

Southern Illinois University Carbondale



## 2016–2017 Counselors' Advisement Catalog

This publication provides information about undergraduate degree programs at Southern Illinois University Carbondale.

Students starting their collegiate training (first graded course from an accredited institution) during the period of time covered by the 2016–2017 Undergraduate Catalog (summer 2016 through spring 2017) are subject to the curricular requirements specified in the 2016–2017 Undergraduate Catalog. The requirements will extend for a seven-calendar-year period from the date of entry for baccalaureate programs and a three-calendar-year period for associate programs. Students, who have not met their undergraduate educational objectives during these periods, will become subject to current curricular requirements.

Should the requirements contained in the SIU Carbondale 2016–2017 Undergraduate Catalog subsequently be changed by SIU Carbondale, students are assured that necessary adjustments will be made so that no additional time is required of them. Where programs include requirements established by agencies external to SIU Carbondale, every effort will be made to follow the same principal as far as possible. Should subsequent curricular requirement changes work to students' advantage, they may elect to meet the new requirements rather than those contained in the undergraduate catalog.

Should SIU Carbondale find it necessary to discontinue an academic program, the effective date, unless otherwise dictated, will be such that the last regularly admitted class will be able to complete the program in regular-time sequence: four years for baccalaureate and two years for associate programs. A student who has withdrawn from SIU Carbondale may not be readmitted to a discontinued program.

SIU Carbondale reserves the right to make changes, as it deems necessary, in curricular requirements, academic policies, and other rules and regulations affecting students, to be effective whenever determined by SIU Carbondale, without regard to students' dates of admission or start of collegiate training.

SIU Carbondale is an Equal Opportunity/Affirmative Action institution in accordance with Civil Rights legislation and does not discriminate on the basis of race, color, religion, national origin, sex, age, disability, sexual orientation, marital status, or other factors prohibited by law in any of its educational programs, activities, admission or employment practices. Concerns regarding this policy should be referred to the University Affirmative Action Office, SIU Carbondale, 1075 S. Normal Avenue, Davies Hall Room 153, Carbondale, IL 62901 and/or telephone (618) 453-1196.

# Table of Contents

Accounting, 3	International Studies, 87
Africana Studies, 4	Journalism, 88
Agribusiness Economics, 5	Kinesiology, 90
Agricultural Systems, 6	Languages, Cultures, and International Studies, 93
Animal Science, 12	Linguistics, 94
Anthropology, 14	Management, 96
Architectural Studies, 15	Marketing, 97
Art, 16	Mathematics, 98
Automotive Technology, 19	Mechanical Engineering, 101
Aviation Flight, 20	Microbiology, 102
Aviation Management, 21	Mining Engineering, 103
Aviation Technologies, 22	Mortuary Science and Funeral Services, 104
Biological Sciences, 23	Museum Studies, 105
Business and Administration, 25	Music, 106
Business Economics, 26	Music Education, 113
Chemistry and Biochemistry, 27	Musical Theater, 114
Cinema and Photography, 28	Paralegal Studies, 115
Civil Engineering, 30	Philosophy, 116
Communication Disorders and Sciences, 31	Physical Therapist Assistant, 117
Communication Studies, 32	Physics, 118
Computer Engineering, 38	Physiology, 119
Computer Science, 39	Plant Biology, 120
Criminology and Criminal Justice, 40	Political Science, 122
Crop, Soil, and Environmental Management, 41	Pre-Dentistry, 123
Dental Hygiene, 45	Pre-Law, 124
Early Childhood, 46	Pre-Medicine, 125
Early Childhood Education, 47	Pre-Nursing, 126
East Asian Language and Culture, 48	Pre-Occupational Therapy, 127
Economics, 49	Pre-Optometry, 128
Electrical Engineering, 50	Pre-Pharmacy, 129
ECE Dual Degree, 51	Pre-Physical Therapy, 130
Electronic Systems Technologies, 52	Pre-Physician Assistant, 131
Elementary Education (1-6), 53	Pre-Podiatry, 132
Engineering Technology, 54	Pre-Veterinary Medicine, 133
English, 55	Psychology, 134
Environmental Studies, 59	Public Health, 135
Fashion Design and Merchandising, 60	Radio, Television, & Digital Media, 136
Finance, 63	Radiologic Sciences, 137
Fire Science Management, 64	Recreation, 138
Foreign Language and International Trade, 65	Rehabilitation Services, 139
Forestry, 66	Social Sciences, 140
French, 71	Social Work, 141
Geography and Environmental Resources, 72	Sociology, 142
Geology, 73	Spanish, 143
German, 74	Special Education, 144
Health Care Management 75	Technical Resource Management, 145
History, 66	Theater, 146
Horticulture, 78	University Studies, 148
Hospitality and Tourism Administration, 82	Workforce Education and Development, 149
Human Nutrition and Dietetics, 83	Zoology, 159
Industrial Management & Applied Engineering, 84	
Information Systems Technologies, 85	
Interior Design, 86	

# Accounting

College of Business  
(Bachelor of Science)

232 Henry J. Rehn Hall  
Telephone: (618) 453-2289

<http://www.business.siu.edu/academics/dept/accounting/index.html>

Accounting is the process of identifying, measuring, and communicating economic data so that sound business judgments and decisions can be made.

The B.S. degree program with a major in accounting meets the objectives of students considering professional positions as certified public accountants or as members of industry or government management teams. As of May 2001, 150 hours of college credit are required to sit for the CPA exam in Illinois. Building on fundamental knowledge developed in core courses and a restricted set of electives, students can select from a variety of other courses to gain in-depth knowledge about their particular areas of interest.

A field internship placement may be an important element in the program and is encouraged for interested students who meet the department's criteria. Students who qualify may arrange to work off campus, during any semester after the sophomore year, under the direction of a cooperating employer. While most of the work assignments are in the St. Louis and Chicago areas, some students have been assigned, at their request, in districts in other states. Students receive valuable work experience, a salary, and 3 hours of university credit under the internship program. The School of Accountancy must approve interns.

## *Accounting as a Major*

It is strongly recommended that the courses listed above for the first two years be completed before the junior year. Many of these courses are prerequisites to later requirements. The school is accredited by The Association to Advance Collegiate Schools of Business International and is a member of the Federation of Schools of Accountancy. A 2.00 GPA in SIU Carbondale accounting courses is required for graduation. A C or better is required in all upper-division accounting courses.

Graduate degrees available: Master of Accountancy (M. Acct.), Doctor of Philosophy in Business Administration (Ph.D.).

## *Representative Career Options*

Accountant	revenue collection officer	auditor, grants and contract officer
assistant controller	plant accountant	retail controller trainee
junior systems analyst	financial management trainee	internal auditor
accounting management trainee	property accountant	budget accountant
accounting and fiscal administration career trainee		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Africana Studies

College of Liberal Arts  
(Bachelor of Arts)

Philip C. Howze, Chair  
Faner Hall Room 4007  
Telephone: (618) 453-7147  
<http://cola.siu.edu/africanastudies/>

Students who wish to enroll in Africana Studies as their sole or primary Major will be expected to fulfill the *general requirements of the College of Liberal Arts*. Students who wish to enroll in Africana Studies as an added Major and who are primarily enrolled in a college at SIU Carbondale other than the College of Liberal Arts must fulfill their college's general requirements. Only Africana Studies courses completed with a least a *C* will fulfill the major requirement.

A minor in Africana Studies consists of a minimum of 20 hours, which are to be selected from Africana Studies course offerings and organized according to each individual student's field of interest. Africana Studies 311A,B is required for the minor.

## *Representative Career Options*

Educator                      Consultant

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Agribusiness Economics

(Agricultural Economics/Agribusiness)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Ira J. Altman, Chair  
226 Agriculture Building  
Telephone: (618) 453-2421  
E-mail: [agecon@siu.edu](mailto:agecon@siu.edu)  
<http://www.agribusiness.siu.edu>

The need to better utilize our natural resources and protect our environment, improve our rural infrastructure, and manage the activities of food/fiber production, processing, and distribution firms in an international setting is creating career opportunities at a quickening pace.

Agribusiness Economics offers a flexible program, which, under the supervision of a faculty adviser, allows the student to pursue either a comprehensive or more specialized course of study in preparation to assume an effective professional role in our dynamic, global, economic, and social environment.

Among career opportunities are grain merchandising; livestock marketing; farm credit; farm management; agribusiness management; sales of farm supplies (chemical, machinery, feed, seed, petroleum); administration of farm energy or environmental programs; agricultural, energy, or environmental policy analysis; regional and rural economic development; resource economics; environmental management and planning; agricultural extension; and real estate sales and appraisal. Courses in Agribusiness Economics in the traditional areas of farm management and marketing emphasize accepted techniques to improve efficiency and farm profitability. Course offerings in agribusiness management, finance, sales, marketing, and commodity futures prepare students to assume positions with a broad range of businesses that comprise the agribusiness sector; from input suppliers to farmers through merchandising and processing agricultural commodities to retail sales to consumers. Course offerings in environmental and natural resource economics, energy economics, agribusiness management, rural development, food policy and agricultural law introduce the needed applied economic skills for effective decision making, complement a more specialized course of study, and provide the basis for dealing with contemporary societal problems.

## *Representative Career Options*

Agricultural salesperson  
grain elevator manager  
Ag. commodities inspector loan officer  
Ag. management specialist  
Ag. market reporter  
ethanol plant manager  
policy analyst and environmental planner,

sales manager  
food broker  
farm manager,  
Ag. marketing specialist  
energy economist  
logistic manager/planner

commodity merchandiser  
Ag. program administrator  
Ag. economist  
risk manager  
resource economist  
economic development specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Agricultural Systems

(Agricultural Communications Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Seburn Pense, Associate Professor  
154 Agriculture Building  
Telephone: (618) 453-2467  
<http://coas.siu.edu/>

The B.S. degree in agricultural systems with a specialization in agricultural communications is designed to build competencies in both agriculture and communication skills. These include knowledge in different content areas of agriculture, print and broadcast journalism, reporting, editing, layout and web design, advertising, public relations, and journalism law and ethics.

This specialization is for those students who plan to work in agricultural communications programs such as news-editorial journalism, photo journalism, advertising/marketing communication, radio-television broadcasting, public relations and web design.

## *Representative Career Options*

agricultural microcomputer specialist  
assistant manager (farm supply business)  
sales representative

assistant county extension adviser  
ag. industry representative

product education specialist  
agricultural manager

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Agricultural Systems

(Agricultural Education Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Seburn Pense, Associate Professor  
AGED Coordinator  
154 Agriculture Building  
Telephone: (618) 453-6984  
<http://coas.siu.edu/>

The B.S. degree program in agricultural systems with an agricultural education specialization meets the objectives of students interested in certification as Illinois high school teachers, grades 9-12, of agricultural education. Students may specialize in one of the following areas: *agribusiness, biology, zoology, plant and soil science, horticulture and animal science.*

Students who major in agricultural systems at SIU Carbondale may choose from an extensive list of courses, work closely with excellent teachers, and participate in many outstanding student activities. The curriculum is focused on three areas of specialization: education, technologies, and production.

Not only are there excellent employment opportunities for agricultural education majors as teachers in high schools and community colleges; the breadth of training also provides educational background needed for adult training programs offered by high schools, colleges, extension services, and industry. Many international agricultural positions are open to persons with this training, which also provides the educational background sought by many agribusiness firms for sales and management training positions.

## *Representative Career Options*

High School Ag Teacher  
coordinator (of classes in Ag. education)  
corporate education specialist

community college instructor  
agricultural literacy coordinator  
Collegiate Future Farmers of America (FFA) and agricultural education clubs organizer

university professor  
extension advisor  
university professor  
extension advisor  
Collegiate Future Farmers of America (FFA) and agricultural education clubs organizer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Agricultural Systems

(General Agriculture Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Dennis G. Watson, Associate Professor  
158B Agriculture Building  
Telephone: (618) 453-6979  
<http://coas.siu.edu/>

The B.S. degree program in agriculture systems with a specialization in general agriculture meets the objectives of students considering a career benefiting from a unique combination of coursework in agriculture and related sciences. Course work involves instruction in selected areas of agriculture, education, and communications. Areas of employment include agricultural extension, agricultural media, post-secondary educational institutions, and industry.

Students who major in agricultural systems at SIU Carbondale may choose from an extensive list of courses, work closely with excellent teachers, and participate in many outstanding student activities.

This is a program for students with good language skills who like working with people. No minor required. No foreign language required. Approximate class size = 30.

## *Representative Career Options*

Ag. media and corporate communications	Specialized Ag.-related jobs in state and federal government and private industry
Ag. research jobs	Marketing and sales for Ag. input suppliers and output buyers
Ag. education jobs	Various jobs within cooperative extension services

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Agricultural Systems

(Agricultural Systems Technology Management Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Dennis G. Watson, Associate Professor  
158B Agriculture Building  
Telephone: (618) 453-6979  
<http://www.siu.edu/~psas>

The B.S. degree program in Agricultural Systems with a specialization in Agricultural Systems Technology Management meets the objectives of students interested in the application of technical knowledge and methods to the management of agricultural systems and enterprises. Course work provides understanding of the technical principles and processes used by businesses and agencies serving production agriculture, communication of information, and the effective management of resources. Excellent opportunities for employment and professional association exist in this field.

Students who major in Agricultural Systems at SIU Carbondale may choose from an extensive list of courses, work closely with excellent teachers, and participate in many outstanding student activities.

## *Agricultural Systems Technology as a Specialization*

This is a specialization for students with an interest in technology as it applies to agricultural and processing systems. An agricultural background is not required for study in the agricultural systems technology specialization. Internships are suggested for the summer terms. No minor required. No foreign language required. Class size 20–50; senior year 15–20.

## *Representative Career Options*

Manufacturer's technical representative  
test cell operator  
agricultural industry's representative  
industrial relations specialist

grain terminal operations manager  
Ag. business manager  
farm manager  
soil and water conservationist

assistant project manager  
Ag. commodities inspector  
territory representative  
agribusiness technician

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Agricultural Systems

(Agricultural Production Management Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Myron Albers, Senior Lecturer  
145F Agriculture Building  
Telephone: (618) 453-6979  
<http://coas.siu.edu/>

The B.S. degree program in Agricultural Systems with a specialization in Agricultural Production Management meets the objectives of students considering production-related careers in farming and agricultural service businesses. Course work develops technical and managerial skills required for the culture of commodity crops, livestock, and enterprise management.

Students who major in Agricultural Systems at SIU Carbondale may choose from an extensive list of courses, work closely with excellent teachers, and participate in many outstanding student activities.

## *Agriculture Production as a Specialization*

Requirements include a minimum of 50 semester hours of courses in four departments in the College of Agricultural Sciences. An additional 29 semester hours of electives are required and may be taken in agriculture or other areas of study. No minor required. No foreign language required.

## *Representative Career Options*

Farmer

farm manager

soil conservationist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Agricultural Systems

(Food and Processing Engineering  
Technology Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Ruplal Choudhary, Associate Professor  
FPET Coordinator  
Agriculture Building, Room 158C  
Telephone: (618) 453-6985  
<http://www.coas.siu.edu>

The B.S. degree program in Agricultural Systems with a food and processing engineering technology specialization is designed for students to be able to manage and supervise operations in the food processing industry and as food processing technologists or managers. The students will gain a fundamental understanding of the science of food processing and preservation operations. The students will gain applied knowledge of food handling, food safety, food packaging, process automation, and operations management. Courses are designed to provide hands on experience on modern food processing industrial practices through interactive classes including laboratory projects, field trips, and internships in the food industry.

## *Agriculture Production as a Specialization*

Requirements include a minimum of 50 semester hours of courses in four departments in the College of Agricultural Sciences. An additional 29 semester hours of electives are required and may be taken in agriculture or other areas of study. No minor required. No foreign language required.

## *Representative Career Options*

Farmer

farm manager

soil conservationist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Animal Science

(Production Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. William Banz, Chair  
127 Agriculture Building  
Telephone: (618) 453-2329  
<http://www.asfn.siu.edu/>

The B.S. degree program in animal science with a specialization in production meets the objectives of students considering careers in the livestock industry. Students can also select courses in other areas of agriculture or in related fields, such as business, communications, or physical sciences. This selection allows students to include in their education the agronomic, agricultural economic, and agricultural engineering phases of agriculture, pre-veterinary medicine, or business as related to animal production.

Instruction, demonstration, and consultation are provided in beef, swine, dairy, and horse production and animal health. Courses are offered in all phases of animal production and management, including animal health, reproduction, animal physiology, animal biotechnology and nutrition.

## *Animal Science as a Major*

The animal science major is supported by extensive facilities for several species of livestock. Every student has the opportunity to get involved in work, research, or observation at the 2000-acre farm system, the core of our animal science program, which has special centers for beef cattle, dairy cattle, horses, and swine. Many students work at the various livestock centers and laboratories to help defray the cost of education as well as gain valuable experience. An intern course also enables students to work in special areas (away from campus) and receive credit.

Graduates are prepared for employment in many phases of animal agriculture. The department maintains close contact with the industry and assists in placing graduates in permanent positions. No minor required. No foreign language required; Class size 20–60; senior year 10–30; Graduate programs are available.

## *Representative Career Options*

Animal husbandry  
swine herdsman  
farm manager  
animal control biologist  
poultry manager

animal physiologist  
animal industry representative  
dairy cattle manager  
livestock manager  
animal biotechnologist

animal breeding expert  
animal hygiene specialist  
product evaluator  
animal nutrition specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Animal Science

(Science and Pre-Veterinary Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. William Banz, Chair  
127 Agriculture Building  
Telephone: (618) 453-2329  
<http://www.asfn.siu.edu/>

The B.S. degree program in animal science with a specialization in science and pre-veterinary meets the needs of students planning to attend veterinary school or pursue graduate work in animal science. Students who complete this option qualify for the B.S. degree, meet the course requirements for admission to a veterinary medicine program, and acquire an excellent foundation for graduate work in animal science.

Most faculty members have advanced degrees (Ph.D.). Instruction, demonstration, and consultation are provided in dairy, horse, beef, swine, meats, and animal health. Courses are offered in all phases of animal production and management, animal health, reproduction, animal physiology, animal biotechnology and nutrition.

## *Animal Science as a Major*

The animal science major is supported by extensive facilities for several species of livestock. Every student has the opportunity to get involved in work, research, or observation at the 2000-acre farm system, the core of our animal science program, which has special centers for beef cattle, dairy cattle, horses, and swine. Many students work at the various livestock centers and laboratories to help defray the cost of education as well as gain valuable experience. An intern course also enables students to work in special areas (away from campus) and receive credit.

Graduates are prepared for employment in many phases of animal agriculture. The department maintains close contact with the industry and assists in placing graduates in permanent positions. No minor required. No foreign language required; Class size 20–60; senior year 10–30; Graduate programs are available.

## *Representative Career Options*

Animal husbandry  
swine herdsman  
animal nutrition specialist

animal physiologist  
animal industry representative  
poultry manager

animal breeding expert  
livestock manager  
animal biotechnologist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Anthropology

College of Liberal Arts  
(Bachelor of Arts)

Dr. John C. McCall, Chair  
3525 Faner Hall  
Telephone: (618) 536-6651  
<http://cola.siu.edu/anthro/>

The B.A. degree program in anthropology meets the objectives of students considering careers in teaching, research, archaeology, museums and archives, linguistic, medicine, personnel or social work, and business. A variety of courses in four sub-fields- archaeology, biological anthropology, linguistic anthropology, and sociocultural anthropology—present a broad view of the field.

Resources for anthropology students include a large university library, the University Museum, a fully equipped computer center, the Center for Archaeological Investigations, and biological anthropology, archaeology, and linguistic laboratories.

The anthropology faculty has a wide array of field and research experience in all sub-fields of the discipline. Members have conducted field research in Latin America and the Caribbean, Africa, Eastern and Southwestern United States, Southern Europe, Northern Europe (Germany), Meso America, Andean and Amazonian South America, Rural North America, African Diaspora, Thailand, and the Pacific Islands. Some also have applied their anthropological knowledge to solving practical problems in various parts of the world.

## *Anthropology as a Major*

The core of the program is a set of four courses that introduce the basic questions and issues of the sub-fields and the methods and techniques used to address them. The core is supplemented by specialty courses that cover societies in different geographic areas: economic and ecological anthropology, the anthropology of law, applied anthropology, human evolution, human genetics and demography, religion, language and culture, primate behavior, and origins of civilization. Several applied or “hands-on” courses provide actual experience in the laboratory and the field, and there is a practicum in museum studies.

Undergraduates are encouraged to get involved in anthropology outside the classroom. Students often work on varied field and laboratory research projects, and two archaeology field schools are offered every summer. The undergraduate Anthropology Club sponsors such activities as trips to nearby archaeological sites, and lectures. Visiting anthropologists from other universities present talks, and the SIU Carbondale faculty and graduate students regularly give informal lunchtime lectures about their current research.

## *Representative Career Options*

Secondary or college teacher  
applied linguist  
population analyst  
archivist  
exhibit preparation

museum curator  
contract archaeologist  
physical anthropologist  
community development planner  
overseas sales representative

social worker  
park service historian  
personnel officer  
medical anthropologist  
archival worker

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Architectural Studies

College of Applied Sciences and Arts  
(Bachelor of Science)

Norman Lach, Program Director  
School of Architecture  
414 Quigley Hall  
Telephone: (618) 453-3734  
E-mail: [nlach@siu.edu](mailto:nlach@siu.edu)  
<http://www.architecture.siu.edu/>

The Bachelor of Science in Architectural Studies (BSAS) is a four-year pre-professional program that prepares graduates for careers in architecture and related fields, or to enter masters-level programs. Graduates with a BSAS degree are prepared for entry-level positions in architecture and related fields. Ultimately, most graduates will continue their education in a professional-level Master of Architecture program in order to satisfy education requirements for licensure.

To support students in their educational endeavors, sophomores, juniors and seniors are provided dedicated studio space. Department facilities include a resource library, model/furniture shop and a dedicated computer graphics laboratory. The computer graphics laboratory will provide access to input/output devices. Each student is required to purchase or lease a laptop computer and software that meets departmental specifications prior to the start of the 200-level courses. Laptop and software specifications will be supplied during the registration process.

Students are encouraged to participate in profession-related student organizations, which include the American Institute of Architecture Students, Construction Specifications Institute, and Illuminating Engineering Society. Additional activities designed to enhance the overall quality of education include the University Honors Program, travel study programs, workshops and guest lectures.

All applicants must satisfy standard University baccalaureate entrance requirements in order to be admitted into the University and included in the Architectural studies applicant pool. Enrollment in the Architectural Studies program will be based upon Enrollment Management criteria. Transfer students will be evaluated on grade point average as calculated by Southern Illinois University Carbondale.

If a student receives a grade of *F* three times in the same course, the course cannot be taken again. Students cannot repeat Architectural studies prefix courses in which they received a grade of *C* or better.

Transfer students should concentrate on completing University Core Curriculum requirements unless the community college has an established 2+2 articulation with SIU. Community college transfer students who have completed an associate's degree without instruction in architecture will require three years' additional study to complete the bachelor's degree due to the required sequence of laboratory/studio classes.

## *Representative Career Options*

Traditional architecture practice  
government-related fields  
engineering-related fields  
sales

facility management  
education  
landscape design  
historic preservation

construction management  
planning  
interior design

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Art

(Art Education)  
(Ceramics)  
(Communication Design)  
(Drawing)  
(Glass)  
(Industrial Design)  
(Metalsmithing)  
Advisor(Painting)  
(Printmaking)  
(Sculpture)

College of Liberal Arts  
(Bachelor of Fine Arts)

Marie Bukowski, Director  
School of Art and Design  
113 Allyn Building  
Telephone: (618) 453-4315  
<http://cola.siu.edu/artanddesign>

Valerie Brooks Wallin, Academic  
Telephone: (618) 453-4313  
E-mail: [vlbrooks@siu.edu](mailto:vlbrooks@siu.edu)

The B.F.A. degree program meets the objectives of students interested in a particular studio discipline or the professional world of design. 120 semester hours are required for graduation: 39 hours in University Core Curriculum, 12 hours in art history (six of which also satisfy University Core Curriculum requirements), and 69 hours in studio art (three of which also satisfy a University Core Curriculum requirement).

## *Art Education as a Major*

The art education program is a combination of studio art, art history, art education, and traditional education courses that prepare students for careers as art teachers in elementary and secondary schools. The direction of the program equips the graduate with the technical skills, historical understanding, and philosophical and practical theory to deal with traditional as well as contemporary trends in art education. Students considering art education as a major should become aware of the requirements for entrance into the Teacher Education Program. Classroom observation is stressed early in the curriculum and culminates in a student-teaching semester. Upon graduation, students will meet the requirements for teacher licensure in Illinois. The program is fully accredited by the National Council for the Accreditation of Teacher Education (NCATE) and the Illinois State Office of Education.

## *Industrial Design as a Major*

Industrial designers create articles that are useful, safe, economical, attractive, and appropriate for specific human needs. They visualize and develop a wide range of items, from simple tools to complex microelectronic hardware, rehabilitation equipment to transportation systems. Under faculty supervision, students learn to use the theories, techniques, and materials common to the profession for defining the problem, assessing the need, developing the solution, and creating the product.

## *Representative First Job Titles*

Product design intern	industrial designer	human factors design specialist
prototype/model maker	product/game designer	
toy designer or research and development/product developer		

## *Communication Design as a Major*

Communication Design is the specialization that creates, informs, and modifies the world around us. Its curriculum provides students with a thorough understanding of and competence in communication in a digital-based society. It includes broad-based technical instruction along with instruction in typography, digital graphic technology, design concepts, information design, and industry standards required by the communication field.

Communication design students learn to combine and develop concepts and employ visualization techniques that instruct, interpret, and/or persuade. This curriculum focuses on message content and theory in print, web, and interactive/multimedia design.

## *Representative First Job Titles*

Multimedia Design	Web Designer	Web Communication Designer
Graphic Communication	Digital Imaging	Multimedia
Interactive Graphic Design	Internet Communication	Motion Graphics
Art Director	Creative Director	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

*Studio Art as a Major (drawing, painting, printmaking, sculpture, ceramics, metals, glass)*

The program consists of intense study and practice in the selected art specializations. All students are required to participate in a B.F.A. seminar and present a senior thesis exhibition. The School of Art and Design will evaluate all transfer credit that pertains to B.F.A. curricula.

Studio courses will be evaluated for transfer credit on the basis of presentation of the work (or professional quality images of it) executed in the course(s). Admission is based on a portfolio review to be conducted when students choose, generally during the particular semester in which 27 hours of major coursework is completed.

Each year the School of Art and Design presents the Rickert-Ziebold Trust Award to winners of a competition open to all graduating seniors. Those judged outstanding by the faculty share a \$15,000 annual award. Previous transfer student winners are:

- 2004 Amy Winkel (Salt Lake Community College), Steve Foutch (Kaskaskia College), James Tierney (College of Lake County) and Chris B. Davis (John A. Logan College)
- 2005 Anthony Cotta (Illinois Central College) and Rebecca Frolker (John A. Logan College)
- 2006 Paula McAteer (John A. Logan College and Southwestern Illinois College) and Katy Setchell (John A. Logan College and Illinois Valley Community College)
- 2007 Sarah Vaughn (Lincoln Trail College, Frontier College, and Olney Central College)
- 2008 John Michael McLain (John A. Logan College)
- 2009 Charles "Grant" Cox (Southeastern Illinois College), Joshua Ingold (John A. Logan College), and Jason Watts (Illinois Central College)
- 2010 Logan Hirsh (Austin Community College) and Beth Ann Porter (Southeastern Illinois College)
- 2011 Wesley Valdez (East Central College)
- 2012 Andrew Jensen (Black Hawk College)
- 2013 Zach Valent (Illinois Central College)
- 2015 Eunji Lee (Lake Land College and John A. Logan College)
- 2016 Dallas LaCassa (McHenry County College) and Ileana Quezada (Fresno City College)

The School of Art and Design is accredited by the National Association of Schools of Art and Design.

*Representative Career Options*

Many B.F.A. graduates go on to graduate school pursuing the M.F.A. degree in their selected disciplines. Others establish their own studios as independent artists and craft persons or accept positions in discipline-related fields.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.



# Automotive Technology

College of Applied Sciences and Arts  
(Bachelor of Science)

Michael Behrmann, Chair  
Department of Automotive Technology  
Telephone: (618) 453-4024  
autotech@siu.edu  
<http://automotive.siu.edu>

The B.S. Degree in Automotive Technology meets the goals of students interested in careers in the automotive, truck, equipment, and related ground transportation industry. The program combines the theoretical and practical hands-on application of knowledge in technical, business/management, computing, communications and professional development courses. The flexibility of the curriculum accommodates the needs of both incoming freshman and transfer students. Students have the option of focusing on multiple areas of emphasis, earning a minor, and possibly earning dual degrees. Students can adjust their focus in areas such as: automotive technical, automotive business operations, automotive management, automotive technical education, marketing, and management.

Enrollment in the Automotive Technology program is based upon established enrollment criteria as explained in Chapter 5 of the SIU Carbondale Undergraduate Catalog under Automotive Technology. The program welcomes students with A.A.S. degrees in Automotive Technology from regionally accredited colleges. These students may qualify for the Capstone Option, as discussed in Chapter 3 of the SIU Carbondale Undergraduate Catalog. Individuals with an Associate in Arts degree or Associate in Science degree may be admitted, but would be required to follow a slightly different program of study.

SIU Carbondale's Automotive Technology program is master certified and meets the rigid standards of the National Institute for Automotive Service Excellence (ASE). The program is housed in a new state-of-the-industry Transportation Education Center. Through a close working relationship with industry, students find numerous paid corporate internships and graduates consistently find abundant and diverse career opportunities in the industry.

## *Representative Career Options*

field service engineer	technical assistance specialist	serviceability engineer
district parts/service manager	customer support manager	automotive instructor
account manager	fleet manager	service advisor
dealership service manager	technical training specialist	district sales manager
field executive	technical writer	diagnostic developer
product manager		

These positions require a four-year degree with skills in communications, management and consumer relations as well as technical knowledge. Major automotive and truck manufacturers, component manufacturers and suppliers, government agencies, insurance organizations, educational institutions, training and curriculum organizations, and service providers are actively seeking four-year automotive technology graduates. The number of job titles and excellent starting salaries reflects the nature of a diverse and expanding field.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Aviation Flight

College of Applied Sciences and Arts  
(Associate in Applied Science)

Michelle Parker-Clark, Academic Advisor

Southern Illinois Airport

Telephone: (618) 453-9224

E-mail: mpclark@siu.edu

<http://www.aviation.siu.edu>

The A.A.S. degree program in Aviation Flight meets the objective of students seeking professional flight instruction leading to a career in aviation. Students that complete the A.A.S. in Aviation Flight typically also complete the B.S. degree in Aviation Management in a two plus two arrangement. Transfer students with more than 26 semester hours of course work and previous flight experience should contact the aviation counselor to determine whether they can apply directly to the bachelor's degree program in aviation management.

NOTE: Admission to the aviation flight program at SIU Carbondale is determined by a selective admission process whereby the most qualified students are selected from applicants. All students who wish to pursue aviation flight as a major or as a second major must complete the aviation flight application process in addition to the application to SIU Carbondale.

Students pursuing this degree incur additional costs. Students should plan on spending approximately \$55,000 to obtain the flight certifications contained in this course work. These flight costs are in addition to tuition and fees, room and board, etc. Flight instruction required in the aviation flight curriculum includes the Private Pilot, Commercial/Instrument, and Multi-Engine certificates and ratings.

## *Aviation Flight as a Major*

Aviation Flight is situated at Southern Illinois Airport, approximately five miles from the main campus. Some training flights are required at night, on weekends, and at other times when University transportation may not be available. For this reason exceptions to student vehicle restrictions will be provided for freshman and sophomore flight students who have their own transportation.

The SIU Carbondale Aviation Flight program is an FAA 141–approved certificate Pilot School with examining authority, providing comprehensive flight training that includes instruction for the most basic flight (Private Pilot) to the most advanced (Practicum in Air Carrier Operations).

## *Post-Associate Aviation Flight Courses*

Additional courses are available for graduates of the associate degree program who want to become FAA certified single engine, multi-engine, and instrument flight instructors. Additional costs are associated with these courses. There is also a post-associate course entitled “Practicum in Air Carrier Operations” which provides qualified aviation flight students with 20 to 30 hours of “pilot-in-command” flight time in multi-engine aircraft.

