus: scattering theory; nuclear forces; nuclear models; nuclear reactions. Prerequisite: 415b.

419-4 INTRODUCTION TO THEORETICAL PHYSICS.
Mathematical techniques: vectors; tensors; matrices; differential equations; special functions; boundary value problems; other selected topics. Prerequisites: 302, MATH 305.

420-2 to 3 SPECIAL EXPERIMENTAL PROJECT.
Individual experimental investigation of a topic to be agreed upon with an instructor. May be repeated for a maximum of 6 hours provided that no experiment is repeated. Prerequisites: 308 and consent of instructor.

421-2 to 3 SPECIAL THEORETICAL PROJECT.
Individual investigation of a topic to be agreed upon with an instructor, using mathematical techniques and often involving systematic library research and computer use. May be repeated for a maximum of 6 hours provided that no topic is repeated. Prerequisites: 308 and consent of instructor.

450-3 SOLID-STATE PHYSICS.
Crystal structures and binding; lattice vibrations; electronic states; band theory of solids; semiconductors; optical properties of solids; other selected topics. Prerequisite: 415a or concurrent enrollment.

480-2 to 3 SELECTED TOPICS IN PHYSICS.
Classroom instruction in a topic of special interest not covered in other courses. May be repeated to a maximum of 6 hours provided that no topic is repeated. Prerequisite: consent of instructor.

490-3 SENIOR PHYSICS HONORS.
Directed by student's Physics Honors Program adviser in independent study format on topics chosen jointly by student and adviser. NOT FOR GRADUATE CREDIT. Prerequisites: 390, 405a.

494-3 METHODS FOR TEACHING PHYSICS.
Ways to teach different topics in physics, problem-solving techniques, and societal issues. Preparing for laboratory activities. Safety concerns. NOT FOR PHYSICS MAJOR OR GRADUATE CREDIT. Prerequisite: consent of instructor.

495-3 PHYSICS HONORS THESIS.
Research project directed by student's Physics Honors Program adviser, the results to be written up in the form of a thesis and presented at a departmental seminar. NOT FOR GRADUATE CREDIT. Prerequisites: 390, 405a, 415a.

POLITICAL SCIENCE

111-3 INTRODUCTION TO POLITICAL SCIENCE.
[INTRO, II] Institutional, behavioral, ideological comparisons of major types of political systems and processes; approaches and systems.

112-3 AMERICAN NATIONAL GOVERNMENT AND POLITICS.
[Adv.SS] Principles and practices of American political systems, constitutions, governmental institutions, political parties, interest groups, elections. Public participation; resultant policies. Meets Constitution requirement.

300-3 INTRODUCTION TO POLITICAL ANALYSIS.
Survey of models and quantitative techniques for organizing and analyzing data about politics; emphasis on applications; use of appropriate computer programs.

310-1 to 4 READINGS IN POLITICAL SCIENCE.
Individualized instruction through specialized program designed by instructor and student. Normal assignment 1000 pages per credit hour; requirements determined prior to registration. For majors and minors only. Prerequisites: 111, 112, consent of instructor.

320-3 INTRODUCTION TO PUBLIC ADMINISTRATION.
[Adv.SS] Processes and problems of managing government agencies, political context, policy impact, effects of bureaucratic organization; managing personnel and finances, evaluating effectiveness, controlling discretion. Prerequisite: 112 or consent of instructor.

340-3 THE PRESIDENCY.
[Adv.SS] Presidential powers and responsibilities, political, legal, constitutional, administrative. Evolution of presidency, its relationships to Congress and Judiciary. Impact on political system. Prerequisite: 112 or consent of instructor.

341-3 THE CONGRESS AND LEGISLATION.
[Adv.SS] Legislative organization and processes: Constitutional responsibilities and political dynamics. Impact on political system. Prerequisite: 112 or consent of instructor.

342-3 ISSUES IN AMERICAN PUBLIC POLICY.
[Adv.SS] Public policies in such areas as taxing and spending, civil rights, welfare, health education, environment; explanations for adoption; problems of implementation; evaluation of impact.

343-3 AMERICAN STATE GOVERNMENTS.
[Adv.SS] Comparative survey, historic and cultural influences, role of parties, interest groups, legislature, governors, and courts; impact on provision of state services. Prerequisite: 112 or consent of instructor.

345-3 PARTIES & INTEREST GROUPS.
[Adv.SS] Characteristics of party system and its components, its interrelationships with interest groups and their impact on the political system, recent changes. Prerequisite 112 or consent of instructor.

346-3 PUBLIC OPINION.
[Adv.SS] Formation, transmission, maintenance of political attitudes and opinions; role of political elites and mass media; implications and consequences for American political system. Prerequisite: 112 or consent of instructor.

350-3 POLITICAL SYSTEMS OF WESTERN EUROPE.
[Adv.SS, II] Britain, France, West Germany: Comparative analysis, historical development, constitutional foundations, political cultures, governmental processes, political participation and dynamics, problems and prospects. Prerequisite: 111 or consent of instructor.

351-3 EASTERN EUROPEAN POLITICAL SYSTEMS IN TRANSITION.
[Adv.SS, II] Historical development, political culture, governmental processes, political participation, problems and prospects. Prerequisite: 111 or consent of instructor.

355-3 POLITICAL SYSTEMS OF LATIN AMERICA.
[Adv.SS, II] Selected political systems: historical context, political culture, governmental processes, political participation; problems and prospects. Prerequisite: 111 or consent of instructor.

356-3 POLITICAL SYSTEMS OF ASIA.
[Adv.SS, II] Chinese, Japanese,and Indian political systems: historical context, political cultures, governmental processes, political participation; problems and prospects. Prerequisite: 111 or consent of instructor.

370-3 INTRODUCTION TO INTERNATIONAL RELATIONS.
[Adv.SS, II] Past and contemporary nationstate system; foreign policy behavior and processes, power, national interests, war, international law, organizations, economy, global problems and prospects. Prerequisite: 111 or consent of instructor.

385-3 INTRODUCTION TO POLITICAL THEORY.
[Adv.SS] Basic concepts of political theory (e.g. justice, liberty, equality); forms of political systems; ideas of major political theorists. Prerequisite: 111 or consent of instructor.

386-3 AMERICAN POLITICAL IDEAS AND THEIR ORIGIN.
[Adv.SS] Sources of contemporary political ideas; colonial, revolutionary, and constitution-building periods; era of democratization, industrialization, civil war and early twentieth century. Prerequisite: 111 or 112 or consent of instructor.

390-3 THE JUDICIAL SYSTEM.
[Adv.SS] Development, organization, and operation of federal court system. Roles and powers of courts, judges, juries, and prosecutors. Prerequisite: 112 or consent of instructor.

410-3 to 6 LEGAL INTERNSHIP.
Assignment as paralegal assistant to legal aid attorneys, public defenders, and prosecuting officers under supervision of professional legal officers. Ten hours per week for 3 credit hours. NOT FOR GRADUATE CREDIT. Prerequisite: 390 or consent of instructor.

411-3 to 6 INTERNSHIP IN GOVERNMENT.
Assignment as para-professional in legislative or administrative offices assisting, and under supervision of, regular professional employees. Ten hours per week for 3 credit hours. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing, political science major.

424-3 ADMINISTRATIVE LAW.
[Adv.SS] Principles of administrative law in United States; extent of and limitations on powers of government regulatory agencies. Prerequisite: 112.

429-1 to 3 TOPICS IN PUBLIC ADMINISTRATION.
Selected administrative problem or process; content may vary from semester to semester. For advanced undergraduates and graduates. May be repeated to maximum of 6 hours. Prerequisite: 320 or consent of instructor.

445-3 VOTING AND ELECTIONS.
[Adv.SS] Political-legal, sociological, psychological bases of voting behavior; theories of electoral outcomes and consequences. Prerequisite: 112 or consent of instructor.

449-1 to 3 TOPICS IN AMERICAN POLITICS.
Selected topics in American politics; content may vary from semester to semester. For advanced undergraduate and graduate students. May be repeated to maximum of 6 hours. Prerequisite: 112 or consent of instructor.

459-1 to 3 TOPICS IN COMPARATIVE POLITICS.
[II] Selected topics in comparative politics; content may vary from semester to semester. Primarily for advanced undergraduate and graduate students. May be repeated to a maximum of 6 hours. Prerequisite: 111 or consent of instructor.

472-3 INTERNATIONAL ORGANIZATIONS.
[Adv.SS, II] Past and present international organizations, origins, structure, decision-making processes, functioning of United Nations and its specialized agencies, problems and prospects. Prerequisite: 370 or consent of instructor.

473-3 UNITED STATES FOREIGN POLICY.
[Adv.SS, II] Formulation, implementation, content, general policy patterns, international, domestic sources, policy instruments, regional dimensions and implications. Prerequisite: 370 or consent of instructor.

479-1 to 3 TOPICS IN INTERNATIONAL RELATIONS.
[II] Selected topics in international relations; content may vary from semester to semester. For advanced undergraduate or graduate students. May be repeated to maximum of 6 hours. Prerequisite: 370 or consent of instructor.

484-3 CLASSICAL POLITICAL THEORY.
[Adv.SS, IC] (Same as PHIL 440) Works of major political thinkers from ancient times to the Renaissance, including Plato, Aristotle, St. Augustine, St. Thomas, and Machiavelli. Prerequisite: junior standing.

485-3 MODERN POLITICAL THEORY.
[Adv.SS, IC] (Same as PHIL 441) Works of major political thinkers from the Renaissance to the present, including Hobbes, Locke, Rousseau, Hegel, Marx, Mill, and Nietzsche.

489-1 to 3 TOPICS IN POLITICAL THEORY.
[Adv.SS] Major issues in political theory or works of one major political thinker. Prerequisite: 385 or consent of instructor.

495-3 CONSTITUTIONAL LAW I.
[Adv.SS] Analyzes Supreme Court decisions dealing with powers of national government and relationships between states and national government, particularly taxing, spending, regulating interstate commerce. Prerequisite: 390 or consent of instructor.

496-3 CONSTITUTIONAL LAW II.
[Adv.SS] Analyzes Supreme Court decisions dealing with individual rights, particularly free speech and press, religion, rights of criminal defendants, voting, constitutional protections against race and sex discrimination. Prerequisite: 390 or consent of instructor.

499-3 TOPICS IN PUBLIC LAW.
Selected topics in public law; content may vary from semester to semester. For advanced undergraduates and graduate. May be repeated to maximum of 6 hours. Prerequisite: 390 or consent of instructor.

PRODUCTION

315-3 PRODUCTION AND OPERATIONS MANAGEMENT.
Operations management in manufacturing and services; forecasting, planning and controlling materials and capacity; MRP II; JIT; project management; quality control; productivity improvement. Prerequisite: MS 251.

