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 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 pre-veterinary medicine. 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’ agriculture courses for the major will be in animal science, but students can also select courses from agronomy, horticulture, human nutrition and dietetics, forestry, agricultural education, agricultural mechanization, agribusiness economics, and farm management. 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 departments 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.

Technology Fee

The School of Agricultural 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 semesters.

Bachelor of Science Degree in Animal Science

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Core Curriculum Requirements</td>
<td>39</td>
</tr>
<tr>
<td>To include MATH 108 and MATH 109, or MATH 111, or MATH 150; CHEM 140A or higher; ZOOL 118; BIOL 211; ABE 204.</td>
<td></td>
</tr>
<tr>
<td>Requirements for Major in Animal Science - Core Requirements</td>
<td>35</td>
</tr>
</tbody>
</table>
### Degree Requirements

<table>
<thead>
<tr>
<th>Course Details</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>28</td>
</tr>
<tr>
<td>Agriculture electives, excluding ANS</td>
<td>5</td>
</tr>
<tr>
<td>Specialization Requirements - Fulfill the requirements of one of the following specializations: Production, Equine, or Pre-Veterinary Medicine.</td>
<td>46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

### Production Specialization

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 140B or higher</td>
<td>4</td>
</tr>
<tr>
<td>ANS 415 and one additional course from ANS 409, ANS 430, ANS 465, or ANS 485</td>
<td>8</td>
</tr>
<tr>
<td>ANS 300- or 400-level courses</td>
<td>9</td>
</tr>
<tr>
<td>ABE 350 or ABE 351</td>
<td>3</td>
</tr>
<tr>
<td>AG Electives</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46</strong></td>
</tr>
</tbody>
</table>

### Equine Science Specialization

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 140B or Higher</td>
<td>4</td>
</tr>
<tr>
<td>ABE 350 or ABE 351</td>
<td>3</td>
</tr>
<tr>
<td>ANS 219, ANS 309, ANS 314, ANS 409, ANS 419, ANS 490</td>
<td>26</td>
</tr>
<tr>
<td>4 credit hours from ANS 112, ANS 212, ANS 312, or ANS 412</td>
<td>4</td>
</tr>
<tr>
<td>AG Electives</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46</strong></td>
</tr>
</tbody>
</table>
### Pre-Veterinary Medicine Specialization

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substitute CHEM 200, CHEM 201, CHEM 202 for CHEM 140A</td>
<td>1</td>
</tr>
<tr>
<td>MATH 109</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 210, CHEM 211, CHEM 212, CHEM 340, CHEM 341, CHEM 350</td>
<td>13</td>
</tr>
<tr>
<td>PHYS 203A,B and PHYS 253A,B</td>
<td>8</td>
</tr>
<tr>
<td>BIOL 211</td>
<td>4</td>
</tr>
<tr>
<td>MICR 301</td>
<td>4</td>
</tr>
<tr>
<td>ANS electives, including one additional 300- or 400-level course</td>
<td>8</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
</tr>
</tbody>
</table>

### Minor in Animal Science or Equine Studies

The minor in Animal Science or Equine Studies requires 16 semester hours, of which at least 12 must be earned at Southern Illinois University Carbondale. An advisor within the department must be consulted before selecting this field as a minor (ANS 112, ANS 123C, ANS 212, ANS 219, ANS 309, ANS 312, ANS 314, ANS 315, ANS 337, ANS 390, ANS 409, and ANS 412). These minors are not awarded to students who have a major in Animal Science.

### Non-Degree Diploma in Companion Animal Nutrition

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.
subsequently, students are assured that necessary adjustments will be made so that no additional time is required of them.