In conjunction with enrollment in the Aviation Management (AVM) program, AF students are eligible for a wide range of flight-related internship or first officer programs at such airlines as United, Delta, United Parcel Service, Cape Air, American, and Southwest.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Aviation Management

College of Applied Sciences and Arts  
(Bachelor of Science)

Michelle Parker-Clark, Academic Advisor

Southern Illinois Airport  
Telephone: (618) 453-9224  
E-mail: mpclark@siu.edu  
<http://www.aviation.siu.edu>

The B.S. degree program in Aviation Management meets the objectives of students preparing for employment in the aviation industry with a major that builds on previous technical training in aviation maintenance, flight, avionics technology, air traffic control, aircraft operations support, or other aviation-related fields, or by choosing a minor while completing the BS in AVM through SIU. The required technical training may be gained at SIU Carbondale in aviation flight or aviation technologies or through other post-secondary institutions, proprietary schools, the military, government agencies (international or domestic), or government-certified flight or maintenance training schools.

Students entering the aviation management major are encouraged to complete the requirements of an aviation-related associate degree under the provision of the Capstone Option. As an alternative to an associate degree in aviation, students in aviation management should have aviation-related work experience, internship experience, or technical training. Finally, concurrent enrollment in aviation-related degree programs, internships, cooperative education, or technical training *is required* for those students not having prior aviation training, experience, or education.

Students who major in aviation management may participate in the following aviation management-related internship/cooperative education programs:

1. The American Airlines Flight Operations Intern Program.
2. Cape Air/Nantucket Airlines First Officer Program.
3. Delta Airlines/SIUC Flight Operations Internship.
4. Southwest Airlines.
5. The United Airlines Flight Operations Internship.
6. Internships at various Midwest airports and other aviation organizations.

Also, Minors are available in Airport Management and Planning; Air Traffic Control, and Aircraft Product Support Management.

## *Representative Career Options*

Graduates of aviation management program find professional, technical, and management positions in aviation manufacturing, airlines, general aviation, military aviation, and government agencies related to aviation.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Aviation Technologies

(Aircraft Maintenance)  
(Helicopter Maintenance)  
(Aviation Electronics)  
(FAA Airframe and Powerplant Certificates)  
College of Applied Sciences and Arts  
(Bachelor of Science)

SIU Carbondale Aviation Technologies  
635 Flightline Rd  
Murphysboro, IL 62966  
Telephone: (618) 536-3371  
<http://www.aviation.siu.edu>

The B.S. degree program in Aviation Technologies is designed to enhance the technical training students have received in electronics or aviation maintenance. This technical training may be obtained through SIU Carbondale by completing the FAA approved Airframe and Powerplant certificate requirements, from other post-secondary institutions, in the military, or other FAA-approved maintenance schools certified under F.A.R. Part 147.

General aviation aircraft, helicopters, and transport category aircraft require highly trained technicians to troubleshoot system, and maintain airframe structures and powerplants. The programs in the Department of Aviation Technologies are ranked among the best in the country, and were developed with input from industry representatives and the Federal Aviation Administration (FAA) to provide the requisite skills and broad educational experience for today's competitive environment. Optional paths within the major provide a great deal of flexibility in preparing for a career in the aviation industry. Students may pursue the FAA approved airframe and powerplant certificates in a five-semester sequence of coursework, or they may include the coursework required for the airframe and powerplant certificate as part of their four-year bachelor's degree in Aviation Technologies..

Transfer students entering the aviation technologies program are encouraged to have completed an appropriate associate degree or its equivalent under the provisions of the Capstone Option. This option allows qualified students to fulfill their degree requirements by completing no more than 60 semester hours of course work beyond their associate degree.

There are three specializations: aircraft maintenance, helicopter maintenance, and aviation electronics. Courses in each of these areas have been selected to provide the student with optimum exposure to theory in the classroom and to develop practical, hands-on skills both in the hangar and in specially designed, task-dedicated laboratories. A basic tool kit is required for all students in Aviation Technologies. Students should expect to spend about \$600 for a tool kit. In addition to University tuition and fees, lab fees, are assessed for the lab portion of appropriate courses. For current charges contact the Department of Aviation Technologist.

## *Aviation Technologies as a Major*

Facilities for Aviation Technologies are located at the Southern Illinois Airport, three miles NNW of the Carbondale campus and three miles ENE of Murphysboro, Illinois.

The SIU Carbondale Aviation Technologies program is acclaimed by many branches of the aviation industry and government agencies as the best school of its kind in the nation. Students will work with more than \$14 million worth of state-of-the-art equipment and training aids, animated training panels, systems trainers, and computer training software covering a variety of jet aircraft. Included are the Boeing 707, 727, 737, 747, 757, 767, and the Douglas DC 8, DC 9, DC 10, MD 11, and MD 80 aircraft. Operational DC 10 and Boeing 747 cockpit procedures trainers are used for instruction as well as an operational Boeing 737-222 aircraft. Students may join such student organizations as Alpha Eta Rho International Aviation Fraternity, the Rotor and Wing Association of America, and even a radio-controlled model airplane club. Members of these organizations often sponsor events like fly-ins, air shows, and field trips to sites of aviation activities. An advisory committee that serves the program is made up of executives in the aviation industry.

## *Representative First Job Titles*

Aviation maintenance technician  
composite technician  
sheet metal mechanic  
maintenance director  
technical writer.

airframe and powerplant mechanic  
aircraft inspector  
helicopter mechanic  
aviation maintenance instructor

structural mechanic  
aircraft maintenance planner  
project manager  
avionics engineer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Biological Sciences

College of Science  
(Bachelor of Science)

Carey Krajewski, Director  
Biological Science Program  
Telephone: (618) 453-2314  
E-Mail: careyk@siu.edu  
www.biologicalsciences.siu.edu

The B.S. degree program in Biological Sciences (College of Science) meets the objectives of students seeking to enter two career paths, each represented by a distinct track within the major: (1) Biomedical Sciences, for students planning to enter the human health professions (e.g., medicine, dentistry) or pursue careers in biomedical research; and (2) Ecology, for students planning to pursue graduate studies or employment in community or ecosystem ecology, environmental biology, or habitat conservation. Courses are selected from the offerings of the four life science departments (Microbiology, Physiology, Plant Biology, and Zoology) to provide breadth of training.

## *Biological Sciences as a Major*

The Biomedical Science track is specifically designed for students wishing to enter the human health professions (i.e., medicine, dentistry, chiropractic, nursing, optometry, pharmacy, physical therapy, physician assistant, podiatry, or public health) either by attending a professional school after graduation, or by entering the technical workforce. The track is also appropriate for those interested in biomedical research, including graduate study. The Ecology track is specifically designed for students who plan on graduate study in community or ecosystem ecology, or related fields, including habitat conservation and environmental biology.

## *Representative Career Options*

Biomedical Science graduates may advance through professional schools to become medical doctors, dentists, chiropractors, nurses, optometrists, pharmacists, physical therapists, physician assistants, podiatrists, or public health workers. Entry-level positions include laboratory and medical technicians. Ecology graduates may advance through graduate school to become academic, governmental, or industrial researchers, managers, or consultants. Entry-level positions include field technician, environmental scientist, and conservation officer.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Biological Sciences

College of Education and Human Services  
(Bachelor of Science)

Carey Krajewski, Director  
Biological Science Program  
Telephone: (618) 453-2314  
E-Mail: [careyk@siu.edu](mailto:careyk@siu.edu)  
[www.biologicalsciences.siu.edu](http://www.biologicalsciences.siu.edu)

The B.S. degree program in Biological Sciences (College of Education and Human Services) is designed for students seeking to obtain licensure as secondary (grades 9-12) biology teachers in Illinois. Course requirements match content areas specified by the Illinois State Board of Education for science with a designation in biology. Students must apply to and be accepted by the Teacher Education Program after completing specific requirements.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Business and Administration

College of Business  
(Bachelor of Science)

Jill Gebke, Assistant Dean  
133A Rehn Hall  
Telephone: (618) 453-7487  
E-mail: [jgebke@business.siu.edu](mailto:jgebke@business.siu.edu)  
<http://onlineug.business.siu.edu>

This AACSB-accredited, special admission online undergraduate degree completion program is designed for students who are seeking a well-rounded business degree with flexibility. This program is designed for off-campus students, who are not able to take traditional classes, who have completed the lower level general business core classes and University Core Curriculum requirements. This includes students from community colleges and other universities, as well as returning students looking to complete the remaining portion of their bachelor's degree. Students in this program will earn a Bachelor of Science degree in Business and Administration. As this is a degree completion program, to be admitted students should have completed at least 60 college credit-hours, including all University Core Curriculum classes and lower level business courses as required by the College of Business. A major in Business and Administration requires students to earn a minimum grade of C in each of the courses taken at SIU Carbondale to satisfy the requirements for the Business and Administration major, and students must earn a minimum 2.0 grade point average for those major courses. Students should apply to Southern Illinois University Carbondale: <http://admissions.siu.edu>. The program is 100% online delivery.

## *Representative Career Options*

Territory Sales Manager  
Analyst  
Office Manager  
Management Trainee  
Business Consultant

Human Resource Coordinator  
Business Development Consultant  
Project Manager  
Associate Account Strategist

Government Property Manager  
Systems Analyst  
Sales Territory Lead  
Banker

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Business Economics

College of Business  
(Bachelor of Science)

Dr. Mark A. Peterson, Chairperson, Department of Finance  
134A Henry J. Rehn Hall  
Telephone: (618) 453-2459  
<http://www.business.siu.edu/academics/bachelor/bus-econ.html>

The B.S. degree program in business economics meets the objectives of students interested in general preparation for future managerial and staff assignments in a variety of business and public organizations. Offered through the College of Business, the business economics major emphasizes the application of economic concepts and the use of critical analysis in the solution of economic and managerial problems.

The program also prepares students for graduate study in economics as well as for the M.B.A. degree. Students who propose professional careers as business and managerial economists are advised to complete one to four years of postgraduate study.

## *Business Economics as a Major*

It is strongly recommended that the courses listed above for the first two years be completed before the junior year, because many of them are prerequisites to later requirements.

The Association to Advance Collegiate Schools of Business International accredits the business economics program.

No minor or foreign language required.

Graduate degrees available: Master of Business Administration (M.B.A.), Master of Accountancy (M.Acc.), and Doctor of Philosophy in Business Administration (Ph.D.).

## *Representative Career Options*

Account executive  
economic analyst  
organization planning officer  
operating plans and procedures officer  
labor relations officer  
industrial economist  
loan examiner

business and economics statistician  
investment analyst  
systems evaluator  
operations research analyst  
workman's compensation officer  
industrial labor relations specialization officer  
economic forecaster

business planning officer  
new business researcher  
marketing representative  
labor economist  
benefits analyst  
business analyst  
loan administrator

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Chemistry and Biochemistry

College of Science  
(Bachelor of Science)  
(Bachelor of Arts)

Dr. Gary Kinsel  
224C Neckers Building  
Telephone: (618) 453-5721  
E-mail: [chemistry@chem.siu.edu](mailto:chemistry@chem.siu.edu)  
<http://www.chem.siu.edu/>

Chemistry is the study of matter, the building blocks of everything. Chemistry is a foundation for continuing studies in agriculture, biology, chemistry, engineering, forensics, medicine, microbiology, pharmacology, physiology and zoology.

All Chemistry majors begin in the Comprehensive Chemistry degree track, which provides a rigorous program in analytical, organic and physical chemistry. After freshman year, students pursuing a B.S. degree may continue in Comprehensive Chemistry or choose a more specialized degree track. Pre-professional students and those interested in biological chemistry may pursue the Biochemistry degree track with advanced courses in life sciences. The Environmental Chemistry degree track complements advanced study in environmental chemistry with related courses in engineering, forestry, geology, plant biology, and soil science. The Forensic Chemistry degree track gives students the background required for investigative research in a crime lab. Although not required for graduate study or employment as a chemist, students are encouraged to pursue certification from the American Chemical Society (ACS).

The Business degree track leads to a B.A. degree with a minor degree in Business and Administration and is ideal preparation for a career in the chemistry industry or graduate studies for a Masters in Business Administration.

## *Chemistry as a Major*

Students participate in undergraduate research applying cutting-edge techniques under the supervision of a faculty advisor with access to research laboratories and state-of-the-art scientific equipment. Undergraduate assistantships and academic credit are available for research. Students present their research at the Undergraduate Research Forum and regional scientific meetings. The Student Affiliates of the American Chemical Society and Alpha Chi Sigma service fraternity organize social and professional activities for students. Free tutoring is available to all students. Faculty advisors assist students, on an individual basis, with career preparation, degree requirements, and course selection.

## *Representative Career Options*

Agricultural chemist	analytical chemist	anesthesiologist
atmospheric chemist	biochemist	biotechnologist
chemical engineer	chemistry teacher	clinical chemist
dentist	endocrinologist	environmental chemist
food chemist	forensic chemist	geochemist
hematologist	inorganic chemist	materials scientist
medical technologist	medicinal chemist	neurochemist
nuclear chemist	nutritionist	oenologist
ophthalmologist	organic chemist	patent attorney
pathologist	petroleum chemist	pharmacist
physical chemist	physician	polymer chemist
radiologist	renewable energy engineer	science writer
soil chemist	surgeon	textile chemist
theoretical chemist	toxicologist	purification chemist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Cinema and Photography

College of Mass Communication and Media Arts  
(Bachelor of Arts)

Dr. Jyotsha Kapur, Chairperson  
1101 Communications Building  
Telephone: (618) 453-2365  
<http://cp.siu.edu/>  
Carol Westerman-Jones, Advisor  
1121 Communications Building  
Telephone: (618) 453-2365

Cinema and Photography provides a well-conceived, in-depth and demanding approach to the visual and aural world of still and moving images. Our programs integrate the study of history, theory, and criticism with the challenges of actually using still and moving image media to inquire, express, and communicate.

The undergraduate major in Cinema and Photography is a B.A. degree program with two distinct specializations; cinema and photography. Both specializations meet the objectives of students interested in a foundation for fine arts, professional and/or educational careers in cinema and photography, a foundation which is reinforced with explorations of the social, cultural, critical and ideological implications of our use of still and moving image media. Course selection, within the framework of the requirements of each specialization allows the student to achieve a specific emphasis to fulfill particular interests and career plans. All students in the major of Cinema and Photography are required to select and complete a minor in an area complimentary to their career pursuits.

Graduate studies are also possible; the College of Mass Communication and Media Arts offers a Master of Fine Art degree with concentrations in cinema and photography.

Students purchase supplies for most cinema and photography production courses. Lab fees and equipment usage fees are required for most production courses. For most studies courses, screening fees are assessed to partially cover the cost of rental and/or acquisition of media support materials, slides, films, videotapes, CD's CD-ROM's, DVD's, etc., which are essential to presenting the object of study. The cost of supplies and outside laboratory finishing services for cinema and photography production courses ranges from an average of \$50 per course to \$1,000 or more, depending on course requirements.

The department reserves the right to retain examples of the work produced by students in fulfillment of its course requirements. Such photographs and films become part of a permanent departmental collection which exhibitions may be prepared.

## *Cinema and Photography as a Major*

The SIU Carbondale Department of Cinema and Photography is recognized by national organizations as one of the leading departments in the country.

Admission to the Cinema and Photography major is open to anyone qualifying for regular admissions to the University. If a transfer student begins at SIU Carbondale in Cinema and Photography with at least 60 credit hours previously completed including the SIU University Core Curriculum requirements or IAI Certification, and at least one course equivalent to SIU Carbondale Cinema and Photography required course, it is possible for a student to complete their requirements for the BA in Cinema and Photography in just two years of coursework at SIU Carbondale. Most CP major transfer course equivalency decisions are made on a case-by-case basis as result of faculty review of the syllabus for the transfer course and the work produced by the student in the course. Transfer students are encouraged to make their advisement/registration appointments in February for Fall semester classes, or in September for Spring semester classes. Cinema and Photography classes have limited seats and fill very quickly.

## *Cinema Minor*

The minor in Cinema offers students a foundation in the history, theory and critical analysis of cinema and the hands-on production of films. Students who wish to minor in Cinema must complete a total of 19 credit hours of Cinema coursework including: CP 101-3 Film History and Analysis and CP 102-4 Introduction to Sound and Image Production, both with grades of B or better, and complete CP 260-3 Understanding Visual Media and 9 additional credit hours of Cinema coursework with grades of C or better. CP 491, 494, 495 and 497 may not count toward the minor. A minimum of 9 credit hours toward the minor in Cinema must be completed at SIUC.

## *Minor in Photography*

A total of 15 credits is required for the minor. The student must complete CP 210: History of Photography, CP 230: Photography I, and CP 330: Photography II, and complete at least six credit hours of 300 or 400 level photography courses in order to obtain a minor. All courses for the minor in photography must be completed with a grade of C or higher.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

Motion Narrative Animation, offered under CP 470A, CP 470B, CP 472 or approved related courses. All courses for the Minor in Animation must be completed with a grade of C or higher, with the exception of CP 102, which must be completed with a grade of B or better.

*Representative Career Options*

Assistant director	assistant cameraperson	cinematographer
lighting technician	assistant sound recordist/mixer	boom operator
assistant editor digital editing assistant	production office coordination staff	production assistant
independent filmmaker	independent producer	screenwriter
assistant production manager	location scout	location manager
special effects operator	film animator	photographer
photo studio assistant	digital retouch and pre-press preparer	color technician
communications specialist	advertising agent	photojournalist
graphic arts technician	multimedia specialist	free-lance photographer.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Civil Engineering

(Environmental Engineering Specialization)  
College of Engineering  
(Bachelor of Science)

Dr. Sanjeev Kumar, Chair  
A108 Engineering Building  
Telephone: (618) 536-2368  
E-mail: kumars@ce.siu.edu  
<http://engineering.siu.edu/civil>

See also: Computer Engineering, Electrical Engineering, Mechanical Engineering, and Mining Engineering.

Civil engineering is a profession in which principles of the mathematical, physical, and engineering sciences, combined with experience and practice, are used to develop safe and economical designs for buildings, bridges, dams and hydraulic systems, environmental engineering systems, and other beneficial projects. Civil engineering is one of the oldest branches of the engineering field and is often called a “people-serving” profession.

The B.S. degree program in civil engineering meets the objectives of students interested in one or more areas of concentration: structural engineering, hydraulic engineering, environmental engineering, and geotechnical engineering. Additional technical electives enable students to gain more in-depth knowledge in these areas of concentration.

The Civil Engineering program at SIU Carbondale prepares students for professional careers in one or more specialty areas of civil engineering. Civil engineers take positions with construction companies, consulting engineering and architectural firms; transportation, public utility and manufacturing companies; the aerospace industry; and governmental agencies on every level. They become involved in the planning, design, and construction of the nation’s infrastructure and the physical facilities that improve and preserve our society: buildings, highways, bridges, hydraulic structures, transportation facilities, environmental engineering systems, and many other structures. The undergraduate civil engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

Transfer students from community colleges or other institutions should have strong backgrounds in the physical sciences, mathematics, social sciences, fine arts, and humanities. Students are encouraged to complete specific University Core Curriculum requirements that include 6 semester hours of English composition, 3 hours of speech, 8 hours of calculus-based university physics, 7 hours of chemistry, 11–14 hours of mathematics, including calculus. Calculus is a prerequisite for most junior-level courses.

## *Representative Career Options*

Civil engineer  
design engineer  
structural engineer and water resources

environmental engineer  
foundation engineer  
geotechnical engineer

construction engineer  
hydraulic engineer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Communication Disorders and Sciences

(Public School Specialization)  
(Clinical Specialization)  
College of Education and Human Services  
(Bachelor of Science)

Dr. Sandie Bass-Ringdahl, Program Coordinator  
316A Rehn Hall  
Telephone: (618) 453-8262  
<http://ehs.siu.edu/rehab/undergraduate/cds/index.php>

The B.S. degree program in communication disorders and sciences meets the objectives of students preparing to work with children and adults whose speech, language, or hearing is impaired. The pre-professional undergraduate curriculum is broad in scope and presents students with the necessary background for the professional program, which is offered at the master's level. Both state and national certification require the M.S. degree.

## Non-Teacher Education Program

Transfer students are encouraged to contact SIU Carbondale College of Education and Human Services, Academic Advisement Office (618 453-6340) at least one semester before they plan to enroll at SIU Carbondale.

## Teacher Education Program

Transfer students are encouraged to contact SIU Carbondale College of Education and Human Services, Academic Advisement Office (618 453-6340) at least one semester before they plan to enroll at SIU Carbondale.

## *Communication Disorders and Sciences as a Major*

Students interested in the public school specialization should refer to admission requirements for the teacher education program. In the departmental major of 30 semester hours the third and fourth years present students with pre-professional training that relates to normal and disordered aspects of speech, language, and hearing. Graduate work is primarily devoted to training in differential diagnosis, assessment, and the management of communication disorders in clinical or school settings. Students will be encouraged to plan programs of study to meet academic and practicum requirements for the Certificate of Clinical Competence of the American Speech-Language-Hearing Association.

## *Representative Career Options* (All require certification/M. S. degree)

speech and language clinician  
speech and hearing consultant

speech and language pathologist  
audiologist

speech and hearing therapist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Communication Studies

(Intercultural Communication)  
College of Liberal Arts  
(Bachelor of Science)

Jay Lewis, Academic Advisor  
1229 Faner Hall  
Telephone (618)-453-3388  
<http://cola.siu.edu/communicationstudies/>

The Bachelor of Science degree in Communication Studies with a specialization in Intercultural Communications meets the objectives of students considering domestic and international careers in business, industry, teaching and government with a focus on intercultural understanding, consensus and appreciation.

Many careers demand the ability to communicate well. The Department of Communication Studies offers a wide range of courses in the history, theory, and successful use of oral communication. The department also sponsors co-curricular activities in debate, performance studies, and public relations. Students on the debate team compete regularly and are ranked among the best in national competition. Public relations students at SIU Carbondale have consistently won national recognition for their projects.

Secondary school and community college students are encouraged to take part in as much speech activity work as possible before entering SIU Carbondale. Those students interested in aspects of oral communication should take elective work in high school or at the community college in the social science areas.

## *Communication Studies as a Major*

Graduate degrees (M.A. and Ph.D.) are available in communication studies. Students choose electives to build their chosen specialization.

## *Representative Career Options*

Technical writer  
advertising agent  
publications staff  
newspaper reporter  
manufacturer's representative  
television announcer  
legislative assistant  
foreign relations officer

visitors' guide  
editor  
personnel interviewer  
radio announcer  
salesperson  
retail manager  
public information officer  
foreign correspondent

communications specialist  
public relations officer  
publicity staff  
speech writer  
newscaster  
communication trainer  
diplomat  
student tour coordinator

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Communication Studies

(Interpersonal Communications)  
College of Liberal Arts  
(Bachelor of Science)

Jay Lewis, Academic Advisor  
1229 Faner Hall  
Telephone (618) 453-3388  
<http://cola.siu.edu/communicationstudies/>

The B.S. degree program in Communication Studies with an Interpersonal Communication Specialization meets the objectives of students considering careers in communication research, conflict management, and employee or client relations, and interested in communication in interpersonal relationships, language in everyday interactions, group communication dynamics, and non-verbal and intercultural aspects of communication.

Many careers demand the ability to communicate well. The Department of Communication Studies offers a wide range of courses in the history, theory, and successful use of oral communication. The department also sponsors co-curricular activities in debate, performance studies, and public relations. Students on the debate team compete regularly and are ranked among the best in national competition. Public relations students at SIU Carbondale have consistently won national recognition for their projects.

Secondary school and community college students are encouraged to take part in as much speech activity work as possible before entering SIU Carbondale. Those students interested in aspects of oral communication should take elective work in high school or at the community college in the social science areas.

## *Communication Studies as a Major*

Graduate degrees (M.A. and Ph.D.) are available in communication studies. Students choose electives to build their chosen specialization.

## *Representative Career Options*

Technical writer	visitors' guide	communications specialist
advertising agent	editor	public relations officer
publications staff	personnel interviewer	publicity staff
newspaper reporter	radio announcer	speech writer
manufacturer's representative	salesperson	newscaster
television announcer	retail manager	human resources trainer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Communication Studies

(Organizational Communication)  
College of Liberal Arts  
(Bachelor of Science)

Jay Lewis, Academic Advisor  
1229 Faner Hall  
Telephone (618) 453-3388  
<http://cola.siu.edu/communicationstudies/>

The B.S. degree program in Communication Studies with an Organizational Communication specialization meets the objectives of students interested in organizational communication. Topics covered include organizational climate and culture, organizational networks, information flow, communication audit methods, impact of new communication technology, superior-subordinate interaction, compliance-gaining, and conflict resolution.

Many careers demand the ability to communicate well. The Department of Communication Studies offers a wide range of courses in the history, theory, and successful use of oral communication. The department also sponsors co-curricular activities in debate, performance studies, and public relations. Students on the debate team compete regularly and are ranked among the best in national competition. Public relations students at SIU Carbondale have consistently won national recognition for their projects.

Secondary school and community college students are encouraged to take part in as much speech activity as possible before entering SIU Carbondale. Those students interested in aspects of oral communication should take elective work in high school or at the community college in the social science areas.

## *Communication Studies as a Major*

Graduate degrees (M.A. and Ph.D.) are available in communication studies. Students choose electives to build their chosen specializations.

## *Representative Career Options*

Technical writer  
editor  
personnel interviewer  
radio announcer  
newscaster  
retail manager communications specialist

visitors' guide  
public relations officer  
publicity staff  
speech writer  
television announcer

advertising agent  
publications staff  
newspaper reporter  
salesperson  
manufacturer's representative

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Communication Studies

(Performance Studies)  
College of Liberal Arts  
(Bachelor of Science)

Jay Lewis, Academic Advisor  
1229 Faner Hall  
Telephone (618) 453-3388  
<http://cola.siu.edu/communicationstudies/>

The B.S. degree program in Communication Studies with a specialization in Performance Studies meets the objectives of students interested in theatrical and everyday performance and the oral interpretation of literature and in careers in performance, writing as performance, and public presentation in forums from the arts to business.

Many careers demand the ability to communicate well. The Department of Communication Studies offers a wide range of courses in the history, theory, and successful use of communication. The department also sponsors co-curricular activities in debate, performance studies, and public relations. Students on the debate team compete regularly and are ranked among the best in national competition. Public relations students at SIU Carbondale have consistently won national recognition for their projects.

Secondary school and community college students are encouraged to take part in as much speech activity as possible before entering SIUC. Those planning to specialize in performance studies are encouraged to take as many literature courses as possible. Students interested in other aspects of oral communication should take elective work in high school or at a community college in the social science areas.

## *Communication Studies as a Major*

Graduate degrees (M.A. and Ph.D.) are available in communication studies. Students choose electives to build their chosen specializations.

## *Representative Career Options*

Arts Coordinator  
model  
stage manager  
personnel interviewer  
speech writer  
television announcer

theater manager  
human resources trainer  
visitors' guide  
publicity staff  
manufacturer's representative  
retail manager

actor  
public relations specialist  
communications specialist  
radio announcer  
salesperson

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Communication Studies

(Persuasive Communication)  
College of Liberal Arts  
(Bachelor of Science)

Jay Lewis, Academic Advisor  
1229 Faner Hall  
Telephone (618) 453-3388  
<http://cola.siu.edu/communicationstudies/>

The B.S. degree program in Communication Studies with a Persuasive Communication specialization meets the objectives of students interested in public and political discourse, argumentation, rhetoric, social influence, and media, and careers in law, politics, sales, corporate and public advocacy, and selected areas in business and mass media.

Many careers demand the ability to communicate well. The Department of Communication Studies offers a wide range of courses in the history, theory, and successful use of communication. The department also sponsors co-curricular activities in debate, performance studies, and public relations. Students on the debate team compete regularly and are ranked among the best in national competition. Public relations students at SIU Carbondale have consistently won national recognition for their projects.

Secondary school and community college students are encouraged to take part in as much speech activity as possible before entering SIU Carbondale. Students interested in aspects of oral communication should take elective work in the social sciences in high school or at a community college.

## *Communication Studies as a Major*

Graduate degrees (M.A. and Ph.D.) are available in communication studies. Students choose electives to build their chosen specializations.

## *Representative Career Options*

Technical writer  
public relations officer  
personnel interviewer  
radio announcer  
newscaster  
retail manager  
manufacturer's representative

communications specialist  
visitors' guide  
publicity staff  
speech writer  
television announcer  
lobbyist

advertising agent  
publications staff  
newspaper reporter  
salesperson  
editor  
human relations trainer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Communication Studies

(Public Relations)  
College of Liberal Arts  
(Bachelor of Science)

Jay Lewis, Academic Advisor  
1229 Faner Hall  
Telephone (618) 453-3388  
<http://cola.siu.edu/communicationstudies/>

The B.S. degree program in Communication Studies with a Public Relations specialization meets the objectives of students considering positions in such areas as public relations, advertising, marketing, government relations, and sales.

Many careers demand the ability to communicate well. The Department of Communication Studies offers a wide range of courses in the history, theory, and successful use of oral communication. The department also sponsors co-curricular activities in debate, performance studies, and public relations. Students on the debate team compete regularly and are ranked among the best in national competition. Public relations students at SIU Carbondale have consistently won national recognition for their projects.

The Pyramid Public Relations Agency, run under faculty supervision by students in the program, gives students practical experience in applying what they have learned. Membership in the Raymond D. Wiley Chapter of the Public Relations Student Society of America provides opportunities for internships, field trips, job placement, involvement in on- and off-campus public relations projects, and association with professional practitioners. The department also encourages internships and practicums.

## *Communication Studies as a Major*

The public relations specialization is an interdisciplinary program, with a focus on communication studies, designed with the assistance of and approved by the Public Relations Society of America. Graduate degrees (M.A. and Ph.D.) are available in communication studies. Students choose electives to build their chosen specializations.

## *Representative Career Options*

Technical writer	visitors' guide	advertising agent
editor	public information officer	public relations officer
publications staff	personnel interviewer	publicity staff
newspaper reporter	radio announcer	speech writer
salesperson	newscaster	television announcer
account executive	retail manager	legislative assistant
communications specialist	manufacturer's representative	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Computer Engineering

College of Engineering  
(Bachelor of Science)

Lisa Lindhorst, Advisement  
D-104 Engineering Building  
Telephone: (618) 453-2261  
E-mail: [lisalind@siu.edu](mailto:lisalind@siu.edu)  
<http://engineering.siu.edu/elec/>

See also: Civil Engineering, Electrical Engineering, Mechanical Engineering, and Mining Engineering.

The Bachelor of Science degree program in Computer Engineering provides the student with a strong background in the basic Electrical and Computer Engineering sciences. Students have the option to choose among several advanced courses in the theory and applications of digital circuits and systems, computer architecture and design, computer networks and digital design automation. This program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology Inc., (EAC/ABET), 111 Market Place, Suite 1050, Baltimore MD 21202-4012, Telephone (410) 347-7700, <[url:www.abet.org](http://www.abet.org)>.

Employment opportunities exist within a range of organizations, such as computer, semiconductor, aviation, electronics, microelectronics, broadcasting, telecommunications, defense and automotive companies, manufacturing and electric power companies, state and federal agencies and laboratories. Employment opportunities cover the spectrum of engineering activities, ranging from research and development, to systems analysis, automation, manufacturing, customer service and support, marketing and sales.

## *Transfer students*

Transfer students from community colleges or other institutions should have strong backgrounds in the physical sciences, mathematics, social sciences, fine arts, and humanities. Students are encouraged to complete specific freshman and sophomore course requirements, which include 6 semester hours of composition; 3 hours of speech, 8 hours of university physics; and 11–14 hours of mathematics, including calculus. Calculus is a prerequisite for junior-level courses.

## *Representative Career Options*

Computer engineer	operations research analyst	patent engineer
systems engineer	electronics engineer	software engineer
sales	digital signal processing engineer	
product development and design engineer	product application and test engineer	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Computer Science

College of Science  
(Bachelor of Science)  
(Bachelor of Arts)

Dr. Michelle Zhu, Undergraduate Program Director  
2125 Faner Hall  
Telephone: (618) 536-2327  
E-mail: [csinfo@cs.siu.edu](mailto:csinfo@cs.siu.edu)  
<http://www.cs.siu.edu/>

Computer Science is an extremely exciting, challenging and rewarding area of study. It incorporates an excellent combination of theoretical and intellectual content on the one hand, and practical application and societal importance on the other. By some standards, it is the strongest discipline in academia today, and has been for the past three decades. Given the 3 to 1 ratio for available jobs vs number of graduates in computer science, CS degree holders are among the most wanted in the industry.