461-3 PRODUCTION PLANNING AND CONTROL.
Long range and aggregate planning; master scheduling; rough cut capacity planning; MRP; CRP; lead time management; production activity control, sequencing, line balancing. Prerequisites: 315, MS 251.

462-3 INVENTORY MANAGEMENT.
Aggregate inventory management, joint replenishment, discrete lot sizes; inventory constraints; distribution; DRP; push and pull systems; projecting inventory investment, purchasing, just-in time approach. Prerequisites: 315, MS 251.

463-3 QUALITY MANAGEMENT AND WORLD CLASS MANUFACTURING.
Process flows, group technology; flexible manufacturing systems, computer integrated manufacturing, total quality management; relationship of improved quality to increase productivity; statistical process control, quality costs. Prerequisites: 315, MS 251.

468-3 POM POLICY/STRATEGY.
Operations strategy and corporate objectives; major operations management strategic decisions; operations/manufacturing structure; focused factory, strategy/technology interface; multinational environment. Prerequisites: 315, MS 251.

490-1 to 6 INDEPENDENT STUDY IN PRODUCTION AND OPERATIONS MANAGEMENT.
Topical areas in greater depth than regularly titled courses permit. Individual or small group readings of projects. May be repeated by permission to a maximum of 6 hours. Prerequisites: consent of instructor and department chairperson.

PSYCHOLOGY

111-3 FOUNDATIONS OF PSYCHOLOGY.
[INTRO] History; psychological methods and techniques; biological foundations of behavior; learning; motivation; development; personality; social; psychopathology.

201-3 CHILD PSYCHOLOGY.
[Adv.SS] Biological and psychological development of child from birth through puberty. Prerequisite: 111.

203-3 ADOLESCENT PSYCHOLOGY.
[Adv.SS] Biological and psychological development of adolescent; relationship between childhood development and adolescent behavior. Prerequisite: 111.

204-3 ADULT DEVELOPMENT AND AGING.
[Adv.SS] Examination of psychological and psychosocial factors in development throughout adulthood; myths and realities of aging. Prerequisite: 111.

205-3 PSYCHOLOGY OF PERSONAL ADJUSTMENT.
[Adv.SS] Personal adjustment; stages of psychosocial development; marriage and family relationships; stress and coping. Prerequisite: 111.

206-3 SOCIAL PSYCHOLOGY.
[Adv.SS] Individual behavior in social situations; social perception; attitude formation and change; social influence; group processes; prejudice and discrimination; aggression; altruism. Prerequisite: 111.

211-3 INTRODUCTION TO STATISTICS.
Methods for organizing, presenting, describing, and interpreting data as applied to psychological research, e.g., correlation; inference; hypothesis testing. Prerequisite: 111 for majors and minors, consent of instructor for others.

212-4 METHODS OF PSYCHOLOGICAL INQUIRY.
[Adv.SS] Laboratory and field techniques psychologists use to study behavior. Includes data collection, analyses, and preparing research reports. Three lecture hours and two laboratory hours per week. Prerequisite: grade of C or better in 211 for psychology majors; consent of instructor for non-majors.

308-3 SOCIAL PSYCHOLOGY OF NONVERBAL BEHAVIOR.
[Adv.SS] Nonverbal behavior in human social setting. Prerequisite: 111.

310-3 EXPERIMENTAL PSYCHOLOGY: SOCIAL/PERSONALITY.
Principles of experimental research and its application to area of social and personality psychology. Prerequisites: 206, 212.

311-3 EXPERIMENTAL PSYCHOLOGY: LEARNING.
[Adv.SS] Conditioning, memory, forgetting. Students design and conduct experiments. Lecture and laboratory. Prerequisites: 111, 211, 212.

312-3 EXPERIMENTAL PSYCHOLOGY: PERCEPTION.
[Adv.SS] Structure and operation of sensory systems and perceptual processes. Psychophysical methods including Theory of Signal Detectability. Lecture and laboratory. Prerequisite: grade of C or better in 212.

313-3 MOTIVATION.
[Adv.SS] Biological, social, and psychological variables influencing the activation, direction, and maintenance of behavior. Students design and conduct experiments. Lecture and laboratory. Prerequisites: 111, 211, 212.

314-3 PHYSIOLOGICAL PSYCHOLOGY.
[Adv.SS] Biological foundations of behavior; structure and function of brain related to personality; behavior; health. Prerequisite: 111 or consent of instructor.

320-3 INTRODUCTION TO INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY.
[Adv.SS] Psychological principles and methods of analysis applied to problems in contemporary work settings. Prerequisite: 111.

374-3 ORGANIZATIONAL PSYCHOLOGY.
[Adv.SS] Relationship between organizational functioning and job satisfaction; motivation; performance; psychological climate in work setting. Prerequisite: 320 or consent of instructor.

404-3 CONTEMPORARY THEORIES OF LEARNING, PERCEPTION AND MOTIVATION.
[Adv.SS] Review of relevant research literature in memory; motivation; information processing. Prerequisite: one of 311, 312, 313, or consent of instructor.

405-3 PSYCHOLOGY OF GENDER.
[Adv.SS, IGR] Psychological and cultural history of gender; changing sex roles; socialization; sexuality; issues related to mental health, stereotyping, cognition. Prerequisite: 111.

409-3 HISTORY AND SYSTEMS.
[Adv.SS] Important antecedents of contemporary scientific psychology; issues, conceptual development, major schools and systems. Prerequisites: junior or senior standing; 111, 211, 212; or consent of instructor.

414-3 ALTERED STATES OF CONSCIOUSNESS.
[Adv.SS] Principles of sensation, perception, and neuropsychology applied to phenomena of normal and altered states of consciousness. Prerequisite: 111.

420-3 BEHAVIOR MODIFICATION.
[Adv.SS] Learning principles; evaluation methods; techniques of managing and modifying human behavior, based upon operant and respondent conditioning. Prerequisite: 111.

421-3 PSYCHOLOGICAL TESTS AND MEASUREMENTS.
Principles of psychological measurement, test construction and evaluation; problems in assessment and prediction. Prerequisite: 211.

430-3 APPLIED BEHAVIORAL ANALYSIS.
[Adv.SS] Applying behavior management principles to human behavior; reinforcement, shaping, stimulus control, fading and punishment in laboratory and applied settings. Prerequisite: 420.

431-3 PSYCHOPATHOLOGY.
[Adv.SS] Classification, description, etiology, and treatment of disorders of personality organization and behavioral integration. Prerequisite: 111.

437-4 PSYCHOLOGICAL INTERVIEWING.
Tactics, techniques, and strategies for listening; probing; question forms; branching and funneling through reading, lecture, and videotaped practice and feedback. Prerequisite: 205 or 206 or consent of instructor.

440-3 THEORIES OF PERSONALITY.
[Adv.SS] Review and critical evaluation of major theories and supporting evidence. Prerequisite: 111.

442-3 ADLERIAN PSYCHOLOGY: THEORY AND APPLICATION.
In-depth summary of theory and application of Alfred Adler and Rudolf Dreikurs, applied to mental health and human relations in family, school, clinic, and workplace. Prerequisites: 111 and junior, senior, or graduate standing.

461-3 ADVANCED SOCIAL PSYCHOLOGY.
[Adv.SS] In-depth readings course on current issues in social psychology. May include social cognition; attitudes; attraction; social influence; aggression; and other issues. Prerequisite: 206 or consent of instructor.

462-3 PSYCHOLOGY OF CRIMINAL BEHAVIOR.
[Adv.SS] Examination of psychological factors which contribute to crime and delinquency; consideration of psychological principles and factors operative in justice system. Prerequisite: 206 or consent of instructor.

465-3 GROUP DYNAMICS AND INDIVIDUAL BEHAVIOR.
[Adv.SS] Small group interaction, including topics of group structure and function; group problem-solving, leadership, etc. Prerequisite: 111.

468-3 PSYCHOLOGY OF HUMAN SEXUALITY.
[Adv.SS] Psychological aspects of human sexuality; pre-adulthood sexuality; adult sexuality; sex roles; special forms of sexual expression; sexual dysfunction. Prerequisite: 111.

473-3 PERSONNEL PSYCHOLOGY.
[Adv.SS] Psychological principles and techniques used in job selection, placement, training, employee evaluation. Prerequisite: PSYC 320 or MGMT 341.

487-3 PSYCHOLOGY OF AGING.
[Adv.SS] Biological, psychological and sociocultural factors in development and aging; age changes in learning, memory, intelligence, personality; special issues such as retirement, Alzheimer's disease, elder abuse. Prerequisite: 204 or graduate standing.

488-3 COMPUTER SOFTWARE FOR PSYCHOLOGICAL RESEARCH.
Using computer as tool in psychological research, including data management; statistical analysis; research writing. Prerequisite: 211 or consent of instructor.

491-1 to 6 RESEARCH IN PSYCHOLOGY.
Research under faculty supervision. Only 9 hours of 491, 492, and 493 (no more than 6 hours in any one course) may be applied toward major in psychology, 3 hours toward minor in psychology. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor and chairperson; must have completed at least 18 hours of psychology; GPA above 3.5.

492-1 to 6 READINGS IN PSYCHOLOGY.
Readings under faculty supervision. Only 9 hours of 491, 492, and 493 (no more than 6 hours in any one course) may be applied toward major in psychology, 3 hours toward minor in psychology. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor and chairperson; must have completed at least 18 hours of psychology; GPA above 3.5.

493-1 to 6 FIELD STUDY IN PSYCHOLOGY.
Supervised experiences in clinics, agencies and other professional settings. Only 9 hours of 491, 492, and 493 (no more than 6 hours in any one course) may be applied toward major in psychology, 3 hours toward minor in psychology. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor and chairperson; must have completed at least 18 hours of psychology; GPA above 3.5.

495-1 to 3 SEMINAR: SELECTED TOPICS.
Offered occasionally when needed. May be repeated to a maximum of 9 hours so long as no topic is repeated. Prerequisite: consent of instructor.

497-1 to 3 HONORS SEMINAR IN PSYCHOLOGY.
Varied topics offered occasionally when needed. May be repeated to a maximum of 6 hours as long as no topic is repeated. NOT FOR GRADUATE CREDIT. Prerequisite: admission to Psychology Honors Academy.

498-1 to 3 PSYCHOLOGY HONORS COORDINATING SEMINAR.
Coordinating seminar for Psychology Honors Program; students develop and report on individual and group projects involving honors level work. May be repeated for a maximum of 12 hours. NOT FOR GRADUATE CREDIT. Prerequisite: admission to Psychology Honors Program.

