ANIMAL SCIENCE - BS, SCIENCE OPTION

This curriculum is designed to provide scientific expertise in chemistry, biological and physical sciences and mathematics and is recommended for students considering entry into the veterinary, medical or allied health field, or the graduate program of their choice. This option provides a strong background for graduate study in a wide variety of disciplines. Animal scientists graduating with a Bachelor of Science degree in this option who do not enter graduate or professional school find employment in rewarding careers in the pharmaceutical, clinical and food-related industries. Students may concentrate on an emphasis area within this option, including the following.

Pre-Professional

Students planning to pursue a career in veterinary medicine can complete all course requirements for admission to the professional curriculum in this emphasis. Students gain experience working with animals through direct contact in laboratory courses and directed field study. Students acquire knowledge of animal systems and animal behavior principles through coursework and interaction with livestock industry leaders. Students are also prepared to seek admission to the professional curricula in medicine, dentistry, pharmacy, optometry and physical therapy.

Pre-graduate Studies

This emphasis prepares students to pursue a Master of Science, Master of Agriculture or Doctor of Philosophy degree. Possible graduate programs include animal behavior, animal breeding, biochemistry, cellular and molecular biology, meats, dairy science, food science and technology, genetics, growth biology, nutrition and reproductive physiology. Experience gained through honors courses, internships, special problems courses and research laboratories helps the student identify specific disciplines of interest for graduate study. Students with advanced degrees are employed as university professors, research scientists or technicians, extension livestock specialists and technical representatives for industry.

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
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<tbody>
<tr>
<td>ANSC</td>
<td>Animal Science Core Curriculum</td>
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<tr>
<td>AGLS 101</td>
<td>Modern Agricultural Systems and Renewable Natural Resources</td>
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<td>ANSC 108</td>
<td>General Animal Science</td>
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<tr>
<td>ANSC 303</td>
<td>Principles of Animal Nutrition</td>
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<td>Animal Breeding</td>
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<td>ANSC 307</td>
<td>Meats</td>
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<td>ANSC 318</td>
<td>Feeds and Feeding</td>
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<td>ANSC 433</td>
<td>Reproduction in Farm Animals</td>
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<td>ANSC 481</td>
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<td>ANSC 406</td>
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<td>ANSC 412</td>
<td>Swine Production and Management</td>
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<td>ANSC 414</td>
<td>Sheep and Goat Production and Management</td>
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<td>ANSC 420</td>
<td>Equine Production and Management</td>
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<td>ANSC 447</td>
<td>Advanced Meat Science and Technology</td>
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<td>DASC 418</td>
<td>Feeding and Management of Dairy Cattle</td>
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<tr>
<td>GENE 301</td>
<td>Comprehensive Genetics</td>
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<td>STAT 301</td>
<td>Introduction to Biometry</td>
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<td>BICH 410</td>
<td>Comprehensive Biochemistry I</td>
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<td>BICH 411</td>
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<td>BIOL 112</td>
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<td>CHEM 102</td>
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<td>CHEM 228</td>
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<td>VTPP 323</td>
<td>Animal Physiology or BIOL 3 or Integrated Human Anatomy and Physiology I</td>
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<tr>
<td>ENGL 104</td>
<td>Composition and Rhetoric</td>
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<tr>
<td>ENGL 210</td>
<td>Technical and Business Writing or COMM 203 or Public Speaking</td>
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<td>ANSC 107</td>
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<td>BIOL 111</td>
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<td>CHEM 101</td>
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<td>and Fundamentals of Chemistry Laboratory I</td>
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<td>ENGL 104</td>
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<tr>
<td>ENGL 210</td>
<td>Technical and Business Writing or COMM 203 or Public Speaking</td>
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<tr>
<td>Government/Political science electives (<a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science</a>)</td>
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<td>Social and Behavioral Science core course (<a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences</a>)</td>
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American History elective [link] 6

American History elective [link] 4

Language, Philosophy and Culture elective [link] 3

Mathematics elective [link] 6

Creative arts elective [link] 3

Foreign language requirement (see Foreign Language table)

International and cultural diversity courses 5

Writing-intensive courses 6

Total Semester Credit Hours 120

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1 Students are required to make a C or better for each of their courses in the major coursework area.

2 Students may choose to use general electives to complete a concentration in a pre-professional program, a pre-graduate study area, and/or a certificate program.

3 Credit by examination may be substituted for POLS 206 or POLS 207.

4 Certain courses in this University Core Curriculum category will fulfill credits toward the six-hour International and Cultural Diversity requirement.

5 Remaining international and cultural diversity (ICD) credits must be fulfilled if University Core Curriculum courses selected do not fulfill the six-hour ICD requirement.

6 All undergraduate students must take at least (2) specific courses in their major designated as writing intensive (W). To be chosen in consultation with your academic advisor.

**Foreign Language**

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
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<tbody>
<tr>
<td><strong>Option 1</strong></td>
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<td>Completed two years high school foreign language</td>
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<td><strong>Option 2</strong></td>
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<td>Select one of the following:</td>
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<tr>
<td>CLAS 101</td>
<td>Beginning Classical Greek I</td>
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<tr>
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<tr>
<td>CLAS 121</td>
<td>Beginning Latin I</td>
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<td>CLAS 122</td>
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<td>FREN 101</td>
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<td>GERM 101</td>
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<td>SPAN 101</td>
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