

## Animal Science

The Animal Science program is a part of the School of Agricultural Sciences. SIU Carbondale's nationally known animal science faculty is dedicated to teaching and to student development. Animal Science teachers at SIU Carbondale represent the range of topics in animal agriculture. There are specialists in animal genetics, reproductive physiology, nutrition and management for each of the species, international food programs, and veterinary medicine. The animal science teachers bring their exciting experience with them into every class they teach. The combination of the visionary and the practical makes a strong and vital faculty for students who want the best professional education they can get.

The program offers three specializations leading to a B.S. degree: production, equine science, and science and pre-veterinary. The latter allows qualified students to transfer to accredited colleges of veterinary medicine prior to receiving the Bachelor of Science degree in Animal Science.

Most of the students' courses for the major will be in animal science, but students can also select courses from horticulture, forestry, agricultural education, agribusiness economics, biology, plant biology, microbiology, zoology, chemistry, geography, geology, physics, physiology, and fermentation. Other classes help the student meet basic University requirements in a way that will strengthen their abilities to think, understand, and communicate about the social, physical, and natural sciences important to animal scientists. Other programs offer supplemental coursework in physiology, genetics, nutrition, animal behavior, and other topics that many animal science students find valuable.

The animal science major is backed up with extensive facilities for several species of livestock, and every student has the opportunity to get involved in work, research, or observation at the University Farm. The core of our animal science program is the 2,000-acre farm system, which includes centers for beef, dairy, equine, and swine.

Hundreds of distinct occupations exist within the animal agriculture field. There are opportunities in animal production work at farm operations, ranches, feedlots, stables, and zoos. There are opportunities in feed and meatpacking industries, equipment suppliers, government and international agencies, veterinary medicine, and numerous other supporting industries that serve producers. Within each of these areas, animal science graduates are employed in such jobs as sales, service, education, communication, finance, and business management. There may be extra expenses for field trips, manuals, or supplies in some courses.

### Bachelor of Science (B.S.) in Animal Science Degree Requirements

Degree Requirements	Credit Hours
University Core Curriculum Requirements	39
To include MATH 108 or higher; CHEM 140A or higher; ZOO 118; ABE 204.	
Requirements for Major in Animal Science - Core Requirements	35
ANS 121, ANS 122, ANS 215, ANS 315, ANS 331, ANS 332, ANS 337, ANS 381, ANS 431, plus one course from ANS 409, ANS 430, ANS 465, or ANS 485 <sup>1</sup>	28
CALPS electives, excluding ANS <sup>2</sup>	7
Specialization Requirements - Fulfill the requirements of one of the following specializations: Production, Equine Science, or Science and Pre-Veterinary.	46

Degree Requirements	Credit Hours
Total	120

<sup>1</sup> ANS 409 is required for the Equine Science specialization.

<sup>2</sup> Any subject in CALPS that is not Animal Science and not required for the major.

### **B.S. Animal Science - Equine Science Specialization Degree Requirements**

Degree Requirements	Credit Hours
CHEM 140A or higher (to account for UCC requirement)	1
CHEM 140B or higher	4
ZOOL 118 (to account for UCC requirements)	1
ABE 350 or ABE 351	3
ANS 219, ANS 309, ANS 314, ANS 419, ANS 490 <sup>1</sup>	22
4 credit hours from ANS 112, ANS 212, ANS 312, or ANS 412	4
CALPS Electives	1
ANS Electives 3xx/4xx level course	10
Total	46

<sup>1</sup> ANS 409 is a required managerial course counted in major block.

### **B.S. Animal Science - Production Specialization Degree Requirements**

Degree Requirements	Credit Hours
CHEM 140A or higher (to account for UCC requirement)	1
CHEM 140B or higher	4
ZOOL 118 (to account for UCC requirement)	1
ANS 415 and one additional course from ANS 409, ANS 430, ANS 465, or ANS 485	8
ANS 300- or 400-level courses	9
ABE 350 or ABE 351	3
CAPLS Electives	4

Degree Requirements	Credit Hours
Electives	16
Total	46

### **B.S. Animal Science - Science and Pre-Veterinary Specialization Degree Requirements**

Degree Requirements	Credit Hours
ZOOL 118 (to account for UCC requirement)	1
Substitute CHEM 200, CHEM 201, CHEM 202 for CHEM 140A	2
MATH 109	3
CHEM 210, CHEM 211, CHEM 212, CHEM 340, CHEM 341, CHEM 350	13
PHYS 203A,B and PHYS 253A,B	8
BIOL 211	4
MICR 301	4
ANS electives, 3xx/4xx level course	8
CALPS Electives	1
Electives	2
Total	46

### **Animal Science Minor**

The minor in Animal Science requires 16 credit hours, of which at least 12 credit hours must be earned at Southern Illinois University Carbondale. The Animal Science minor consists of set tracks related to Animal Science and is approved by the advisor/faculty members. An advisor within the program must be consulted before selecting this field as a minor. This minor is not awarded to students who have a major in Animal Science.

### **Equine Studies Minor**

The minor in Equine Studies requires 16 credit hours, of which at least 12 credit hours must be earned at Southern Illinois University Carbondale. Equine Studies minor consists of ANS 219, ANS 309, ANS 409 and 5 additional ANS courses approved by the Animal Science advisor or faculty member. An advisor within the program must be consulted before selecting this field as a minor. This minor is not awarded to students who have a major in Animal Science.

## **Companion Animal Nutrition Non-Degree Diploma**

The non-degree diploma program is intended to enhance the marketability and training of students who wish to pursue careers in Animal and Veterinary management and sciences. Enrollment in the Animal Science major is not required to complete the program. While the diploma itself does not lead to a degree, courses can be counted in the Animal Science specializations as electives. Student not wishing to pursue a baccalaureate must complete the unclassified undergraduate application.

Requirements for non-degree diploma in Companion Animal Nutrition: 18 credit hours.

Courses: ANS 115, ANS 215, ANS 316, ANS 365, ANS 445, ANS 481.

## **Capstone Option for Transfer Students**

The SIU Carbondale Capstone Option may be available to eligible students who have earned an associates degree or the equivalent. The Capstone Option reduces the University Core Curriculum requirements from 39 to 30 hours, therefore reducing the time to degree completion. See the Capstone Option section for more information on this option.

## **Technology Fee**

The College of Agricultural, Life, and Physical Sciences assesses undergraduate majors a technology fee of \$4.58 per credit hour up to 12 credit hours. The fee is charged Fall and Spring semester.

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