499-3 PSYCHOLOGY SENIOR HONORS PAPER.
Independent project to be completed during senior year under faculty supervision. Committee chairperson must be member of Psychology Department. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing, admission to Psychology Honors Academy.

PUBLIC ADMINISTRATION AND POLICY ANALYSIS

410-1 INTRODUCTION TO MICROCOMPUTING.
Introduction to personal computers and development of skills in using word processing and database applications common to the public sector.

411-1 SPREADSHEET APPLICATIONS.
Development of skills in spreadsheet construction and public sector applications.

412-1 SPSS.
Skills in using SPSS-PC: importing files; data entry; data analysis; exporting files. Prerequisite: concurrent enrollment in PAPA 420 or consent of instructor.

420-3 QUANTITATIVE ANALYSIS.
Research design; descriptive statistics; hypothesis testing; nonparametric statistics; analysis of variance; correlation; regression. Prerequisite: 412 or consent of instructor.

499-1 to 3 SEMINAR IN PUBLIC ADMINISTRATION.
Intensive study of selected topic. May be repeated to a maximum of 6 hours provided no topic is repeated. Topics chosen by department to supplement regular course offerings.

RECREATION

300-3 INTRODUCTION TO RECREATION.
History, philosophy, economics, concepts, values, functions of recreation and leisure. Exploration of professional recreation field.

312-3 to 4 DAYCAMP/PLAYGROUND LEADERSHIP.
Field experiences at approved recreational sites under professional supervision. Prerequisites: 300, 320, and consent of instructor.

320-3 PROGRAMS IN RECREATION.
Principles, standards, organization conducive to comprehensive program development. Prerequisite: 300 or concurrent enrollment.

348-3 RECREATION LEADERSHIP.
Leadership functions and skills related to recreational settings. Situational approach to leadership styles.

349-3 CAMPING EDUCATION.
Basics of resident camps, administration, physical design, equipment, program, personnel, purposes, traditions, possibilities, health, safety.

365-3 ORGANIZATION AND ADMINISTRATION OF COMMUNITY RECREATION.
Facilities, equipment, finance, promotion, personnel practices, purchasing, maintenance, policies.

389-3 to 4 AFFILIATION IN RECREATION.
Practicum for majors. Observe and assist in approved program under professional supervision. Prerequisites: junior standing, consent of instructor.

400-3 RECREATIONAL PLANNING AND DESIGN.
General features, special requirements, principles, standards for areas and facilities. NOT FOR GRADUATE CREDIT. Prerequisite: 320

410-3 PROBLEMS IN RECREATION.
Economic, political, sociological, psychological issues; case studies, decision making, problem solving. NOT FOR GRADUATE CREDIT.

420-3 PARKS AND RECREATION LEGAL LIABILITY.
Local, state, federal statutes pertaining to public and quasi-public agencies. Emphasis on legal liability and risk management. NOT FOR GRADUATE CREDIT.

470-12 INTERNSHIP IN RECREATION.
Culminating experience in approved agency under professional supervision. NOT FOR GRADUATE CREDIT. Prerequisites: 389, senior standing, and consent of instructor.

RUSSIAN

101-4 ELEMENTARY RUSSIAN.
[SKILLS] Listening, speaking, reading, and writing within context of Russian culture. Lab included.

102-4 ELEMENTARY RUSSIAN.
[SKILLS, IC] Continuation of 101. Lab included. Prerequisite: 101.

104-8 ELEMENTARY RUSSIAN.
[SKILLS, IC] Intensive instruction in listening, speaking, reading, and writing within context of Russian culture. Equivalent to 101 and 102. Must enroll for all 8 credit hours. Lab included. Check with department chairperson to determine if course will be offered.

201-4 INTERMEDIATE RUSSIAN.
[Adv.FAH] Continued practice in listening, speaking, reading, and writing. Grammar review. Cultural and literary readings, compositions. Lab included. Prerequisite: 102 or consent of instructor.

202-4 INTERMEDIATE RUSSIAN.
[Adv.FAH] Continuation of 201. Lab included. Prerequisite: 201 or consent of instructor.

220-3 INTERMEDIATE RUSSIAN CONVERSATION.
Practice in intermediate-level conversation. Focus on pronunciation and fluency. Prerequisite: 102 or equivalent.

499-3 READINGS IN RUSSIAN.
Selected areas of language, literature, and culture. Individual work or small groups supervised by Russian faculty. NOT FOR GRADUATE CREDIT. Prerequisites: 202 and consent of instructor.

SCIENCE

341-3 FOUNDATIONS OF SCIENCE.
[Adv.NSM] General background in science: biology, chemistry, physics. Laboratory emphasis on process skills, hands-on activities, and science projects suitable for elementary children. Prerequisites: junior standing and consent of instructor.

401-2 to 4 SELECTED CONCEPTS IN PHYSICS.
New discoveries and/or methodologies and techniques in the field. Demonstration and laboratory experiences to support the learning process. May be repeated to a maximum of 8 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

405-2 to 4 SELECTED TECHNIQUES IN PHYSICS.
Modern experiments, demonstrations, and equipment; advances in technology; laboratory management and safety. May be repeated to a maximum of 8 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

411-2 to 4 SELECTED TOPICS IN CHEMISTRY.
New discoveries and/or methodologies and techniques in the field. Demonstration and laboratory experiences to support the learning process. May be repeated to a maximum of 8 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

414-1 to 3 HISTORY OF CHEMISTRY.
Topics in history of chemistry. May be repeated to a maximum of 6 hours so long as no topic is repeated. Prerequisite: one college level chemistry course.

415-2 to 4 SELECTED TECHNIQUES IN CHEMISTRY.
Modern experiments, demonstrations, and equipment; advances in technology; laboratory management and safety. May be repeated to a maximum of 8 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

421-2 to 4 SELECTED TOPICS IN BIOLOGY.
New discoveries and/or methodologies and techniques in the field. Demonstration and laboratory experiences to support the learning process. May be repeated to a maximum of 8 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

425-2 to 4 SELECTED TECHNIQUES IN BIOLOGY.
Modern experiments, demonstrations, and equipment; advances in technology; laboratory management and safety. May be repeated to a maximum of 8 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

431-2 to 4 SELECTED TOPICS IN EARTH AND ENVIRONMENTAL SCIENCES.
New discoveries and/or methodologies and techniques in the field. Demonstration and laboratory experiences to support the learning process. May be repeated to a maximum of 8 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

435-2 to 4 SELECTED TECHNIQUES IN EARTH AND ENVIRONMENTAL SCIENCES.
Modern experiments, demonstrations, and equipment; advances in technology; laboratory management and safety. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

442-1 to 4 SPECIAL TOPICS IN TEACHING SCIENCE IN ELEMENTARY SCHOOLS.
Topics of special interest in teaching science. Lecture and/or laboratory format. May be repeated to a maximum of 8 hours as long as no topic is repeated. Prerequisite: two years of college science and mathematics.

452-1 to 4 SPECIAL TOPICS IN TEACHING SCIENCE IN SECONDARY SCHOOL.
Topics of special interest in teaching science. Lecture and/or laboratory format. May be repeated to a maximum of 8 hours as long as no topic is repeated. Prerequisite: two years of college science and mathematics.

462-1 to 4 SPECIAL TOPICS IN TEACHING SCIENCE IN COLLEGE.
Topics of special interest in teaching science. Lecture and/or laboratory format. May be repeated to a maximum of 8 hours as long as no topic is repeated. Prerequisite: two years of college science and mathematics.

489-1 to 3 INDEPENDENT STUDY IN SCIENCE EDUCATION.
Supervised study of assigned material based on needs of student. May be repeated to a maximum of 9 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: two years of college science and mathematics.

SOCIAL SCIENCES

200-3 FOUNDATIONS OF SOCIAL SCIENCE.
Analysis of the concepts and methodologies of selected Social Science disciplines appropriate for teachers.

SOCIAL WORK

200-4 FOUNDATIONS OF SOCIAL WORK I.
Structure, knowledge base and issues of social work as a profession. Emphasis on service values and ethics. Three hours class and forty hours in social services.

201-4 FOUNDATIONS OF SOCIAL WORK II.
Analysis of factors in development of social policies services and social work. Functions of major service systems. Three hours class and forty hours fieldwork. Prerequisites: 200, HIST 111b, ECON 111.

301-3 SOCIETAL RESPONSES TO HUMAN NEEDS.
Description and analysis of human needs and problems on individual and collective levels; relationships between conceptualizations of problems/needs and society's responses to them.

302-3 HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT I.
Psychological and sociological perspectives on human functioning, with social work applications to individuals, families and groups; special emphasis on developmental perspectives and human diversity. Prerequisites: 200, BIOL 111, PSYC 111 or SOC 111 or ANTH 111.

303-3 HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT II.
Psychological and sociological perspectives on human functioning, with social work applications to organizations and communities; special emphasis on cultural diversity. Prerequisites: 200, BIOL 111, HIST 111b, PSYC 111 or SOC 111 or ANTH 111.

315-4 SOCIAL WORK PRACTICE I.
Problem-solving model for generalist practice; application to working with individuals. Beginning skills for lab. Three hours class, plus weekly lab. Prerequisites: 200, PSYC 111 or SOC 111 or ANTH 111.

316-4 SOCIAL WORK PRACTICE II.
Applications of generalist practice principles and selected practice models to social work with groups and families. Three hours class, continuation of lab. Prerequisite: 315.

386-2 AIDS: SOCIAL AND PSYCHOLOGICAL ISSUES.
Social responses and services for persons who are HIV-positive and persons living with AIDS; disease processes and needs of clients.

387-2 SEXUAL DIVERSITY: ISSUES FOR SOCIAL WORK.
[IGR] Examination of alternative expressions of sexuality; gender identity issues; impact of social norms on clients, programs, practitioners. Special emphasis on working with gay/lesbian clients. Prerequisite: 201.

388-2 SUBSTANCE ABUSE.
Types of substance abuse; implications for practice and impact on clients in a variety of fields of social work. Basic intervention principles for the helping professions.

395-1 to 6 INDEPENDENT STUDY IN SOCIAL WORK.
To be arranged with member of social work faculty prior to registration. Open to social work majors only. Prerequisites: 200, 201, junior or senior standing, consent of instructor.

400-3 SOCIAL WORK PRACTICE III.
Applications of generalist practice principles and selected practice models to social work with organizations and communities. NOT FOR GRADUATE CREDIT. Prerequisites: 200, 201, 303, 316.

401-3 SOCIAL WELFARE POLICY ANALYSIS.
Selected models of policy analysis with applications to social welfare issues. Special emphasis on legislative processes. NOT FOR GRADUATE CREDIT. Prerequisites: 201, 301, POLS 342.

