ANIMAL SCIENCE - BS, PRODUCTION/INDUSTRY OPTION

This curriculum prepares students for careers in animal-oriented agribusinesses. Other courses, in addition to animal science courses, include accounting, economics, genetics and management. A wide array of internships giving students invaluable experience in all phases of livestock production and related industries is available. Career opportunities include sales, management, public relations, marketing, quality control and education. Students may concentrate on an emphasis area within this option, including the following.

Beef Cattle

Students receive training that enables them to pursue careers in ranch management, feedlot management, pharmaceutical sales and other service-oriented livestock industries. Students are trained in all aspects of production, marketing and merchandising techniques for employment in the beef industry. The University Beef Cattle Center gives students hands-on experience.

Dairy

The focus of this emphasis area is to develop a well-rounded, knowledgeable student. Students have the opportunity to apply scientific principles, problem-solving methods, state-of-the-art techniques and information transfer to complex dairy production systems.

Equine

Designed for students with professional or vocational interests in horses and the horse industry. Coursework emphasizes equine nutrition, breeding, reproduction, health, management, training and judging. Lectures are reinforced with laboratories in which students work with horses. Graduates are well prepared for careers with horse production farms, stallion stations, performance and race training stables, breed associations, performance horse organizations, feed and pharmaceutical companies, county extension positions, and other industries and agencies related to the horse industry.

Meat

Students prepare for a career in the meats industry by taking meat science and processing and evaluation courses. Students also can conduct research through special problems courses and can gain valuable work experience on campus in the Meat Science Section or the Rosenthal Meat Science and Technology Center or off campus through internships or summer jobs. Job opportunities are available in packing, processing, retailing, purveying, food service, promotion, public relations and government regulatory agencies.

Sheep

Designed to prepare students for careers in the sheep and goat industries and in the associated wool and mohair industries, this emphasis gives students first-hand experience in sheep production and management practices, as well as procedures for processing and evaluating fleeces. Job opportunities are diverse and include flock management, marketing of lamb and fiber products, feed and pharmaceutical sales and county extension agent positions.

Swine

This emphasis area is designated for students planning to pursue a career in swine production or closely allied industries. Students are taught the principles of breeding and genetics, nutrition and feeding, animal health, environmental control and waste management as they relate to profitable swine production systems. These principles are reinforced by hands-on experience with the department's swine herd. Career paths include management of swine production units and technical service or sales for feed, pharmaceutical and breeding stock companies.

Program Requirements

First Year		
Fall		**Semester Credit Hours**
ANSC 101	Introductory Seminar for Animal Science	1
ANSC 107 & ANSC 108	General Animal Science and General Animal Science Laboratory	4
CHEM 119	Fundamentals of Chemistry I	4
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) [1]		3
Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics) [1]		3
	Semester Credit Hours	**15**
Spring		
ANSC 111	Animal Production Systems	3
ANSC 113	Farm Animal Biosystems	2
BIOL 107 or BIOL 111	Zoology or Introductory Biology I	4
Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication) [1]		3
Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics) [1]		3
	Semester Credit Hours	**15**
Second Year		
Fall		
ANSC 303/ NUTR 303	Principles of Animal Nutrition	3
CHEM 222	Elements of Organic and Biological Chemistry	3
Select one of the following:		3
AGEC 105	Introduction to Agricultural Economics	
ECON 202	Principles of Economics	
ECON 203	Principles of Economics	
Select one of the following:		3
ANSC 309	Applied Animal Record Keeping	
STAT 301	Introduction to Biometry	
STAT 302	Statistical Methods	
STAT 303	Statistical Methods	

American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) [1]		3
	Semester Credit Hours	**15**
Spring		
ACCT 209	Survey of Accounting Principles	3
ANSC 307/ FSTC 307	Meats	3
ANSC 333 & ANSC 334	Reproduction in Farm Animals and Reproduction in Farm Animals Laboratory	3
GENE 301	Comprehensive Genetics	3
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) [1]		3
	Semester Credit Hours	**15**
Third Year		
Fall		
ACCT 210	Survey of Managerial and Cost Accounting Principles	3
ANSC 305	Animal Breeding	3
ANSC 318	Animal Feeds and Feeding	3
Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) [1]		3
Government/Political science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science) [1]		3
	Semester Credit Hours	**15**
Spring		
ANSC 326/ FSTC 326 or BIOL 206	Food Bacteriology or Introductory Microbiology	3
Select one of the following:		3
AGEC 325	Principles of Farm and Ranch Management	
AGEC 340	Agribusiness Management	
MGMT 309	Survey of Management	
ANSC disciplinary focus [2]		4
Government/Political science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science) [1]		3
Directed elective [3]		3
	Semester Credit Hours	**16**
Summer		
Animal science experience [4]		0
ANSC 399	Animal Science Experience	
	Semester Credit Hours	**0**
Fourth Year		
Fall		
AGEC 330 or FINC 409	Financial Management in Agriculture or Survey of Finance Principles	3
ANSC disciplinary focus [2]		4
Agriculture elective [5]		3
Directed elective [3]		3
General elective		3
	Semester Credit Hours	**16**
Spring		
ANSC 498	Animal Science Capstone	4
Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication) [1]		3
Directed elective [3]		3
General elective		3
	Semester Credit Hours	**13**
	Total Semester Credit Hours	**120**

1. To be selected from the University Core Curriculum. The University Core Curriculum includes a requirement for 3 hours of International and Cultural Diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) and 3 hours of Cultural Discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/). Refer to the University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/) catalog page for a list of acceptable courses. A course satisfying another Core category, a college/department requirement or taken as a general elective can be used to satisfy these requirements. Select in consultation with an academic advisor.
2. Select from the following courses: ANSC 404, ANSC 406, ANSC 408, ANSC 412, ANSC 414, ANSC 420, ANSC 429, ANSC 434, ANSC 437, ANSC 447, ANSC 451; DASC 418. 8 total hours required.
3. Any ANSC (http://catalog.tamu.edu/undergraduate/course-descriptions/ansc/) course that is not fulfilling part of your "major coursework" category.
4. All students are required to complete an animal science experience in order to graduate. May include but is not limited to: undergraduate research, study abroad, internships, and competitive judging teams. To be selected in consultation with your academic advisor.
5. Any course taught within the College of Agriculture and Life Sciences.

Students are required to make a C or better in each of their courses in their major (ANSC) coursework area.

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

Maximum of 4hrs of ANSC 485 may be used in this program.

Maximum of 5hrs of ANSC 494 may be used in this program.