The computer science department offers two-degree programs to undergraduate students. The Bachelor of Science and the Bachelor of Arts degree programs are both offered through the College of Science. The curriculum specified for the Bachelor of Science degree is more traditional and somewhat more flexible in that it prepares the student for a wide range of careers as well as for graduate degree programs in computer science. The Bachelor of Arts degree program requires secondary concentration in other programs and students can have a multidisciplinary education background.

## *Computer Science as a Major*

The curriculum covers programming, software engineering, computer hardware and software systems, parallel and distributed computing, simulation, graphics, artificial intelligence, robotics, database systems, networking, security, and computer applications to business and science. Advisers from the department guide students toward courses that will help them pursue their academic and professional interests.

## *Representative Career Options*

Applications developer  
systems programmer  
software engineer  
research associate  
data communications specialist

web programmer  
programmer/analyst  
database specialist system administrator  
digital/electronics designer consultant  
graphic applications programmer

scientific programmer  
systems analyst  
game developer  
artificial intelligence developer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Criminology and Criminal Justice

College of Liberal Arts  
(Bachelor of Arts)

Joseph Schafer, Chair  
Michael Harbin, Advisor  
4248 Faner Hall  
Telephone: (618) 453-5701  
<http://cola.siu.edu/ccj/>

The B.A. degree program in criminology and criminal justice meets the objectives of students considering careers in policing, the courts, corrections, juvenile justice, and private security, as well as those of students preparing for graduate education in criminal justice or criminology.

The curriculum provides a broad view of crime and criminal justice. Building on fundamental knowledge developed in core courses, students can select from a variety of other courses to gain in-depth knowledge about their particular areas of interest. Students may take supplemental courses—foreign language, accounting, and psychology, for example—to complement their special interests. This approach provides a sound foundation in criminology and criminal justice while allowing the flexibility needed to accommodate individual interests and needs.

A field internship placement may be an important element in the program and is encouraged for interested students who meet the department's criteria.

## *Representative Career Options*

Police officer  
tional counselor  
group home supervisor  
private security officer

investigator  
probation or parole officer  
youth counselor  
delinquency prevention specialist

corrections officer  
juvenile intake officer  
rehabilitation counselor  
social/ behavioral researcher

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Crop, Soil and Environmental Management

Crop Production & Management-Science Option  
College of Agricultural Sciences  
453-2496(Bachelor of Science)

Dr. Karen Jones, Professor  
Agriculture Building, Room 176  
Telephone (618)453-2496  
<http://www.coas.siu.edu>

The Crop, Soil and Environmental Management major is administered through the Department of Plant, Soil and Agricultural Systems, and the program includes a science option.

The program provides thorough training in theory and practice. Although the science option is oriented toward students interested in advanced degrees and research, students may choose elective courses from the College of Agricultural Sciences and other departments in the university and structure individualized programs through internships, special studies, and seminars.

## *Crop, Soil and Environmental Management Major*

Numerous job opportunities are available for graduates of this major. The department maintains close contact with employers and assists students in identifying internships and permanent positions. A minor is not required and there are no foreign language requirements.

## *Representative Career Options*

Agronomist  
plant ecologist  
plant pest control inspector  
plant and soil laboratory technologist

production manager  
plant breeder  
technical service representative

farm manager  
plant quarantine inspector  
plant pathologist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Crop, Soil and Environmental Management

Crop Production & Management-General Option  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Karen Jones, Professor  
Agriculture Building, Room 176  
Telephone (618) 453-2491  
<http://www.coas.siu.edu>

The Crop, Soil and Environmental Management major is administered through the Department of Plant, Soil and Agricultural Systems, and the program includes a general option.

The program provides thorough training in theory and practice. The general option is production oriented although students may choose elective courses from the College of Agricultural Sciences and other departments in the university and structure individualized programs through internships, special studies, and seminars.

## *Crop, Soil and Environmental Management Major*

Numerous job opportunities are available for graduates of this major. The department maintains close contact with employers and assists students in identifying internships and permanent positions. A minor is not required and there are no foreign language requirements.

## *Representative Career Options*

plant and soil laboratory technologist  
plant pest control inspector farm manager  
plant breeder

production manager  
Agronomist  
technical service representative

plant quarantine inspector  
plant ecologist  
plant pathologist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Crop, Soil and Environmental Management

Soil Science-Science Option  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Rachel Cook, Professor  
Agricluture, Room 161E  
Telephone (618) 453-1795  
<http://www.coas.siu.edu>

The Crop, Soil and Environmental Management major is administered through the Department of Plant, Soil and Agricultural Systems, and the program includes a science option.

The program provides thorough training in theory and practice. Although the science option is oriented toward students interested in advanced degrees and research, students may choose elective courses from the College of Agricultural Sciences and other departments in the university and structure individualized programs through internships, special studies, and seminars.

## *Crop, Soil and Environmental Management Major*

Numerous job opportunities are available for graduates of this major. The department maintains close contact with employers and assists students in identifying internships and permanent positions. A minor is not required and there are no foreign language requirements.

## *Representative Career Options*

soil conservationist  
environment mapping scientist  
environmental health scientist

water conservationist  
Agronomist  
technical service representative

soil erosion prevention specialist  
plant and soil laboratory technologist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Crop, Soil and Environmental Management

Soil Science-General Option  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Rachel Cook, Professor  
Agriclture, Room 161E  
Telephone (618) 453-1795  
<http://www.coas.siu.edu>

The Crop, Soil and Environmental Management major is administered through the Department of Plant, Soil and Agricultural Systems, and the program includes a science option.

The program provides thorough training in theory and practice. The science option is production oriented although students may choose elective courses from the College of Agricultural Sciences and other departments in the university and structure individualized programs through internships, special studies, and seminars.

## *Crop, Soil and Environmental Management Major*

Numerous job opportunities are available for graduates of this major. The department maintains close contact with employers and assists students in identifying internships and permanent positions. A minor is not required and there are no foreign language requirements.

## *Representative Career Options*

Agronomist  
soil erosion prevention specialist  
plant and soil laboratory technologist

soil conservationist  
environment mapping scientist  
technical service representative

water conservationist  
environmental health scientist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Dental Hygiene

College of Applied Sciences and Arts  
(Bachelor of Science)

Faith Y. Miller, Program Director  
Room 114A, Applied Sciences and Arts Building  
Telephone: (618) 453-8880  
E-mail: [fymbags@siu.edu](mailto:fymbags@siu.edu)  
<http://sah.siu.edu/undergraduate/dental-hygiene/index.php>

The Dental Hygiene Program at SIU offers a challenging, professional level of education for students who intend to enter the oral health profession of dental hygiene. The curriculum is designed to incorporate advances in technology in the oral health field and is composed of 120 hours of academic course work to be completed in four years. Our program provides students with the opportunity for an excellent education and preparation for a successful professional career. Students have the opportunity to attend the Chicago Midwinter Dental Conference, the Illinois Dental Hygienists' Association Annual Session, and the American Dental Hygienists' Annual Session.

Due to a variety of circumstances, including rules of accreditation, limitations of facilities, and faculty-student ratio, enrollment in the program is limited. Following admission to the University, a prospective student must submit a separate Dental Hygiene application packet to the Admissions Clerk. This application packet is available at the program website. It is important to complete all application procedures by the deadline listed at the program website.

Our Dental Hygiene program is one of the premier programs in the country and is the only Bachelor's degree program in the State of Illinois. Hands-on dental hygiene experiences in the on-site dental hygiene clinic and in extramural rotations develop professional skills of students and provide care to the community. The dental/dental hygiene clinic and laboratory facilities as well as the SIUC Community Dental Center are state of the art facilities.

The SIU Community Dental Center provides dental and dental hygiene services to Medicaid recipients. The Dental Sealant Grant Program provides oral exams and dental sealants to children enrolled in free or reduced school lunch programs, as well as children who are eligible for Medicaid. Give Kids a Smile Day partners with community volunteer dentists and dental hygienists to provide dental treatment to area children. Students provide fluoride varnish and parent education programs for Head Start and Early Head Start programs.

Students who major in Dental Hygiene are eligible for a variety of scholarship opportunities through the University, the College of Applied Sciences and Arts, and from several local and national dental organizations.

## *Degree Completion*

The dental hygiene program offers a bachelor of science in dental hygiene degree completion program for students who have completed an associate of applied science in dental hygiene. If qualified, students may be admitted under the Capstone Option. Courses required for the degree completion program are on an individual basis. The last 30 hours must be completed at SIU Carbondale. Articulation agreements are being developed with various associate degree dental hygiene programs in Illinois.

## *Representative Career Options*

Licensed dental hygienist	clinician, oral health consultant	researcher, health administrator
public health dental hygienist	oral health educator.	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Early Childhood

(Child and Family Services)  
College of Education and Human Services  
(Bachelor of Science)

Academic Advisement Office  
122 Wham Education Building  
Telephone: (618) 453-6340

Dr. Stacy Thompson, Program Coordinator  
Department of Curriculum and Instruction  
327 Wham Education Building  
Telephone: (618) 536-2441  
<http://ehs.siu.edu/ci/>

The B.S. degree program in early childhood with a specialization in child and family services meets the objectives of students preparing for positions as child care and family programs directors or teachers in private schools and child care centers; child development and parenting specialists with social, public health, and welfare agencies, such as Head Start and D.C.F.S.; developmental therapists; parent educators; and child life specialists.

## *Early Childhood as a Child and Family Services Major*

The Child and Family Services program is designed for students who prefer to work with children in non-public school settings, such as Head Start or child care, or with children and families through an agency setting. In selecting courses, students can follow any of four suggested career tracks: early childhood program director; child development specialist; parent educator; or social service specialist. This program is flexible, with many choices of electives for a specialized program. Students have practicum experiences with infants, toddlers, and preschoolers at relevant agencies/programs. They also do a semester-long internship in an agency or early childhood setting as a capstone experience.

## *Representative Career Options*

Program director  
recreational leader  
family education specialist  
family educator,

child care center director  
preschool director  
children's programs organizer  
teacher (infant/toddler and pre-school care)

child development specialist  
child behavior education specialist  
developmental therapist  
child advocate specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.



# East Asian Language & Culture

College of Liberal Arts  
(B.A. Languages, Cultures & International Studies)  
(Specialization in East Asian Language and Culture)  
(Minors in Chinese, Japanese, and East Asian Civilization)

Dr. Alan Kim, East Asian Section Head & Advisor  
Department of Languages, Cultures, and International Trade  
2024 Faner Hall  
Telephone:(618) 453-5421  
E-mail: [alanhkim@siu.edu](mailto:alanhkim@siu.edu)  
<http://cola.siu.edu/languages/>

China and Japan have rich, ancient cultures and also play an increasingly vital role in today's world. Students pursuing the interdisciplinary East Asian Language and Culture specialization will acquire proficiency in Chinese or Japanese, and take courses in English that introduce them to East Asian culture. They will gain a basic knowledge of the history, culture, and literature of people who speak their chosen language, and will learn how to think critically across cultures through analysis of beliefs, media, customs, and artifacts. In the course of their language study, they will gain the ability to discuss how and why Chinese or Japanese differ from English, helping them to understand how language works in general and how English and Chinese or Japanese work in particular. Students enjoy a wide range of career options in the public and private sectors, in the U.S. and abroad. The East Asian specialization is flexible enough to allow students to study a second field as well, widening their intellectual career horizons still further.

## *East Asian Language and Culture as a Minor*

East Asian Language and Culture offers three minors. Chinese requires 21 hours in Chinese (CHIN) courses. Japanese requires 21 hours in Japanese (JPN) courses. East Asian Civilization requires 15 hours in coursework in Chinese, Japanese, or East Asian studies. At least three 3 hours must be taken in a regularly scheduled course at SIU Carbondale.

## *Representative Career Options*

international business	federal and state government agencies employee	international organizations
journalism	teaching	history-related positions
cultural exchanges	tourism	political science
international law	nonprofit and humanitarian foundations	diplomacy and foreign service

Language study improves linguistic and analytical skills helpful for most careers and for graduate study.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Economics

College of Liberal Arts  
(Bachelor of Arts)

Dr. Subhash C. Sharma, Chair  
4121 Faner Hall  
Telephone: (618) 536-7746  
<http://cola.siu.edu/economics/>

The B.A. degree program in economics is great preparation for students pursuing careers in various areas of business, including banking and finance, industry, trade, and utilities. Majoring in economics is also excellent preparation for careers in law, medicine, government, non-profits, and international relations, and for graduate study in business, law, or any of the social sciences.

## *Economics as a Major*

The degree program in economics consists of 30 semester hours of economics courses, 15 hours of which are required courses. For the remaining 15 hours students choose one of three areas to specialize in: general economics, financial economics, law and economics, and international economics.

*To Counselors:* We recommend that high school students thinking of majoring in economics take economics in high school, if it is offered. Community college students interested in economics should study principles of macro- and microeconomics.

## *Representative Career Options*

Market research analyst  
finance administrator  
enterprises studies officer  
investment analyst, loan administrator  
production supervision  
labor economist  
legislative aide  
tax economist  
stock market analyst

economic analyst  
budget analyst  
international banking officer  
industrial economist  
price economist  
business planner  
population economic analyst  
urban economist

economic forecaster  
government economic  
international trade economist  
manufacturer's representative  
transportation economist  
economic geographer  
right-of-way agent  
financial adviser

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Electrical Engineering

(Computer Engineering Specialization)  
College of Engineering  
(Bachelor of Science)

Lisa Lindhorst, Advisement  
D-104 Engineering Building  
Telephone: (618) 453-2261  
E-mail: [lisalind@siu.edu](mailto:lisalind@siu.edu)  
<http://engineering.siu.edu/elec/>

See also: Civil Engineering, Computer Engineering, Mechanical Engineering, and Mining Engineering.

The B.S. degree program in electrical engineering meets the objectives of students preparing for professional and technical employment or for graduate studies leading to advanced degrees. Employment opportunities exist in such organizations as governmental laboratories, consumer goods manufacturers, and telecommunications, electric power, computer, and microelectronic companies. This program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology Inc., (EAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone: (410) 347-7700, <[url: www.abet.org](http://www.abet.org)>.

Flexibility in this major allows students to choose among courses in application and theory of circuits, systems, communications, digital systems, controls, electronics, instrumentation, electromagnetics, and power systems.

## *Transfer students*

Transfer students from community colleges or other institutions should have strong backgrounds in the physical sciences, mathematics, social sciences, fine arts, and humanities. Students are encouraged to complete specific freshman and sophomore course requirements, which include 6 semester hours of composition; 3 hours of speech, 8 hours of university physics; and 11–14 hours of mathematics, including calculus. Calculus is a prerequisite for junior-level courses.

## *Representative Career Options*

Computer engineer	product development and design engineer	product application and test engineer
sales	operations research analyst	patent engineer
systems engineer	electronics engineer	software engineer
digital signal processing engineer		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Electrical and Computer Engineering

DUAL DEGREE  
College of Engineering  
(Bachelor of Science)

Linda Lindhorst, Advisement  
D-104 Engineering Building  
Telephone: (618) 453-2261  
E-mail: [lisalind@siu.edu](mailto:lisalind@siu.edu)  
<http://engineering.siu.edu/elec/>

The B.S. degree program in electrical engineering meets the objectives of students preparing for professional and technical employment or for graduate studies leading to advanced degrees. Employment opportunities exist in such organizations as governmental laboratories, consumer goods manufacturers, and telecommunications, electric power, computer, and microelectronic companies. This program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology Inc., (EAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone: (410) 347-7700, <[url: www.abet.org](http://www.abet.org)>.

Flexibility in this major allows students to choose among courses in application and theory of circuits, systems, communications, digital systems, controls, electronics, instrumentation, electromagnetics, and power systems.

## *Transfer students*

Transfer students from community colleges or other institutions should have strong backgrounds in the physical sciences, mathematics, social sciences, fine arts, and humanities. Students are encouraged to complete specific freshman and sophomore course requirements, which include 6 semester hours of composition; 3 hours of speech, 8 hours of university physics; and 11–14 hours of mathematics, including calculus. Calculus is a prerequisite for junior-level courses.

## *Representative Career Options*

Electrical engineer	product development and design engineer	product application and test engineer
sales	operations research analyst	patent engineer
communications engineer	computer engineer	power engineer
systems engineer	electronics engineer	systems engineer
software engineer	control engineer	digital signal processing engineer.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Electronic Systems Technologies

College of Applied Sciences and Arts  
(Bachelor of Science)

Dr. Sam Chung, Director  
School of Information Systems & Applied Technologies  
106 Applied Sciences and Arts Building  
Telephone: (618) 453-7253

Lisa Lindhorst, Academic Advisor  
E-mail: [lisalind@siu.edu](mailto:lisalind@siu.edu)  
Telephone: (618) 453-7281  
<http://isat.siu.edu>

The B.S. in Electronic Systems Technologies (EST) is a career-oriented program designed to provide the electronics technician with the tools necessary for advancement to supervisory positions in the field of electronics. The pervasive nature of electronics has resulted in the need for highly trained technologists in all sectors of business and industry. Students entering the program as freshmen are not required to have a background in electronics. Requirements for the major provide a sequential program in electronics and allow students to select courses that lead toward careers in the electronics industry. Students can select one of two baccalaureate educational paths: 1) electronic systems technologies or 2) electronics systems technologies with an electronics management specialization.

The Electronic Systems Technologies degree is a four-year program that provides training in fundamental electronic theory and advanced supervisory and technical skills. Students may enter the program at the freshman level or build on previous technical training received in military schools, technical institutes, and community colleges. Credit for postsecondary course work, military training, and work experience will be evaluated on an individual basis. The program is ideally suited for students who possess an associate in applied science degree in electronics technology. The A.A.S. degree may be coupled with SIU Carbondale's Capstone Option. A mandatory internship/co-op experience ensures that students receive field experience in their chosen career field. The curriculum places emphasis on skills necessary to achieve long-term career goals in biomedical equipment technology, automation and control, telecommunications, and networking.

## *Transfer students*

Transfer students from community colleges or other institutions should have strong backgrounds in the physical sciences, mathematics, social sciences, fine arts, and humanities. Students are encouraged to complete specific freshman and sophomore course requirements, which include 6 semester hours of composition; 3 hours of speech, 8 hours of university physics; and 11–14 hours of mathematics, including calculus. Calculus is a prerequisite for junior-level courses.

## *Representative Career Options*

Computer engineer	product development and design engineer	product application and test engineer
sales	operations research analyst	patent engineer
systems engineer	electronics engineer	software engineer
digital signal processing engineer		

## *Baccalaureate Degree Program in Electronic Systems Technologies—Electronics Management Specialization*

The electronic systems technologies major that chooses the electronics management specialization will take course work designed to provide an effective school-to-work transition for specific careers in the electronics industry. Completion of this specialization provides graduates with advanced skills required by an electronics technologist. Technical skills include planning and implementation of preventive maintenance programs, testing, troubleshooting, and calibration of electronic equipment and systems. In addition, the specialization will include skills in writing, interpreting, and presenting technical documentation.

This curriculum offers the flexibility to best serve the student's background and career goals. It also works well for students who already possess an associate in applied science (A.A.S.) degree in electronics technology. The Capstone Option is available, and formal program articulation agreements between SIU Carbondale and community colleges have been developed to ensure that the student is able to receive a baccalaureate degree in electronic systems technologies with a specialization in electronics management with the completion of an additional 60 hours of approved course work.

## *Representative Career Options*

Production technician	biomedical technician	field service manager
production manager	broadcast technician	production supervisor
systems/ network analyst	process control technician	technical salesperson
instrumentation calibration technician		

Entry-level salaries vary with the type of industry and its geographic location. Typically, starting salaries range from \$35,000 to \$60,000 per year.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

## Elementary Education (1-6)

College of Education and Human Services  
(Bachelor of Science)

Academic Advisement Office  
122 Wham Education Building  
Telephone: (618) 453-6340

Dr. Christie McIntyre, Program Coordinator  
Department of Curriculum and Instruction  
327 Wham Education Building  
Telephone: (618) 536-2441  
<http://ehs.siu.edu/ci/>

The B.S. degree in education with a major in elementary education meets the objectives of students interested in teaching grades 1-6 and prepares them to fulfill the minimum requirements for the state of Illinois Professional Educator License. Elementary education majors are prepared to accept jobs in self-contained classrooms at the elementary level. Students should study the section in the current SIU Carbondale undergraduate catalog that lists requirements. In addition to general University and College of Education and Human Services requirements, students must meet all requirements prerequisite to student teaching.

SIU students seeking Illinois licensure must apply for licensure through the College of Education and Human Services Office of Teacher Education and must meet licensure requirements in effect at the time of their graduation. Licensure requirements are determined by the Illinois State Board of Education and are subject to change. Teacher licensure candidates are urged to consult the current SIU Carbondale Undergraduate Catalog and materials published by the SIU College of Education and Human Services Office of Teacher Education for updates to Illinois teacher licensure requirements.

### *Elementary Education (1-6) as a Major*

Elementary education has four parts: University Core Curriculum courses required of all students pursuing a bachelor's degree at SIU Carbondale; the teacher education program—a professional education sequence that culminates in a semester of student teaching; a group of required and elective courses in the professional field of elementary education; and observed and actual experiences with children. All students should refer to Teacher Education Program Admission Requirements. Contact the Office of Teacher Education in the College of Education and Human Services at (618) 453-2354.

### *Transfer Students*

Transfer students planning to complete the teacher licensure program are encouraged to contact the College of Education and Human Services Academic Advisement Office at (618) 453-6340 at least one year before enrolling at SIU Carbondale.

### *Representative Career Options*

first through sixth grade classroom teacher

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Engineering Technology

(Electrical)  
College of Engineering  
(Bachelor of Science)

Dr. Julie Dunston, Chair  
D-105 Engineering Building  
Telephone: (618) 536-3396  
E-mail: [dunston@siu.edu](mailto:dunston@siu.edu)  
<http://www.engr.siu.edu/tech/>

In the occupational spectrum between the technician and the engineer, engineering technology lies at the end of the spectrum closer to the engineer, integrating scientific and engineering knowledge and methods with technical skills and applying them to the support of engineering activities.

The B.S. degree program in engineering technology (electrical engineering technology specialization) meets the objectives of students planning careers in electronics, manufacturing, power generation, communication industries, and computer technologies. Students study electrical circuits, logic design, communications, microprocessors, and microcomputers. Other courses prepare them for participation in the planning and installation of power distribution systems, the operation and maintenance of complex electrical systems and industrial automation and control.

This curricula is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, (TAC/ABET), [www.abet.org](http://www.abet.org).

## *Engineering Technology as a Major, with a Specialization in Electrical Engineering Technology*

Required for the degree are 120 semester hours of course work, including mathematics and basic science; communications; humanities and social science; required major; and elective technology courses. A minimum of 30 semester hours in engineering technology must be taken in residence at SIU Carbondale.

The courses required for transfer students with associate in applied science degrees from an occupational program are dependent on the student's previous program. For the electrical engineering specialization, 30 hours in the engineering technology curriculum must be taken at SIU Carbondale. A Capstone Option may be available in the engineering technology degree program. Students' Capstone Option applications must be on file by the end of their first semester at SIU Carbondale. Additional qualification requirements are detailed in this catalog under Capstone Option.

## *Representative Career Options*

Employment opportunities for graduates with B.S. degrees in electrical engineering technology are excellent. Graduates are employed in the communications industry, electronic and electrical industries; by transportation industries and consulting firms; in the power and energy industries, in machinery manufacturing companies, and in many other areas.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# English

(General Literature/Grad School Preparation)  
College of Liberal Arts  
(Bachelor of Arts)

Dr. Elizabeth Klaver, Chair  
Department of English, Faner Hall  
Telephone: (618) 453-5321  
<http://www.english.siu.edu/>

Students who choose to study literature, language, and composition at Southern Illinois University Carbondale have excellent resources available to them: an experienced faculty, well-equipped facilities and extensive library collections. The B.A. degree program in English is offered with four areas of specialization (general studies/ graduate school; pre-professional; creative writing; teacher education) that will accommodate a variety of career objectives. Each specialization requires students to complete a set of English core courses (ENGL 301, 302A, 302B, 303, 305, and 365, or 471 or 472), as well as a series of additional courses specifically relevant to the area of concentration. Students who plan to declare English as a major should consult the department's director of undergraduate studies as soon as they know they will major in English. If possible, transfer students should contact a departmental adviser before their first registration at SIUC. (Any of the four English specializations may be modified by entry into the departmental honors program.)

The Bachelor of Arts program in English with a specialization in *general studies/graduate school preparation literature specialization* appeals to students preparing for graduate study and for occupations such as journalism and publishing that place more than usual emphasis on effective communication and organization of ideas. The broadly based program focuses on English, American, and world literatures and includes study in the various forms and periods of literature. For students with excellent undergraduate records, a taste for literary analysis and criticism, and a desire to teach young adults rather than adolescents, college teaching is a viable option for a career. This concentration, which allows a great deal of flexibility in choosing upper-division courses, offers a thorough background in composition, language, and literature, both contemporary and historic.

## *English as a Major*

Major goals of the University Core Curriculum, pre-graduate study, and pre-professional specializations are 1) teaching students to write clearly and effectively; 2) preparing them to read precisely with insight and understanding; and 3) familiarizing them with the history, artistry, and human values of our linguistic and literary heritage. Although a minor field is not required, English majors are encouraged to consider complementary minor fields such as foreign languages and literatures, history, philosophy, linguistics, speech communication, journalism, psychology, sociology, political science, African Studies, Black American studies, theater, computer science, business administration, and marketing. Creativity, critical thinking, and communication—skills acquired in the English major—are crucial for success in any field of study. The English major and minor complement and enhance study in virtually all academic disciplines. Students planning to enter graduate school are encouraged to take two years of a single foreign language.

## *Representative Career Options*

prepare for graduate school	journalist	english teacher
college english teacher	writer	various roles within publishing
variety of roles within the professional world		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# English

(Pre-Professional Specialization)  
College of Liberal Arts  
(Bachelor of Arts)

Dr. Elizabeth Klaver, Chair  
Department of English, Faner Hall  
Telephone: (618) 453-5321  
<http://www.english.siu.edu/>

The Bachelor of Arts degree program in English with a specialization in *pre-professional preparation* attracts students who want to write clearly and effectively and to read with understanding. The emphasis on language and communication in this program may be particularly attractive to pre-law, pre-business and pre-med students. Indeed, surveys show that the verbal abilities of English graduates are highly desirable in business and government. Courses in literature are included to refine the student's awareness of language, capacity for analytic thinking, and understanding of human behavior.

## *English as a Major*

Major goals of the University Core Curriculum, pre-graduate study, and pre-professional specializations are 1) teaching students to write clearly and effectively; 2) preparing them to read precisely with insight and understanding; and 3) familiarizing them with the history, artistry, and human values of our linguistic and literary heritage. Although a minor field is not required, English majors are encouraged to consider complementary minor fields such as foreign languages and literatures, history, philosophy, linguistics, speech communication, journalism, psychology, sociology, political science, African Studies, Black American studies, theater, computer science, business administration, and marketing. Creativity, critical thinking, and communication—skills acquired in the English major—are crucial for success in any field of study. The English major and minor complement and enhance study in virtually all academic disciplines. Students planning to enter graduate school are encouraged to take two years of a single foreign language.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# English

(Creative Writing)  
College of Liberal Arts  
(Bachelor of Arts)

Dr. Elizabeth Klaver, Chair  
Department of English, Faner Hall  
Telephone: (618) 453-5321  
<http://www.english.siu.edu/>

The Bachelor of Arts degree program in English with a specialization in *creative writing* meets the objectives of students who want to pursue and refine an interest in literature and language through their creative abilities. The equivalent of seven courses beyond the Core Curriculum required of all English majors is offered, culminating in a directed senior writing project such as a collection of short stories or poems, a novel, or a play. All faculties teaching these courses have published their own creative writing, and the major thrust of the student's work will be toward publication. An alternative to the senior project, if appropriate arrangements can be made, might be an internship in a publishing firm.

## *English as a Major*

Students interested in creative writing are strongly urged to confer with the director of undergraduate studies in English as soon as possible. The designs of these specializations require a great deal of advisement and consultation to insure that students go through the proper sequence of courses. If possible, transfer students should contact a departmental adviser before their first registration at SIU Carbondale.

## *Representative Career Options*

Webmaster  
announcer  
correspondent  
feature writer  
assistant librarian  
television writer  
recreation specialist

public relations officer  
continuity writer  
critical writer  
program assistant  
rewriter  
manufacturer's representative  
interpreter.

publications personnel  
copywriter  
editorial writer  
reporter  
technical writer  
sales agent

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# English

(Teacher Education)  
College of Liberal Arts  
(Bachelor of Arts)

(Teacher Education)  
College of Liberal Arts  
(Bachelor of Arts)

Dr. Elizabeth Klaver, Chair  
Department of English, Faner Hall  
Telephone: (618) 453-6866  
<http://cola.siu.edu/english/>

Chief Academic Advisor  
122 Wham Building  
Telephone: (618) 453-6340  
[ehs.siu.edu/](http://ehs.siu.edu/)

Students who plan to teach English at the high school level grades 9-12, can prepare through either the College of Liberal Arts or the College of Education and Human Services at SIU Carbondale. Both degrees require admission to the teacher education program. The teacher education program consists of courses required for teacher licensure, a semester of student teaching, and the English core (ENGL 301, 302A, 302B, 303, 305, and 365 or 471 or 472), as well as courses in language analysis; challenges in teaching composition, language, literature and reading in high school; advanced courses in English literature before 1800, and continental literature; and one elective course. All English TEP students are required to have one year of a foreign language.

## *English as a Major*

The Bachelor of Arts and Bachelor of Science degree programs in English education meet the objectives of students preparing for teaching at the secondary level, for graduate study, or for positions requiring effective communication of ideas. Students will gain a thorough background in composition, language, and literature, studying the various forms of English, American, and world literature, contemporary and historic. Students interested in the teacher education preparation specialization should become aware of the requirements for entering the teacher education program. The Department of English requires a 2.75 GPA in the major and successful (C or better) completion of three upper-division English courses for recommendation to unconditional status in the teacher education program.

## *Representative Career Options*

secondary-level English teacher

a variety of positions requiring effective communication skills

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Environmental Studies (Minor)

Interdisciplinary

Dr. Leslie A. Duram, Director  
Telephone: 618-453-6084  
Email: [duram@siu.edu](mailto:duram@siu.edu)  
[www.environmentalstudies.siu.edu](http://www.environmentalstudies.siu.edu)

Welcome to Environmental Studies (ENVS)! Open to all Majors: you can add some “green” to any degree. The Environmental Studies minor is an excellent complement to any major, and serves to enhance your career opportunities. You earn an Environmental Studies minor through 15 credit hours, drawing from the expertise of faculty and departments across campus. The goal is to broaden your perspective, while allowing you to follow your individual interests. You will expand your viewpoint and gain new skills for environmental analysis. For example, you can learn more about environmental ethics and media, ecology and wildlife; environmental education and policies; green buildings and organizations. The possibilities to widen your knowledge base are nearly endless. This minor helps unify the theme of environmental studies, while creating individual paths for student success.

The Environmental Studies minor is built around one core course, three topic courses (Environment, Society, Skills), and one unifying final course.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Fashion Design and Merchandising

(Fashion Design)  
School of Architecture  
College of Applied Sciences and Arts  
(Bachelor of Science)

Dr. Craig Anz, Interim Director  
School of Architecture  
410 Quigley Hall  
Telephone: (618) 453-3734/E-mail: [canz@siu.edu](mailto:canz@siu.edu)  
<http://architecture.siu.edu/>

Dr. Laura Kidd, Program Director  
311 Quigley Hall  
Telephone: (618) 453-1981 / E-mail: [lkidd@siu.edu](mailto:lkidd@siu.edu)

The B.S. degree program in Fashion Design and Merchandising with a specialization in fashion design meets the objectives of students preparing for design occupations either in an industrial setting or in a custom shop. Many careers in design-related businesses are also available to the graduates of this program. The variety of courses offered provides students with opportunities to develop individual skills and competencies.

## *Fashion Design as a Specialization*

This specialization is intended for students interested in professional preparation in fashion design or allied design positions in either industrial or commercial fashion businesses. The courses available to students cover textile information, fashion design, and skills required for developing original designs into patterns and completed garments. Courses in fashion design and merchandising are complemented by courses in art, business, and other areas that will provide a suitable background for various career opportunities.