482-5 FIELD INSTRUCTION I.
With 483, two consecutive semesters of directed practicum consisting of a minimum of 400 hours in approved social service setting. Weekly seminars on campus. Social work majors only. NOT FOR GRADUATE CREDIT. Prerequisites: 400 or concurrent enrollment, completion of 300-level program requirements, and consent of Practicum Coordinator.

483-5 FIELD INSTRUCTION II.
Continuation of 482. NOT FOR GRADUATE CREDIT. Prerequisite: 482.

484-2 SOCIAL SKILLS INTERVENTION METHODS.
Use of educational formats in the helping professions to teach or enhance social skills; manage life transitions. NOT FOR GRADUATE CREDIT. Prerequisite: 316.

485-2 AIDS: ISSUES FOR SOCIAL WORK.
Continuation of 386 with professional applications. Practice and policy issues in working with HIV-positive clients, persons living with AIDS, companions and families. NOT FOR GRADUATE CREDIT. Prerequisite: 386

486-2 PERSPECTIVES ON HUMAN DIVERSITY.
[Adv.SS, IGR] Use of fiction and non-fiction to illustrate and compare characteristics and perspectives of diverse populations by reason of race, ethnicity, gender, life-style, etc. NOT FOR GRADUATE CREDIT.

487-2 SOCIAL WORK PRACTICE WITH INVOLUNTARY AND RESISTANT CLIENTS.
Examines factors and characteristics which lead to resistance in a variety of fields of practice; examines issues of social control, and practice approaches. NOT FOR GRADUATE CREDIT. Prerequisite: 315 or consent of instructor.

488-2 SOCIAL WORK PRACTICE MODELS.
Survey of theories of models of change used in social work practice with individuals and families in social work settings. NOT FOR GRADUATE CREDIT. Prerequisite: 315 or consent of instructor.

489-2 ALTERNATIVE VISIONS OF SOCIAL DEVELOPMENT.
[Adv.SS] Examination of current trends and social issues in light of utopian and dystopian literature. NOT FOR GRADUATE CREDIT.

495-2 SPECIAL TOPICS IN SOCIAL WORK.
Topics not included in regular course offerings. Topic and prerequisites specified in semester course schedule. May be repeated to a maximum of 6 hours with different topics. NOT FOR GRADUATE CREDIT.

SOCIOLOGY

111-3 INTRODUCTION TO SOCIOLOGY.
[INTRO] Characteristics and consequences of group life. Scientific and humanistic study of social processes and institutions, including change, control, religion, education, inequality, health, family.

200-3 COOPERATION AND CONFLICT.
[Adv.SS] Communication, specialization, reciprocity, conflict resolution. Families, feudalism, cities, nations. Capitalism, socialism, communism, corporations, cooperatives. Learning formats: games, role playing, discussions, lectures.

300-3 SOCIAL PROBLEMS.
[Adv.SS] Extent and causes of a number of current American social problems; how social conditions become problems. Some attention to methods of researching problems.

304-3 RACE AND ETHNIC RELATIONS.
[Adv.SS, IGR] Racial and cultural interaction and conflict; causes of prejudice and discrimination; status and participation of minority groups; national and international aspects of majority-minority relations.

308-3 WOMEN, GENDER AND SOCIETY.
[Adv.SS, IGR] (Same as WMST 308) Sociological and feminist perspectives on women in American society with an emphasis on institutions that create, maintain, and reproduce gender and gender inequality.

312-3 SOCIAL RESEARCH METHODS.
[Adv.SS] Fundamentals of measurement, research design, and logic of determining cause-effect relationships. Includes experimental, survey, archival, field research methods. Interrelationships between theory and research.

335-3 URBAN SOCIOLOGY.
[Adv.SS] Rise, development, structure, culture, planning, and problems in early and modern cities. How sociologists study cities; metropolitan areas. Some attention to urban social segregation.

338-3 INDUSTRY AND SOCIETY.
[Adv.SS] Development, changing nature, and social impact of industrial organization; transition from mass production to flexible systems; employee participation and labor-management relations.

372-3 CRIME AND JUSTICE.
[Adv.SS] Crime and criminality and the U.S. system of criminal justice. Violence, drug offenses, burglary, con-games and other crimes; police, prosecution, courts, and punishment.

373-3 JUVENILE DELINQUENCY.
[Adv.SS] Causes, consequences, and prevention of youthful crime; historical and contemporary issues; role of family, school, and community; sporadic and chronic delinquency; prevention, treatment, and punishment.

390-3 to 6 SPECIAL TOPICS IN SOCIOLOGY.
[Adv.SS] Topics not included in regular course offerings. May be repeated to a maximum of 6 hours provided no topic is repeated.

391-3 MARRIAGE AND FAMILY.
[Adv.SS] Marriage and the family in U.S. society; behavioral change including gender roles, dating and mate selection, love and intimacy, alternative family forms, communication/conflict, divorce/remarriage.

394-3 SOCIOLOGY OF THE BLACK FAMILY.
[Adv.SS] The Black family in U.S. society; historical and sociological study of contemporary Black family forms, gender roles, love, intimacy and mate selection, parenting, well-being of children.

396-1 to 6 READINGS IN SOCIOLOGY.
Supervised reading, projects, and field experience in selected areas. May be repeated for up to 6 hours provided no topic is repeated. Prerequisites: consent of instructor and chairperson.

410-3 STATISTICS WITH COMPUTER APPLICATIONS.
Survey of key statistical concepts, their application and interpretation. Using a computer to calculate and graphically display statistics. Creating and manipulating data sets. Hypothesis testing. Prerequisite: 312 or consent of instructor.

420-3 LEADERSHIP.
[Adv.SS] Leadership as parents, teachers, counselors, employers, change agents. Group problem-solving process. Social movements. Prerequisite: senior standing or consent of instructor.

421-3 INDIVIDUAL AND SOCIETY.
[Adv.SS] Integration of individual and society; role structure and orientation to society; habits, communication, channels of meaning, emergence, presentation and defense of self.

431-3 EMPLOYMENT AND WORKPLACE CHANGE.
[Adv.SS] Practical application and critical analysis of theories, approaches, strategies of organizational and workplace change. Organizations as mechanistic, organic, cultures, political systems and arenas of conflict.

433-3 INTERNSHIP IN EMPLOYMENT RELATIONS.
Supervised placement in actual employment setting. Acquisition of hands-on experience and practical skills, providing head start in meeting career objectives. NOT FOR GRADUATE CREDIT. Prerequisites: 111, 312, 338, 410 or consent of instructor.

441-3 HEALTH, ILLNESS AND SOCIETY.
[Adv.SS] Social determinants of sickness and death; illness as social behavior; patient-practitioner relationships, hospitals, issues in organization and delivery of health care.

447-3 UNDERGROUND ECONOMY.
[Adv.SS] Social organization of illegal markets, money laundering, illegal gambling, drug trafficking, estimated volume of unreported economic activities, methods of estimation.

451-3 SURVEY OF THEORY.
[Adv.SS] Major classical theorists including Durkheim, Marx, and Weber, and contemporary schools of thought including functionalism; conflict; exchange;symbolic interaction.

470-3 SOCIOLOGY OF DEVIANCE.
[Adv.SS] Behavior such as prostitution, drug use, murder, racism, sexual variances, rape and insanity examined theoretically and empirically.

474-3 VICTIMS AND SOCIETY.
[Adv.SS] Sociological analysis of war, crime, inequality, racism, sexism and other victim-generating conditions and processes; a non-lecture, active-learning course. Prerequisites: 111 and senior standing, or consent of instructor.

481-3 POPULATION DYNAMICS.
[Adv.SS, II] National and world population growth; death rates; the demographic transition of age and gender; life expectancy; fertility; marriage; divorce; migration; urbanization.

490-3 SPECIAL TOPICS IN SOCIOLOGY.
[Adv.SS] Topics not included in regular course offerings. May be repeated once to a maximum of 6 hours provided no topic is repeated.

SPANISH

101-4 ELEMENTARY SPANISH.
[SKILLS] Listening, speaking, reading, and writing. Culture of Spanish-speaking countries. Lab included.

102-4 ELEMENTARY SPANISH.
[SKILLS, IC] Continuation of 101. Lab included. Prerequisite: 101 or placement testing.

104-8 ELEMENTARY SPANISH.
[SKILLS, IC] Intensive instruction in listening, speaking, reading, and writing. Culture of Spanish-speaking countries. Lab included. Equivalent to 101 and 102. Must enroll for all 8 hours credit. Check with department chairperson to determine if course will be offered.

201-4 INTERMEDIATE SPANISH.
[Adv.FAH] Continued practice in listening, speaking, reading, and writing. Grammar review. Cultural and literary readings; compositions. Lab included. Prerequisite: 102 or placement testing.

202-4 INTERMEDIATE SPANISH.
[Adv.FAH] Continuation of 201. Lab included. Prerequisite: 201 or placement testing.

220-3 INTERMEDIATE SPANISH CONVERSATION.
Practice in intermediate-level conversation. Focus on pronunciation and fluency. Prerequisite: 102 or placement testing.

301-4 ADVANCED SPANISH.
In-depth grammar review. Composition and conversation. Lab included. Prerequisite: 202 or consent of instructor.

302-4 ADVANCED SPANISH.
Selected topics in grammar, readings, and composition. Lab included. Prerequisite: 301 or consent of instructor.

304-3 INTERPRETATION.
Oral translation of selected passages, alternating between English and Spanish; development of precision and clarity in both languages.

305-4 COMPUTER ASSISTED WRITTEN TRANSLATION.
Computerized automatic translation: English/Spanish and Spanish/English. Lab included. Prerequisites: 202 or consent of instructor, some familiarity with word processing.

306-3 CONTEMPORARY SPANISH PROFESSIONAL READINGS.
Selections from publications related to professions and issues.

307-3 BUSINESS SPANISH.
Oral and written business expression; specialized terminology and idioms. Prerequisite: 202 or consent of instructor.

308-3 SPANISH PHONETICS.
Articulatory exercises to acquire correct pronunciation; difficulties encountered by speakers of American English. Prerequisite: 202 or consent of instructor.

311-3 CONTEMPORARY SPAIN.
[Adv.FAH, IC] Analysis of significant aspects of Spanish culture to improve intercultural understanding and develop language skills. Prerequisite: 202 or consent of instructor.

312-3 CONTEMPORARY SPANISH AMERICA.
[Adv.FAH, IC] Analysis of significant aspects of Spanish-American culture to improve intercultural understanding and develop language skills.

351-3 SURVEY OF SPANISH LITERATURE: PENINSULAR.
[Adv.FAH, IC] Representative prose, poetry, drama. Prerequisite: 202 or consent of instructor.

