

# Equine Science

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## Department Information

- **Department Web Site:**  
www.ndsu.edu/agriculture/academics/academic-units/animal-sciences (<http://www.ndsu.edu/agriculture/academics/academic-units/animal-sciences/>)
- **Credential Offered:**  
B.S.
- **Official Program Curriculum:**  
catalog.ndsu.edu/undergraduate/program-curriculum/equine-science/ (<http://catalog.ndsu.edu/undergraduate/program-curriculum/equine-science/>)

## EQUINE SCIENCE

The depth and reach of the U.S. equine industry is far greater than many people realize. There are 7.2 million horses in the United States and the industry contributes \$122 billion to the gross domestic product. Over 1.3 million people own horses, and an additional 38 million people who don't own horses identify as a horse enthusiast. Careers in the U.S. horse industry support the equivalent of approximately 454,000 full-time jobs working directly with horses and 988,000 indirect jobs that provide support to the equine industry.

## THE PROGRAM

The Equine Science program provides a well-rounded, science-based education encompassing both classroom and experiential learning opportunities. For individuals interested in pursuing their education beyond a Bachelor of Science degree, the Equine Science curriculum can be tailored to meet the requirements for veterinary schools and graduate programs.

## THE CURRICULUM

The Equine Science major is designed to provide a strong overall background with supporting course work in the sciences, humanities and general education. Classes include anatomy, physiology, nutrition, health, production management, horsemanship and equitation. Hands-on learning opportunities are a priority with 70% of the equine courses providing students this type of experience. The curriculum requires students to complete an internship, study abroad or research experience. These unique opportunities allow students to put what they learn into practice, and offers the chance to gain valuable experiential education in the horse industry.

An Equine Science minor through North Dakota State University allows students to explore several equine-related courses and gain general horse industry knowledge. Students can also receive a minor in Equine Assisted Activities & Therapies which focuses on coursework in equine science, human development, and psychology. Both minors pair well with essentially any major offered at NDSU.

## THE FACULTY

The Equine Science Program has outstanding faculty members with diverse backgrounds in the equine industry who are ready to help students learn and thrive at NDSU. Our faculty have taught internationally, earned multiple teaching and advising awards, and maintain active research programs.

Equine Science faculty expertise is complemented by other faculty within the Department of Animal Sciences and across the university. The overall quality of the faculty at North Dakota State University has been recognized through numerous awards for teaching and research excellence.

## CAREER OPPORTUNITIES

Our graduates find exciting careers in diverse areas including sales representatives for nutrition, pharmaceutical and equipment products; marketing specialists; barn and facility managers; equine event and show managers; working with breed and industry associations; equine reproduction; horse training and sales preparation; and riding instructors. In addition to career opportunities following graduation, many students have chosen to continue their education in veterinary schools or graduate programs.

## EXTRA-CURRICULAR ACTIVITIES

The NDSU Horsemen's Association supports a variety of equine-related activities. The club supports the Intercollegiate Horse Show teams, sponsors IHSA shows, and conducts several youth camps.

The NDSU Rodeo Club provides students the opportunity to gain experience and knowledge of the sport of rodeo. The club supports the Intercollegiate Rodeo Team and also sponsors the Bison Stampede Rodeo each fall.

## FINANCIAL AID AND SCHOLARSHIPS

Part-time work and work-study programs are available at the equine center, in several different livestock units, and in animal science laboratories within the department. Over \$50,000 in departmental scholarships are awarded to Equine Science, Animal Science and Veterinary Technology students

annually. In addition, the College of Agriculture, Food Systems, and Natural Resources awards scholarships each year to incoming freshman and current NDSU students. Contact the Office of the Dean, College of Agriculture, Food Systems, and Natural Resources, for more information on college scholarships <https://www.ag.ndsu.edu/academics/scholarships> (<https://www.ag.ndsu.edu/academics/scholarships/>)

Student loan, grant and work-study information is available from the Office of Financial Aid and Scholarships, and One Stop <https://www.ndsu.edu/onestop/finaid/>

## Sample Program Guide

IMPORTANT DISCLAIMER: A Sample Program Guide provides an unofficial guide of program requirements and should be used by prospective students who are considering attending NDSU in the future. It is NOT an official curriculum and should NOT be used by current NDSU students for official degree planning purposes. Note that the official curriculum used by current NDSU students can vary from the Sample Program Guide due to a variety of factors such as, but not limited to, start year, education goals, transfer credit, and course availability.

To ensure proper program completion, enrolled students should utilize Degree Map (<https://www.ndsu.edu/registrar/degreemap/>) and Schedule Planner (<https://www.ndsu.edu/onestop/degree-map-and-planning/>) in Campus Connection and consult regularly with their academic advisor to ensure requirements are being met.

<b>First Year</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
ANSC 101 or 102		1 ANSC 223	2
ANSC 218		3 BIOL 111 & BIOL 100L*	4
ANSC 260		2 COMM 110	3
ENGL 110		3 ENGL 120	3
MATH 103, 105, 107, or 146		3 Humanities/Fine Arts	3
Social/Behavioral Science and Cultural Diversity		3	
		<b>15</b>	<b>15</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
AGEC 242		3 ECON 201	3
ANSC 260L		1 MICR 202 & 202L	3
ANSC 261		1 PLSC 315	3
CHEM 117 & 117L**		4 STAT 330	3
Humanities/Fine Arts		3 Elective	3
Elective		3	
		<b>15</b>	<b>15</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
ANSC 235		2 AGEC 244	3
ANSC 360		3 ANSC 364	3
ANSC 357		3 ANSC 371 or 370	3
ANSC Elective		3 ANSC 463 & 463L	4
ENGL 32X Upper-level Writing		3 BIOC 260	4
		<b>14</b>	<b>17</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
ANSC 379, 393, or 396		2-5 ANSC 478	3

ANSC Elective	6 ANSC 480	3
Elective	3 Elective	7
NRM/PLSC/RNG/SOIL Elective	3	
Wellness	2	
<b>16-19</b>		<b>13</b>

**Total Credits: 120-123**

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BIOL 111 and 100L are recommended, but can be replaced by BIOL 150 and 150L

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CHEM 117 and 117L are recommended, but can be replaced by CHEM 121 and 121L