## *Representative Career Options*

Consumer market analyst  
fashion coordinator  
fashion merchandising expert  
cost analyst  
purchasing manager  
customer relations specialist

consumer relations officer  
pattern designer  
advertising assistant  
customer services specialist  
textile selector  
pattern maker

fashion designer  
tailor, clothing economist  
retail store manager  
sales agent  
textile laboratory assistant  
manufacturer's representative.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Fashion Design and Merchandising

(Fashion Merchandising)  
School of Architecture  
College of Applied Sciences and Arts  
(Bachelor of Science)

Dr. Laura Kidd, Program Director  
311 Quigley Hall  
Telephone: (618) 453-3374  
E-mail: lkidd@siu.edu  
<http://architecture.siu.edu/undergraduate/fdm/index.php>

The B.S. degree program in Fashion Design and Merchandising with a specialization in fashion merchandising meets the objectives of students preparing for careers in retail stores as buyers or department managers or in personnel, training, inventory control, and security. Professional and free elective hours make it possible for students to choose the courses that support their career goals.

## *Representative Career Options*

Consumer market analyst  
fashion merchandising expert  
cost analyst  
purchasing manager  
customer relations specialist

consumer relations officer  
advertising assistant  
customer services specialist  
textile selector  
manufacturer's representative.

fashion coordinator  
retail store manager  
sales agent  
textile laboratory assistant

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Fashion Design and Merchandising

(Fashion Styling)  
School of Architecture  
College of Applied Sciences and Arts  
(Bachelor of Science)

Dr. Craig Anz, Interim Director  
School of Architecture  
410 Quigley Hall  
Telephone: (618) 453-3374/E-mail: [canz@siu.edu](mailto:canz@siu.edu)  
<http://architecture.siu.edu/undergraduate/fdm/index.php>  
Dr. Seung-Hee Lee, Program Director  
311 Quigley Hall  
Telephone: (618) 453-1981 / E-mail: [shlee@siu.edu](mailto:shlee@siu.edu)

The B.S. degree program in Fashion Design and Merchandising with a specialization in fashion styling meets the objectives of students preparing for careers as a fashion stylist, for example, in commercial styling (catalogs or advertisements) or editorial styling (magazines). A stylist is responsible for choosing props to communicate a fashion idea, trend or theme. Professional elective hours make it possible for students to choose the courses that support their career goals.

## *Fashion Stylist Specialization*

This specialization offers flexibility for students. In addition to a 4-year option, there is a 3-year option for students with a cosmetology license and a 1+1+2 option for students with a cosmetology license plus an associate's degree.

## *Representative Career Options*

Commercial stylist  
personal shopper

editorial stylist  
fashion event planner

wardrobe consultant

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Finance

(Financial Management Option)  
(Financial Institutions Option)  
(Financial Investment Option)  
College of Business  
(Bachelor of Science)

Dr. Mark A. Peterson, Chairperson  
Department of Finance  
134A Henry J. Rehn Hall  
Telephone: (618) 453-2459  
<http://www.business.siu.edu/academics/dept/finance/index.html>

Finance is the acquisition, management, and financing of resources, with due regard to market prices, for firms and individuals. Within a firm, financial considerations drive the central decisions about research, engineering, production, and marketing. In governmental activities, sophisticated financial techniques are becoming increasingly important. The financial executive plays a key role in the successful management of both business and governmental operations.

The B.S. degree program in finance with a financial management option meets the objectives of students planning careers in the financial operations of business firms and public institutions. The degree program with a financial institutions option meets the needs of those planning careers related to financial intermediaries and financial markets. The financial investments option is designed for those interested in Security Analysis and Portfolio Management. Certain courses may require the purchase of additional materials.

## *Finance as a Major*

Finance majors must earn a minimum grade of C in each of the courses taken to satisfy the requirements for the Finance major AND earn a minimum 2.0 GPA for those major courses.

It is strongly recommended that the courses listed above for the first two years be completed before the junior year. Many of these courses are prerequisites to later requirements. The department is accredited by the Association to Advance Collegiate Schools of Business International.

For finance majors and minors, Finance courses completed more than seven calendar years prior to the current term must be repeated. All 300 and 400 level business courses may be repeated for a grade only once.

Graduate degrees available: Master of Business Administration (M.B.A.), Master of Accountancy (M.Acc.), and Doctor of Philosophy in Business Administration (Ph.D.).

## *Representative Career Options*

Internal auditor	finance administrator	financial analyst
trust administrator	wage-salary administrator	systems analyst
inventory controller	credit analyst	investment analyst
operations research analyst	budget administrator	consumer researcher
controller	credit manager	finance officer
financial management intern	bursar assistant (college)	grant coordinator (college)
assistant fiscal officer	assistant to the paymaster	payroll and assignment supervisor
assistant to the director of finance	head cashier	financial planning agent
loan administrator	analyst	industrial economist
business analyst	loan administrator	loan examiner
industrial labor relations specialization officer		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Fire Service Management

College of Applied Sciences and Arts  
(Bachelor of Science)

Office of Fire Service Management Programs  
(618) 453-7277

<http://extendedcampus.siu.edu/programs/off-campus-programs/programs/fsm.php>

The Bachelor of Science in Fire Service Management currently is offered only at off-campus locations and provides those with a fire science-related technical background with a two-year, upper division program of study that enhances the successful graduate's pursuit of a career in the fire service industry. The program is designed to provide practical course work in areas of management and supervision for fire service professionals. Admission to the program requires prior completion of a fire science-related Associate of Applied Science (AAS) degree or prior formal training equivalent to a fire science related AAS or prior fire science-related licensure or certification, or prior employment in a fire science-related field.

The Capstone Option is available for eligible students who meet the Capstone criteria outlined in Chapter 3. Those seeking the Capstone Option must complete the application and must meet all eligibility criteria, including the fire science-related AAS degree with a 2.25 GPA or better, no later than the end of their first semester in the bachelor's degree program.

The Bachelor of Science in Fire Service Management is an ideal program of study for fire service professionals who have a prior, fire service-related AAS or its equivalent or who have extensive work experience in the fire service industry. Successful graduates are prepared for career enhancing opportunities that include fire service related management and supervisory positions, the insurance industry, the fire equipment manufacturing industry and other related fields.

The Fire Service Management program has signed articulation agreements with numerous colleges. Check with the office of Fire Service Management Programs for a current list. These agreements take advantage of the Capstone Option discussed in Chapter 3 of the Undergraduate Catalog which can be found at <http://registrar.siu.edu/catalog/undergraduatecatalog.html>.

For additional information about this major, contact the Office of Fire Service Management Programs at (618) 453-7277 or visit our homepage: <http://extendedcampus.siu.edu/programs/off-campus-programs/programs/fsm.php>

## *Representative Career Options*

Fire service related management and supervisory positions, the insurance industry, the fire equipment manufacturing industry and other related fields.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Foreign Language and International Trade

College of Liberal Arts  
(B.A. Languages, Cultures & International Studies)  
(Specialization in Foreign Language and International Trade)

Brooke Thibeault, Director  
Department of Languages, Cultures, and International Trade  
2039 Faner Hall  
Telephone: (618) 453-5428  
<http://flit.siu.edu/>

The program in Foreign Language and International Trade (FLIT) meets the objectives of students considering careers in the world of international business.

The FLIT program combines courses from the College of Liberal Arts and the College of Business. It consists of 46 semester hours of business-related courses and 30 credit hours (above 100-level) in one of these foreign languages: Chinese, French, German, Japanese, or Spanish. An internship late in the program gives students the opportunity to travel and work in an international company or agency.

## *Foreign Language and International Trade as a Program*

The program in FLIT provides its graduates the best available training for entry into the international business community. Students take courses that give them background in the business world and in the culture, religion, philosophy, politics, history, and geography of the country where the language they are studying is spoken.

No grade lower than C will be accepted for any course required by the major. A 2.75 GPA is a pre-requisite to MGMT 345, FL 495, and graduation.

Besides the major courses, the student must complete all other University Core Curriculum, college, and University requirements.

## *Representative Career Options*

Market researcher	administrator of state	banking, insurance
international, federal, and local government offices	professional in areas including taxes, logistics, contracts and sales	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Forestry

(Forest Hydrology Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Jim Zaczek, Chair  
184 Agriculture Building  
Telephone: (618) 453-3341  
<http://www.forestry.siu.edu>

Forest Hydrology provides hands-on field training and classroom instruction which integrates natural resource management in a watershed context with an emphasis on freshwater and forest resources. Specialized course work includes Watershed Management, Watershed Management Field Laboratory, Forest Hydrology, and Forest Soils, in addition to the core forest management and recreation courses. Water resource electives from a variety of departments across campus can also be taken. A few examples are Plant and Soil Science, Geology, Zoology, Geography, and Civil Engineering.

Students also have the option of selecting a course track that will qualify them for employment as a hydrologist in a federal agency. The SIU Carbondale undergraduate Forestry curriculum is accredited by the Society of American Foresters [5400 Grosvenor Lane, Bethesda, MD 20814-2198; (301) 897-8720] and all specializations lead to a Bachelor of Science degree in Forestry.

## *Forestry Hydrology as a Major*

Located within ten miles of the SIU Carbondale campus are a national wildlife refuge, two state parks, four recreational lakes, and a national forest. The 270,000 acre Shawnee National Forest, in particular, provides students with a wealth of hands-on experiences in a natural setting.

SIU Carbondale maintains laboratory facilities in water quality and soil fertility that provide students with opportunities for undergraduate research and training. The local communities also contain a mosaic of forested and agricultural watersheds that are utilized in a variety of unique research applications involving undergraduate student support.

## *Transferring Students*

Students transferring to SIU Carbondale should strive to complete BIOL 200B or PLB 200 or ZOOL 118, and MATH 108, 109 or 141 before coming to SIU Carbondale. These courses are prerequisites to forestry courses and must be taken in the first two years to avoid delays in graduation.

Students are strongly encouraged to call or visit the Department of Forestry to discuss courses that will prepare them for the course of study in forestry. This should be done before their first year at a community college.

## *Representative Career Options*

Career opportunities are excellent for B.S. graduates trained in forestry. A Forestry major will allow you to combine your interest in natural resources with your desire for an exciting and rewarding career. Those graduates specializing in Forest Hydrology are prepared to: work as a hydrologist, water quality specialist, or soil and water conservationist in a federal or state agency; work for a private consulting firm in the areas of hydrology, water quality, watershed management or wetland science; work for a NGO such as the Nature Conservancy or Prairie Rivers Network in watershed management hydrology, and/or water quality; pursue graduate studies in hydrology, watershed management and soil science. NOTE: In order to qualify for federal employment as a hydrologist, graduates must complete 6 credit hours of calculus and 6 credit hours of physics. Students should discuss this goal with their academic advisor.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Forestry

(Forest Resources Management Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Jim Zaczek, Chair  
184 Agriculture Building  
Telephone: (618) 453-3341  
<http://www.forestry.siu.edu>

The B.S. degree program with a specialization in forest resources management meets the objectives of students considering careers in forest management and production, multiple-use resource management, and the forest products industries.

The goal of the specialization is to develop individuals with sufficient understanding of the physical, biological, and economic considerations required to make sound management decisions for sustainable multiple uses of forest resources. Integrated management of natural and renewable resources, coordination of forest use methods and conservation practices, and conservation of the wildlands heritage are emphasized. A four-week session (field study) is required after the junior year to give the student practical field experience.

The specialization is accredited by the Society of American Foresters (5400 Grosvenor Lane, Bethesda MD 20814-2198; 301 897-8720).

## *Forestry as a Major*

Available to the Department of Forestry for teaching and research are the Crab Orchard National Wildlife Refuge, the Shawnee National Forest, the Union State Tree Nursery and Forest, and many state parks and conservation areas, comprising several hundred thousand acres of forest land, in the vicinity of the University.

Internships are not required for forestry students but are strongly recommended. Internships are an excellent opportunity for students to learn more about careers in forestry and receive on-the-job experience. Announcements for internship opportunities are available in the forestry department and in Student Services in the College of Agricultural Sciences.

## *Transferring Students*

Prospective students are strongly encouraged to call or visit the Department of Forestry to discuss courses that will prepare them for the course of study in forestry. This should be done before their first year at a community college.

## *Representative Career Options*

Forest engineer  
watershed manager  
plant ecologist  
public and environmental health forester  
grazing lands supervisor  
timber manager  
manager

silviculture specialist  
wildlife manager  
pollution control specialist  
consulting  
research forester  
soil conservationist  
vegetation manager

forest manager  
forest products technologist  
forest conservation specialist  
forester  
forest extension worker  
forest resources

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Forestry

(Forest Recreation and Park Management Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Jim Zaczek, Chair  
184 Agriculture Building  
Telephone: (618) 453-3341  
<http://www.forestry.siu.edu>

The B.S. degree program with a specialization in outdoor recreation resources management meets the objectives of students seeking careers in managing and administering wildlands for outdoor recreation and park uses in a variety of agencies that operate in diverse geographic and natural settings.

The National Recreation and Park Association and the Society of American Foresters are among those who recommend the following courses. The specialization is accredited by the Society of American Foresters (5400 Grosvenor Lane, Bethesda MD 20814-2198; 301 897-8720).

## *Forestry as a Major*

Available to the Department of Forestry for teaching and research are the Crab Orchard National Wildlife Refuge, the Shawnee National Forest, the Union State Tree Nursery and Forest, and many state parks and conservation areas, comprising several hundred thousand acres of forest land, in the vicinity of the University.

Internships are not required for forestry students but are strongly recommended. Internships are an excellent opportunity for students to learn more about careers in forestry and receive on-the-job experience. Announcements for internship opportunities are available in the forestry department and in Student Services in the College of Agricultural Sciences.

## *Transferring Students*

Prospective students are strongly encouraged to call or visit the Department of Forestry to discuss courses that will prepare them for the course of study in forestry. This should be done before their first year at a community college.

## *Representative Career Options*

Recreational resource planner	conservation officer	game warden
forest recreation specialist	range manager	watershed manager
wildlife manager	environmental educator	pollution control specialist
public and environmental health forester	parks supervisor	research forester
forest extension worker	park ranger	forest resources manager
park naturalist	environmental interpreter	eco- tourism specialist
heritage and natural resource interpreter		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Forestry

(Urban Forest Management Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Jim Zaczek, Chair  
184 Agriculture Building  
Telephone: (618) 453-3341  
<http://www.forestry.siu.edu>

Urban Forest Management emphasizes coursework and skills necessary for dealing with trees stressed by the urban environment. Included in the program are courses in tree identification, forest ecology and ecosystems, forest social science, forest measurements, and forest resource management. Also included is coursework from a variety of biological and social science departments: plant pathology, landscape design, landscape plant materials and management, state of local government, and small business management.

The SIU Carbondale undergraduate Forestry curriculum is accredited by the Society of American Foresters [5400 Grosvenor Lane, Bethesda, MD 20814-2198; (301) 897-8720] and all specializations lead to a Bachelor of Science degree in Forestry.

## *Urban Forest Management as a Major*

Within ten miles of the SIUC campus are located one national wildlife refuge, two state parks, four recreational lakes, and a national forest. The 270,000 acre Shawnee National Forest, in particular, provides students with a wealth of hands-on experiences in a natural setting.

In addition, SIUC maintains a variety of lab and greenhouse facilities where students study soil and forest ecosystem processes.

All forestry students spend ample time in the field as part of their coursework. All students are required to participate in a summer field studies course. You will learn directly from forest management professionals and get a first hand look at the challenges and rewards of a career in Urban Forestry.

Career opportunities are excellent for B.S. graduates trained in forestry. A Forestry major will allow you to combine your interest in natural resources with your desire for an exciting and rewarding career.

## *Transferring Students*

Prospective students are strongly encouraged to call or visit the Department of Forestry to discuss courses that will prepare them for the course of study in forestry. This should be done before their first year at a community college.

## *Representative Career Options*

city arborist	village forester	manager in the tree care industry
private forestry consultant	tree care contractor	
graduate studies in forestry and natural resources		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Forestry

(Wildlife Habitat Management and Conservation Specialization)  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Jim Zaczek, Chair  
184 Agriculture Building  
Telephone: (618) 453-3341  
<http://www.forestry.siu.edu>

Wildlife Habitat Management and Conservation helps students develop knowledge and skills in integrated natural resource management with an emphasis on habitat management for wildlife. Included in the program are courses in tree identification, forest ecology, ecosystems, forest health and natural resources management. Specialized course work in zoology, wildlife management and geography prepares students for wildlife, conservation and forestry-related careers.

This specialization includes areas of study recommended and accredited by the Society of American Foresters and includes the course work necessary to qualify as a Certified Associate Wildlife Biologist.

## *Wildlife Habitat Management and Conservation as a Major*

Within ten miles of the SIU Carbondale campus are located one national wildlife refuge, two state parks, four recreational lakes, and a national forest. The 270,000 acre Shawnee National Forest, in particular, provides students with a wealth of hands-on experiences in a natural setting.

In addition, SIU Carbondale maintains a variety of lab and greenhouse facilities where students study wildlife and forest ecosystem processes.

All forestry students spend ample time in the field as part of their coursework. All students are required to participate in a summer field studies course. You will learn directly from forest and wildlife management professionals and get a firsthand look at the challenges and rewards of career opportunities in the Wildlife Habitat Management & Conservation area.

## *Transferring Students*

Students transferring to SIU Carbondale should strive to complete BIOL 200A and 200B, CHEM 140A, and MATH 108 before coming to SIU Carbondale. These courses are prerequisites to forestry courses and must be taken in the first two years to avoid delays in graduation.

Prospective students are strongly encouraged to call or visit the Department of Forestry to discuss courses that will prepare them for the course of study in forestry. This should be done before their first year at a community college.

## *Representative Career Options*

Career opportunities are excellent for B.S. graduates trained in Forestry. This specialization well prepares graduates for wildlife- and forestry-related careers in federal and state governmental agencies, non-governmental conservation organizations, and natural resource consulting firms. Students also will be well-prepared for entry into the profession of conservation police officer and includes the course work necessary to qualify as a Certified Associate Wildlife Biologist.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# French

College of Liberal Arts  
(B.A. Languages, Cultures & International Studies)  
(Specialization in French, with or without K-12 Teaching License)  
(Minor in French)

Dr. Veronique Masier, French Section Head & Advisor  
Department of Languages, Cultures, and International Trade  
2068 Faner Hall  
Telephone: (618) 453-5423  
E-mail: profmasier@gmail.com  
<http://cola.siu.edu/languages/>

Students in the French specialization will gain advanced-level language proficiency and knowledge of the rich history, culture, and literature of people who speak French. Students will learn how to think critically across cultures through analysis of beliefs, media, customs, and artifacts. In the course of their language study, students will gain the ability to discuss how and why French differs from English, helping them to understand how language works in general and how English and French work in particular. The French specialization is flexible enough to allow students to study a second field as well, widening their intellectual and career horizons still further.

French students may choose to enter the Teacher Education Program in conjunction with the College of Education and Human Services and pursue a K-12 teaching license in the State of Illinois. Students doing so may choose to earn a B.A. through the College of Liberal Arts or a B.S. through the College of Education and Human Services.

Students with expertise in French should take a placement test to help them sign up for the proper class. A free online placement test is available at <http://webcape.byuhtsrc.org>. Students who have successfully completed one year of French in high school should normally start at the second semester level; students who have completed two years should normally start at the third semester.

Unit credit (without grade) on the basis of proficiency may be obtained through the Department in French. This may be accomplished by taking a validating course or by examination. Basic language skills courses taken at SIU, up to and including 320B, may serve as validating courses. Upon receiving a grade of A or B in a validating course, students may be granted validating credit for up to two of the immediately preceding basic skills courses. Credit through examination can be done by CLEP examination which is offered by the University Testing Services.

## *French as a Major Specialization (without K-12 teaching licensure)*

A specialization in French consists of 33 semester hours in courses above 100 level, including FR 201, 320, and at least two 400-level courses plus 21 hours of courses at the 300 or 400-level. At least one literature course, one culture course, and one writing intensive course must be taken. Transfer students who majored in French must complete a minimum of 12 semester hours in language courses, including at least one 300 or 400-level French course, at SIU Carbondale.

## *French as a Major Specialization (with K-12 teaching licensure)*

A specialization in French consists of 33 semester hours in courses above 100 level, including FR 201, 320, and at least two 400-level courses plus 18 hours of courses at the 300 or 400-level. At least one literature course, one culture course (including 370), and one writing intensive course must be taken. Transfer students who majored in French must complete a minimum of 12 semester hours in language courses, including at least one 300 or 400-level French course, at SIU Carbondale. Students must also pass oral and written language proficiency exams before they undertake their professional semester of student teaching off-campus.

## *French as a Minor*

A minor in French consists of 18 semester hours in courses above the 100 level. At least three hours must be taken in a regularly scheduled 300 or 400-level course at SIU Carbondale.

## *Representative Career Options*

Expertise in a foreign language & culture prepares one for a range of careers in the global economy, including international business, governmental or NGO work in international affairs, and work in the US for companies or agencies whose clients speak a language other than English (including customer relations, public service, and the tourism industry). Foreign language study prepares one for teaching careers: for K-12 teaching, our Teaching Education Program is ideal; for college teaching graduate study will be required. Language study improves linguistic and analytical skills helpful for most careers and for graduate study.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Geography and Environmental Resources

College of Liberal Arts  
(Geographic Information Science)  
(Environmental Sustainability)  
(Climate and Water Resources)

Dr. Justin Schoof  
4520 Faner Hall  
Telephone: (618) 536-3375  
E-mail: geog@siu.edu  
<http://cola.siu.edu/geography/>

Majors earning a Bachelor of Science degree in Geography and Environmental Resources study the dynamic relationship between nature and society in the field and the computer laboratory as well as in the traditional classroom. Field work, use of computers, and internships are prominent components of the integrated environmental problem-solving approach.

Students choose among three concentrations: environmental sustainability, geographic information science (GIS), and climate and water resources. A foundation of core courses helps students develop the analytic and research skills appropriate to their interest. Honors courses in GENV are available to students admitted to the University Honors Program.

## *Geography as a Major*

Students majoring in geography will take many other courses in their junior and senior years, including studies of geographic information systems, remote sensing, spatial analysis, environmental systems analysis, environmental management, sustainable development, natural hazards, climatology, and global climate change.

The Department of Geography and Environmental Resources has excellent facilities to support its instructional program. The department maintains the Environmental GIS Lab and the Advanced Geospatial Analysis Lab that trains students on computer simulation of environmental issues such as weather, air and water pollution, floods, and earthquakes. The personal computer facilities of these labs are used extensively for computer-assisted instruction. Facilities feature state-of-the-art Geographic Information Systems software and computers are employed in a number of projects, including modeling hydrological and ecological processes in wetlands.

## *Representative Career Options*

geographer  
regional analyst  
planner  
water resources planner  
emergency manager  
GIS analyst  
recycling coordinator  
water quality manager

environmental planner  
map librarian  
conservation specialist  
research climatologist  
environmental educator  
GIS coordinator  
regional planner

GIS specialist  
location analyst  
recreation planner  
cartographer  
geospatial intelligence analyst  
natural resource consultant  
social studies teacher

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Geology

(Environmental)  
(Geophysical)  
(Resource Geology)  
College of Science  
(Bachelor of Science) (Bachelor of Arts)

Dr. Steven Esling, Chair  
102 Parkinson Laboratory  
Telephone: (618) 453-3351  
FAX (618) 453-7393  
E-mail: [geology@geo.siu.edu](mailto:geology@geo.siu.edu)  
<http://www.geology.siu.edu>

Geology deals with the earth—its materials, processes, history and environments. Students in geology can work toward a B.A. or a B.S. degree. The B.S. degree program is recommended for those planning to pursue graduate studies or a professional career in geology. The bachelor of arts degree program is recommended for students who plan to combine geologic education with other interests, such as environment law, engineering, biology, chemistry, business, teaching.

Both field and laboratory studies are important aspects of geological work. Employment opportunities for geologists are found in state and federal geological surveys; private and public organizations concerned with the environment; the quality and development of water resources; engineering firms; government agencies dealing with planning, land use, geologic hazards, construction, and hazardous waste disposal; and petroleum, coal, and other mining industries. Other geologists become teachers at a variety of levels, from grade school to college.

## *Geology as a Major*

The department has excellent laboratory and field equipment, and students are encouraged to use it in independent study projects as well as supervised study. With few exceptions, classes for geology majors tend to be small, and students work closely with the faculty and receive individual attention both in and outside the classroom. The department helps students find suitable graduate programs or jobs in geology and related areas. A summer field course in the Rocky Mountains, normally taken between the junior and senior years, is required for the B.S. degree and is strongly recommended for the B.A. degree.

SIU Carbondale is in a particularly interesting geologic location, embracing a diversity of rock formations, deposits of oil, coal, gas, and fluorite, and a great variety of terrain.

## *Representative Career Options*

Geologist	coal geologist	environmental scientist
economic geologist	exploration geologist	geochemist
engineering geologist	geophysicist	groundwater geologist
hydrogeologist	volcanologist	petrologist
petroleum geologist	photogeologist	sedimentologist
stratigrapher	field geologist	geomorphologist
structural geologist	product studies and testing geologist	seismologist
paleontologist	geologic data analyst	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# German

College of Liberal Arts  
(B.A. Languages, Cultures & International Studies)  
(Specialization in German with or without K-12 Teaching License)  
(Minor in German)

Dr. Carola Daffner, Section Head & Advisor  
Department of Languages, Cultures, and International Trade  
2030 Faner Hall  
Telephone: (618) 453-5419  
E-mail: [cdaffner@siu.edu](mailto:cdaffner@siu.edu)  
<http://cola.siu.edu/languages>

Students in the German specialization will gain advanced-level language proficiency and knowledge of the rich history, culture, and literature of people who speak German. Students will learn how to think critically across cultures through analysis of beliefs, media, customs, and artifacts. In the course of their language study, students will gain the ability to discuss how and why German differs from English, helping them to understand how language works in general and how English and German work in particular. The German specialization is flexible enough to allow students to study a second field as well, widening their intellectual and career horizons still further.

German students may choose to enter the Teacher Education Program in conjunction with the College of Education and Human Services and pursue a K-12 teaching license in the State of Illinois. Students doing so may choose to earn a B.A. through the College of Liberal Arts or a B.S. through the College of Education and Human Services.

Students with expertise in German should take a placement test to help them sign up for the proper class. A free online placement test is available at <http://webcape.byuhttrsc.org>. Students who have successfully completed one year of German in high school should normally start at the second semester level; students who have completed two years should normally start at the third semester.

Unit credit (without grade) on the basis of proficiency may be obtained through the Department in German. This may be accomplished by taking a validating course or by examination. Basic language skills courses taken at SIU, up to and including 320B, may serve as validating courses. Upon receiving a grade of A or B in a validating course, students may be granted validating credit for up to two of the immediately preceding basic skills courses. Credit through examination can be done by CLEP examination which is offered by the University Testing Services.

## *German as a Major Specialization (without K-12 teaching licensure)*

A specialization in German consists of 33 semester hours in courses above 100 level, including GER 201, 320, and at least two 400-level courses plus 21 hours of courses at the 300 or 400-level. At least one literature course, one culture course, and one writing intensive course must be taken. Transfer students who majored in German must complete a minimum of 12 semester hours in language courses, including at least one 300 or 400-level German course, at SIU Carbondale.

## *German as a Major Specialization (with K-12 teaching licensure)*

A specialization in German consists of 33 semester hours in courses above 100 level, including GER 201, 320, and at least two 400-level courses plus 18 hours of courses at the 300 or 400-level. At least one literature course, one culture course (including 370), and one writing intensive course must be taken. Transfer students who majored in German must complete a minimum of 12 semester hours in language courses, including at least one 300 or 400-level German course, at SIU Carbondale. Students must also pass oral and written language proficiency exams before they undertake their professional semester of student teaching off-campus.

## *German as a Minor*

A minor in German consists of 18 semester hours in courses above the 100 level. At least three hours must be taken in a regularly scheduled 300 or 400-level course at SIU Carbondale.

## *Representative Career Options*

Expertise in a foreign language & culture prepares one for a range of careers in the global economy, including international business, governmental or NGO work in international affairs, and work in the US for companies or agencies whose clients speak a language other than English (including customer relations, public service, and the tourism industry). Foreign language study prepares one for teaching careers: for K-12 teaching, our Teaching Education Program is ideal; for college teaching graduate study will be required. Language study improves linguistic and analytical skills helpful for most careers and for graduate study.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Health Care Management

College of Applied Sciences and Arts  
(Bachelor of Science)

Dr. Sandra K. Collins, Program Director

131 Applied Sciences and Arts Building

Telephone: (618) 453-8802

Email: [skcollin@siu.edu](mailto:skcollin@siu.edu)

<http://www.sah.siu.edu/undergraduate/health-care-management/index.php>

The B.S. degree program in Health Care Management provides course work and experience in health care supervision and management in a variety of settings.

Through a combination of major requirements, approved major electives, general electives, internship and SIUC University Core Curriculum requirements, the Bachelor of Science degree in Health Care Management prepares students for supervisory and administrative positions in such health and medical care facilities as hospitals, nursing homes, managed care facilities, assisted living, and physician practices. Health Care Management graduates have also been successful in various graduate programs.

The 41-semester-hour University Core Curriculum requirements may be satisfied by course credits from any accredited college or university or credit received through CLEP, USAFI, DAN TES, or proficiency examinations. Students who have completed an A.A.S. degree may be eligible for the Capstone Option, which reduces the hours required in university core from 41 to 30. Students may also receive credit for previous educational, and occupational experience. Credit is established by departmental evaluation.

## *Representative Career Options*

healthcare organizations  
long-term care organizations  
insurance carriers

hospitals  
government agencies  
graduate studies

physician offices  
information technology

Many HCM graduates work in finance, marketing, human resources, and other management fields in a wide variety of healthcare settings including: hospitals and health systems, long-term care organizations, physician group practices and health insurance and pharmaceutical companies. HCM graduates with interests in policy may find positions in state health, aging and insurance departments, federal agencies such as the Centers for Medicare and Medicaid Services (CMS) and with private trade and research organizations. In addition, some HCM graduates pursue graduate education in medicine, health law, public health, and business or in the growing fields of health administration or health services research and policy. Experts predict continued rapid growth in employment and income in health administration.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIUC Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# History

College of Education and Human Services  
(Bachelor of Science)

Chief Academic Adviser  
122 Wham Building  
Telephone: (618) 453-6340

At one time, people thought teaching was the only thing one could do with a degree in history. Now, although most history majors enter other fields, those who choose to become educators will find history an excellent discipline. More than a million new teachers will be needed in the U.S. during the next decade or so, and many of them will be teachers of history at the high school and middle school levels.

The B.S. degree program in history consists of 33 semester hours in history courses. Four courses must be evenly distributed over two fields chosen from United States and non-United States history courses. Students must also complete 9 hours at the 400 level of the 33-hour total.

## *History as a Major*

The B.S. consists of 33 credit hours and combines intensive study of history with a broad background in humanities and social sciences. Students planning to teach in secondary schools should consult the teacher education program admission requirements.

## *Transfer Students*

Transfer students planning to complete the teacher certification program are encouraged to contact the College of Education and Human Services, Student Services Office at least one semester prior to enrolling at SIU Carbondale.

## *Representative Career Options*

Secondary level History Educator

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# History

College of Liberal Arts  
(Bachelor of Arts)

Dr. Kay J. Carr, Chair  
3374 Faner Hall  
Telephone: (618) 453-4391  
<http://history.siu.edu/>

## *History as a Major*

Teaching history can be a fine career, although the majority of history graduates enter other fields. Students with a background in history are often employed in library and archival work, government or diplomatic service, or news and special events reporting. SIU Carbondale history graduates currently occupy positions in institutions ranging from the CIA and Chase-Manhattan Bank to Sears Roebuck, British Airways, ABC, and Time-Life. The study of history is also an excellent preparation for law school and for graduate work in a wide variety of fields.

## *Representative Career Options*

Administrative aide	legal assistant	policy researcher
archival worker	records manager	museum curator
library administrative assistant	market researcher	needs analyst
environmental historian	genealogical researcher	military historian
legislative research assistant	editor or editorial assistant	publishing sales representative
peace corps volunteer	historical society director	newscaster, budget analyst
teacher, overseas marketing assistant	corporate archivist	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Horticulture

General Option  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Paul Henry, Professor  
Agriculture, Room 176D  
Telephone (618) 453-1783  
<http://www.coas.siu>

The Horticulture major is administered through the Department of Plant, Soil and Agricultural Systems, and the program includes a general option.