352-3 SURVEY OF SPANISH-AMERICAN LITERATURE: COLONIAL PERIOD UNTIL THE PRESENT.
[Adv.FAH, IC] Representative prose, poetry, drama. Prerequisite: 202 or consent of instructor.

353-3 SURVEY OF DRAMA IN THE SPANISH LANGUAGE.
[Adv.FAH] Selected readings, literary and cultural background. Prerequisite: 202 or consent of instructor.

400a,b 2 each SENIOR ESSAY IN SPANISH.
Supervised (a) research; (b) preparation of an extensive scholarly paper in Spanish. NOT FOR GRADUATE CREDIT. Prerequisite: 202.

412a,b 3 each U.S.A. HISPANICS.
Hispanic cultures in the USA. Study of the unique contributions of a) Mexican Americans and b) Cuban Americans and Puerto Rican Americans through their language, literature and the arts. Prerequisite: 301 or consent of instructor.

451-3 STUDIES IN SPANISH LITERATURE: BEGINNINGS THROUGH 17TH CENTURY.
[Adv.FAH, IC] Literary analysis of prose, poetry, and drama, 11th through 17th centuries. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

452-3 STUDIES IN LITERATURE IN THE SPANISH LANGUAGE: 17TH THROUGH 20TH CENTURIES.
[Adv.FAH, IC] Literary analysis of prose, poetry, and drama. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

453-3 SEMINAR IN HISPANIC LITERATURE.
[Adv.FAH, IC] Critical and analytical study of masterpieces. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

454-3 to 6 SEMINAR.
Critical and analytical study of selected topics of literature or literary criticism. May be repeated to a maximum of 6 hours provided that no topic is repeated.

457-3 DON QUIXOTE.
[Adv.FAH, IC] Critical and analytical study of Cervantes' masterpiece. Prerequisite: 301 or consent of instructor.

461-3 SPANISH STYLISTICS.
Writing style: application of stylistics to development of skill in written expression. Advanced work in principles of grammar and composition. Prerequisite: 6 hours of 300-level courses.

471-3 SPANISH-AMERICAN LITERATURE: SHORT STORIES AND NOVEL.
[IC] Representative works of last four decades of 20th century. NOT FOR GRADUATE CREDIT. Prerequisite: 301 or consent of instructor.

499-3 READINGS IN SPANISH.
Selected areas of language, literature, and culture. Individual work or small groups supervised by Spanish faculty. Prerequisites: senior standing and consent of instructor.

SPECIAL EDUCATION

400-3 THE EXCEPTIONAL CHILD.
Psychology, identification, and methods of teaching individuals with exceptionalities, including individuals with learning disabilities.

410a-3 PROBLEMS AND CHARACTERISTICS OF THE BEHAVIOR DISORDERED CHILD.
Definition, screening, assessment, placement, programming, behavior management, multicultural concerns related to education of children with behavior disorders. Prerequisite: 400.

410b-3 PROBLEMS AND CHARACTERISTICS OF THE MENTALLY RETARDED CHILD.
Definition, screening, diagnosis, classification systems, classroom management. Educationally significant characteristics including cognitive, emotional, sociological, multicultural. Prerequisite: 400.

410c-3 PROBLEMS AND CHARACTERISTICS OF THE GIFTED CHILD.
Designed to assist teachers in identification of and programming for gifted/talented children. Prerequisite: 400.

410g-3 PROBLEMS AND CHARACTERISTICS OF THE LEARNING DISABLED.
Language, social, and educational characteristics of individuals with learning disabilities. Definition, service delivery models; multicultural concerns. Prerequisite: 400.

410t-3 PROBLEMS AND CHARACTERISTICS OF THE TRAINABLE MENTALLY HANDICAPPED.
Basic concepts of intelligence; psychological testing; educational assessment; causes of retardation as these concepts relate to educational and therapeutic consideration for the trainable mentally handicapped.

411-3 ASSESSMENT OF EXCEPTIONAL CHILDREN.
Techniques, theories, methods, instruments. Use and application of techniques to case study practices. Prerequisite: 410.

415-3 MICROCOMPUTERS AND EXCEPTIONAL INDIVIDUALS.
Overview of use of computers to meet unique needs of individuals with disabilities. Hardware and software adaptations. Prerequisite: 400.

420a-3 METHODS AND MATERIALS FOR TEACHING CHILDREN WITH BEHAVIOR DISORDERS.
Methods and materials applied in teaching and managing individuals with behavior disorders. Prerequisites: 410a, 411, class permit card.

420b-3 METHODS AND MATERIALS IN THE EDUCATION OF THE EDUCABLE MENTALLY HANDICAPPED.
Teaching mildly mentally handicapped in special education. Prerequisites: 410b, 411, class permit card.

420c-3 METHODS AND MATERIALS FOR THE EDUCATION OF THE GIFTED.
Teaching gifted children. Acceleration; enrichment; pull out programs. Prerequisite: 410c.

420g-3 METHODS AND MATERIALS FOR TEACHING CHILDREN WITH LEARNING DISABILITIES.
Methods and materials applied in teaching children with learning disabilities. Prerequisites: 410g, 411, class permit card.

420t-3 METHODS AND MATERIALS IN THE EDUCATION OF THE TRAINABLE MENTALLY HANDICAPPED.
Education and remediation processes in overall academic development of the moderate/severe mentally handicapped. Methods and materials, both commercially and teacher developed. Prerequisites: 410t, 411, class permit card.

430-3 BEHAVIOR MANAGEMENT IN SPECIAL EDUCATION.
Overview of biophysical, psychodynamic, ecological, learning theories, interventions. Prerequisite: 400.

440-3 PRESCHOOL EDUCATION FOR EXCEPTIONAL CHILDREN.
Theories of child development as related to special education. Prerequisite: 400.

441-3 ASSESSMENT OF PRESCHOOL EXCEPTIONAL CHILDREN.
Instruments for assessment of academic, cognitive, perceptual-motor development. Diagnosis and remediation. Prerequisite: 440.

450-3 INSTRUCTIONAL PROGRAMMING FOR STUDENTS WITH DISABILITIES.
Service delivery models; principles and application of scheduling, physical environment; curricular and instructional concepts and application; integration of technology. Prerequisite: 411.

470-3 SECONDARY SCHOOL PROGRAMMING FOR ADOLESCENTS WITH DISABILITIES.
Organizational, administrative, and curricular adjustments needed for adolescents with disabilities. Stresses work-study programs. Prerequisite: 400.

481-3 SEMINAR IN THE INSTRUCTION OF CHILDREN AND ADOLESCENTS WITH DISABILITIES.
Professional, ethical, and legal concerns of assessment; instruction, evaluation, behavior management, materials, technologies. NOT FOR GRADUATE CREDIT. Prerequisite: concurrent enrollment with first 499.

490-3 LANGUAGE DEVELOPMENT IN SPECIAL EDUCATION.
Overview of developmental milestones of language acquisition in both normal and disabled individuals. Techniques for identification and instruction. Prerequisite: 400.

496-1 to 6 READINGS AND INDEPENDENT STUDY IN SPECIAL EDUCATION.
Specific problem areas in education of individuals with disabilities. Topic conditions of study approved via contract. Prerequisite: consent of instructor.

498-3 to 6 WORKSHOP: SELECTED TOPICS IN SPECIAL EDUCATION.
Topical workshop on concepts, strategies, and concerns in special education. May be repeated to a maximum of 6 hours.

499a-6 to 12 SPECIAL EDUCATION STUDENT TEACHING: BEHAVIOR DISORDERS.
Teaching students with social and emotional disorders under immediate supervision of cooperating teacher and general supervision of university instructor. First student teaching experience must be 12 hours; second or third student teaching experiences for 6 hours each. NOT FOR GRADUATE CREDIT. Prerequisite: completion of all required coursework.

499b-6 to 12 SPECIAL EDUCATION STUDENT TEACHING: EDUCABLE MENTALLY HANDICAPPED.
Teaching students with educable mental retardation under immediate supervision of cooperating teacher and general supervision of university instructor. First student teaching experience must be 12 hours; second or third student teaching experiences for 6 hours each. NOT FOR GRADUATE CREDIT. Prerequisite: completion of all required coursework.

499g-6 to 12 SPECIAL EDUCATION STUDENT TEACHING: LEARNING DISABILITIES.
Teaching students with learning disabilities under immediate supervision of cooperating teacher and general supervision of university instructor. First student teaching experience must be 12 hours; second or third student teaching experiences for 6 hours each. NOT FOR GRADUATE CREDIT. Prerequisite: completion of all required coursework.

499t-6 to 12 SPECIAL EDUCATION STUDENT TEACHING: TRAINABLE MENTALLY RETARDED.
Teaching students with trainable mental retardation under immediate supervision of cooperating teacher and general supervision of university instructor. First student teaching experience must be 12 hours; second or third student teaching experiences for 6 hours each. NOT FOR GRADUATE CREDIT. Prerequisite: completion of all required coursework.

SPEECH COMMUNICATION

103-3 INTERPERSONAL COMMUNICATION SKILLS.
[SKILLS, IGR] Principles and practices of oral communication emphasizing message formation and delivery, listening, perception, awareness of verbal and nonverbal codes, and managing conflict.

104-3 ORAL ARGUMENTATION SKILLS.
[SKILLS] Theories; strategies; techniques for researching, analyzing, constructing, and presenting oral arguments for and against selected contemporary topics and issues. Emphasis on in-class presentations.

105-3 PUBLIC SPEAKING.
[SKILLS] Theories; strategies; techniques for researching, organizing, outlining, and delivering speeches. Emphasis on speaking skills in professional and academic contexts.

111-3 INTRODUCTION TO SPEECH COMMUNICATION.
[INTRO] Study of the historical evolution of communication studies, including theories and practices. Examination of contemporary applications and issues (freedom of speech, ethics, etc.).

200-3 PROFESSIONAL AND TECHNICAL PRESENTATION SKILLS.
Developing and delivering speeches, presentations, and briefings in corporate and professional settings. Models and strategies for technical presentations and group and business meetings. Prerequisite: 104 or 105 or consent of instructor.

201-3 SMALL GROUP COMMUNICATION.
[Adv.FAH] Principles, theories, models, methods of group formation, discussion, and decision-making. Current problems used as focus for exploring group behavior.

203-3 INTRODUCTION TO ORGANIZATIONAL COMMUNICATION.
Principles, theories, organizational skills necessary to function effectively as professionals. Topics include: motivation, goal setting, feedback, delegating, resolving conflicts.

210-3 INTERRACIAL COMMUNICATION.
[Adv.FAH, IGR] Personal dimensions of intergroup communication, especially the interaction of black and white Americans.

