ANIMAL SCIENCE

The animal science major at North Dakota State University encompasses physiology, nutrition, genetics, reproduction, marketing, management and husbandry of livestock; the important scientific understanding for the utilization of animal products; and experiences necessary for leadership in, and advocacy for, industries that provide animals and animal products that benefit humans.

The Program

The Department of Animal Sciences offers degree programs in animal science, equine science, and veterinary technology. The faculty and staff conduct teaching, research and Extension programs to support production and utilization of many types of animals, including beef cattle, dairy cattle, sheep, swine and horses, as well as other managed animals, including those that provide other types of food and fiber, companion animals and animals in zoos.

The Curriculum

Five study options are available for the animal science major.

Animal Production, Management and Husbandry -- This option is designed for students wanting a background in the principles of animal management and husbandry. It includes broad training in animal husbandry, production and management. Employment opportunities include careers in livestock production, allied support fields and in technical support fields, including agricultural positions within the Cooperative Extension Service.

Animal Biomedical Science -- This option offers students a more scientific approach to animal science, preparing them for veterinary medicine, graduate research in animal science, teaching, food technology and the biotechnology industry. Students may receive an animal science degree while meeting academic requirements for application to veterinary schools.

Animal Agribusiness -- This option is designed for students desiring a background in the business and economic principles as they apply to the livestock industry. It leads to broad training in animal husbandry, production, business and management. Employment opportunities include careers in agribusiness, sales and marketing of livestock and products for the livestock industry, and a variety of public and private institutions which serve the business of animal agriculture.

Livestock Media -- This option offers students an opportunity to acquire skills in journalism, advertising and public relations in addition to the fundamentals of animal science. Employment opportunities include working for a variety of media outlets such as print and virtual media, TV, radio, magazines, breed associations, or commodity organizations, as well as positions involved in public relations in the livestock industry.

Meat Science -- This option provides the opportunity to emphasize knowledge about the science concerning muscle biology and evaluation and processing of red meat. This option prepares students for a broad variety of career opportunities in the meat industry, including management, sales, meat inspection and meat marketing.

High School Preparation

High school preparation should include course work in biology, chemistry, English and algebra.

Career Opportunities

Animal science students qualify for many varied occupations that involve animal and agriculture business, livestock products and land management. Graduates find employment with colleges and universities, private industry and foreign assignments, as well as federal and state land management agencies. Specific employment opportunities are available in the areas of Extension Service; financial lending; the promotion, management and sale of livestock and meat; feed sales; and farm, ranch and natural resource management. The increasing need for research in animal sciences has encouraged many students (15 percent) to enter graduate school.

Extra-Curricular Activities

The Saddle and Sirloin Club is an active student organization which sponsors the Little International Livestock Show, the Hall of Fame Banquet, various 4-H and FFA livestock judging contests, Kiddie Days, Spring Livestock and Meat Judging Contests and other campus activities. Animal science students often belong to the Judging Club, Dairy Club, Rodeo Club, Horseman’s Association, Collegiate Cattlewomen, Range Club or Collegiate FFA Chapter.

Financial Aid And Scholarships

Part-time work and work-study programs in the seven livestock units, animal science laboratories and offices are available through the department. Freshman scholarships are awarded by the College of Agriculture, Food Systems, and Natural Resources (contact the Office of the Dean of Agriculture, Food Systems, and Natural Resources). Numerous awards and more than 30 scholarships are available to sophomore, junior and senior animal science majors. Scholarships are announced in the spring semester and awarded fall semester.

For Further Information

Department of Animal Sciences
North Dakota State University
Hultz Hall 100
Dept #7630
PO Box 6050
Fargo, ND 58108-6050

Tel. (701) 231-7641
Fax: (701) 231-7590
Email: ndsu.ansc@ndsu.edu
Web: www.ag.ndsu.edu/ansc
### Credits | General Education Requirements
---|---
First Year Experience  
1 | AGRI 189 - Skills for Academic Success  
Communication  
3 | COMM 110 - Fundamentals of Public Speaking  
3, 3 | ENGL 110, 120 - College Composition I, II  
3 | English Upper Level Writing Course  
Quantitative Reasoning  
3 | STAT 330 - Introductory Statistics  
Science & Technology  
6 | BIOL 111 - Concepts of Biology and CHEM 117, 117L - General Chemistry I and Lab and PLSC 315 - Genetics  
[or]  
CHEM 121, 121L - General Chemistry I and Lab and CHEM 122 - General Chemistry II and PLSC 315 - Genetics  
6 | Humanities & Fine Arts  
Social & Behavioral Sciences  
3 | ECON 201 - Principles of Microeconomics  
Social and Behavioral Sciences Elective  
2 | Wellness  
- Cultural Diversity  
Global Perspective  
3 | ECON 201 - Principles of Macroeconomics  
40 | TOTAL

### Credits | Major Requirements
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3 | ANSC 114 - Introduction to Animal Sciences  
1 | ANSC 150 - Animal Science Orientation  
VETS 150 - Introduction to Veterinary Profession  
or  
AGRI 150 - Agriculture Orientation  
3 | ANSC 240 - Meat Animal Evaluation and Marketing  
3 | ANSC 300 - Domestic Animal Behavior & Management  
3 | ANSC 323 - Fundamentals of Nutrition  
3 | ANSC 324 - Applied Animal Nutrition  
1 | ANSC 393 - Undergraduate Research  
ANSC 396 - Field Experience  
3, 1 | ANSC 463, 463L - Physiology of Reproduction and Lab, 1  
3 | ANSC 478 - Research/Issues in Animal Agriculture  
3 | ANSC 480, 482, 484, 486, 488 - Industry/Production Capstone  
1 | ANSC 494 or 496 - Internship or Research Experience  
3 | MATH 103 - College Algebra or higher  
3 | VETS 135 - Anatomy and Physiology of Domestic Animals  
35-41 | Courses to complete requirements for Option  
14-20 | Electives  
83-95 | TOTAL

128 | CURRICULUM TOTAL

This sample curriculum is not intended to serve as a curriculum guide for current students, but rather an example of course offerings for prospective students. For the curriculum requirements in effect at the time of entrance into a program, consult with an academic advisor or with the Office of Registration and Records.  
https://bulletin.ndsu.edu/undergraduate/programs/

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103 | 7/16