The program provides thorough training in theory and practice. The general option is focused on sustainable agriculture although students may choose elective courses from the College of Agricultural Sciences and other departments in the university and structure individualized programs through internships, special studies, and seminars.

## *Horticulture as a Major*

Numerous job opportunities are available for graduates of this specialization. The department maintains close contact with employers and assists students in identifying internships and permanent positions. A minor is not required and there are no foreign language requirements.

## *Representative Career Options*

Plant and soil laboratory technologist	production manager, plant quarantine inspector	plant pest control inspector
farm manager	foreman-park maintenance	plant ecologist
public and environmental health scientist	plant breeding expert	plant morphologist
technical service representative	plant physiologist	plant pathologist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Horticulture

Science Option  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Alan Walters, Professor  
Agriculture, Room 145A  
Telephone (618) 453-3446  
<http://www.coas.siu.edu>

The Horticulture major is administered through the Department of Plant, Soil and Agricultural Systems, and the program includes a science option.

The program provides thorough training in theory and practice. Although the science option is oriented towards students interested in advanced degrees and research, students may choose elective courses from the College of Agricultural Sciences and other departments in the university and structure individualized programs through internships, special studies, and seminars.

## *Horticulture as a Major*

Numerous job opportunities are available for graduates of this specialization. The department maintains close contact with employers and assists students in identifying internships and permanent positions. A minor is not required and there are no foreign language requirements.

## *Representative Career Options*

Plant and soil laboratory technologist  
plant pest control inspector  
public and environmental health scientist  
plant morphologist  
plant pathologist

production manager  
farm manager  
plant ecologist  
technical service representative

plant quarantine inspector  
foreman-park maintenance  
plant breeding expert  
plant physiologist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Horticulture

Landscape Horticulture Specialization  
College of Agricultural Sciences  
(Bachelor of Science)

Professor Karen Midden  
Agriculture, Room 161F  
Telephone (618) 453-2496  
<http://www.coas.siu.edu>

The Horticulture major is administered through the Department of Plant, Soil and Agricultural Systems, and the program includes a landscape horticulture specialization.

The specialization provides thorough training for students seeking interesting careers in landscaping or gardening in parks, playgrounds, residential, or industrial areas; in road, street, and parkway improvement and maintenance; and in other public and private work to make the environment more pleasing and useful.

## *Landscape Horticulture Major*

Numerous job opportunities are available for graduates of this specialization. The department maintains close contact with employers and assists students in identifying internships and permanent positions. A minor is not required and there are no foreign language requirements.

## *Representative Career Options*

Landscape gardener  
water conservationist  
plant pest control inspector  
scientist  
technical service representative

nurseryman  
production manager  
foreman-park maintenance  
plant ecologist  
plant physiologist

garden center manager  
plant quarantine inspector  
public and environmental health  
plant morphologist  
plant taxonomist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Horticulture

Turf Specialization  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. Kenneth Diesburg  
Agriculture, Room 161G  
Telephone (618) 453-2496  
<http://www.coas.siu.edu>

The Horticulture major is administered through the Department of Plant, Soil and Agricultural Systems, and the program includes a turfgrass management specialization.

The specialization provides thorough training in theory and practice emphasizing practical and professional turfgrass management; species and cultivar selection, identification, and establishment; turfgrass culture and physiology; basic nutrient management programs; irrigation practices; compaction control; pest identification and control; and lawn equipment maintenance.

## *Horticulture as a Major*

Numerous job opportunities are available for graduates of this specialization. The department maintains close contact with employers and assists students in identifying internships and permanent positions. A minor is not required and there are no foreign language requirements.

## *Representative Career Options*

Professional turf manager	assistant golf course superintendent	sports turf manager
parks and recreation manager	lawn care business owner and manager	grounds manager
sod production business owner and manager	vegetation manager	utility right-of-way
plant and soil laboratory technologist	plant pest control inspector	
turf and ornamental technical sales and service		
technical writer and turf and ornamental magazine		
soil conservation and erosion prevention specialist,		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Hospitality and Tourism Administration

Department of Animal Science, Food and Nutrition  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. William Banz, Chair  
127 Agriculture Building  
Telephone: (618) 453-2329  
<http://www.asfn.siu.edu/>

The B.S. degree program in Hospitality and Tourism Administration meets the objectives of students preparing for challenging careers in hospitality and tourism management.

The academic emphasis of the multidisciplinary program is on providing students with the practical principles, management concepts, and analytical tools used in the hotel, restaurant, tourism, and event industries.

The program recognizes the importance not only of academic theory, but also of obtaining appropriate hospitality and tourism-related experiences. The program has a two-stage or six month internship program and also uses on-site food service facilities as part of the academic courses. The program is accredited by the Accreditation Commission for Programs in Hospitality Administration, 203 S Morris St., P.O. Box 278, Oxford, MD, 21654, Phone (416) 226-5527.

## *Representative Career Options*

Manager trainee  
assistant convention coordinator  
event planner  
lodging assistant manager / supervisor

restaurant assistant manager  
catering and sales assistant manager  
supervisor

front office manager trainee  
marketing coordinator

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Human Nutrition and Dietetics

Department of Animal Science, Food and Nutrition  
College of Agricultural Sciences  
(Bachelor of Science)

Dr. William Banz, Chair  
127 Agriculture Building  
Telephone: (618) 453-2329  
<http://www.asfn.siu.edu/>

The B.S. degree program in Human Nutrition and Dietetics meets the objectives of students interested in careers as Registered Dietitians. The program fulfills the academic requirements of the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics.

## *Didactic Program in Dietetics Specialization*

The Didactic Program in Nutrition and Dietetics (DP) provides the classroom component of dietetics education, culminating in a B.S. degree, and is the first step in becoming a Registered Dietitian. The SIU DPD program is fully accredited by the Accreditation Council for Education in Nutrition and Dietetic (ACEND) of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6995, phone (312) 899-5400. It must be followed, as a post-baccalaureate program, by an accredited supervised practice (experience) program to qualify you to take the RD and/or L.D. exams. The dietetic curriculum combines courses in chemistry, biological and social sciences, and business with courses in human nutrition and dietetics. Given the sequential nature of the course work, it is essential to plan your program carefully.

## *Representative Career Options*

Dietitian, nutritionist	nutrition educator	food service manager/director
nutrition specialist	staff dietitian	

## *Nutrition for Wellness Specialization*

The B.S. degree program in Human Nutrition & Dietetics with a specialization in Nutrition for Wellness meets the objectives of students who wish to explore and seek employment in the fields of physical health, wellness education, and a variety of other related topics.

The Nutrition for Wellness curriculum is designed to provide students with an understanding of the role of food and nutrition in overall wellness. A foundation in nutrition is supplemented with a variety of courses in health education and behavior, exercise, and health promotion. Students in this specialization will assess the role of nutrition and healthy eating in disease prevention and wellness, evaluate the role of exercise in overall health, and learn the importance of nutrition education for the community at large. The Nutrition for Wellness specialization is also well positioned to complement a double major in a field such as Physiology or Exercise Science.

## *Representative Career Options*

Health Coach	wellness coach, nutritionist	community health worker
health educator	corporate wellness coordinator	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Industrial Management and Applied Engineering

College of Engineering  
(Bachelor of Science)

Dr. Julie Dunston, Chair  
D105 Engineering Building  
Telephone: (618) 536-3396  
E-mail: [dunston@siu.edu](mailto:dunston@siu.edu)  
<http://www.engr.siu.edu/tech/>

The B.S. degree program in industrial management and applied engineering with a specialization in quality management meets the needs of students preparing for careers as management-oriented technical professionals in the economic enterprise system.

The industrial management and applied engineering program has three themes. Students become familiar with the theories, concepts, and principles found in the humanities, social and behavioral sciences and acquire a thorough grounding in communications skills. They learn to understand, apply principles, concepts of mathematical and physical sciences. They learn to use concepts and current skills in a variety of technical disciplines that include six sigma, lean manufacturing, robotics, processes, computer-aided manufacturing, quality control, motion and time study, plant layout, project management, industrial safety, production and inventory control, human relations, and geometric dimensioning and tolerancing.

## *Industrial Management and Applied Engineering (Quality Management) as a Major*

Community college occupational and technical credits from courses such as electronics technology, management, marketing, mechanical technology, metals technology, plastics, transportation, building construction, and architectural drafting may be applicable towards degree requirements, permitting students to obtain a B.S. degree in a minimum length of time. The recommended guidelines for the bachelor's degree are met through the completion of 28 semester hours in the Industrial Management and Applied Engineering core, 41 semester hours in the University Core, and 51 semester hours in the Quality Management Specialization.

The courses required for transfer students with associate in applied science degrees from an occupational program are dependent on the student's previous program. For the quality management specialization, 30 hours in the industrial management and applied engineering curriculum must be taken at SIUC. A Capstone Option may be available in the industrial technology degree program. Students' Capstone Option applications must be on file by the end of their first semester at SIUC. Additional qualification requirements are detailed in this catalog under Capstone Option.

## *Career Opportunities*

Employment opportunities for graduates are excellent, permitting a wide choice of initial positions and flexibility for later job promotion or transfer. Federal statistics show that the need for technologists and related workers will continue. All types of industry have positions associated with six sigma, lean manufacturing, production planning and scheduling, process design, quality control, methods analysis, personnel supervision, project management, facility planning, cost estimating, maintenance supervision, and other manufacturing-related functions.

## *Representative Career Options*

Manufacturing manager  
safety manager  
marketing support manager

production planning and control specialist  
first line supervisor  
industrial engineer

quality engineer  
operations planner  
plant location manager

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Information Systems Technologies

College of Applied Sciences and Arts  
(Bachelor of Science)

Dr. Sam Chung, Director  
School of Information Systems & Applied Technologies  
106 Applied Sciences and Arts Building  
Telephone (618) 453-7253

Shannon Gwaltney, Academic Advisor  
Telephone (618) 453-7281  
E-mail: shanng@siu.edu  
<http://isat.siu.edu>

The B.S. degree in information systems technologies (IST) prepares students for careers in a wide variety of work settings that rely on end-user computerized information technologies. Many of the courses are hands-on computer activities related to applications software, networking communications, computer troubleshooting, and maintenance.

The IST curriculum is based on input from business and industry professionals, educators, national associations, and potential employers. Ten courses (30 semester hours) constitute major departmental approved electives to accommodate the student's specific interest such as programming, networking, security; web development, systems analysis, and IT project management.

Students in the IST program have access to a variety of computer equipment and support services in many on-campus computer learning centers. SIU Carbondale's newest computer laboratory is located in the same building as the College of Applied Sciences and Arts and in close proximity to most of the IST classrooms and faculty offices. The computers in all wireless centers are networked allowing students free and unlimited access to e-mail and the Internet.

All applicants must satisfy standard University baccalaureate entrance requirements in order to be admitted to the University and included in the Information Systems Technologies (IST) major. Enrollment in the Information Systems Technologies program will be based upon the selective admissions criteria noted below. High school graduates will be evaluated on ACT results and class rank. Any student transferring from outside the University or from other SIUC programs into the Information Systems Technologies major will be evaluated on a required 2.5 GPA as calculated by SIUC.

The IST degree is compatible with two-year associate degrees (A.S., A.A., or A.A.S.) offered at community colleges. Students with an A.S. or A.A. will enroll in IST career courses and advance to IST major courses at SIU Carbondale. This degree is especially compatible with associate in applied science (A.A.S.) degrees in areas such as computer information processing, business, or various applications. Students with related A.A.S. degrees will complete University Core Curriculum courses and advanced IST major courses. All previous course work and work experience will be evaluated for course credit upon completion of the required forms.

Students with an A.A.S. may qualify for the Capstone Option. Please refer to the current SIU Carbondale undergraduate catalog for information about articulation agreements and the Capstone Option.

## *Representative Career Options*

Graduates of the Information Systems Technologies degree program have obtained the skills necessary to begin a career in one of many exciting technology areas. Graduates are commonly hired for job titles such as network administrator, systems analyst, information security specialist, support technician, web application developer, and database administrator. Entry-level salaries range from \$35,000 to \$65,000.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Interior Design

College of Applied Sciences and Arts  
(Bachelor of Science)

Jon Davey, Program Director  
School of Architecture  
404 Quigley Hall  
Telephone: (618) 453-3734  
E-mail: [jdavey@siu.edu](mailto:jdavey@siu.edu)  
<http://www.architecture.siu.edu/>

The Interior Design program is continually responsive to the demands and standards of qualification for the profession and its related fields. The program is accredited by the Council for Interior Design Accreditation, Grand Rapids, MI 49503-2822, (616)-458-0400. A four-year curriculum is offered resulting in a Bachelor of Science degree in Interior Design that is a CIDA Accredited Professional Level Program.

Students receive a comprehensive, interdisciplinary education in preparation for a wide range of design and administrative positions in the fields of commercial, corporate, healthcare, hospitality, retail and residential design with interior design and architecture firms, corporations, government agencies, etc. Graduates of the program are also well positioned to pursue the National Council for Interior Design Qualification (NCIDQ) Exam, which provides certification of professional credentials and is a requirement for licensure in many jurisdictions.

To support students in their educational endeavors, sophomores, juniors and seniors are provided dedicated studio space. Program facilities include a resource library, model/furniture shop, digital fabrication lab, and a computer graphics laboratory with access to input/output devices. Each student is required to purchase or lease a laptop computer and software that meet program specifications prior to the start of the 200-level courses.

Students are encouraged to participate in profession-related student organizations, which include the American Society of Interior Designers, International Interior Design Association, Illuminating Engineering Society, and U.S. Green Building Council. Other activities designed to enhance the overall quality of education include the University Honors Programs, travel study programs, workshops and guest lectures, and Residence Hall Living Learning Communities.

All applicants must satisfy standard University baccalaureate entrance requirements in order to be admitted into the University and included in the interior design program. Transfer and change of major students are evaluated on grade point average as calculated by Southern Illinois University Carbondale. Prospective transfer students should concentrate on completing courses articulated or approved as substitutes for SIU's University Core Curriculum requirements. Prior to taking courses that appear to equate to the professional sequence, the applicant should consult with the Program Director.

If a student receives a grade of *F* three times in the same course, the course cannot be taken again. Students cannot repeat Interior Design prefix courses in which they received a grade of *C* or better.

## *Representative Career Options*

Traditional interior design practice includes corporate, healthcare, hotel, restaurant, retail store/shopping mall, education, public, government, residential and entertainment facility design, facility management, corporate and managerial positions, and sole-proprietorships; and related-profession opportunities in architecture, landscape design, set and theatrical design, product/industrial design, event design, art, photography, and more.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# International Studies

College of Liberal Arts  
(B.A. Languages, Cultures & International Studies)  
(Specialization in International Studies)

Dr. Yasuko Taoka, Chair  
2166 Faner Hall  
Telephone: (618) 536-5571  
<http://languages.siu.edu>

The program in International Studies meets the objectives of students considering careers that benefit from an international perspective by providing knowledge of comparative global and international issues, ability to communicate in a foreign language, an understanding of other cultures, as well as a deeper acquaintance with a particular region.

This multidisciplinary program features five components: an introductory seminar, 15 semester hours of global and international comparative issues courses, 15 semester hours of courses in a regional focus, foreign language competency (advanced level), and a senior project as a capstone course. The regional focus is chosen from one of the four following geographic areas: Africa and the Middle East, Asia and the South Pacific, Europe, or Latin America and the Caribbean. Foreign language competency is developed in a language spoken in the region of focus.

Study abroad is strongly recommended in the region of focus and up to six semester hours of study abroad may substitute for courses in the Regional Focus component

## *International Studies as a Major*

The program in International Studies provides its graduates with an understanding of comparative international issues, intercultural skills, meaningful proficiency in a foreign language, and preparation for citizenship, both local and global.

No grade lower than C will be accepted for any course required by the major. Majors must maintain a 2.50 grade point average overall throughout the program.

## *Representative Career Options*

Peace Corps volunteer  
international affairs representative

government service officer  
international relations specialist

foreign service officer  
business administrator

professionals in areas including: international law, finance, education, public policy, the arts, communications, medical preparation, public service, international development agencies, non-governmental organizations, businesses and philanthropic agencies

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Journalism

(Advertising)  
(News–Editorial)  
(Photojournalism)  
(New Media News Production)  
(Sports Media)  
College of Mass Communication and Media Arts  
(Bachelor of Science)

Uche Onyebadi, Director  
1202 Communications Building  
Mailcode 6601  
Telephone: (618) 536-3361  
<http://mcma.siu.edu/journalism/>

The B.S. program in the SIU Carbondale School of Journalism helps students prepare for positions of responsibility in advertising and related marketing communications fields, news-editorial journalism, photojournalism, new media news production, sports media and other fields in which the ability to communicate is essential. The School of Journalism also helps students prepare for graduate studies in mass communication, the social sciences, and law.

The School of Journalism at SIU Carbondale occupies a national leadership role in mass communication education, with a comprehensive program combining the liberal arts with the practice of journalism in modern society. Through their major courses, students acquire the specific skills necessary to become professionals in advertising, news-editorial, photojournalism, new media production, and other communication fields. Students are encouraged to develop in-depth knowledge by completing the requirements of a structured minor in a subject area outside the college.

## *Advertising specialization*

Students in this program learn to analyze problems in the promotion of goods and services and identify solutions. They develop skills in verbal and visual communication and presentation of materials. Students will prepare to enter a wide variety of positions with marketing communications firms—including advertising, sales promotion, public relations, sports communication and promotion, and direct marketing agencies—in communications media, and with retail or manufacturing firms.

As the communication revolution expands, the need increases for individuals with the ability to prepare and present news and information precisely and accurately for a variety of media. Students in the news-editorial specialization receive practical training in the theory and practice of identifying, gathering, processing, interpreting, writing, and presenting news for traditional print and broadcast/cable media and for new computer-based media. The program prepares students for professions in which the ability to communicate to a mass audience is essential.

## *Photojournalism specialization*

This program is the only full-scale photojournalism program in the state. The photojournalism program remains on the cutting edge by integrating traditional photojournalism instruction in a digital environment with new media skills in website development, audio and video production. Students graduate with the full package of skills required by today's industry and a thorough understanding of the theory and ethical considerations necessary to succeed in today's media landscape.

## *New media news production specialization*

This program is designed to give students a high level of competence to function as content developers, a strong sense of aesthetics and design, more hands-on technical instruction, and a deep understanding of the principles of networked audio/visual communication used in the print and electronic media. Students in this specialization will also choose either an editorial or persuasive (advertising) emphasis within the curriculum to focus their developing skills in digital communication.

The proliferation of sports programming in both traditional and new media is triggering an increasing demand for graduates with sports production, sports promotion and sports journalism backgrounds. The School of Journalism and the Radio, Television, & Digital Media Department have joined forces to establish specializations in both academic units. The School of Journalism's *sports media specialization* has two tracks. One prepares students for sports reporting, the other for sports promotion. The reporting track includes new sports courses and the essentials from the news/editorial specialization. The promotions track adds new sports courses to the essentials of the advertising specialization.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

Undergraduates are urged to enter the School of Journalism as freshmen to obtain the advantage of journalism advisement.

Strong skills in the use of the English language are required to enter the first writing course, JRNL 302 or JRNL 310. Students may demonstrate proficiency in the use of the English language with an English ACTE subscore of 22 or higher or by earning grade of C or higher in JRNL 201.

### *Journalism as a Major*

In addition to the University Core Curriculum courses, the academic requirements for a B.S. degree in journalism include 39 semester hours in journalism course work approved by the school, 72 credits outside mass-communications and completion of a minor approved by the School. Outside mass-communication credit requirements are part of the Accrediting Council on Education in Journalism and Mass Communications standards, which accredits the School of Journalism at SIU.

Students at community colleges are encouraged to complete University Core Curriculum courses and earn electives in areas of interest.

Students must take 30 hours of journalism at SIU Carbondale. Transfer students should contact the School of Journalism for transfer course information. The student, with the assistance of the journalism academic adviser, should exercise care in course selection to assure that these requirements are met.

Graduate studies are also possible through the College of Mass Communication and Media Arts.

### *Representative Career Options* (all specializations are represented)

Advertising agency account executive	advertising copywriter	advertising layout artist
advertising production director	advertising salesperson	assignment editor
online/website manager	online/website design specialist	copy editor
new media content manager/coordinator	cable communication coordinator	editor
graphic designer	magazine production and design specialist	feature writer
magazine writer	sports marketing and promotions	media researcher
sports writer media account executive	media planner	news editor
photographer	photojournalist	newsletter specialist
public relations representative	public opinion researcher	reporter
retail advertising director	sports reporter	telecommunications consultant

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Kinesiology

(Physical Education Teacher Education Major)  
College of Education and Human Services  
(Bachelor of Science)

Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340

Dr. Juliane Wallace, Chair  
106 Davies Hall  
Telephone (618) 536-2431  
<http://ehs.siu.edu/kinesiology/>

The B.S. degree program in Physical Education Teacher Education meets the objectives of students considering positions as teachers, coaches, or specialists in public and private elementary or secondary schools, colleges, and universities, as well as other social agencies that promote physical activity programs. Courses have been designed to meet the requirements of state departments of education and other agencies that have adopted professional standards.

Complete and integrated experience in teaching physical education and assisting in coaching under qualified supervisors is provided in the cooperating schools of the area. Added experiences are gained through membership in professional associations, participation on intramural teams, assisting in service class testing, professional journals, and working with recreational and school groups in teaching techniques of various activities.

## *Physical Education Teacher Education as a Major*

The major in physical education teacher education is preparation for a traditional career as a physical educator. In addition to the teacher education sequence, which culminates in a semester of student teaching, students are encouraged to pursue endorsements in additional teaching areas. It is also possible to seek certification to coach in public school athletic programs. Graduates with the physical education teacher education major meet the licensure requirements of the Illinois Office of Education and those of many other states.

Students interested in this program should become familiar with the requirements for entering the physical education teacher education program. A minimum GPA of 2.75 is required.

A minor (the student may select the area) is recommended. Minors are available in dance and coaching. See the current SIUC undergraduate catalog for specific major requirements.

## *Transfer Students*

Transfer students planning to complete the physical education teacher education program are encouraged to contact SIUC College of Education and Human Services, Academic Advisement Office (618) 453-6340.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Kinesiology

(Exercise Science Major)  
College of Education and Human Services  
(Bachelor of Science)

Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6315

Dr. Juliane Wallace, Chair  
106 Davies Hall  
Telephone (618) 453-3331  
<http://ehs.siu.edu/kinesiology/>

The B.S. degree program in Exercise Science meets the objectives of students who hope to direct fitness programs in private, industrial, and public settings. Preparation in this program enables the graduate to assess components of adult fitness, design individual exercise programs for the development and maintenance of physical fitness, and manage a physical fitness program. Graduates will have the foundation for continued study at the graduate level.

## *Representative Career Options*

Corporate fitness

personal trainer

health fitness director

Additionally, a degree in exercise science can lay the groundwork for careers in physical therapy, physician assistant, occupational therapy, cardiac rehabilitation, chiropractor, podiatry, and exercise training with cancer survivors.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Kinesiology

(Sport Administration Major)  
College of Education and Human Services  
(Bachelor of Science)

Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6315

Dr. Juliane Wallace, Chair  
106 Davies Hall  
Telephone (618) 453-3331  
<http://ehs.siu.edu/kinesiology/>

This major is designed for students who are interested in working in various administrative areas in the realm of sport. Students are exposed to the economic, financial, legal, ethical, managerial, sociological, and psychological aspects of sport. Job opportunities exist at the professional, intercollegiate, interscholastic, community, and youth levels within the growing sport industry.

## *Representative Career Options*

Sports marketing	facility and event management	coaching, sports media
business operations	athletic management	
a variety of administrative roles in the sports industry		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Languages, Cultures, and International Studies

(Classics)  
(East Asian Language and Culture)  
(Foreign Languages and International Trade)  
(French)  
(German)  
(International Studies)  
(Spanish)

College of Liberal Arts  
(Bachelor of Arts)

Dr. Yasuko Taoka, Chair  
Department of Languages, Cultures, and International Trade  
2166 Faner Hall  
Telephone: (618) 536-5571  
Email: taoka@siu.edu  
<http://cola.siu.edu/languages>

The B.A. degree program in Languages, Cultures, and International Studies (LCIS) is designed to allow students to pursue a range of different educational goals and prepare themselves for a variety of careers where language proficiency is a supporting factor. The major has a core of courses in a foreign language, and students choose among three broad areas of study: Language and Culture; Foreign Languages and International Trade; and International Studies.

Language and Culture provides a humanistic education that deepens students' knowledge of their chosen language and culture. There are five specializations: *Classics* (Latin, Greek), *East Asian Language and Culture* (Chinese, Japanese), *French, German, and Spanish*. French, German, or Spanish students may choose to enter the Teacher Education Program and earn a B.A. in the College of Liberal Arts or a B.S. in the College of Education and Human Services with K-12 licensure in their chosen language.

The *Foreign Language and International Trade* (FLIT) specialization meets the objectives of students considering careers in the world of international business. FLIT combines courses from the College of Liberal Arts and the College of Business. A Capstone internship late in the program gives students the opportunity to travel and work in an international company or agency.

The *International Studies* specialization meets the objectives of students considering careers that benefit from an international perspective. Students choose a regional focus from one of the four following geographic areas: Africa and the Middle East, Asia and the South Pacific, Europe, or Latin American and the Caribbean.

Minors available in: American Sign Language, Chinese, Classical Civilization, East Asian Civilization, French, German, Greek (Ancient), International Studies, Japanese, Latin, and Spanish.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Linguistics (Theoretical)

College of Liberal Arts  
(Bachelor of Arts)

UG Linguistics Director  
3234 Faner Hall  
Telephone: (618) 536-3385  
<http://www.linguistics.siu.edu/>

The B.A. degree program in linguistics presents an introduction to the nature of language as a human activity. The methodology of linguistics has been adopted by fields as diverse as anthropology, law, psychology, and computer science, where linguists contribute to the design of speech synthesizers, computer speech understanding systems, and natural language processing.

Linguistic theory deals with issues such as: How much of language is learned and how much is determined by the innate structure of the human mind? How and why do languages change? How and why do people talk differently in different parts of a country?

## *Representative Career Options*

ESL teacher  
market research analyst

natural language software developer  
legal consultant

archival worker

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Linguistics - ENL

College of Liberal Arts  
(Bachelor of Arts)

UG Linguistics Director  
3234 Faner Hall  
Telephone: (618) 536-3385  
<http://www.linguistics.siu.edu/>

The English as a New Language track in Linguistics focuses on teaching in an ESL or Bilingual classroom. More than a million new teachers will be needed in the U.S. during the next decade or so, and many of them will need background in teaching new speakers of English.

The B.A. with specialization in ESL/Bilingual Education consists of 30 credit hours in linguistics courses. Students must also satisfy the departmental foreign language requirement of either one year of a language that is structurally significantly different from English or two years of any language (or equivalent).

## *Linguistics as a Major*

The B.A. with specialization in ESL/Bilingual Education consists of 30 credit hours and combines intensive study of the English language with pedagogical methods. Students planning to teach in secondary schools should consult the teacher education program admission requirements.

## *Transfer Students*

Transfer students planning to complete the teacher certification program are encouraged to contact the College of Education and Human Services, Student Services Office at least one semester prior to enrolling at SIU Carbondale.

## *Representative Career Options*

ESL teacher

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Management

(General Management)  
(Entrepreneurship)  
(Global E-Business)  
(Supply Chain Management)  
(Personnel Management)  
(Management of Health-Care Enterprises)  
College of Business  
(Bachelor of Science)

eter P. Mykytyn, Jr., Chairperson  
214 Henry J. Rehn Hall  
Telephone: (618) 453-3307  
<http://www.business.siu.edu/academics/dept/management/>

Management is the process of setting overall direction and objectives for an organization and determining policies for the efficient acquisition and application of human and physical resources. Successful managers exert leadership to achieve unity, consistency, and continuous improvement in performance; support efficiency and innovation; and develop and motivate personnel.

The B.S. degree program in management meets the objectives of students interested in professional positions as members of industry or government management teams. Building on fundamental knowledge developed in core courses and a restricted set of electives, students can select from a variety of other courses to gain in-depth knowledge about their own areas of interest.

The curriculum prepares students by emphasizing the knowledge, tools, and techniques used by professional managers. The courses impart technological and human resources management skills, preparing students for success in managing modern organizations. Students may choose from six specializations: *general management*, which prepares students to make and implement decisions through which people and organizations can work toward a common goal; *entrepreneurship*, which prepares students for the risks and rewards of independent ventures; *global e-business*, which prepares students to operate and compete in a global arena centered on web-based E-commerce technologies that involve transacting business and collaborating with customers, employees, and business partners; *supply chain management*, through which students learn how to efficiently manage the flow of materials, goods, services, and information throughout the value chain, from suppliers to customers; *personnel management*, which trains students in managerial strategies and programs for making the most effective use of the skills and abilities of organizational personnel; and *management of health-care enterprises*, which focuses on the application of sound principles of management and leadership to the effective operation of health care facilities and health service organizations.

## *Management as a Major*

The department is accredited by the AACSB International–The Association to Advance Collegiate Schools of Business.

Minor not required. Foreign language not required. Graduate degrees available: Master of Business Administration (M.B.A.), Master of Accountancy (M.Acc.), and Doctor of Philosophy in Business Administration (Ph.D.).

## *Management as a Minor*

A minor in Management consists of a minimum of 15 semester hours, including Management 304, 318, 345, and six credit hours in Management at the 300 level or above. All pre-requisites for the classes must also be satisfied. An advisor within the College of Business must be consulted before selecting this field as a minor.

## *Technology Fee and Differential Tuition*

The College of Business assesses College of Business majors a technology fee of \$6.00 per credit hour for Fall and Spring semesters up to twelve semester hours and Summer up to six semester hours. The technology fee is being phased out and will be subsumed under the differential tuition surcharge (see item below). Consequently, students will be charged either the technology fee or the differential tuition surcharge but not both.

The College of Business has a differential tuition surcharge of 15% of applicable tuition for declared College of Business majors who are new students. The differential tuition surcharge will be assessed at the in-state tuition rate. If students are charged the differential tuition surcharge, the technology fee (in above item) will not be assessed.

The College of Business has implemented a “minor program fee” that is equal to 15% of 15 credit hours of applicable tuition for declared College of Business minors. This fee is applicable for new students.

## *Representative First Job Titles*

Management trainee	supervisor	personnel specialist
human resource coordinator	business analysts	business application developers
web designer	operations scheduler	assistant plant manager
office manager		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Marketing

College of Business  
(Bachelor of Science)

Dr. Cheryl Burke Jarvis, Chair

229 Henry J. Rehn Hall

Telephone: (618) 453-4341

<http://www.business.siu.edu/academics/dept/marketing/>

Marketing is the process of conceiving, planning and executing the pricing, promotion, and distribution of goods, services and ideas to create exchanges that satisfy both individual and organization objectives.

The B.S. degree program in marketing meets the needs of students planning careers in one of the lively areas of marketing. The program conveys an understanding of the role of marketing in an economic system and in a business organization. Emphasis is on analytical approaches to the creative solution of marketing problems. Courses are designed in a variety of sequences to help meet the needs and interests of students. The sequences are: general marketing administration, international marketing, industrial marketing, sales administration, promotional administration, physical distribution administration, and retail administration.

## *Marketing as a Major*

A grade of C or better is required for all marketing majors, in all-marketing courses taken to satisfy major requirements.

Minor not required. Foreign language not required.

Graduate degrees available: Master of Business Administration (M.B.A.), Master of Accountancy (M.Acc.), and Doctor of Philosophy in Business Administration (Ph.D.). The Association to Advance Collegiate Schools of Business International accredits the department.

## *Representative Career Options*

Advertising Account Manager  
Customer Service Representative  
Event Planner  
Internet Marketing Manager  
Marketing Manager  
Media Sales Representative  
Retail Manager  
Sales Promotions Coordinator

Brand Manager  
Direct Sales Specialist  
Fundraising Coordinator  
Manufacturer's Representative  
Media Relations Manager  
Non-Profit Marketing Manager  
Sales Associate

Consultant  
Distribution Manager  
Purchasing Agent  
Market Research Analyst  
Retail Buyer  
Public Relations Manager  
Sales Manager

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Mathematics

College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
135 Wham Building  
Telephone: (618) 453-6340

Department of Mathematics  
E-mail: mathchair@siu.edu  
Telephone: (618) 453-5302  
<http://www.math.siu.edu/>

With interest growing in improving mathematical performance in public schools, this is an exciting and promising time to become a mathematics teacher. Undergraduates who choose to major in mathematics in the College of Education and Human Services can expect to find several job offers when they graduate. Shortages of high school mathematics teachers exist in many parts of the country, and salaries have improved substantially. By selecting appropriate electives, mathematics majors in the College of Education and Human Services may also prepare themselves for positions in industry or business.