213-3 INTRODUCTION TO PUBLIC RELATIONS.
Contemporary theories and practices emphasizing communication skills. Lectures, PR simulations, guest practitioners. Appropriate for majors in any academic area.

223-3 INTERPERSONAL COMMUNICATION THEORY AND APPLICATIONS.
[Adv.FAH] Explores beginning, maintaining and ending relationships. Emphasizes gender, racial and cultural influences, power, self-image and metacommunication. This course contains both theoretical and experiential approaches to personal relationships. Prerequisite: 103.

261-3 ORAL INTERPRETATION OF LITERATURE.
[Adv.FAH] Principles and skills in selecting, editing and presenting literature in an oral reading format. Prerequisite: 104 or 105 or consent of instructor.

300-3 COMMUNICATION IN INTERVIEWING.
Forming questions, gathering information, building rapport, maintaining effective interaction in interviews. Emphasizes perspective of both interviewer and interviewee. Practice with critiqued video playbacks.

305-3 LISTENING.
Examination of process of experiencing meaning in messages. Opportunity to diagnose personal listening skills, learn relevant theory and models, practice effective listening styles.

309-1 to 6 INDEPENDENT PROJECTS IN SPEECH COMMUNICATION.
Projects in 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 a maximum of 6 hours cumulative. Prerequisite: by permit only.

313-3 APPLIED PUBLIC RELATIONS.
Advanced study and application of practices introduced in 213. Emphasis on developing communication materials for PR campaigns. Prerequisite: 213.

329-3 COMMUNICATION RESEARCH METHODS.
Contemporary methods applicable to analysis of human communication processes. Includes logic of research design and statistical reasoning. Practical experience with communication survey research design.

330-4 THEORIES OF COMMUNICATION.
[Adv.FAH] Contemporary and significant historical approaches to developing and testing theories and models of the process of human communication.

331-3 GENDER AND COMMUNICATION.
[IGR] Investigation of the influences of gender on the communication process. Activities, exercises and presentations sensitize students to gender influences on verbal and nonverbal communication.

403-3 ORGANIZATIONAL COMMUNICATION THEORY AND APPLICATIONS.
Diagnosing communication problems in organizations and implementing solutions. Research methods and theoretical applications in organizational communication. Prerequisite: 203 or consent of instructor.

409-3 SENIOR PROJECT IN SPEECH COMMUNICATION.
Transfer of student's research project or paper into oral presentation for departmental faculty/students demonstrating ability to conceptualize communication processes and deliver a professional-quality presentation. NOT FOR GRADUATE CREDIT. Prerequisites: 20 hours in speech communication, senior standing.

410-3 RHETORICAL THEORY AND CRITICISM.
[Adv.FAH] Classical and contemporary theories and methods for analyzing and evaluating public address and other significant forms of communication. Prerequisite: 330 or consent of instructor.

411-3 ANALYSIS OF POLITICAL COMMUNICATION.
Role of communication in politics. Topics include speech preparation, delivery, image promotion, public opinion formation, lobbying behavior as factors in political communication strategies.

413-3 CASE STUDIES IN PUBLIC RELATIONS.
Strategies and critical analyses of ethical issues and approaches in the social and political atmosphere of public relations. Prerequisite: 213 or consent of instructor.

414-3 PUBLIC RELATIONS CAMPAIGNS.
Development of comprehensive public relations campaign proposals and formal presentations to clients. Implementation of the proposal. Prerequisites: 313 and 329 or consent of instructor.

419-3 SPECIAL TOPICS IN SPEECH COMMUNICATION.
Variable content course emphasizing pertinent contemporary communication issues. May be repeated for total of 9 hours as long as no topic is repeated. Contact Department of Speech Communication for current topic.

423-3 HONESTY AND DECEPTION IN COMMUNICATION RELATIONSHIPS.
Theory and research in trust, honesty, deception, secrets and excuses. Verbal and nonverbal cues to concealment, falsification, detection apprehension, deception guilt.

431-3 PATTERNS AND PROCESSES OF INTRAPERSONAL COMMUNICATION.
Inner speech, self-concept, personality, emotions, consciousness, perceptual filters, cognitive complexity, decoding stimuli, communication apprehension, other processes within the individual which affect communication behavior. Prerequisite: 330 or consent of instructor.

433-3 LANGUAGE AND SPEECH COMMUNICATION.
[Adv.FAH] Role and impact of language in speech communication development, processes and behavior. Relational development and conflict resulting from differences in language usage. Prerequisite: 330 or consent of instructor.

434-3 NONVERBAL COMMUNICATION.
[Adv.FAH] Nonverbal theories across varied contexts. Means of transmission and reception of nonverbal cues. Relationship of nonverbal and verbal behavior. Prerequisite: 330 or consent of instructor.

435-3 ANIMAL COMMUNICATION BEHAVIOR.
[Adv.FAH] Nature of behavior in several social species. Role of communication in defining, regulating, and maintaining social systems. Prerequisite: consent of instructor.

461-3 STRATEGIES FOR TEACHING SPEECH COMMUNICATION.
Philosophy of speech education and approaches for teaching speech in curricular and co-curricular settings. Meets for 5 hours. Prerequisite: 12 hours of speech communication or consent of instructor.

462-3 DIRECTING SECONDARY SCHOOL THEATER ARTS PROGRAMS.
Philosophies, principles and techniques of producing theater arts programs in the secondary school.

464-3 FAMILY COMMUNICATION.
Communication functions and behavior within families which develop, maintain, enrich, or limit family relationships.

491-1 to 9 INTERNSHIP IN SPEECH COMMUNICATION.
Study, observation, and professional experience with business and organizations in the various areas of communication under joint supervision of the organizational representative and the speech communication faculty sponsor. May be repeated to a maximum of 9 hours, 3 of which may count toward a speech communication major. NOT FOR GRADUATE CREDIT. Prerequisites: junior or senior standing, a major in speech communication, consent of Director of Internships, acceptance of organizational representative.

SPEECH PATHOLOGY AND AUDIOLOGY

201-3 HUMAN COMMUNICATION AND ITS DISORDERS.
Communicative disorders presented by individuals of all ages; multicultural and low incidence populations. Legal and social issues included.

231-3 PHONETICS.
Phonology and major dialects; description and transcription of normal, different, and disordered speech.

303-3 INTRODUCTION TO SPEECH AND HEARING SCIENCES.
Basic orientation to physiological, acoustical, linguistic, and psychological aspects of normal human communication. Prerequisites: 201, 231, 320.

312-3 NORMAL LANGUAGE AND SPEECH ACQUISITION.
Normal development of linguistic code, including phonology, morphology, syntax, semantics, pragmatics. Prerequisites: 201, 231.

320-3 ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISMS.
Structure and functioning of normal communication system. Prerequisites: 201, 231.

400-1 to 3 INDEPENDENT STUDY IN SPEECH PATHOLOGY AND AUDIOLOGY.
Investigative consideration of relevant topics not covered extensively in regular curriculum. Prerequisite: consent of instructor.

441-3 DISORDERS OF ARTICULATION.
Factors influencing development of atypical articulation; assessment and intervention. Prerequisites: 201, 231.

442-3 SPEECH DISORDERS.
Basic principles of diagnosis and intervention with individuals with vocal and fluency disorders. Prerequisites: 201, 320.

444-3 LANGUAGE DISORDERS OF CHILDREN.
Etiology, assessment, and intervention with infants, children, and adolescents with developmental disorders. Prerequisites: 312, 320.

445-3 LANGUAGE DISORDERS OF ADULTS.
Etiology, assessment, and intervention with individuals with acquired communication disorders. Prerequisites: SPPA 312, 320.

446-1 CLINICAL OBSERVATION IN SPEECH PATHOLOGY.
Supervised clinical observation in preparation for clinical assignments. Prerequisites: 441, 444.

449-1 to 3 CLINICAL PRACTICE IN SPEECH PATHOLOGY.
Supervised clinical practice. Twenty clock hours of clinical activity for each hour of credit. May be repeated to a maximum of 3 hours. Prerequisites: 3.0 GPA, 441, 444.

450-3 CLINICAL PROCEDURES IN THE SCHOOLS.
Legal, organizational, and professional issues; service delivery options. Prerequisite: consent of instructor.

452-3 CLINICAL PROCEDURES IN SPEECH PATHOLOGY AND AUDIOLOGY.
Principles underlying clinical interview and client relationships. Therapy and procedures in obtaining, recording, and evaluating test results. Prerequisites: 441, 442, 444.

461-3 BASIC AUDIOMETRY.
Principles and techniques of pure tone and speech reception testing. Prerequisite: 303.

469-1 to 3 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 to a maximum of 3 hours. Pass/no credit. Prerequisite: 461.

471-3 AURAL REHABILITATION.
Management of the hearing impaired; auditory training, speech reading, speech conservation, counseling. Prerequisite: 461.

498-3 NON-ORAL COMMUNICATION SYSTEMS.
Augmentive communication including manual systems, communication boards, electronic devices, computer adaptations employing words, pictures, other symbols. Evaluation, teaching strategies, system modifications. Prerequisites: 441, 444.

499-2 SENIOR ASSIGNMENT SEMINAR.
Analytic and critical study of topics related to research, professionalism, and practice in speech-language pathology. Prerequisites: SPPA 201, 231, 303, 312, 320, 441, 444; concurrent enrollment in SPPA 461, 471, or 445.

STATISTICS

107-3 CONCEPTS OF STATISTICS.
[SKILLS] Basic concepts of descriptive statistics; probability distribution and inferential statistics (estimating parameters and testing hypotheses); sampling, experimental design, correlation and regression, consumer price index. Credit may not be granted for both STAT 107 and STAT 244. Prerequisite: one and one-half years of high school algebra or MATH 095.

244-3 STATISTICS.
Summarizing data, including distributions, change and growth, relationships. Basics of survey design and experimental design. Inferential statistics, including confidence intervals and hypothesis testing. Credit may not be granted for both 107 and 244. Prerequisite: MATH 130 or MATH 150.

380-3 STATISTICS FOR APPLICATIONS.
Descriptive statistics, basic probability rules and distributions, inferences for means, variances and proportions, design and analysis of experiments, regression analysis. Prerequisite: MATH 152.

410-3 STATISTICAL ANALYSIS.
Design of surveys and experiments. Inferential statistics, including confidence intervals and hypothesis testing. Simple and multiple regression. May not be used to satisfy requirements of a mathematics or statistics major specialization or minor. Prerequisite: MATH 130 or MATH 150 or consent of instructor.

478-3 TIME SERIES.
Statistical analysis of time series. Regression and exponential smoothing. Box-Jenkins methodology. Prerequisite: 380 or 480b.