The B.S. degree program in mathematics through the College of Education and Human Services meets the objectives of students considering careers in teaching. Students planning to teach in secondary schools should consult the teacher education program admission requirements.

A standard college algebra and trigonometry course is available as one course or as separate courses to incoming freshmen to prepare them for a three-semester sequence in calculus and analytic geometry. Most mathematics students will take an introductory linear algebra course while completing the calculus. Then they will select junior-level courses from those in algebraic structures, analysis, number theory, geometry, differential equations, and probability.

## *Mathematics as a Major*

The B.S. program in the College of Education and Human Services provides a solid background for a career in teaching high school mathematics, grades 9-12, while preparing students for graduate study in mathematics or for a career in business or industry. As a student in the College of Education and Human Services you will complete the professional education sequence, which stresses early classroom observation and culminates in a semester of student teaching. On graduation you will have met the requirements for teacher licensure in Illinois.

Foreign language is not required for the B.S. degree in education.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Mathematics

College of Liberal Arts  
(Bachelor of Arts)

Dr. Bhaskar Bhattacharya, Interim Chair  
Dr. Wesley Calvert, Undergraduate Program Director  
360A Neckers Building  
Telephone: (618) 453-5302  
E-mail: mathchair@siu.edu  
<http://www.math.siu.edu/>

The B.A. degree program in mathematics is appropriate for students whose interests outside of mathematics tend toward the social sciences, business, psychology, law, or the humanities. Mathematics can also be a good major for pre-medical and pre-law students.

Students in this program take a secondary concentration of two or three courses in some field in which mathematics is applied, or a minor in some department in the College of Liberal Arts. The mathematical requirements for the Bachelor of Arts and Bachelor of Science degrees are the same. Students interested in an Actuarial Career should add the Actuarial Mathematics specialization to their program.

## *Mathematics as a Major*

Mathematics is growing and changing. Exciting new problems appear each year, and the variety of career opportunities is constantly increasing. SIUC combines the variety of course work and highly qualified staff available at a large university with small classes and personal attention not available at many large universities. Calculus classes here are taught by experienced professors and average about 30 to 35 students in size. Most upper-division courses have 15 to 20 students.

Students will plan their advanced-level course programs together with their mathematics faculty advisers. One course from each of four areas will introduce the main branches of mathematics. Selection of at least five additional courses will depend on students' particular interests, which may be in mathematical research, or teaching, or in business applications, science and technology, statistics, actuarial science, or computer science.

For many mathematics students, we recommend a minor in computer science or even a double major in mathematics and computer science.

A full range of graduate programs is available in mathematics and related fields.

## *Representative Career Options*

Systems analyst	actuarial trainee	mathematician
operations research analyst	statistician	mathematical programmer
computing analyst research mathematician	technical sales representative	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Mathematics

College of Science  
(Bachelor of Science)

Dr. Bhaskar Bhattacharya, Interim Chair  
Dr. Wesley Calvert, Undergraduate Program Director  
360A Neckers Building  
Telephone: (618) 453-5302  
E-mail: mathchair@siu.edu  
<http://www.math.siu.edu/>

The B.S. degree program in mathematics in the College of Science meets the objectives of students considering careers as actuaries, computer systems analysts, mathematicians, operations research analysts, and statisticians. It is also a good preparation for law or medicine. A Bachelor of Science or Bachelor of Arts program in Computer Science can also combine well with a B.S. program in mathematics. Freshmen with four years of high school mathematics, including trigonometry, should start with the calculus sequence. Students lacking any part of this background should plan to start with college algebra, trigonometry, or pre-calculus. It is expedient to complete the calculus sequence, linear algebra, and a course in computer programming by the end of the sophomore year.

## *Mathematics as a Major*

Mathematics is growing and changing. SIU Carbondale offers students the variety of course work and highly qualified staff of a large university with small classes and personal attention not available at many large universities. Calculus classes here are taught by experienced professors and average about 30 to 35 students. Most upper division courses have 15 to 20 students.

Students will plan their advanced-level course programs with their faculty advisers. One course from each of four core areas will introduce students to the main branches of mathematics. Selection of at least five additional courses will depend on the student's particular interests, which may be mathematical research, teaching, applications in business or science and technology, statistics, actuarial science, or computer science.

For many mathematics students, a minor in computer science or a double major in mathematics and computer science is a good choice. Specially tailored programs are available for students planning a double major in engineering, physics, chemistry, business and administration, and mathematics.

A full range of graduate programs is available in mathematics and related fields.

## *Representative Career Options*

Systems analyst  
mathematician  
computing analyst

actuarial trainee  
operations research analyst  
technical sales representative

cryptographer  
statistician  
marketing analyst

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Mechanical Engineering

College of Engineering  
(Bachelor of Science)

Dr. Rasit Koc, Chair  
E27 Engineering Building  
Telephone: (618) 536-2396  
E-mail: kocr@engr.siu.edu  
<http://meep.engr.siu.edu/>

See also: Civil Engineering, Computer Engineering, Electrical Engineering, and Mining Engineering.

Mechanical Engineering is one of the broadest fields of engineering. Mechanical engineers learn measurement and instrumentation, computer-aided design, computer simulation, computer control, combustion, and engine analysis. They learn to design thermal systems for mechanical and electrical equipment including heating, ventilating, air conditioning, and refrigeration. Students learn how to design and produce new materials for advanced engineering applications. Courses are also offered in subjects related to the chemical processes and environmental control industries. Graduates are highly sought after in a variety of industries such as automotive, aerospace, and manufacturing. The 124-hour undergraduate program provides a balance of experience in thermal and mechanical systems and the opportunity for specialized design courses. This program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology Inc. (EAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD. 21202, (410) 347-7700, <URL: [www.abet.org](http://www.abet.org)>.

## *Mechanical Engineering as a Major*

Transfer students from other institutions should have strong backgrounds in the physical sciences, mathematics, social sciences, fine arts, and humanities. Students are encouraged to complete specific freshman and sophomore course requirements, which include 6 semester hours of composition; 3 hours of speech; 8 hours of university physics; 7 hours of chemistry; 11–14 hours of mathematics, including calculus and differential equations; 3 hours of analytical mechanics (statics); and 2 hours of engineering graphics. Calculus is a prerequisite for most junior-level courses. A minor is not required. No foreign language is required.

## *Representative Career Options*

Mechanical engineer  
control engineer  
application and test engineer  
CAD engineer  
combustion and automotive specialist

design engineer  
system analyst  
patent engineer  
HVAC engineer  
quality assurance specialist

consultant  
product development engineer  
plant engineer  
instrumentation engineer  
sales engineer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Microbiology

College of Science  
(Bachelor of Science)

Dr. Douglas Fix, Department Chair  
131 Life Science II  
Telephone: (618) 536-2349  
E-mail: [microbiology@micro.siu.edu](mailto:microbiology@micro.siu.edu)  
<http://www.micro.siu.edu/>

Microbiology is the study of microorganisms, including bacteria, archaea, viruses, protozoa, fungi, and yeast. The science examines the morphology, classification, evolution, growth, reproduction, genetics, biochemistry, ecology, and relationship of microbes to other living organisms, including humans.

The B.S. degree program in microbiology meets the objectives of students considering careers with pharmaceutical, food and beverage, or biotechnology industries, or in the health professions. It is good preparation for graduate study leading to advanced degrees or for laboratory or teaching positions. A Microbiology major is well prepared to enter a medical or dental professional school curriculum.

Opportunities for specialized training in microbial physiology, ecology, diversity, immunology, genetics, biochemistry, and industrial processes are available.

## *Microbiology as a Major*

Opportunities for microbiologists with four years of university training are numerous and varied. Careers are available in such fields as 1) pharmaceutical industries involved in the discovery and production of antibiotics and vaccines, and the development of new clinical tests for disease diagnosis; 2) the food and beverage industries in areas such as microbial fermentation and quality control; 3) clinical, veterinary and public health and university laboratories; 4) molecular genetics and other areas of biotechnology based on microbiology.

Teaching and research opportunities exist at the university level for holders of the doctoral degree.

Positions are available in many local, state and federal agencies, as well as in industry, for the microbiologist with a good capacity for pure or applied research.

## *Representative Career Options*

Microbiologist	medical microbiologist	lab technician
biostatistician	bioinformatician	genetics research technician
biotechnologist	serologist	histologist
cytologist	parasitologist	virologist
microbiology researcher	wine chemist	assistant brewmaster
fishery bacteriologist	quality control specialist	biological photography staff
manufacturer's representative	public health officer	biology teacher
genetic engineer	water quality engineer	

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Mining Engineering

College of Engineering  
(Bachelor of Science)

Dr. Lizette Chevalier  
E102 Engineering Building  
Telephone: (618) 453-4321  
-Email: [cheval@engr.siu.edu](mailto:cheval@engr.siu.edu)  
<http://engr.siu.edu/mining/>

See also: Civil Engineering, Computer Engineering, Electrical Engineering, and Mechanical Engineering.

Mining engineers engage in planning, design, development, and management of surface and underground mining operations by which the earth's mineral deposits are put to use. The B.S. degree program in mining engineering meets the objectives of students considering careers with mining operations and related industries. Course work in the program includes study of surface and underground mining systems, mine ventilation, ground control and rock mechanics, mineral and coal processing, material handling systems, mineral economics, mine health and safety engineering, operations research, and computer aided mine design. Facilities include modern, well-equipped rock mechanics, mine ventilation, and mineral processing laboratories.

This program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology Inc. (EAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD. 21202, (410) 347-7700, <[url: www.abet.org](http://www.abet.org)>.

## *Transfer Students*

Transfer students from community colleges or other institutions should have strong backgrounds in the physical sciences, mathematics, social sciences, fine arts, and humanities. Students are encouraged to complete specific freshman and sophomore course requirements, which include 6 semester hours of composition; 3 hours of speech, 8 hours of university physics, 4 semester hours of chemistry; 11–14 semester hours of math, including calculus; 2 semester hours of analytical mechanics (statics); and 2 semester hours of graphics. Calculus is a prerequisite for most junior-level courses. Students transferring are required to: (a) have an associate degree in a baccalaureate-oriented program or (b) meet the Core Curriculum requirements for engineering students. See departmental advisor for an approved course.

## *Representative Career Options*

Mining engineers may work in engineering or management positions for mining and exploration and construction companies, equipment manufacturing concerns, research organizations, or government agencies. The course work also provides strong preparation for further study at the graduate level. The average starting salary offered to our graduates compares favorably with national trends.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Mortuary Science and Funeral Services

College of Applied Sciences and Arts  
(Bachelor of Science)

Anthony Fleege, Program Director  
18C Applied Sciences and Arts Building  
Telephone: (618) 453-5698  
E-mail: splash@siu.edu

<http://sah.siu.edu/undergraduate/mortuary-science-funeral-service/index.php>

The mission of the Mortuary Science and Funeral Service program is to challenge students to achieve academic and professional excellence; prepare students to acquire entry level positions in the funeral service profession; provide quality instruction and stay current with trends of the profession; cultivate and maintain excellent relations with local, state, and national organizations; enhance University and community relations; and work toward the continued improvement of the Mortuary Science and Funeral Service program as an ongoing process

This program is the only baccalaureate-level program in mortuary science and funeral service offered in a public university in the state of Illinois. The initial program was developed in response to a request from the Illinois Funeral Directors Association. The Mortuary Science and Funeral Service program at SIUC is accredited by the American Board of Funeral Service Education (ABFSE), 3432 Ashland Ave., Suite U, St. Joseph, MO 64506 (816) 233-3747, web: [www.abfse.org](http://www.abfse.org). Graduates meet licensing requirements established by the Illinois Department of Financial and Professional Regulations. This program in mortuary science and funeral service is recognized by other state licensing boards.

This program is designed to accept students directly from high school or to accommodate students transferring from other accredited post-secondary institutions. Thirty students will be selected to begin the professional sequence each fall semester. Enrollment in the program is limited due to a variety of circumstances, including rules of accreditation, limitations of facilities/ internship sites, and faculty-student ratio.

To be considered for admission to the program, a Mortuary Science and Funeral Service application must be completed. The application packet will be sent to the prospective student following admission to the University. It is important that all application procedures be completed as early as possible. Selection will be based on a candidate's high school rank, grades in high school mathematics and science courses, and ACT results. For transfer students, the grade-point average as calculated by SIUC and the earned college-level credits will be used for selection criteria. Recommendations from funeral directors, essay responses, and professional references are also required of all applicants. Decisions on who is selected into the professional sequence will be made beginning in January on a rolling basis.

Prospective students attending another college or university transferring to SIUC should concentrate on completing courses that will articulate as SIUC UCC requirements. Prior to taking courses that appear to equate to the professional sequence, applicant should consult with an adviser in the Mortuary Science and Funeral Service program.

In addition to the professional course work, the student will be responsible for the University Core Curriculum as well as a number of courses, which will lead to an understanding of the psychological, sociological, and theological implications of life and death. Each student will serve a semester-long internship at an approved off-campus facility. The expenses related to the internship courses are the responsibility of the student. The Internship Coordinator and/or Program Director will assign the internship location. Prior to participation in the internship, students may be required to undergo an "Internship Site Required" criminal background check and drug screening. Faculty members in the professional courses are licensed funeral directors and embalmers with experience in the profession. The program's advisory committee is composed of mortuary science and funeral service professionals.

Professional courses are offered in the program's preparation laboratory. The student is required to complete the Hepatitis B vaccine series before participating in the laboratory classes. The vaccine may be acquired at the SIUC Student Health Center, a local health department, or through a private physician. The cost of this vaccine is the responsibility of the student and documentation showing completion of the vaccine series must be presented to the advisor prior to registration. In addition, there are expenses for personal protective equipment and laboratory supplies.

In accordance with accreditation standards, each student will be required to take the National Board Examination prior to graduation. The expenses for the exam is the responsibility of the student. The annual passage rate of first-time takers on the National Board Examination (NBE) for the most recent three-year period for this institution and all ABFSE accredited funeral service education programs is posted on the ABFSE web site: <[www.afse.org](http://www.afse.org)>. Since laws governing the profession are enacted at the state level, licensing and qualification requirements vary among states. Prospective students should contact the licensing body of the state in which they wish to attempt licensure.

The specific goals and objectives for the mortuary science and funeral service program may be found at <http://www.sah.siu.edu/MSFS/MSHOME.HTML>.

## *Representative Career Options*

Funeral director and embalmer apprentice  
grief and bereavement support  
casket or chemical sales/marketing

corporate advancement in management  
public relations

pre-need and after-care specialist  
mortuary education instructor

---

*NOTE:* Specific degree requirements and further information may be located within the current SIUC Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

## Museum Studies (Minor)

Museum Studies is available as an undergraduate interdisciplinary minor. The purpose of the minor is to introduce students to various aspects of museum work, to acquaint them with the opportunities and problems faced by museums and museum personnel, and to create career opportunities for students who might seek employment in a museum. Emphasis will be placed on actual work situations in such diverse museum functions as exhibition, curation, cataloging, acquisition, education and administration.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Music

College of Liberal Arts  
(Bachelor of Arts in Music)  
Liberal Arts specialization

Dr. Eric Lentz, Director  
105 Altgeld Hall  
Telephone (618) 453-2870

Jennifer Presner, Assistant Director  
Altgeld Hall  
Telephone (618) 536-8742  
<http://cola.siu.edu/music/>

The Bachelor of Arts in Music degree is a liberal arts degree individually tailored to meet the educational goals of each student pursuing it. The Bachelor of Arts in Music (Liberal Arts specialization), essentially a double major, offers considerable flexibility to students by allowing them to combine their coursework in Music and the University Core Curriculum with another Elective Core area of their choice. Some areas that might be combined with music include business, radio-television, theater, cinema, and visual communication. For example, a BA in Music with visual communication as the Elective Core might lead to work with cartoons, children's instructional materials or TV commercials. Students pursuing the BA in Music with a business specialization combine music with economics and marketing for a career in arts management, promotion, sales, or marketing. They can also pursue a double major in Music (Business specialization) with radio-television for a career in broadcast programming, production, writing, or management. Both programs provide options that include recording engineering and internships in areas of particular interest. Students pursuing the BA in Music with psychology, sociology, history or philosophy might pursue work in ministry, social advocacy, or music therapy.

The music major degree program is established in accordance with the published regulations of the National Association of Schools of Music, of which the School of Music is a member.

## *Music as a Major*

Of the 50 hours required to complete the Bachelor of Arts in Music (Liberal Arts specialization), the required courses are MUS 357A,B, MUS 488 and 8 hours of approved music electives. In addition, at least one year of foreign language is required. This can be met by one of the following: (a) passing an 8-hour 100-level sequence in one language; (b) by earning 8 hours of 100-level credit in one language by proficiency exam; or (c) completing three years of one language in high school with no grade lower than C. The 30 Elective Core hours necessary to complete the degree program are selected by the student with the approval of the student's faculty sponsor and the undergraduate committee. This planning should be done during the first semester of the student's admittance to the School of Music with undergraduate committee approval secured not later than the end of the second semester. Changes may be made if agreed upon by the student, the undergraduate committee and the student's faculty sponsor. At least 40 hours toward the Liberal Arts degree must be at the 300-400 level. The Bachelor of Arts in Music does not provide the necessary prerequisites for graduate study in a Master of Music degree program.

Of the 55 to 56 hours required to complete the Bachelor of Arts in Music (Business specialization), 18 to 19 hours are in specific music courses, 14 to 15 hours in music electives, and 27 hours are in accounting, economics, finance and marketing courses.

## *Representative Career Options*

Career options vary depending upon a student's combined coursework. Please see the examples above.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Music

College of Liberal Arts  
(Bachelor of Arts in Music)  
Business specialization

Dr. Eric Lenz, Director  
105 Altgeld Hall  
Telephone (618) 453-2870  
<http://cola.siu.edu/music/>

Jennifer Presar, Assistant Director  
Altgeld Hall  
Telephone (618) 536-8742

The B.A. degree program with a Music Business specialization meets the objectives of students planning careers as recording engineers or technicians, commercial arrangers or composers, arts managers, promoters, or salespeople in the music business or the entertainment industry. Students take 32–35 semester hours in music and 27 in accounting, economics, finance, management, and marketing.

## *Music as a Major*

Credits in a student's principal applied field are based on private lessons with a member of the faculty, weekly participation in Studio Hour (Tuesdays at 10 A.M.), and recorded attendance each term at seven campus recitals or concerts, approved for the purpose by the School of Music faculty, in which the student is not a participant.

## *Representative Career Options*

Music marketing specialist  
fund raiser for opera company

audio-marketing  
instrument sales

management trainee for recording studio  
management agency specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Music

(Instrumental Performance)  
College of Liberal Arts  
(Bachelor of Music)

Dr. Eric Lenz, Director  
105 Altgeld Hall  
Telephone (618) 453-2870  
<http://cola.siu.edu/music/>

Jennifer Presner, Assistant Director  
Altgeld Hall  
Telephone (618) 536-8742

The bachelor of music degree program with an instrumental performance specialization meets the objectives of students planning careers in musical performance, conducting, teaching, and research. Students planning one of these careers are assumed to have had extensive experience in performing with school groups and/or as soloists and to possess basic music-reading ability. They should also exhibit a strong sensitivity to music and a desire to communicate it to others.

Following is the first two years' course of study for students who intend to pursue careers as instrumentalists and/or private teachers. Those wishing to pursue this specialization should, before the sophomore year, secure approval by the appropriate applied jury, and thereafter enroll for and receive a one-hour lesson each week for three credits per term in applied music.

## *Music as a Major*

Credits in one's principal applied field are based on private lessons with a member of the faculty, weekly participation in Studio Hour (Tuesdays at 10 A.M.), and recorded attendance each term at seven campus recitals or concerts, in which the student is not a participant, approved by the School of Music faculty.

All music majors must maintain satisfactory membership, each term in residence, in one of the following: Music 011– Marching Salukis, 013– Symphonic Band, 014– Concert Wind Ensemble, 017– Symphony, 020– Choral Union, or 022– Concert Choir.

## *Representative Career Options*

Classical music specialist  
instrumental soloists  
woodwinds instruments specialist

symphony orchestra or band artist  
string instruments specialist

music conductor  
brass instruments specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Music

(Keyboard Performance)  
College of Liberal Arts  
(Bachelor of Music)

Dr. Eric Lenz, Director  
105 Altgeld Hall  
Telephone (618) 453-2870  
<http://cola.siu.edu/music/>

Jennifer Presner, Assistant Director  
Altgeld Hall  
Telephone (618) 536-8742

The bachelor of music degree program with a keyboard performance specialization meets the objectives of students planning careers in musical performance, private teaching, and research. Students planning one of these careers are assumed to have had extensive experience in performing with school groups and/or as soloists and to possess basic music-reading ability. They should also exhibit a strong sensitivity to music and a desire to communicate it to others.

Following is the first two years' course of study for students intending to pursue careers as keyboard performers and/or private teachers. Those wishing to pursue this specialization should, before the sophomore year, secure approval by the appropriate applied jury and thereafter enroll for and receive a one-hour lesson each week for three credits per term in applied music.

## *Music as a Major*

Credits in one's principal applied field are based on private lessons with a member of the faculty, weekly participation in Studio Hour (Tuesdays at 10 A.M.), and recorded attendance each term at seven campus recitals or concerts, in which the student is not a participant, approved for the purpose by the School of Music faculty.

All music majors must maintain satisfactory membership, each term in residence, in one of the following: Music 011– Marching Salukis, 013– Symphonic Band, 014– Concert Wind Ensemble, 017– Symphony, 020– Choral Union, or 022– Concert Choir. Piano majors may substitute Music 341, Accompanying Laboratory, during the junior and senior years.

## *Representative Career Options*

Classical music specialist  
private teacher

solo performer

church organist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Music

(Music Theory-Composition)  
College of Liberal Arts  
(Bachelor of Music)

Dr. Eric Lenz, Director  
105 Altgeld Hall  
Telephone (618) 453-2870  
<http://cola.siu.edu/music/>

Jennifer Presner, Assistant Director  
Altgeld Hall  
Telephone (618) 536-8742

The bachelor of music degree program with a music theory–composition specialization meets the objectives of students planning careers in music composition, music theory, teaching, and research. Students planning one of these careers are assumed to have had extensive experience in performing with school groups and/or as soloists and to possess basic music-reading ability. They should also exhibit a strong sensitivity to music and a desire to communicate it to others.

## *Music as a Major*

Credits in a student's principal applied field are based on private lessons with a member of the faculty, weekly participation in Studio Hour (Tuesdays at 10 A.M.), and recorded attendance each term at seven campus recitals or concerts, approved for the purpose by the School of Music faculty, in which the student is not a participant.

All music majors must maintain satisfactory membership, each term in residence, in one of the following: Music 011–Marching Salukis, 013–Symphonic Band, 014–Concert Wind Ensemble, 017–Symphony, 020–Choral Union, or 022–Concert Choir.

## *Representative Career Options*

Classical music specialist  
arranger

theory teacher  
music composition teacher

composer  
music theory specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Music

(Vocal Performance)  
College of Liberal Arts  
(Bachelor of Music)

Dr. Eric Lenz, Director  
105 Altgeld Hall  
Telephone (618) 453-2870  
<http://cola.siu.edu/music/>  
Jennifer Presner, Assistant Director  
Altgeld Hall  
Telephone (618) 536-8742

The bachelor of music degree program in music with a vocal performance specialization meets the objectives of students planning careers in musical performance, conducting, teaching, and research. Students planning one of these careers are assumed to have had extensive pre-university experience in performing with school groups and/or as soloists, basic music reading ability, strong sensitivity to music, and a desire to communicate it to others.

## *Music as a Major*

Credits in one's principal applied field are based on private lessons with a member of the faculty, weekly participation in Studio Hour, and recorded attendance each term at seven campus recitals or concerts, in which the student is not a participant, approved by the School of Music faculty.

All music majors must maintain satisfactory membership, each term in residence, in one of the following: Music 011—Marching Salukis, 013—Symphonic Band, 014—Concert Wind Ensemble, 017—Symphony, 020—Choral Union, or 022—Concert Choir.

## *Representative Career Options*

Classical music specialist  
opera specialist  
church choirmaster

music conductor  
music specialist, choral group artist

vocal soloist  
assistant to music specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Music

(Studio Jazz Performance)  
College of Liberal Arts  
(Bachelor of Music)

Dr. Eric Lenz, Director  
105 Altgeld Hall  
Telephone (618) 453-2870  
<http://cola.siu.edu/music/>  
Jennifer Presner, Assistant Director  
Altgeld Hall  
Telephone (618) 536-8742

Studio Jazz majors are required to be in Jazz Ensemble every semester of study. In addition, at least 4 semesters of non-jazz-related ensembles are required. Majors are also required to be in Jazz Combo for at least 4 semesters. Majors with saxophone as a primary instrument must also take one semester each of applied clarinet and flute. Corresponding document required under the supervision of the applied professor.

## *Music as a Major*

Credits in one's principal applied field are based on private lessons with a member of the faculty, weekly participation in Studio Hour, and recorded attendance each term at seven campus recitals or concerts, in which the student is not a participant, approved by the School of Music faculty.

All music majors must maintain satisfactory membership, each term in residence, in one of the following: Music 011–Marching Salukis, 013–Symphonic Band, 014–Concert Wind Ensemble, 017–Symphony, 020–Choral Union, or 022–Concert Choir.

## *Representative Career Options*

Jazz music specialist

solo performer

private teacher

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Music Education

(Bachelor of Music)  
College of Liberal Arts  
*Choral/General Music Emphasis*

Dr. Frank J. Grzych, Director  
105 Altgeld Hall  
Telephone (618) 536-8742  
<http://cola.siu.edu/music/>

Dr. Douglas Worthen, Assistant Director  
105 Altgeld Hall  
Telephone (618) 536-8742

The School of Music bachelor's degree program in music education prepares students to teach general or instrumental or choral music in the public schools. Licensure to teach grades K–12 are awarded on the completion of all requirements. Students planning one of these careers are assumed to have had extensive experience in performing with school groups and/or as soloists and to possess music-reading ability. They should also exhibit a strong sensitivity to music and a desire to communicate it to others.

\* Students who intend to transfer with an associate degree from a community college should contact the director of the School of Music in advance to determine the comparability of music classes and to avoid spending additional time completing the bachelor's degree.

Students should make formal application for admission to the Teacher Education Program in the Fall semester of their second year.

## *Music as a Major*

The professional education sequence is carried out in cooperation with the College of Education and Human Services, and includes courses in psychology, evaluation, and classroom management. The sequence culminates in a full semester of student teaching. Students will also study vocal or instrumental music, with courses in conducting, arranging, instrumental techniques, and teaching methods, in preparation for teaching music at the elementary, junior high, and high school levels.

All music majors must maintain satisfactory membership, each term in residence, in one of the following: Music 011– Marching Salukis, 013–Symphonic Band, 014–Concert Wind Ensemble, 017–Symphony, 020–Choral Union, or 022–Concert Choir. Instrumental music education majors must enroll in Music 011 for a minimum of one semester.

## *Representative Career Options*

public School general music teacher  
private school music teacher  
music conductor  
music specialist  
church choirmaster

public instrumental music teacher  
private lesson music instruction  
vocal soloist  
choral group artist

public school choral music teacher  
music specialist  
opera specialist  
assistant to music specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Musical Theater

College of Liberal Arts  
(Bachelor of Fine Arts)

Tim Fink, Program Director  
Altgeld Hall, Room 208  
Telephone (618) 453-2121  
<http://cola.siu.edu/musicaltheater/>

Co-sponsored by the Department of Theater and the School of Music, the BFA in Musical Theater is a professional degree program designed to prepare students for a career in musical theater performance. All students must audition to enter the program. Toward the end of their 3rd semester, BFA candidates must pass a jury of singing, acting and dance, along with a review of their efforts to date in order to continue in the program. The degree requires 120 credit hours for graduation, 79 of which must be in music, theater and dance. Those students not passing their jury will receive advisement as to other options in music and theater. In addition to their coursework,

BFA Musical Theater students are required to audition for all musicals and plays, and attend the pre-determined number of plays and concerts. BFA MT students are waived from the College of Liberal Arts foreign language requirements and from mandatory music ensemble participation required each semester of applied study. BFA MT students are required to meet only 2 semesters of ensemble requirement.

## *Representative Career Options*

broadway performer  
non-equity tours  
theme park performers  
Disney theme parks / cruise ships  
directing

National Equity (union) Tours  
professional regional theater  
outdoor theater  
dance instruction  
coaching

off-broadway  
cruise ships  
children's theater  
choreography

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Paralegal Studies

College of Liberal Arts  
(Bachelor of Science)  
*General or Pre-Law Specialization*

Daniel A. Silver, J.D., Interim Director  
4426 Faner Hall  
Telephone (618) 453-1230  
<http://cola.siu.edu/paralegal/>

The B.S. degree Paralegal Studies program is based on the proposed Curriculum for the Training of Law Office Personnel, as stated by the American Bar Association Standing Committee on Paralegals. The program seeks to promote critical and analytical thinking; to teach general legal terminology specific to the various areas of legal instruction; to teach professional oral and written communication skills, including through legal research and writing; to exemplify professionalism and high ethical standards of the legal profession; to prepare students to practice as professional paralegals within law offices, corporations, government, or administrative agencies; and to perform professional procedural and substantive legal activities in assisting and under the supervision of an attorney. Our program embraces a range of social sciences, humanities, and communication skills that gives students a grasp of the social and ethical contexts of the legal profession, encourages the spirit of inquiry, and develops confidence. Paralegals cannot provide legal advice, except as permitted by law and directed by an attorney, nor can paralegals establish a client relationship or represent a client in court.

The program provides two curricula paths, general and pre-law specialization, to provide for professional competency and an intellectual background for the students' future professional lives, including an understanding of law and its function in society. The Paralegal Studies program is also a great steppingstone for those who wish to go on to law school. Students must meet a minimum 2.25 grade point average requirement for transfer admission. Paralegal majors can satisfy the CoLA Writing-Across-the Curriculum requirement by passing Paralegal Studies 300a and b, with a grade of C or higher. Paralegal Studies majors must complete University and College of Liberal Arts requirements and must complete each of PARL 300A, 300B, and 310 with a grade of C or higher; and Paralegal Studies majors must complete a minimum of 34 hours of required paralegal courses, at least 15 hours of which must be earned at SIU Carbondale.

## *Representative First Job Titles*

Paralegal

legal assistant

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Philosophy

College of Liberal Arts  
(Bachelor of Arts)

Dr. Andrew Youpa, Program Director

3065 Faner Hall

Telephone (618) 536-6641

<http://cola.siu.edu/philosophy/>

The B.A. degree program in philosophy provides a framework for students preparing for careers in law, government service, theology, and education, as well as graduate school. Courses in the Department of Philosophy range widely through ethics, aesthetics, logic, metaphysics, and the histories of Western and Asian philosophies, and also art, education, history, and religion.

## *Philosophy as a Major*

The Department of Philosophy maintains its own advisement system to help students design programs that best suit their interests and needs. The Honors Program in philosophy provides students a chance to participate in seminars on a variety of topics.

## *Representative Career Options*

Law school/Lawyer  
medical ethicist (health administration)  
software designer  
employee relations  
archival worker  
public information specialist  
interaction studies specialist

editor  
stockbroker  
minister  
grievances specialist  
museum curator  
civic reform studies specialist group  
public health investigator

writer  
technical writer  
community relations  
public relations  
librarian  
morale studies specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Physical Therapist Assistant

College of Applied Sciences and Arts  
(Associate in Applied Science)

Julie Davis, Program Director  
CASA 114B  
1365 Douglas Drive  
Telephone (618) 453-3618 or 453-7211  
E-mail: [jfrman@siu.edu](mailto:jfrman@siu.edu)  
<http://www.sah.siu.edu/undergraduate/physical-therapist-assistant/index.php>

The Associate in Applied Science Physical Therapist Assistant degree program is accredited by the Commission on Accreditation in Physical Therapy Education, 1111 N Fairfax Street, Alexandria, VA 22314-1488. It is designed to prepare the graduate to work under the supervision of a physical therapist to treat disabilities resulting from birth defects, disease, or injury. Successful completion of the program provides graduates with the educational requirements necessary to take state licensing examinations for physical therapist assistants.