480a,b-3 each INTRODUCTION TO MATHEMATICAL STATISTICS.
Mathematical statistical theory. Probability models, distributions of random variables, sampling distributions, generating functions, central limit theorem and limiting distributions, parameter estimation, statistical hypotheses, linear models. Must be taken in sequence. Prerequisite: MATH 250.

481-3 DESIGN AND ANALYSIS OF EXPERIMENTS.
Designs for experimentation and their statistical inference. One-way, two-way classifications, complete and incomplete block designs. Factorial and fractional factorial designs. Response surface designs. Prerequisite: 380 or 480a,b.

482-3 REGRESSION ANALYSIS.
Inference in simple, multiple, polynomial and non-linear regression. Stepwise regression, subset selection; residual analysis, transformations and diagnostics. Prerequisite: 380 or 480a,b or consent of instructor.

483-3 SAMPLE SURVEYS.
Simple random sampling, stratified sampling, one-stage and two-stage cluster sampling. Ratio, regression, difference estimation. Estimation of population size. Prerequisite: 380 or 480a,b or consent of instructor.

484-3 RELIABILITY ENGINEERING.
(Same as IE 463) Probabilistic models for the reliability of coherent systems, statistical models for lifetimes of components and for repairable systems, reliability estimation and production, MIL standards. Prerequisites: 480a,b or IE 365.

485-3 STOCHASTIC PROCESSES.
Markov chains with applications, poisson processes, Markov processes with discrete states in continuous time, renewal theory and queuing theory, Brownian motion and stationary processes. Prerequisite: 480a.

486a,b-3 each ACTUARIAL MATHEMATICS.
Utility theory, risk models, survival distributions, life tables. Life insurance models, life annuities, premium calculation, valuation theory for pension plans. Prerequisite: 480a.

487-3 NONPARAMETRIC STATISTICS.
Distribution-free tests and estimation, randomization, sign test, signed-rank test, power, robustness, inferences concerning location and scale parameters for two independent samples, goodness-of-fit. Prerequisite: 480 a,b or consent of instructor.

488-3 DESIGN AND CONTROL OF QUALITY SYSTEMS.
(Same as IE 465) Quality design by experimental design; determination of process capability; quality control using statistical control charts; acceptance sampling. May not be used for graduate credit in the School of Engineering. Prerequisite: 480 a,b or IE 365.

495-1 to 3 INDEPENDENT STUDY.
Research and reading in specified area of interest such as analysis of variance, design of experiments, estimation, testing hypotheses, linear models, robust procedures, reliability. May be repeated to a maximum of 9 hours. Prerequisite: written consent of adviser and instructor.

THEATER

111-3 THE DRAMATIC EXPERIENCE
[INTRO] Introductory course to give student understanding of how essential components of theater work together to produce dramatic experience.

112a-3 ACTING I: INTRODUCTION TO ACTING.
Fundamentals of acting combining improvisational exercises with method approach to developing role; emphasis on relaxation, imagination, concentration, objectives. Open to non-majors.

112b-3 ACTING II: CREATING A ROLE.
Beginning work in scene study and monologues; emphasizing serious, internal realistic acting techniques applicable to both stage and TV/film. Prerequisite: 112a.

130-2 to 3 REHEARSAL AND PERFORMANCE.
Acting practicum in stage productions developed for public performance discipline. May be repeated with consent of instructor. Prerequisite: must be cast in theater production.

141-3 FILM ANALYSIS.
[Adv.FAH] Fundamentals of film analysis studied as skill essential to understanding of narrative visual media.

150a,b-3 each DESIGN AND TECHNICAL PRODUCTION FOR THE THEATER.
Theory and practice of scenery, costumes and lighting for dramatic presentations; stagecraft, model making, stage management, makeup, and sound also covered. Laboratory work required. May be repeated to a maximum of 6 hours.

190-1 to 3 SPECIAL PROJECTS.
Individual work in any area of theater. May be repeated to a maximum of 6 hours. Prerequisite: consent of instructor.

195-1 to 3 THEATER PRACTICUM.
Practical work on University Theater productions. Backstage work in scenery, lighting, costumes, props, sound, or makeup. Work to be arranged for individual needs, interests. May be repeated to a maximum of 6 hours. Prerequisite: consent of instructor.

204-3 FORMS OF DRAMATIC ACTION.
Principles of dramatic action as exemplified in selected plays. Relationships between theatrical process and dramatic form in tragedy and comedy.

210-3 ACTING III: COMEDY AND CHARACTERIZATION.
Exercises and scene work introducing external techniques for physical/vocal characterization and comedy. Prerequisites: 112a,b.

215-3 MOVEMENT AND VOICE FOR THE STAGE.
Principles of stage movement and theatrical vocal technique: vocal production, vocal and physical characterization, introduction to dialect study and stage combat. Prerequisites: 112a,b and consent of instructor.

230-2 to 3 REHEARSAL AND PERFORMANCE.
Acting practicum in stage productions developed for public performance. Role analysis, ensemble playing, rehearsal and performance discipline. May be repeated with consent of instructor. Prerequisite: must be cast in theater production.

235-2 INTRODUCTION TO T'AI CHI CH'UAN.
"Slow-motion" exercise that promotes relaxation, circulation, balance, flexibility. Includes principles and postures from short form of Yang style T'ai Chi Ch'uan.

241-3 FILM HISTORY.
[Adv.FAH] Highlights of narrative film history with emphasis on periods and movements which have had enduring influence on contemporary film. Prerequisite: 141 or consent of instructor.

250-3 THEATER GRAPHICS.
Basic theatrical drawing—studio. Perspective rendering, drafting, water color techniques, figure drawing. Prerequisite: one year of beginning art studio or consent of instructor.

260-3 COSTUME DESIGN.
Theory, rendering techniques, history of dress and costume construction techniques, research for period silhouettes and character presentation. Laboratory work on University Theater productions required. Prerequisites: 150a,b and consent of instructor.

265-2 THEATER MAKEUP.
Design and application techniques using pan cake, grease paint, prosthetics, crepe hair. Projects include character, old age, ethnic, fantasy makeup. Prerequisite: consent of instructor.

270-3 ADVANCED LIGHTING DESIGN.
Lighting concepts and sensitivity to lighting environments. Lighting plans, light plots, schedules and section drawings. Laboratory work on University Theater productions required. Prerequisites: 150a,b and consent of instructor.

290-1 to 3 SPECIAL PROJECTS.
Individual work in any area of theater. May be repeated to maximum of 6 hours. Prerequisite: consent of instructor.

295-1 to 3 THEATER PRACTICUM.
Practical work on University Theater productions. Backstage work in scenery, lighting, costumes, props, sound, or makeup. Work to be arranged for individual needs, interests. May be repeated to a maximum of 6 hours. Prerequisite: consent of instructor.

309-3 MUSICAL THEATER WORKSHOP.
Preparation and performance of musical comedy scenes in a variety of styles: acting, singing, dancing ensemble, solo work. May be taken twice.

310-3 PERFORMANCE STUDIO I: INTERNATIONAL/EXPERIMENTAL STYLES.
[IC] Utilization of international and experimental performance techniques, designed to promote global and contemporary aesthetics and abilities. Prerequisites: junior standing in the theater and dance program and consent of instructor.

320-3 DIRECTING FOR THE STAGE.
Elements of director's craft: interpretation, composition and blocking, design and technical considerations, working with actors and directing a scene. Prerequisites: 112a, 150a or b.

330-2 to 3 REHEARSAL AND PERFORMANCE.
Acting practicum in stage productions developed for public performance. Role analysis, ensemble playing, rehearsal and performance discipline. May be repeated with consent of instructor. Prerequisite: must be cast in theater production.

350-3 SCENE DESIGN.
Advanced study of rendering techniques. Design projects, critique sessions, and research techniques. May be taken twice. Prerequisite: 250 or instructor consent.

355-2 SCENE PAINTING FOR THE THEATER.
Traditional and contemporary techniques including layout, cartooning, lining, textures, color. Studio work. Prerequisites: 150a, b recommended.

375-2 SOUND FOR THE THEATER.
Sound control, microphone amplification, acoustics, sound effects. Practical operation with microphones, turntables, tapedecks, and loudspeakers.

376-1 to 3 PROJECTS IN STAGE MANAGEMENT.
Practical experience serving as stage assistant director and/or stage manager for University or Student Experimental Theater productions. May be repeated to a maximum of 9 hours. Prerequisites: 150a, b, approval of director of production, and consent of instructor.

390-1 to 3 SPECIAL PROJECTS.
Individual work for advanced students in any area of theater. May be repeated to a maximum of 6 hours. Prerequisite: consent of instructor.

395-1 to 3 THEATER PRACTICUM.
Practical work on University Theater productions. Backstage work in scenery, lighting, costumes, props, sound, or makeup. Work to be arranged for individual needs, interests. May be repeated to a maximum of 6 hours. Prerequisite: consent of instructor.

401a,b-3 each HISTORY OF THE THEATER.
[Adv.FAH] Drama, performance, architecture, design, and cultural environment of (a) Primitive, Greek, Roman, Medieval, Renaissance; (b) Restoration, Eighteenth century, Romantic, Modern. NOT FOR GRADUATE CREDIT.

405-3 THEATER BUSINESS MANAGEMENT PRACTICUM.
Principles of management systems organization and practice as applied to performing arts units. Mission development, personnel selection, funding, budgeting, promotion, operational continuity. Internship. NOT FOR GRADUATE CREDIT.

410a-3 SENIOR ASSIGNMENT IN PERFORMANCE.
Supervised independent research culminating in written and performance project. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing in Theater and Dance, approved project.

410b-3 ACTING IV: ACTING AS A CAREER.
Information and skills necessary to gain professional work as an actor or acting teacher. Auditions, photographs, interviews, cold-readings, commercials, voice tapes, introduction to television acting. NOT FOR GRADUATE CREDIT.

412-3 ACTING FOR TELEVISION.
Acting principles and techniques. Exercises, commercials, and scenes from television scripts will be video-taped and critiqued for on-camera effectiveness. NOT FOR GRADUATE CREDIT.

420-3 PROJECTS IN DIRECTING.
Direction of plays staged for performance. Analysis of script, development of director's prompt book, rehearsal procedure, collaborative work with designers. Done under faculty supervision. May be repeated to a maximum of 6 hours. NOT FOR GRADUATE CREDIT. Prerequisite: 320.

430-2 to 3 REHEARSAL AND PERFORMANCE.
Acting practicum in stage productions developed for public performance. Role analysis, ensemble playing, rehearsal, performance discipline. May be repeated with consent of instructor. NOT FOR GRADUATE CREDIT. Prerequisite: must be cast in theater production.

450-1 to 3 ADVANCED SCENE DESIGN PROJECTS.
Advanced practical work on studio or University Theater productions. May be repeated to maximum of 9 hours. NOT FOR GRADUATE CREDIT. Prerequisites: 250 and consent of instructor.

455-3 SENIOR PROJECT-PORTFOLIO.
Advanced design projects with emphasis on research and conceptual approaches. Written assignments on production problems. Geared toward development of well-balanced professional portfolio. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

460-1 to 3 ADVANCED COSTUME DESIGN PROJECTS.
Advanced practical work on studio or University Theater productions. May be repeated to maximum of 9 hours. NOT FOR GRADUATE CREDIT. Prerequisites: 260 and consent of instructor.

470-1 to 3 ADVANCED LIGHTING DESIGN PROJECTS.
Advanced practical work on studio or University Theater productions. Normally limited to work as lighting designer, assistant lighting designer, or master electrician. May be repeated to a maximum of 9 hours. NOT FOR GRADUATE CREDIT. Prerequisites: 270 and consent of instructor.

475-1 to 3 ADVANCED STAGECRAFT PROJECT.
Advanced practical work on studio or University Theater productions in area of technical theater. May be repeated to a maximum of 9 hours. NOT FOR GRADUATE CREDIT. Prerequisites: 150a,b recommended, consent of instructor.

480-3 COMPUTERS FOR THEATER: MULTI-IMAGE PRESENTATIONS.
Computer image-making techniques related to theater and dance. Class/lab work includes computer graphics, "paint box", three-dimensional imagery, ray tracing, video digitizers, computer enhancing, multi-slide presentations. Prerequisites: advanced undergraduate or graduate standing and consent of instructor.

482-3 COMPUTERS FOR THEATER: ANIMATION.
Computer image-making techniques as related to theater and dance. Class/lab work includes computer animation (vector, cell, "real-time"), genlock techniques, computer generations for video enhancement. Prerequisites: advanced undergraduate or graduate standing and consent of instructor.

485-1 to 3 SPECIAL PROJECTS IN COMPUTERS.
Individual or small group project work in computers as related to performing arts. Computer graphics, computer animation, video enhancing, multi-image slide productions. May be repeated to a maximum of 9 hours. Prerequisites: advanced undergraduate or graduate standing and consent of instructor.

490-1 to 3 SPECIAL PROJECTS.
Individual work for advanced students in any area of theater. May be repeated to a maximum of 6 hours. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

495-1 to 3 THEATER PRACTICUM.
Practical work in University Theater productions. Backstage work in scenery, lighting, costumes, props, sound, or makeup. Work to be arranged for individual needs, interests. May be repeated to a maximum of 6 hours. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

UNIVERSITY

112-2 THE UNIVERSITY EXPERIENCE.
Academic, cultural, and social aspects of a university. History, structure, programs and supportive resources of SIUE. Study skills, personal attitudes and choices for newly entering students.

WOMEN'S STUDIES

200-3 ISSUES IN FEMINISM.
[Adv.SS, Adv.FAH, IGR] Beliefs, values, and commitments of the women's movement and their implications for lives of both women and men. May count for Adv.SS or Adv.FAH but not both.

308-3 WOMEN, GENDER AND SOCIETY.
[Adv.SS, IGR] (Same as SOC 308) Sociological and feminist perspectives on women in American society with an emphasis on institutions which create, maintain, and reproduce gender and gender inequality.

313-3 WOMEN IN CROSS-CULTURAL PERSPECTIVE.
[Adv.SS, IGR] (Same as ANTH 313) Comparisons of positions, roles, and problems of women in contemporary cultures from selected world areas and socioeconomic levels. Anthropological perspectives on issues of women's studies.

331-3 GENDER AND COMMUNICATION.
[IGR] (Same as SPC 331) Investigation of the influences of gender on the communication process. Activities, exercises and presentations, sensitize students to gender influence on verbal and nonverbal communication.

341-3 AFRICAN-AMERICAN WOMEN IN AFRICAN-AMERICAN LITERATURE.
[Adv.FAH, IGR] (Same as ENG 341) Poems, novels, short stories, essays, dramas, biographies, appropriate historical documents, portraying roles of African-American women in America.

345-3 PHILOSOPHICAL CONCEPTIONS OF WOMEN.
[Adv.FAH] (Same as PHIL 345) Theories of the nature and role of women as expounded by philosophers past and present.

346-3 SOCIAL PHILOSOPHIES OF THE WOMEN'S MOVEMENT.
[Adv.FAH, IGR] (Same as PHIL 346) Social philosophy from feminist perspective. Major theoretical works of women's movement. Prerequisite: 200 strongly recommended.

350-3 WOMEN IN SOCIAL INSTITUTIONS: A COMPARATIVE APPROACH.
[IGR] (Same as IS 350) Historical, cultural, and social class differences in contexts of education, family, health care, economics, religion, politics.

351-3 WOMEN IN MASS COMMUNICATIONS.
[IGR] (Same as MC 351) Early minority and white women journalists' struggles. Social, political, technological contexts. Media as tools of social change. Historical patterns. Positive and negative male influences. Prerequisite: junior standing.

390-3 SPECIAL PROBLEMS.
Varying topics in the study of gender bearing directly on women's experience. May be repeated for maximum of 6 hours provided no topic is repeated.

405-3 PSYCHOLOGY OF WOMEN.
[Adv.SS, IGR] (Same as PSYC 405) Psychological and cultural history of gender, changing sex roles, socialization, sexuality, issues related to mental health, stereotyping, and cognition. Prerequisite: PSYC 111.

426-3 FAMILY AND KINSHIP IN CROSS-CULTURAL PERSPECTIVE.
[Adv.SS, IC] (Same as ANTH 426) History and cross-cultural perspectives on kinship and family. Studies a variety of family experiences through readings, speakers, and discussions. NOT FOR GRADUATE CREDIT.

428-3 TOPICS IN EUROPEAN WOMEN'S HISTORY.
[Adv.SS, II] (Same as HIST 428) Selected topics in women's history since the Middle Ages. Chronological framework will vary from semester to semester.

440-3 WOMEN IN AMERICAN SOCIAL HISTORY.
[Adv.SS, IGR] (Same as HIST 440) Women from various social classes, ethnic and racial groups, and geographic regions. Social institutions such as family; church; schools; etc. Colonial era to present.

450-3 SCIENCE, GENDER, AND RACE.
[IGR] (Same as BIOL 450) Current social issues and historical perspectives of science, especially biology, and its medical and technical applications as they relate to gender and race. Prerequisite: junior standing.

451-3 GENDER AND EDUCATION.
[IGR] (Same as EDFD 451) Policies and practices related to sex-role stereotyping, teacher expectations and gender, curricular bias, discrimination, personnel policies, strategies for change.

456-3 SEMINAR ON WOMEN WRITERS.
[IC] (Same as FR 456) Fiction, nonfiction, drama, and poetry. Taught in English. For credit in FL, term paper written in French.

473a,b-3 each WOMEN IN ART.
[Adv.FAH, IC] (Same as ART 473) (a) The history of women artists from the Middle Ages to World War II; (b) The history of women artists from World War II to the present.

478-3 STUDIES IN WOMEN, LANGUAGE, AND LITERATURE.
[IGR] (Same as ENG 478) Relationships among society, gender, language, and literature: ways women are affected by and depicted in language and literature; literature written by women; feminist criticism. Prerequisite: junior standing or consent of instructor.

490-3 SPECIAL PROBLEMS.
Varying topics, in depth study of gender and women's experience. May be repeated for a maximum of 6 hours provided no topic is repeated.

495-1 or 3 INDEPENDENT STUDY.
Individual research in women's experience or feminist theory. Content and format to be arranged with instructor. Prerequisite: consent of Women's Studies Coordinator.

499-3 PRACTICUM IN WOMEN'S STUDIES.
Practical learning experience in women-oriented activities or organizations. Ten hours weekly plus readings or paper. Prerequisite: consent of Women's Studies Coordinator.

BUILDING KEY

AD	Art & Design
AL	Alton Campus
BC	Belleville Area College
B2	Classroom Building 2
B3	Classroom Building 3
CB	Communication Building
EC	Early Childhood Center
ER	Envirnmtl Res Trng Ctr
ES	East St. Louis Center
H/R	Heating/Refrig. Plant
LB	Lovejoy Library
PB	Peck Building
RB	Rendleman Building
RC	Religious Center
RH	Residence Hall
SC	Student Fitness Center
SF	Scott Air Force Base
SL	Science Building
SP	Sewage Plant
SS	Supporting Services
TB	Metcalf Stu Ex Theater
TC	Tosovsky Center
TL	Twr Lk Common Bldg
UC	University Center
UP	University Park
VC	Vadalabene Center
29	Tract 29
31	Tract 31
44	Tract 44
68	Tract 68

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Academic Marketing Services, RB 0103 2631
- Arts & Issues Series/Marketing 2626
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Admissions, Undergraduate, RB 1215, Coordinator, James Rotter 2645
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- Freshman Applicants (A-Z) 2721
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ALESTLE (See Student Publications) 3528

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Ceramic Area, AD 1114 . . . 3146
Sculpture Area, AD 1115 . . . 2094

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- Biomedical Library, Gloria D. Kharibian, Bldg. 277 Rm. 0007 474-7277

Advanced Education Clinic, Bldg. 272 474-7149
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Growth, Development & Structure, Henry G. Elsbach, Bldg. 274 Rm. 1101 474-7030
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Director of Research, Bldg. 271 Rm. 1100 474-7118
Director of Resource Development, Katherine D. Siddens, Bldg. 273 Rm. 2204 474-7128
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EAST ST. LOUIS CENTER
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Papers on Language and Literature, Brian Abel Ragen and Jack Voller, PB 0219 2119
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String Development Program, Carol Smith, TR 42 2839
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After Hours Hotline 3818

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Key to the SIUE Campus

1 Art & Design Building
2 Building 2
3 Building 3
4 Communications Building
5 Early Childhood Center
6 Engineering Building
7 Lovejoy Library
8 Metcalf Student Experimental Theater
9 Peck Building
10 Religious Center
11 Rendleman Building
12 Science Building
13 Student Fitness Center
14 Student Residence Hall
15 Tower Lake Apartments
16 University Center
17 Vadalabene Center for Health, Recreation and Physical Education

PARKING LOTS

A NORTH, CENTRAL, SOUTH Special Registered Vehicles
B University Center—Attended Pay Lot (Visitor's Parking)
C Rendleman Building—Metered Lot
E Special Registered Vehicles
VC Vadalabene Center—Special Registered Vehicles and Metered Parking
P1, P2, P3 Registered Vehicles for Faculty and Staff
P4 Registered Vehicles for Residence Hall
P5-P15 Registered Vehicles for Faculty, Staff and Students

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