## *Physical Therapist Assistant as a Major*

Regular semesters will utilize classroom laboratory and clinical education experiences; the final summer semester requires two full-time six-week internships at two separate facilities away from the University campus.

Applicants need to apply to the program well in advance. Enrollment for the fall class will be closed as soon as available spaces are filled with qualified candidates.

Students are to provide documentation of immunizations with their application due to clinical site requirements. Some clinical sites may require drug testing and criminal background checks.

## *Representative Career Options*

Physical therapist assistant

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Physics

College of Science  
(Bachelor of Science)

Dr. Naushad Ali, Chair  
483A Neckers Building  
Telephone (618) 453-2643  
E-mail: physics@physics.siu.edu  
<http://www.science.siu.edu/physics/>

A basic knowledge of classical and quantum physics is essential for successful entry into a wide variety of interdisciplinary areas of science such as biophysics, geophysics, communications science, space science, environmental science, medical science, and engineering. The B.S. degree program in physics through the College of Science meets the objectives of students undertaking the sound preparation in modern physics necessary for pursuing advanced study in physics and related areas or participating in research and development work in industry or government laboratories.

The program of study provides for a mastery of the basic principles of classical and quantum physics. It also provides a breadth of coverage in the application of physical principles to related fields. Because of the central position of physics among the physical sciences, the physics graduate with adaptable analytical and experimental skills can contribute to the solution of pressing national problems, from energy to the environment.

## *Physics as a Major*

At SIU Carbondale, students may elect one of several options to prepare to be physicists. Choices exist for both the experimentally and theoretically oriented student. The physics major may prepare to enter graduate school or an industrial and/or government laboratory.

## *Representative Career Options*

Physicist	acoustician	design physicist
quality control physicist	research physicist	aerodynamics scientist
applied physics researcher	astrophysicist	optics physicist
atomic and molecular physicist	biophysicist	geophysicist
factory insurance representative	thermodynamicist	material physicist
manufacturer's representative	mechanics physicist	nuclear physicist
plasma physicist	product studies and testing physicist	solid-state physicist
physical metallurgy scientist	biophysicist	astronomer
geodesist	crystallographer	air pollution analyst
theoretical physicist	health physicist	computational physicist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Physiology

College of Science  
(Bachelor of Science)

Dr. Dale B. Hales, Chair  
245 Life Science II  
Telephone (618) 453-1544  
E-mail: [physiology@siu.edu](mailto:physiology@siu.edu)  
<http://www.physiology.siu.edu>

Physiology involves studying how life processes operate and how organisms function during life. The B.S. degree program in physiology meets the objectives of students considering preparation for further education in medical and other health-related professional schools and in graduate programs in physiology, cell biology, and other disciplines.

Courses include physiological techniques, pharmacology, physiology, and anatomy. A bachelor's degree in physiology provides background for a variety of research positions in academia, industry, and government as well as working with data analysis, sales, and professional writing. The best employment opportunities after graduate work are in colleges and universities. Government agencies are the second largest employers of physiologists.

## *Physiology as a Major*

The Department of Physiology offers training in mammalian, cellular, molecular and integrative physiology, pharmacology, biophysics, and human anatomy. Students majoring in physiology are encouraged to gain research experience under faculty supervision. The undergraduate major provides general rather than specialized training in physiology.

In addition to adequate equipment for all routine work, our students can use cell and tissue culture facilities, ultra-centrifuge, high-performance liquid chromatography, and other analytical chemistry instruments, complete facilities for immunoassays, environmental chambers with controlled photoperiod and temperature, activity recorders, light, fluorescent and electron microscopes, conventional and Real-Time PCR machines, protein and nucleic acid electrophoresis, densitometer, and infrared imaging equipment, micro-array readers; fully equipped animal rooms, analytic balances, refrigerated centrifuges; constant temperature baths and ovens; walk in cold rooms, physiographs; fraction collectors; oscilloscopes; blood gas apparatus; body composition analyzers, electrocardiograph, and strength-testing equipment.

## *Representative First Job Titles*

Physiologist  
manufacturer's representative  
biostatistician  
pharmaceutical sales representative

physiological researcher  
pathologist  
researcher

genetics researcher  
technical writer  
toxicologist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Plant Biology

College of Science  
(Bachelor of Arts)

Dr. Stephen Ebbs, Chair  
420 Life Science II  
Telephone (618) 536-2331  
E-mail: [plant-biology@plant.siu.edu](mailto:plant-biology@plant.siu.edu)  
<http://www.plantbiology.siu.edu>

Plant biology will be one of the most active fields of science in the 21st century. Plant biologists play vital roles in fighting hunger and disease, improving human health, developing new consumer products and pharmaceuticals, producing biofuels, reclaiming damaged and disturbed landscapes, protecting biodiversity and fragile ecosystems, and conserving valuable natural resources. Students in the Plant Biology program receive training in both field and laboratory settings, using an array of modern research tools, laboratory skills, and field techniques.

The B.A. degree program in plant biology is designed to meet the objectives of students considering careers in plant biology or related fields with federal and state agencies, botanical gardens, in private industry, or in education. While the B.A. degree can also provide preparation for graduate school, the B.S. degree in Plant Biology provides a more complete preparation for advanced study. The B.A. degree in Plant Biology can be further tailored to meet different career goals via four degree specializations: 1) general plant biology, 2) conservation & biodiversity, 3) molecular and biochemical physiology, and 4) ecology. The specializations allow students to concentrate their coursework in the indicated area.

Successful completion of a specialization appears as a notation on the student's official transcript.

## *Plant Biology as a Major*

Selection of one of the four specializations in Plant Biology should be done in close consultation with the department chair and/or undergraduate advisor to insure that the requisite coursework for that specialization is covered.

An honors program is available to those juniors and seniors in plant biology who have an overall grade point average of 3.00 or better and an average in plant biology courses of 3.25 or better.

A minor in Plant Biology can be used to complement majors in biological sciences, forestry, plant and soil science, zoology, and other disciplines.

The Department of Plant Biology strongly encourages all undergraduates to become involved in one or more research experiences, internships, paraprofessional positions, or work experiences during their program. The department chair and/or undergraduate advisor work with the student to identify and secure such opportunities during the academic year or summer.

## *Representative First Job Titles*

Biological technician	biologist	biotechnologist
botanist	conservation biologist	conservation officer
cytologist	ecologist	economic botanist
environmental consultant	environmental educator	greenhouse manager
herbarium curator	horticulture technician	museum curator
naturalist	nature interpreter	plant biologist
plant breeding technician	plant molecular biologist	plant morphologist
plant pathologist	plant physiologist	plant protection technician
plant taxonomist		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Plant Biology

College of Science  
(Bachelor of Science)

Dr. Stephen Ebbs, Chair  
420 Life Science II  
Telephone (618) 536-2331  
E-mail: [plant-biology@plant.siu.edu](mailto:plant-biology@plant.siu.edu)  
<http://www.plantbiology.siu.edu/>

Plant biology will be one of the most active fields of science in the 21st century. Plant biologists play vital roles in fighting hunger and disease, improving human health, developing new consumer products and pharmaceuticals, producing biofuels, reclaiming damaged and disturbed landscapes, protecting biodiversity and fragile ecosystems, and conserving valuable natural resources. Students in the Plant Biology program receive training in both field and laboratory settings, using an array of modern research tools, laboratory skills, and field techniques.

The B.S. degree program in plant biology is designed to meet the objectives of students considering careers in plant biology or related fields with federal and state agencies, botanical gardens, in private industry, or in education. The B.S. degree in Plant Biology is also recommended for students who plan to pursue graduate study in plant biology or a related field. Like the B.A. degree, the B.S. degree in Plant Biology can be further tailored to meet different career goals via four degree specializations: 1) general plant biology, 2) conservation & biodiversity, 3) molecular and biochemical physiology, and 4) ecology. The specializations allow students to concentrate their coursework in the indicated area.

Successful completion of a specialization appears as a notation on the student's official transcript.

## *Plant Biology as a Major*

Selection of one of the four specializations in Plant Biology should be done in close consultation with the department chair and/or undergraduate advisor to insure that the requisite coursework for that specialization is covered.

An honors program is available to those juniors and seniors in plant biology who have an overall grade point average of 3.00 or better and an average in plant biology courses of 3.25 or better.

A minor in Plant Biology can be used to complement majors in biological sciences, forestry, plant and soil science, zoology, and other disciplines.

The Department of Plant Biology strongly encourages all undergraduates to become involved in one or more research experiences, internships, paraprofessional positions, or work experiences during their program. The department chair and/or undergraduate advisor work with the student to identify and secure such opportunities during the academic year or summer.

## *Representative Career Options*

Biological technician	biologist	biotechnologist
botanist	conservation biologist	conservation officer
cytologist	ecologist	economic botanist
environmental consultant	environmental educator	greenhouse manager
herbarium curator	horticulture technician	museum curator
naturalist	nature interpreter	plant biologist
plant breeding technician	plant molecular biologist	plant morphologist
plant pathologist	plant physiologist	plant protection technician
plant taxonomist		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Political Science

(International Affairs)  
(Public Service)  
(Pre-Law)  
College of Liberal Arts  
(Bachelor of Arts)

Virginia Tilley, Chair  
3081 Faner Hall  
Telephone (618) 536-2371  
<http://cola.siu.edu/politicalscience/>

Political Science is the study of issues that most immediately and profoundly affect our lives. In the global, national and local political arenas, decisions are made every day that influence the way we live. The political science major will prepare you to address these issues intelligently. You will gain knowledge and skills to make a contribution in today's dynamic economic and political world. Courses in political science teach you skills in writing, analysis and communication and prepare you for work in all sectors of society: business, education, government and industry.

Students planning to major in political science should consult with the political science academic advisor as early as possible to plan their program of study. As a political science major you will be able to choose from a curriculum that combines structure with flexibility. The department offers three specializations: International Affairs, Pre-Law, and Public Service. Within each area, students take a sequence of courses that prepares them for their future plans and careers. Students are encouraged to gain practical experience by enrolling in internships and study abroad programs. Students consult with the political science academic advisor before enrolling in departmental courses each semester.

Students majoring in political science must complete core and elective requirements listed below for a minimum of 33 hours of which at least 15 must be earned at Southern Illinois University Carbondale. A minimum of three of these courses must be taken at the 400-level. A maximum of nine hours of Political Science 390 and 395 may be counted toward the minimum of 33 hours. Students must complete the departmental exit survey as final graduation requirement for the major in political science.

## *Political Science as a Major*

At SIU Carbondale's Department of Political Science we are committed to helping our majors develop the skills in writing, analysis, and communication that are necessary for success in any career path. As a political science major you will have access to excellent instruction by nationally recognized faculty. You can practice what you learn in the classroom by participating in extra-curricular activities such as the Pre-Law Association, Student Ambassadors, Undergraduate Student Government, and the Public Administration Student Organization. Majors in political science are afforded an enriched educational experience through opportunities to intern with local, state, and federal levels of government. A degree in political science from SIU Carbondale will prepare you for a rewarding career in government, media, education, business, and nonprofit sectors.

## *Representative Career Options*

Graduates of our political science program find employment in such diverse vocations as law; business; journalism; public and international affairs; campaign management; federal, state, and local government; and nonprofit organizations. Our alumni hold positions with such organizations as the Federal Bureau of Investigation, U.S. Department of Energy, Missouri State Senate, U.S. House Budget Committee, Department of State, Motorola, McDonnell Douglas, Caterpillar Inc., John Deere and Co., Smith Barney, Coldwell Banker, Ford Motor Co., and many more. In addition to these fine organizations, many alumni have their own law practices or teach at secondary and higher levels of education. Some of our most notable graduates include Former U.S. Ambassador to the United Nations Donald McHenry, Illinois Attorney General Roland Burris, and Chief Justice of the Illinois Supreme Court Ben Miller.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Dentistry

Pre-Professional Non-degree Program  
College of Science

Gail Robinson, Health Professions Advisor

A-185 Neckers Building

Telephone (618) 536-2147

E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)

<http://www.science.siu.edu/academics/prehealth.html>

SIU Carbondale does not offer a degree in pre-dentistry. An academic major must be chosen. The pre-professional program in pre-dentistry meets the objectives of students planning for dental careers and prepares them to take the Dental Admission Test, which must be done not later than spring of the junior year. The Health Professions Information Office offers information and guidance to pre-dental students. The SIU Carbondale pre-dental program meets the general requirements of all United States dental schools. For the School of Dental Medicine in Alton, students need at least one semester of biochemistry.

If all requirements are completed, students may take the Dental Admission Test in spring of their junior year and apply for entry to dental school after three years of undergraduate preparation. Students may choose any major and must complete the departmental, college, and University requirements for a degree. Dental schools give no preference among possible majors. In addition to required courses, students should choose from among the following courses, as their time permits: genetics, cellular biology, embryology, developmental biology, comparative anatomy, microbiology, psychobiology, and personality or social psychology. Additional mathematics, statistics, humanities, and social sciences will also be helpful. Professional training requires four years in the dental school. Specialties beyond general practice require further training.

## *Dentistry*

Dentistry is becoming increasingly involved in the detection of a variety of diseases and in aesthetic improvement, correction and reconstruction, preventive dental care, and community health care, as well as private practice.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Law

(Pre-Professional Specialization in Political Science Major)  
College of Liberal Arts

Virginia Tilley, Chair  
3081 Faner Hall  
Telephone (618) 536-2371  
<http://cola.siu.edu/politicalscience/>

The College of Liberal Arts has a pre-law designation to identify and assist students interested in pursuing a career in the law and/or enrolling in law school. Students planning to apply to law school may select any major course of study and, because their undergraduate grades are important in the law school application process, they are encouraged to select a major in which they can perform very well.

## *Applying to Law School*

Students who plan on applying to law school will need to take the Law School Admission Test (LSAT) sometime during their junior or senior year. The LSAT is administered by a company called Law Services and is offered at SIU. A practice LSAT is offered by SIU Testing Services and the SIU Division of Continuing Education offers a LSAT preparatory course. Students who perform exceptionally on the LSAT may be subject to certain conditions, enroll and be admitted into the SIU School of Law as a junior.

More information about the LSAT and the law school application process can be obtained from advisors in the College of Liberal Arts (CoLA) Advisement Office (Faner 1229), from Law Service at <<http://www.lsac.org>>, or from the SIU School of Law, Office of Admissions and Student Affairs at <<http://www.law.siu.edu>>.

## *Student Organizations*

Students interested in a career in the law and/or enrolling in Law School can join the Pre-Law Association, a registered student organization that schedules speakers and events related to a legal career. Students are encouraged to visit the Pre-Law Association website at <<http://www.prelaw.rso.siu.edu>>. In conjunction with the Pre-Law Association, the Department of political science sponsors an annual moot court competition for pre-law students that are held in conjunction with the Model Illinois Government simulation.

## *Preparing for a Legal Career*

Students interested in pursuing a legal career should recognize that certain courses available in the College of Liberal Arts might be helpful in preparing either for the LSAT, the study of law, and/or a career in the law.

For example, students in the Political Science program can declare a pre-law specialization within their major, which includes courses in administrative law, civil liberties and constitutional law.

Any course, however, that develops or improves a student's analytical reasoning, reading comprehension, logical reasoning, or writing skills will be beneficial for the LSAT, the study of law, and/or a career in the law. Development or improvement of oral communication skills, which are currently not tested on the LSAT but are very important for the study of law or a legal career, is also strongly recommended.

A list of courses that offer the opportunity to improve or develop these skills appears below. This is not an exhaustive list. With some exceptions, students do not need to be enrolled in a particular major to take any or all of these courses. Students who are not in a CoLA program, therefore, are strongly advised to take one or more of these courses to supplement their studies. For more information about these courses, contact an academic advisor in the CoLA Advisement Office. Anthropology 202, 298, 370, 410A and 410E; Criminology and Criminal Justice 203, 310, 320, 374 and 408; Economics 240, 241, 340 and 341; English 290, 291, 300, 391 and 491; History 330A, 400, 450B, 467A,B, and 490; Linguistics 104, 200, 201 and 415; Philosophy 105, 309I, 320, 344 and 441; Political Science 230, 323, 332I, 333a, 333b, 334, 435, 436, 437, 438, AND 439; Psychology 211, 223, 301, 304, 311, 431 and 420; Sociology 308, 312, 372, 424, and 473; Speech Communication 221, 310, 325, 326, 411, 421 and 463.

## *Representative Career Options*

Admission to law school and subsequent careers in law, business, government, and a variety of other fields.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

## Pre-Medicine (including Osteopathic Medicine)

Pre-Professional Non-degree Program  
College of Science

Gail Robinson, Health Professions Advisor

A-185 Neckers Building

Telephone (618) 536-2147

E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)

<http://www.science.siu.edu/academics/prehealth.html>

SIU Carbondale does not offer a degree in pre-medicine. An academic major must be chosen. The Health Preprofessional Committee guides the pre-medical program at SIUC. Through the Health Professions Information Office, students are able to obtain information about professional schools and their requirements, curriculum guidance, and assistance with the procedures involved in applying to medical or osteopathic medical schools. The curriculum meets the general requirements of all United States medical schools and is designed to provide students with a strong course background on which to base their medical education.

Pre-medical students may choose any major in which to earn the bachelor's degree. Requirements of that degree, of the college in which it is granted, and of the University must be met at the same time as pre-medical requirements are taken. If a science major is chosen, there will be considerable overlapping of requirements.

Additional courses recommended for pre-medical preparation include embryology or developmental biology, comparative anatomy, microbiology, psychobiology, and social sciences. As of 2015, the MCAT has a Psychological, Social, and Biological Foundations of Behavior section. Students will need Introductory Psychology and Sociology at a minimum.

### *Medicine*

Medical training will require another four academic years, plus residency. Admission to medical schools is extremely competitive. Students can help themselves by making realistic appraisals of their interests and abilities, by planning ahead to meet all requirements and time schedules, and by keeping themselves informed of admission requirements and procedures. They will receive help through the Health Professions Information Office and the Health Preprofessional Committee.

During all their undergraduate years students should be increasing their knowledge of medicine as a profession. Some suggestions are to shadow a physician, volunteer in a hospital, work as a medical scribe, or gain certification as an EMT (Emergency Medical Technician) or CNA (Certified Nurses Assistant). Involvement in extracurricular activities and community service is increasingly important in gaining admission to medical school.

Medicine today offers both promise and challenge, whether students are interested in becoming primary care physicians, specialists, or medical scientists. Prevention as well as cure, and the extension of health care to all of society, have become important goals in medical education.

The flexibility with which pre-medical students at SIU Carbondale may approach their undergraduate requirements, as well as the quality of the pre-medical preparation, make it possible for students to achieve excellent pre-medical training.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Nursing

Pre-Professional Non-degree program  
College of Science

Mary Smith, Regional Nursing Program Advisor

Lindegren Hall Room 0016F

Telephone: (618) 453-4349

E-mail: [mindyr@siu.edu](mailto:mindyr@siu.edu)

<http://www.science.siu.edu/academics/prehealth.html>

A Bachelor's Degree in Nursing is offered at both Southern Illinois University Carbondale (SIU Regional Nursing Program) and Edwardsville. Although students can complete pre-nursing requirements through an accelerated course load in one year\*, many choose to apply after three semesters of course work. Students apply to SIUE, who manages the program on both campuses. The bachelor's degree in nursing is awarded by SIUE. The Nursing Program on either campus is three years.

The bachelor's program is designed for those who wish to become registered nurses and provides a platform on which to build a career through graduate study for advanced practice roles such as nurse administrator or nurse practitioner.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Occupational Therapy

Pre-Professional Non-degree Program  
College of Science

Gail Robinson, Health Professions Advisor

A-185 Neckers Building

Telephone (618) 536-2147

E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)

<http://www.science.siu.edu/academics/prehealth.html>

SIU Carbondale does not offer a degree in pre-occupational therapy. An academic major must be chosen. SIU Carbondale offers courses to meet the requirements of any occupational therapy school. Admission is competitive. Applicants should have investigated occupational therapy and have some experience in patient care. Application must be made from nine months to a year in advance of the beginning date at the professional schools.

## *Occupational Therapy*

The Accreditation Council of Occupational Therapy Education is requiring that all occupational therapy programs be at the masters or doctoral level. Most programs are currently at the Master's level. The undergraduate degree may be in any discipline, provided that specific occupational therapy requirements are met. Students are advised to contact the professional school where they would like to attend to keep up-to-date on specific requirements. Occupational therapists work to maximize the function and life satisfaction of persons whose daily life performance have been, or might be, affected by disease, disability, life stress, and other factors. Therapy consists of facilitating participation in roles and activities that are important to the patient or client. A variety of rehabilitation strategies are used in occupational therapy.

Occupational therapy offers a rewarding career for people who want to improve the quality of life of individuals, groups, and communities. Practitioners work in a wide variety of settings such as school systems, hospitals, private practices, home-health, industrial settings and community-based organizations.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Optometry

Pre-Professional Non-degree Program  
College of Science

Gail Robinson, Health Professions Advisor  
A-185 Neckers Building  
Telephone (618) 536-2147  
E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)  
<http://www.science.siu.edu/academics/prehealth.html>

SIU Carbondale does not offer a degree in pre-optometry. An academic major must be chosen. The Health Preprofessional Committee guides the pre-optometry program at SIU Carbondale. Through the Health Professions Information Office, students are able to obtain information about professional schools and their requirements, curriculum guidance, and assistance with the procedures involved in applying to optometry schools. The curriculum meets the general requirements of all United States optometry schools and is designed to provide students with a strong course back-ground on which to base their education.

## *Optometry*

Optometry training requires four years in an accredited professional school. The candidates then take a licensing examination.

## *Representative Career Options*

Career opportunities exist in individual or group practice, in hospitals or eye clinics, in public health agencies, in industrial health programs, and in consultant services to other professions, such as educators in remedial reading, illuminating engineers, or highway safety planners

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Pharmacy

Pre-Professional Non-degree Program  
College of Science

Gail Robinson, Health Professions Advisor

A-185 Neckers Building

Telephone (618) 536-2147

E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)

<http://www.science.siu.edu/academics/prehealth.html>

SIU Carbondale does not offer a degree in pre-pharmacy. Students only need to fulfill prerequisite course requirements. Recent changes in pharmacy programs make it imperative that pre-pharmacy students have a particular school in mind and that they are aware of its requirements. There are five Illinois pharmacy schools: the Chicago College of Pharmacy (Midwestern University), the University of Illinois at Chicago, and Southern Illinois University at Edwardsville, Chicago State University, and Rosalind Franklin University, all offering a doctoral degree (Pharm. D.). The programs require two to three years of preparatory courses, and some students have bachelor's degrees.

## *Pharmaceutical Field*

Students with an aptitude for science and interest in the pharmaceutical field will find that pharmacy offers a variety of careers.

## *Representative Career Options*

The pharmacist may practice in a retail business, in a hospital or clinic, or in public health facilities. In industrial pharmacy there are opportunities in research, manufacturing, quality control, administration, and sales.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Physical Therapy

Pre-Professional Non-degree Program  
College of Science

Gail Robinson, Health Professions Advisor

A-185 Neckers Building

Telephone (618) 536-2147

E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)

<http://www.science.siu.edu/academics/prehealth.html>

SIU Carbondale does not offer a degree in pre-physical therapy. An academic major must be chosen. SIU Carbondale offers courses to meet the requirements of any physical therapy school. *Admission is competitive.* Applicants should have some knowledge about physical therapy and some experience in patient care. Application must be made from nine months to a year in advance of the beginning date at the professional schools.

Students are required to have current certifications in cardiopulmonary resuscitation (CPR) and first aid.

The Commission on Accreditation of Physical Therapy Education is requiring that all physical therapy programs be at the master or doctoral level. The doctoral program is three years long. Most have already made the change doctoral programs. The undergraduate degree may be in any discipline, provided that specific physical therapy requirements are met. Students are advised to contact the professional school where they might want to attend in order to keep up-to-date on their specific requirements.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Physician Assistant

Pre-Professional Non-degree Program  
College of Science

Gail Robinson, Health Professions Advisor  
A-185 Neckers Building  
Telephone (618) 536-2147  
E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)  
<http://www.science.siu.edu/academics/prehealth.html>

SIU Carbondale does not offer a degree in pre-physician assistant. An academic major must be chosen. SIUC offers courses to meet the requirements of most programs leading to certification as a physician assistant. Most Physician Assistant programs offer a master's degree only and demand that an applicant have a bachelor's degree from an accredited university. *Admission to all Physician Assistant programs is competitive.* Prior health-care experience is important, including credentialed employment in a healthcare setting. A total of 2000 hours is preferred. The GRE or MAT is required.

Pre-physician Assistant students may choose any major in which to earn the bachelor's degree. Requirements of that degree, of the college in which it is granted, and the University must be met at the same time as pre-physician assistant requirements are taken. If a science major is chosen, there will be considerable overlapping of requirements.

Only grades of C or better are accepted, and the prerequisite course GPA must be at least a 3.0 on a 4 point scale.

## *Physician Assistant*

A Physician Assistant is a "mid-level" provider who is licensed to practice medicine with physician supervision. PA's perform a wide range of medical duties, and a PA's responsibilities depend on the type of health care setting and his/her experience and training.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Podiatry

Pre-Professional Non-degree Program  
College of Science

Gail Robinson, Health Professions Advisor  
A-185 Neckers Building  
Telephone (618) 536-2147  
E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)  
<http://www.science.siu.edu/academics/prehealth.html>

SIU Carbondale does not offer a degree in pre-podiatry. An academic major must be chosen. Podiatrists diagnose and treat foot disorders caused by injury or disease and also perform foot surgery. SIU Carbondale's pre-podiatry program meets the general requirements of all United States podiatry schools. The following curriculum prepares students to take the Medical College Admissions Test in the spring of their junior year. The Health Professions Information Office offers information and guidance to pre-podiatry students and assists in the process of application by furnishing a composite letter of recommendation for each student who applies to podiatry school.

## *Podiatry*

No degree is given in pre-podiatry. Students must complete the major and college requirements for a bachelor's degree. Podiatry schools state some preference for biological science majors, but other majors are acceptable.

Professional training requires four years. Residencies of one to three years are required for specialties beyond general practice as a podiatrist. Specialties such as podiatry surgery and primary care podiatry medicine, pediatric and geriatric podiatry, sports medicine, and research may be chosen as alternatives to general practice.

General practice podiatrists are highly trained health care providers who specialize in the prevention, diagnosis, and treatment of problems affecting the foot and ankle. They see people of all ages and are often the first medical specialists to diagnose and treat systemic problems affecting the feet and ankles such as AIDS, gout, diabetes, hypertension, and osteoarthritis.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Pre-Veterinary Medicine

Pre-Professional Non-degree Program  
College of Agricultural Sciences  
College of Science

Gail Robinson, Health Professions Advisor  
A-185 Neckers Building  
Telephone (618) 536-2147  
E-mail: [health-professions@cos.siu.edu](mailto:health-professions@cos.siu.edu)  
<http://www.science.siu.edu/academics/prehealth.html>

SIUC does not offer a degree in pre-veterinary medicine. An academic major must be chosen. The pre-veterinary medicine curriculum is based on the requirements for application to University of Illinois College of Veterinary Medicine, the only veterinary school in Illinois. Although most accepted students have completed a bachelor's degree, students may apply to professional school after two years' undergraduate preparation. Some students choose to spread the required pre-veterinary courses through a third year. Students completing a degree should choose a major in either the College of Agricultural Sciences (i.e., Animal Science) or the College of Science (i.e., Zoology).

In addition to required pre-veterinary courses, there are recommended courses from which students may choose in accordance with their available time. These include equine courses, animal nutrition, behavioral manipulation of animals, comparative anatomy, cell physiology, environmental biology, organismic functional biology, business management or economics, and animal ethnology.

No degree is given in pre-veterinary studies. Students should choose an academic major in a science or in animal science and complete degree requirement simultaneously with the admission requirements of the veterinary school. Admission is competitive and is usually granted to the best-prepared students. Most first-year veterinary students have four or more years of pre-veterinary education.

Experience with animals, preferably working for a veterinarian, is essential. The University of Illinois requires a letter of recommendation from a veterinarian. The Graduate Record Examination (GRE) is now the standardized admissions test for the University of Illinois. It is offered three times each year at SIU Carbondale.

## *Veterinary Medicine*

Completion of training in a school of veterinary medicine requires four years. The University of Illinois veterinary medicine program accepts Illinois residents, although a few out-of-state students may be accepted. While pre-veterinary students are preparing to apply to the veterinary school, they can develop related or alternate interests in the diverse offerings at SIU Carbondale.

## *Representative Career Options (Professional Veterinarians)*

small animal practice	meat inspection	livestock disease prevention and control
control of diseases transmitted from animal to man	supervision of interstate movement of animals	
research in animal disease or in drugs used in animal care		

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Psychology

College of Liberal Arts  
(Bachelor of Arts)

Dr. Reza Habib, Director, Undergraduate Program

Life Science II, Room 281  
Telephone (618) 536-2301  
<http://cola.siu.edu/psychology/>

Pursuing a major in psychology prepares the student to seek employment in a wide variety of settings once the B.A. degree is earned and for study in numerous post-graduate programs. Pursuing a career as a professional psychologist normally requires at least two years of graduate work. An undergraduate degree in psychology also prepares the student for graduate work in other areas such as business, law, rehabilitation counseling, social work and medical school.

The Psychology Major comprises fourteen (four required and ten elective) Psychology courses for 44 semester hours credit.

## *Psychology as a Major*

The major program is aimed at providing broad general education rather than training in specialized professional psychological skills.

## *Representative Career Options*

Alcoholism and drug addiction researcher  
senior citizens center (director)  
probation and parole in-charge  
mental health clinic technician

various other positions working with people, research or data

adoption worker  
prisoner classification interviewer  
rehabilitation and resettlement personnel  
human resources

sales agent  
claims authorizer  
drug abuse counselor  
government services

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Public Health

(Community Health)

College of Education and Human Services  
(Bachelor of Science)

Advisement  
307 Pulliam, Telephone  
(618) 453-2777

College of Education Student Services  
122 Wham Building  
Telephone: (618) 453-2354  
<http://ehs.siu.edu/her/undergraduate/health-education.php>

The Department of Health Education and Recreation offers a community health education specialization within the Health Education major. The *community health education* specialization is for those planning to conduct health education and promotion activities in non-classroom settings.

Community Health Educators help people acquire the knowledge and skills needed to live healthy, happy lives. Employment opportunities are expected to grow due to the changes in delivery of healthcare and to the growth of the aging population. Health educators are sought for positions in public health departments, schools, state departments of education, community agencies, wellness centers, fitness centers, and environmental agencies.

## *Community Health Education as a Major*

For those planning to conduct health education and health promotion activities in non-classroom settings, the curriculum in community health includes advanced concepts of health, evaluation in health education, consumer health, community health administration in the United States, and environmental dimensions of health education. Students will also complete a field experience in a health or safety agency.

The community health education specialization is an attractive bachelor's degree alternative for students holding an associate in applied science degree in a health field.

## *Representative Career Options*

Community Health Educators may find a variety of opportunities in public health departments, schools, state departments of education, community agencies, wellness centers, fitness centers, and among environmental agencies.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Radio, Television, & Digital Media

College of Mass Communication and Media Arts  
(Bachelor of Arts)

Dr. Novotny Lawrence, Chair  
1048 Communications Building  
Telephone (618) 536-7555  
<http://mema.siu.edu/rtd/>

The B.A. degree program in Radio, Television, & Digital Media meets the objectives of students preparing for leadership positions in the broadcasting industry or in related fields. Students must declare an area of concentration in one of six specializations-Digital Media Arts and Animation, Electronic Journalism, Electronic Sport Media, Media Industries, Radio/Audio Production, and Television/Video Production-and are encouraged to gain actual experience in any phase of broadcasting at University operated or local commercial radio and television stations and through internships.

## *Transfer of Broadcasting Credits*

Transfer students with broadcasting credits from two-year institutions may apply toward the major, as determined by course evaluations administered through the Radio, Television, & Digital Media advisement office.

A minor is required of all students who major in Radio, Television, & Digital Media. The minor should comprise courses in a single discipline outside the department. Students should consult with an academic adviser for specific recommendations.

In addition, they are expected to develop a concentration in a single area by taking concentrated courses in Electronic Journalism, Video/TV Production, Radio/Audio Production, Media Industries, Digital Media Arts and Animation, and Electronic Sports Media. Students are also required to complete at least 6 semester hours in foreign language or approved substitution. The Department of Radio, Television, and Digital Media with approximately 301 students, is one of the most respected programs of its kind in the nation.

## *Representative Career Options*

Producer  
news writer  
newscaster  
sales manager  
disc jockey  
radio account executive  
news and assignment editor

director  
copywriter  
announcer  
researcher  
station manager  
camera technician  
continuity director

sales representative  
news reporter  
program director  
community affairs director  
broadcast engineer  
scriptwriter

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Radiologic Sciences

College of Applied Sciences and Arts  
(Bachelor of Science)

Richard McKinnies, Program Director

213A Applied Sciences and Arts Building

Telephone (618) 453-7260

E-mail: [rmck@siu.edu](mailto:rmck@siu.edu)

<http://www.sah.siu.edu/undergraduate/radiologic-sciences/index.php>

The program in radiologic sciences prepares qualified health care professionals to function as first assistants to the physician in medical practice, using radiant energy, ionizing radiation (X-ray), other forms of electromagnetic energy, and sound waves for the imaging, diagnosis, and treatment of disease. The traditional medical specialties of radiography, radiation therapy, medical diagnostic sonography, and magnetic resonance imaging/computed tomography, are available at SIU Carbondale. Each distinct specialty option has its own educational criteria, accreditation, and clinical training requirements.

The program prepares technologists for entry-level positions and also prepares the technologist who wishes to gain additional expertise. The basic radiologic technology curriculum is designed to meet the guidelines for the American Registry of Radiologic Technologists. The bachelor's degree program with options in medical diagnostic sonography, magnetic resonance imaging/computed tomography, or radiation therapy, meets specific accreditation guidelines and provides opportunities for professional growth of the radiologic technologist.

## *Representative Career Options*

Entry-level technologist positions

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Recreation

(Therapeutic Recreation)  
(Leisure Services Management)  
(Outdoor Recreation Leadership and Management)  
College of Education and Human Services  
(Bachelor of Science)

Academic Advisement Office  
307 Pulliam Hall  
Telephone (618) 453-4331

College of Education and Human Services Advisement  
122 Wham Education Building  
Telephone (618) 453-6340  
<http://ehs.siu.edu/her/>

The specializations in therapeutic recreation, leisure services management, and outdoor recreation leadership and management in the Bachelor of Science degree program in recreation meet the objectives of students planning careers in the management of leisure-time pursuits. The *leisure services management* specialization emphasizes campus recreation services, commercial recreation management, outdoor recreation management, or recreation administration and management. *Therapeutic recreation* uses activities to help those with a disability live a more independent lifestyle whether in a community or clinical setting.

The curriculum emphasizes the practical as well as the theoretical aspects of recreation by offering two supervised field experiences and an internship in various recreation settings throughout Illinois and the nation.

## *Recreation as a Major*

Opportunities exist within the curriculum for students to take courses that provide a broad background in recreational activities and skills. Students are encouraged to join the Student Recreation Society where they can further their professional skill through various educational activities.

## *Representative Career Options*

park ranger	recreation supervisor	activity director
tour director	hotel manager	golf course manager
rehabilitation center activity specialist	fitness center manager	nature center director

All aspects of recreation are expected to continue expanding.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Rehabilitation Services

College of Education and Human Services  
(Bachelor of Science)

Dr. Stacia Robertson, Coordinator

310A Rehn Hall

Telephone (618) 536-7704

srbtrsn@siu.edu

<http://ehs.siu.edu/rehab/undergraduate/rehab-services/index.php>

The B.S. degree program in rehabilitation meets the objectives of students with career interests in the field of rehabilitation. Employment can be found in community-based rehabilitation programs, mental health and retardation programs, independent living centers, and alcohol and drug abuse programs, among others.

The rehabilitation services courses are designed to help students develop a solid understanding of the field of rehabilitation, a familiarity with various disabilities people experience and the psychosocial aspects of these disabilities; an understanding of helping professions and the interpersonal skills required of helping professionals; knowledge of various community resources and the services provided by these resources; an awareness of basic practices in the field of rehabilitation; the skills to use the elementary principles of applied behavior analysis; oral, written, and non-verbal communication skills for working with people with disabilities, their families, and other service providers; a familiarity with professional organizations and journals in the field; a solid base of knowledge enabling the student to pursue graduate work.

## *Representative Career Options*

developmental training coordinator  
substance abuse technician  
job placement specialist

independent living specialist  
case manager  
rehabilitation program coordinator

employment specialist  
residential service director

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Social Sciences

College of Education and Human Services  
(Bachelor of Science)

Academic Advisement Office  
122 Wham Education Building  
Telephone (618) 453-6340

Dr. Grant Miller, Program Coordinator  
Curriculum and Instruction  
327 Wham Education Building  
Telephone (618) 536-2441  
<http://ehs.siu.edu/ci/>

The B.S. degree program in Social Sciences with a history designation in the Department of Curriculum and Instruction meets the objectives of students preparing to teach in senior high schools. Graduates are licensed by the Illinois State Board of Education to teach grades 9–12 and to teach in public and private settings throughout the United States and in some foreign countries. Students will take course work in history, political science, economics, geography, psychology, and sociology.

SIU students seeking Illinois licensure must apply for licensure through the College of Education and Human Services Office of Teacher Education and must meet licensure requirements in effect at the time of their graduation. Licensure requirements are determined by the Illinois State Board of Education and are subject to change. Teacher licensure candidates are urged to consult the current SIU Carbondale Undergraduate Catalog and materials published by the SIU College of Education and Human Services Office of Teacher Education for updates to Illinois teacher licensure requirements.

## *Social Science as a Major*

The B.S. degree program with a history designation in social sciences education will prepare students to teach social studies in senior high schools. An endorsement in political science, psychology, economics, geography, or sociology may be added. Students will have many opportunities to observe and work with young people in classrooms during the three semesters prior to student teaching.

Students should be aware of requirements for entrance into the Teacher Education Program listed in the SIU Carbondale Undergraduate Catalog.

## *Transfer Students*

Transfer students planning to complete the Teacher Education Program are encouraged to contact the College of Education and Human Services, office of Teacher Education Program at least one semester prior to enrolling at SIU Carbondale.

## *Representative Career Options*

High School Social Studies Teacher

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Social Work

College of Education and Human Services  
School of Social Work  
(Bachelor of Science)

Academic Advisement Office  
122 Wham Building  
Telephone (618) 453-1235 or (618) 453-6340  
Email: [sswundergrad@siu.edu](mailto:sswundergrad@siu.edu)  
<http://www.siu.edu/~socwork/index.html>

The B.S. degree program in social work meets the objectives of students with career interests in the human services field. Positions in child welfare, gerontology, mental health, health services, women's programs, and public and private social service agencies are typically available to graduates.

The curriculum provides an interdisciplinary approach to understanding man in contemporary society, basic social problems, and some of the issues associated with the prevention and treatment of these problems. Students are helped to understand the principles and basic skills employed in developing and delivering services to individuals, families, groups, and communities. Students are prepared for direct service practice in both rural and urban settings.

## *Representative Career Options*

Social worker  
residential welfare facilitator  
cooperative extension service worker  
community planning and redevelopment expert  
outreach worker  
activities director

social welfare aide  
employment aide  
alcoholism and drug addiction counselor  
probation and parole officer  
residential care worker

casework manager  
recreation worker  
child placement agent  
case aide  
mental health worker

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Sociology

College of Liberal Arts  
(Bachelor of Arts)

Dr. William F. Danaher, Chair  
3384 Faner Hall  
Telephone (618) 453-2494  
cola.siu.edu/sociology/

The B.A. degree program in sociology meets the objectives of students considering employment in a wide range of organizations, from businesses to research institutes to social service agencies. A degree in sociology can also prepare students for graduate work in law, social work, public administration, rehabilitation, library science, and administration of justice, as well as sociology.

Sociology is the science of society. It studies how human groups, institutions, and social movements shape people's lives. Because sociology prepares students to think and act critically in the practical details of life, sociology students study such topics as the city, juvenile delinquency, marriage and the family, sex-roles, criminology, social change, complex organizations, power, and social inequality. Training in sociology is basic both to creative living and to such practical tasks as the development and effective working of businesses, families, community service agencies, political movements and parties, churches, social clubs, government, industry, and schools.

## *Sociology as a Major*

The Department of Sociology offers two alternative plans of study for completion of its major.

*General sociology* is for those seeking a broad academic background in sociology and is usually chosen by those who want a general liberal arts education in the social sciences or those anticipating graduate study in social science.

*Applied sociology* combines the general program in sociology with individually planned programs built around applied courses and fieldwork experience to give students actual experience in a variety of applied settings and to enhance mastery of specific skills sought by employers.

## *Representative Career Options*

Administrative aide (government)  
corrections/parole officer  
advertising agent  
lawyer  
public survey analyst  
personnel officer

business management officer  
community relations personnel  
marketing researcher  
health care researcher  
teacher  
social service worker

child care worker  
journalist  
labor relations specialist  
health services manager  
urban planner

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Spanish

College of Liberal Arts  
(B.A. Languages, Cultures & International Studies)  
(Specialization in Spanish with or without K-12 Teaching License)  
(Minor in Spanish)

Dimitrios Karayiannis, Section Head & Advisor  
Department of Languages, Cultures, and International Trade  
2027 Faner Hall  
Telephone: (618) 453-5425  
E-mail: dimitrio@siu.edu  
<http://cola.siu.edu/languages/>

Students in the Spanish specialization will gain advanced-level language proficiency and knowledge of the rich history, culture, and literature of people who speak Spanish. Students will learn how to think critically across cultures through analysis of beliefs, media, customs, and artifacts. In the course of their language study, students will gain the ability to discuss how and why Spanish differs from English, helping them to understand how language works in general and how English and Spanish work in particular. The Spanish specialization is flexible enough to allow students to study a second field as well, widening their intellectual and career horizons still further.

Spanish students may choose to enter the Teacher Education Program in conjunction with the College of Education and Human Services and pursue a K-12 teaching license in the State of Illinois. Students doing so may choose to earn a B.A. through the College of Liberal Arts or a B.S. through the College of Education and Human Services.

Students with expertise in Spanish should take a placement test to help them sign up for the proper class. A free online placement test is available at <http://webcape.byuhtsrc.org>. Students who have successfully completed one year of Spanish in high school should normally start at the second semester level; students who have completed two years should normally start at the third semester.

Unit credit (without grade) on the basis of proficiency may be obtained through the Department in Spanish. This may be accomplished by taking a validating course or by examination. Basic language skills courses taken at SIU, up to and including 320B, may serve as validating courses. Upon receiving a grade of A or B in a validating course, students may be granted validating credit for up to two of the immediately preceding basic skills courses. Credit through examination can be done by CLEP examination which is offered by the University Testing Services.

## *Spanish as a Major Specialization (without K-12 teaching licensure)*

A specialization in Spanish consists of 33 semester hours in courses above 100 level, including SPAN 201, 320, and at least two 400-level courses plus 21 hours of courses at the 300 or 400-level. At least one literature course, one culture course, and one writing intensive course must be taken. Transfer students who majored in Spanish must complete a minimum of 12 semester hours in language courses, including at least one 300 or 400-level Spanish course, at SIU Carbondale.

## *Spanish as a Major Specialization (with K-12 teaching licensure)*

A specialization in Spanish consists of 33 semester hours in courses above 100 level, including SPAN 201, 320, and at least two 400-level courses plus 18 hours of courses at the 300 or 400-level. At least one literature course, one culture course (including 370), and one writing intensive course must be taken. Transfer students who majored in Spanish must complete a minimum of 12 semester hours in language courses, including at least one 300 or 400-level Spanish course, at SIU Carbondale. Students must also pass oral and written language proficiency exams before they undertake their professional semester of student teaching off-campus.

## *Spanish as a Minor*

A minor in Spanish consists of 18 semester hours in courses above the 100 level. At least three hours must be taken in a regularly scheduled 300 or 400-level course at SIU Carbondale.

## *Representative Career Options*

Expertise in a foreign language & culture prepares one for a range of careers in the global economy, including international business, governmental or NGO work in international affairs, and work in the US for companies or agencies whose clients speak a language other than English (including customer relations, public service, and the tourism industry). Foreign language study prepares one for teaching careers: for K-12 teaching, our Teaching Education Program is ideal; for college teaching graduate study will be required. Language study improves linguistic and analytical skills helpful for most careers and for graduate study.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Special Education

(Learning Behavior Specialist I)

College of Education and Human Services  
(Bachelor of Science)

Dr. Carl Flowers, Interim Chair  
223 Wham Education Building  
Telephone (618) 453-2311  
<http://ehs.siu.edu/cqmse/undergraduate/>  
Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340

The B.S. degree program in special education meets the objectives of students preparing to work with children with specific learning disabilities, emotional and behavioral disorders, mental retardation, autism, traumatic brain injury, orthopedic or other health impairment. Students will complete a program leading to licensure as a Learning Behavior Specialist I (LBSI).

## *Special Education as a Major*

The teacher education program is a professional education sequence that culminates in a semester of student teaching. The special education core is designed to give students a thorough overview of the field, beginning with an introductory course. After that comes study in assessment, general procedures, functional curriculum, behavior management, academic methods, secondary programming, and home-school coordination in special education, followed by child psychology and psychopathology or human behavior and mental health. Other courses prepare students to teach reading, mathematics, and instruction of other content areas.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Technical Resource Management

(Formerly Advanced Technical Studies)  
College of Applied Sciences and Arts  
(Bachelor of Science)

Dr. Sam Chung, Director  
School of Information Systems and Applied Technologies  
106 Applied Sciences and Arts Building  
Telephone: (618) 453-7253  
isat.siu.edu/trm

Lisa Lindhorst, Academic Advisor  
Telephone: (618) 453-7281  
E-mail: lisalind@siu.edu

The Bachelor of Science degree program in Technical Resource Management (TRM) is designed specifically for the individual who has entered a career path for which a traditional baccalaureate degree is not available. The degree program is a flexible, individually designed program of study emphasizing technical leadership and supervision for students with a broad range of technical education, interests, and experience. It is ideally suited for graduates of occupational training programs in accredited institutions of higher education.

The Technical Resource Management program has a long history of serving students from community colleges throughout Illinois. A number of Illinois community college programs have transfer agreements with the TRM program. Such agreements are designed to help students prepare for transfer into the Technical Resource Management program at Southern Illinois University Carbondale by outlining the most efficient academic plan for a particular technical discipline. To determine whether a community college program has an agreement with TRM, contact the community college or the School of Information Systems & Applied Technologies.

Students who are interested in pursuing a degree in Technical Resource Management are encouraged to contact a program representative as early as the first semester at their community college. For more information, contact the School of Information Systems & Applied Technologies.

## *Representative Career Options*

Supervisor  
construction foreman  
technical manager

team leader  
project manager

district sales and service manager  
project coordinator

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Theater

(Design/Tech Specialization)  
College of Liberal Arts  
(Bachelor of Arts)

Jay Lewis, Academic Advisor  
2249 Communications Building  
Telephone (618) 453-8114  
<http://theater.siu.edu/>

The SIUC Department of Theater is an accredited institutional member of the National Association of Schools of Theater. The Department of Theater blends scholarship and practice into an academically based theater experience. The B.A. degree program in theater meets the objectives of students preparing for careers in professional, educational, or community theater, as well as establishing a solid academic foundation for many complementary fields. The theater program provides comprehensive course work in performance, directing, play writing, and design.

Courses in acting, voice, movement, directing, theater history, dramatic literature, playwriting, production design, and technical theater, are augmented by an extensive production schedule in two on-campus theaters. Courses in theater history, dramatic theory, and criticism, and specialized courses, such as children's theater and theater management, complement the program. The production schedule is extensive enough to allow students to design sets, lights, and costumes and to write, act, and direct for these productions. Seminars in dramaturgy and American theater, coordinated with ongoing research projects and visits of artists-in-residence, enhance the total experience.

## *Theater as a Major*

During the academic year, four productions: three plays, one opera or musical, are performed in the McLeod Theater. Numerous original one-act plays and other shows are produced in the Christian H. Moe Laboratory Theater.

The heavy production schedule provides many opportunities for practical experience in all aspects of theater. The Department of Theater also offers the M.F.A. degree with specializations in design, playwriting and directing. The Department of Speech Communication sponsors doctoral studies in theater.

No minor is required. Scholarships are available.

## *Representative Career Options*

Costume designer  
lighting technician  
cutter  
makeup specialist  
theater instructor  
sales

sound designer  
stage carpenter  
draper  
actor/actress  
scene designer  
speech writer

draftsman  
seamstress  
choreographer  
publicist  
playwright  
lawyer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Theater

(Performance Specialization)  
College of Liberal Arts  
(Bachelor of Arts)

Jay Lewis, Academic Advisor  
2249 Communications Building  
Telephone (618) 453-8114  
<http://theater.siu.edu/>

The SIU Carbondale Department of Theater is an accredited institutional member of the National Association of Schools of Theater. The Department of Theater blends scholarship and practice into an academically based theater experience. The B.A. degree program in theater meets the objectives of students preparing for careers in professional, educational, or community theater, as well as establishing a solid academic foundation for many complementary fields. The theater program provides comprehensive course work in performance, directing, play writing, and design.

Courses in acting, voice, movement, directing, theater history, dramatic literature, playwriting, production design, and technical theater, are augmented by an extensive production schedule in two on-campus theaters. Courses in theater history, dramatic theory, and criticism, and specialized courses, such as children's theater and theater management, complement the program. The production schedule is extensive enough to allow students to design sets, lights, and costumes and to write, act, and direct for these productions. Seminars in dramaturgy and American theater, coordinated with ongoing research projects and visits of artists-in-residence, enhance the total experience.

## *Theater as a Major*

During the academic year, four productions: three plays, one opera or musical, are performed in the McLeod Theater. Numerous original one-act plays and other shows are produced in the Christian H. Moe Laboratory Theater.

The heavy production schedule provides many opportunities for practical experience in all aspects of theater. The Department of Theater also offers the M.F.A. degree with specializations in design, playwriting and directing. The Department of Speech Communication sponsors doctoral studies in theater.

No minor is required. Scholarships are available.

## *Representative Career Options*

Costume designer  
lighting technician  
cutter  
makeup specialist  
theater instructor  
sales

sound designer  
stage carpenter  
draper  
actor/actress  
scene designer  
speech writer

draftsman  
seamstress  
choreographer  
publicist  
playwright  
lawyer

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# University Studies

College of Liberal Arts  
(Bachelor of Arts)  
(Bachelor of Science)

Andrew Balkansky, Director  
134 Student Services Building  
Telephone (618) 453-4351

The B.A. and B.S. degree programs in university studies meet the objectives of students interested in designing multidisciplinary, interdisciplinary programs of study.

Since the university studies program does not have an established curriculum, students use the resources of the entire University. For example, students interested in arts management might combine fine arts courses with courses in or related to business, thereby gaining the necessary skills to manage a civic center or theater. Students planning to attend law school might elect to combine political science, philosophy, history, and business courses in preparation for the study of law. Other students choose a broad range of courses to complete a degree program.

After admission to the University, as undecided students or in a degree program, students interested in the university studies program should arrange an interview with a University Studies faculty adviser to determine eligibility. Students who meet the criteria can then be admitted to the program.

## *Major in University Studies*

\*All University Studies students are required to pass one composition course beyond the University Core Curriculum requirements, plus one writing intensive (WAC) course. The B.A. degree also requires completion of one year of a foreign language.

\*To complete the program, students must complete 42 semester hours at the senior level (300–400).

\*Students cannot exceed the program's prescribed limits on distribution of courses while in the program.

No more than 20 semester hours, in addition to University Core Curriculum requirements, may be taken in any department or school in a college.

No more than 40 semester hours, in addition to University Core Curriculum requirements, may be taken in any SIUC college or in its equivalent in an institution from which the student has transferred.

There is one exception to these limits. Students may take up to 54 hours in the College of Liberal Arts, provided that they do not exceed a total of 27 hours in any of the following areas: humanities, social sciences, and fine or performing arts.

\*Cannot be earned in conjunction with any other Bachelor's degree.

\*Students are required to be in good academic standing when entering the program, and maintain a grade point average of 2.0 or higher for all subsequent course work.

## *Representative Career Options*

Career opportunities vary based upon area(s) of concentration.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Workforce Education and Development

Career and Technical Education Teacher Licensure  
Business, Marketing and Computer Education Option  
College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340

Barbara Hagler, Coordinator  
212 Pulliam Hall  
Telephone (618) 453-3321  
<http://ehs.siu.edu/wed/>

The B.S. degree program in Workforce Education and Development with a business, marketing and computer education specialization leading to teacher certification meets the objectives of students preparing to teach office education, accounting, data processing, general business/consumer education, and marketing.

## *Representative Career Options*

You can prepare for licensure to teach grades 9–12 through this specialization in these teaching areas: accounting, basic business, business computer programming/systems, information technology, and marketing. Through this specialization you will also be qualified for instructional positions in career colleges, government agencies, and business and industry programs.

## *Applying to the SIUC Teacher Education Program*

After completing 30 hours of college credit, students in this program must apply to the Teacher Education Program. Consult the current SIU Carbondale Undergraduate Catalog for information about additional degree requirements.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Workforce Education and Development

Education, Training and Development Specialization  
College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340

Workforce Education and Development  
212 Pulliam Hall  
Telephone (618) 453-3321  
<http://ehs.siu.edu/wed/>

The B.S. degree program in Workforce Education and Development with an education, training and development specialization meets the objectives of technically trained students for training and development positions in education, business, industry, labor, government, and the military.

Corporations spend billions of dollars each year to train their employees and develop their management staffs. Non-business organizations, charitable organizations, schools, and universities are rapidly recognizing the need for trainers. Graduates of our programs have been employed by public and private organizations to establish training programs for vocational, technical, and professional staff.

Added to the students' professional and technical training is University Core Curriculum courses (in science, social science, humanities, and communications) and professional education courses. Students must complete work experiences and internships tailored to their specific career goals.

This specialization is *not* a licensure program for teaching at the secondary level.

## *Special Note to Community College Personnel*

Transfer students who have completed a two-year associate in applied science (A.A.S.) degree program may qualify to apply for our Capstone Option, in which students make a contract with SIUC and the Department of Workforce Education and Development that will give them maximum credit for transfer work and guarantee their graduation with the completion of no more than 60 additional semester hours of work. Credit hours may also be awarded for work experience and for other post-secondary vocational training and course work. Students' Capstone Option applications must be on file by the end of their first semester at SIUC. Additional qualification requirements are detailed under Capstone Option.

## *Representative Career Options*

Training and development positions in education, business, industry, labor, government, and the military.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Workforce Education and Development

Career and Technical Education Teacher Licensure  
Family and Consumer Science Educational Services Option  
College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340

Terre Eversden, Ph.D., CFCS  
212 Pulliam Hall  
Telephone (618) 453-3321  
<http://ehs.siu.edu/wed/>

The B.S. degree program in Workforce Education and Development with the Family and Consumer Sciences-Educational Services option meets the objectives of students preparing for positions in agencies and businesses that develop informational materials, demonstrate products, coordinate conferences, and work with individual customers or clients.

Family and Consumer Sciences is concerned with human development, parenting, interpersonal relations, values, resource management, nutrition, and consumerism. Opportunities are found not only in kitchens, nutrition labs, the fashion industry, and small specialty boutiques, but also in business and government offices, in juvenile services and programs for abused children, in community health agencies, and in public and private organizations that work to improve the quality of life.

## *Representative Career Options*

Graduates of this specialization move into business-related and communication careers that combine knowledge of Family and Consumer Sciences with teaching skills. They may work in product development kitchens and laboratories of food companies, in consumer information offices, and in advertising or publicity departments for the promotion of products; as writers and educators of educational materials or as free-lance consultants. Graduates work in government, community health agencies, and in public and private agencies to improve the quality of life for individuals and families.

Teacher licensure not required for this specialization.

Graduate degrees available.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.



# Workforce Education and Development

Instructional Systems Designer/Curriculum Developer Program of Study  
in Education, Training, and Development

College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building

Telephone (618) 453-6340  
<http://ehs.siu.edu/wed/>

Decisions about instructional design involve selecting teaching methods and strategies that fit learning needs and instructional objectives. Such decisions not only require a basic knowledge of teaching methods but also an understanding of how to plan and design a learning experience. The instructional systems design specialist program prepares individuals for careers as instructional designers, curriculum and instructional writers, and instruction and learning specialists. Entry-level jobs are filled by college graduates who have completed courses in a wide range of fields. Experienced jobs are filled by college graduates who also have related technical work experience in a variety of occupational areas.

## *Representative Career Options*

Instructional designers

curriculum and instructional writers

instruction and learning specialists

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Workforce Education and Development

Instruction and Learning Specialist Program of Study in Education, Training and Development  
College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340  
<http://ehs.siu.edu/wed/>

The instruction and learning specialist program prepares individuals for a wide variety of occupations in adult training and education. Stressing strategic approaches to learning as integral part of working is driven by the cognitive sciences and recent research in adult learning. Instruction and learning specialists facilitate this approach. Entry-level jobs are filled by college graduates who have completed courses in a wide range of fields. Experienced jobs are filled by college graduates who also have related technical work experience in a variety of occupational areas.

## *Representative Career Options*

training specialist

industry learning consultant

community education advisor

instruction consultant

technical trainer

patient educator

clinical educator

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Workforce Education and Development

Human Resources Specialist Program of Study in Education, Training and Development  
College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340  
<http://ehs.siu.edu/wed/>

The human resource development specialist program prepares individuals for a wide variety of occupations in the human resources field. Attracting the most qualified employees and matching them to the jobs for which they are best suited is important for the success of any organization. However, many enterprises are too large to permit close contact between top management and workers. Human resource development specialists provide this link. Entry-level jobs are filled by college graduates who have completed courses in a wide range of fields.

## *Representative Career Options*

human resource information systems specialist  
job analyst; recruiter; human resource assistant

employee development

staffing specialist

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Workforce Education and Development

Technology Education Teacher Licensure  
(Dual Degree: Automotive Technology & Workforce Ed & Development)

College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340

212 Pulliam Hall  
Telephone (618) 453-3321  
<http://ehs.siu.edu/wed/>  
Contact: Barbara Hagler, Coordinator

This dual degree program prepares students for automotive technology teaching positions in grades 9-12. Teachers prepared through this program instruct in comprehensive high schools or in one of the area career centers in approved automotive or industrial/technical programs. The primary purpose of technology education in the comprehensive high school is to promote and develop technological literacy. Upon completion of this teacher education program, students are awarded the Career and Technical Education Teacher Licensure issued by the Illinois State Educator Preparation and License Board (SEPLB).

SIU Carbondale Teacher Education Program admission requirements and information can be found online at: [http://ehs.siu.edu/tep/undergraduate/apply-to-the-teacher-education-program/admission\\_requirements.php](http://ehs.siu.edu/tep/undergraduate/apply-to-the-teacher-education-program/admission_requirements.php). Separate admission criteria are used for entry into the Automotive Technology Program.

Students enrolled in the Automotive Technology / Technology Education teacher licensure program would be interested in membership in the International Technology Education Association and the Association for Career and Technical education with its Division of Technology and/or Division of trade and Industrial Education. Within the state, students would be interested in the Illinois Association for Career and Technical Education. Automotive Professional Associations: Illinois College Automotive Instructors Associations, North American Council of Automotive Teachers. NOTE: The Illinois College of Automotive Instructors Association has the word college in the name but welcome high school instructors.

## *Representative Career Options*

automotive technology teacher

technology teacher

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Workforce Education and Development

Career and Technical Education Teacher Licensure  
Technology Education Option

College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340

212 Pulliam Hall  
Telephone (618) 453-3321  
<http://ehs.siu.edu/wed/>  
Contact: Barbara Hagler, Coordinator

This program prepares students for technology education and industrial/technical teaching positions in grades 9-12 and at the community college level. Teachers prepared through this program instruct in comprehensive high schools or in one of the area career centers in approved industrial/technical programs. The primary purpose of technology education in the comprehensive high school is to promote and develop technological literacy. Although the skills may differ according to the program emphasis, the Illinois Plan for Industrial Technology Education identifies these content areas: communication technology, production technology, transportation technology, and energy utilization technology. Some typically titled courses or programs in Illinois schools and career centers relating to technology education (industrial/technical) are:

Architectural drafting	Auto body	Electricity/electronics
Machine drafting	Building trades/construction	Heating/air conditioning
Graphic communications	Computer maintenance	Welding and fabrication
Automotive technology	Principles of technology	

Upon completion of this program, students are awarded the teaching licensure issued by the Illinois State Educator Preparation and License Board (SEPLB).

Students enrolled in the technology education teacher licensure program would be interested in membership in the International Technology Education Association and the Association for Career and Technical Education with its Division of Technology and/or Division of Trade and Industrial Education. Within the state, students would be interested in the Illinois Association for Career and Technical Education.

The technology education (industrial and technical) teacher licensure course of study is an articulated program beginning with an Associate of Applied Science Degree in an industrial technology area offered at Illinois community colleges. Once the AAS Degree is obtained, the student will enter the SIU Carbondale Capstone Program. SIU Carbondale Teacher Education Program admission requirements and information can be found online at: <http://web.coehs.siu.edu/public/TEP/index.htm>.

## *Representative Career Options*

technology teacher at both secondary and community college level  
industrial/technical content teacher at the secondary and community college level

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Workforce Education and Development

Career and Technical Education Teacher Licensure  
Health Careers Option

College of Education and Human Services  
(Bachelor of Science)

Chief Academic Advisor  
122 Wham Education Building  
Telephone (618) 453-6340

212 Pulliam Hall  
Telephone (618) 453-3321  
<http://ehs.siu.edu/wed/>  
Contact: Barbara Hagler, Coordinator

The focus of the Health Careers (health occupations) Teacher Licensure Program is to prepare teachers who will design curriculum and deliver instruction in a comprehensive high school or area career center health occupations program. The nursing sequence is the most common health occupations program at the secondary level. In this program, health occupations teachers develop students to successfully demonstrate required skills and knowledge to pass the state administered exam to become certified nurse assistants (CNA). This same model is used in other health career disciplines teaching the skills specific to their discipline. Upon completion of this program, students are awarded the Teacher Licensure issued by the Illinois State Educator Preparation and License Board (SEPLB).

Students enrolled in the health careers Teacher Licensure Program would be interested in membership in the Health Occupations Division of the Association for Career and Technical Education and in the Illinois Association for Career and technical Education.

The health careers teacher licensure course of study is an articulated program beginning with an Associate Degree Nursing (AND) Program offered at Illinois community colleges. Once nursing licensure is obtained, the student will enter the SIU Carbondale Capstone Program. SIUC Teacher Education Program admission requirements and information can be found online at: <http://web.coehs.siu.edu/public/TEP/index.htm>.

## *Representative Career Options*

high school health occupations teacher

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.

# Zoology

College of Science  
(Bachelor of Science)  
(Bachelor of Arts)

Dr. Carey Krajewski, Chair  
351 Life Science II  
Telephone (618) 536-2314  
E-mail: [zoology@zoology.siu.edu](mailto:zoology@zoology.siu.edu)  
[www.zoology.siu.edu](http://www.zoology.siu.edu)

A student majoring in Zoology may work toward either a Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) degree. The B.A. provides an opportunity for a broad, liberal arts education by allowing students to take 18-25 hours of courses in areas of interest outside the major. It is appropriate for those who desire a strong background in zoology, but are pursuing nonscience careers in business, law, journalism, zookeeping, or other fields.

Students seeking a Zoology B.S. must choose one of five specializations: animal biology, environmental biology, fisheries biology and aquatic conservation, pre-veterinary medicine, or wildlife biology and conservation. The Animal Biology track is designed for students contemplating graduate studies of animal behavior or ecology, biodiversity, evolution, or systematics. The Environmental Biology track is designed for students interested in biological approaches to environmental quality. Fisheries Biology and Aquatic Conservation is designed for students whose interest is in the ecology and management of fishes and aquatic ecosystems (e.g., fisheries management, aquaculture, aquatic ecosystem management, or graduate studies in applied fish biology); course requirements are those necessary for certification as a Fisheries Professional Associate by the American Fisheries Society. The Pre-Veterinary Science track is designed for majors planning to enter veterinary school or other animal-health jobs. Wildlife Biology emphasizes wildlife ecology, management, and conservation; course requirements include those specified by The Wildlife Society's certification program. Zoology majors develop an individualized curriculum, including a senior project for those in the BS program, in consultation with a faculty mentor.

## *Representative Career Options*

Options will vary depending upon chosen specialization.

---

*NOTE:* Specific degree requirements and further information may be located within the current SIU Carbondale Undergraduate Catalog at <http://registrar.siu.edu/pdf/ugradcatalog1617.pdf>.