

# Equine Science

## 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.
- **Sample Program Guide:**  
[catalog.ndsu.edu/programs-study/undergraduate/equine-science/#planofstudytext](http://catalog.ndsu.edu/programs-study/undergraduate/equine-science/#planofstudytext) (<http://catalog.ndsu.edu/programs-study/undergraduate/equine-science/#planofstudytext>)

## Major Requirements

### Major: Equine Science

**Degree Type:** B.S.

**Minimum Degree Credits to Graduate:** 120

### University Degree Requirements

1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
3. Satisfactory completion of the general education requirements as specified by the university.
4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
5. At least 30 credits must be NDSU resident credits. Resident credits include credits registered and paid for at NDSU.
6. At least 36 credits presented for graduation must be in courses numbered 300 or higher.
7. Students presenting transfer credit must meet the NDSU residence credits and the minimum upper level credit. Of the 30 credits earned in residence, a minimum of 15 semester credits must be in courses numbered 300 or above, and 15 semester credits must be in the student's curricula for their declared major.

For complete information, please refer to the Degree and Graduation Requirements (<http://catalog.ndsu.edu/past-bulletin-archive/2023-24/academic-policies/undergraduate-policies/degree-and-graduation/>) section of this Bulletin.

### University General Education Requirements

Code	Title	Credits
<b>Communication (C)</b>		<b>12</b>
ENGL 110	College Composition I	
ENGL 120	College Composition II	
COMM 110	Fundamentals of Public Speaking	
Upper Division Writing <sup>†</sup>		
<b>Quantitative Reasoning (R) <sup>†</sup></b>		<b>3</b>
<b>Science and Technology (S) <sup>†</sup></b>		<b>10</b>
<b>Humanities and Fine Arts (A) <sup>†</sup></b>		<b>6</b>
<b>Social and Behavioral Sciences (B) <sup>†</sup></b>		<b>6</b>
<b>Wellness (W) <sup>†</sup></b>		<b>2</b>
<b>Cultural Diversity (D) <sup>**†</sup></b>		
<b>Global Perspectives (G) <sup>**†</sup></b>		
<b>Total Credits</b>		<b>39</b>

\* May be satisfied by completing courses in another General Education category.

<sup>†</sup> General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.

- A list of university approved general education courses and administrative policies are available here (<http://catalog.ndsu.edu/past-bulletin-archive/2023-24/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).

## Major Requirements

Code	Title	Credits
<b>Required Core Courses for Equine Science</b>		
ANSC 218	Anatomy and Physiology of Domestic Animals	3
ANSC 223	Introduction to Animal Nutrition	2
ANSC 235	Equine Evaluation	2
ANSC 260	Introduction to Equine Studies	2
ANSC 260L	Equine Care and Management Practicum	1
ANSC 261	Basic Equitation & Horsemanship	1
ANSC 357	Animal Genetics	3
or ANSC 358	Equine Genetics	
ANSC 360	Equine Nutrition	3
ANSC 364	Equine Anatomy and Physiology	3
ANSC 370	Fundamentals/Animal Disease	3
or ANSC 371	Fundamentals of Animal Disease II	
ANSC 480	Equine Industry and Production Systems	3
ANSC 478	Research and Issues in Animal Agriculture	3
ANSC 393	Undergraduate Research	2
or ANSC 396	Field Experience	
ANSC 463	Physiology of Reproduction	3
ANSC 463L	Physiology of Reproduction Laboratory	1
Animal Science Electives	Select 9 credits of ANSC prefix courses	9
Select one of the following:		1
ANSC 101	Student Success Techniques - Animal and Equine Science	
ANSC 102	Student Success Techniques - Animal Sciences with Pre-Veterinary Medicine Emphasis	
ANSC 201	Student Success Techniques - Nontraditional & Transfer Students	
VETS 101	Student Success Techniques: Veterinary Technology	
Select one pair from the following:		4
BIOL 111 & BIOL 100L	Concepts of Biology and Non-Majors Biology Lab	
BIOL 150 & 150L	General Biology I and General Biology I Laboratory	
Select one of the following:		3
MATH 103	College Algebra	
MATH 105	Trigonometry	
MATH 107	Precalculus	
MATH 146	Applied Calculus I	
AGEC 242	Introduction to Agricultural Management	3
AGEC 244	Agricultural Marketing	3
BIOC 260	Elements of Biochemistry	4
CHEM 117 & 117L	Chemical Concepts and Applications and Chem Concepts and Applications Lab (May satisfy general education category S)	4
ECON 201	Principles of Microeconomics (May satisfy general education category B)	3
MICR 202 & 202L	Introductory Microbiology and Introductory Microbiology Lab (May satisfy general education category S)	3
PLSC 315	Genetics (May satisfy general education category S)	3
STAT 330	Introductory Statistics (May satisfy general education category R)	3
Choose from any level PLSC, NRM, or RNG		3
<b>Total Credits</b>		<b>81</b>

**Degree Requirements and Notes:**

- Students must earn at least a 2.00 GPA that is based on the courses that are used to satisfy major requirements.
- Transfer grades of 'C' or better to count towards major requirements.

**Minor Requirements****Minor: Equine Science**

Required Credits: 16

**Minor Requirements**

Code	Title	Credits
<b>Required Courses</b>		
ANSC 223	Introduction to Animal Nutrition	2
ANSC 260	Introduction to Equine Studies	2
ANSC 260L or ANSC 261	Equine Care and Management Practicum Basic Equitation & Horsemanship	1
ANSC 360 or ANSC 364	Equine Nutrition * Equine Anatomy and Physiology	3
<b>Elective Courses: Select a minimum of 8 credits from the following:</b>		<b>8</b>
ANSC 235	Equine Evaluation	
ANSC 300	Domestic Animal Behavior and Management	
ANSC 357 or ANSC 358	Animal Genetics Equine Genetics	
ANSC 360	Equine Nutrition *	
ANSC 361	Intermediate Horsemanship	
ANSC 362	Colts in Training	
ANSC 364	Equine Anatomy and Physiology *	
ANSC 371	Fundamentals of Animal Disease II	
ANSC 461	Advanced Horsemanship and Equitation	
ANSC 463	Physiology of Reproduction	
ANSC 480	Equine Industry and Production Systems	
ANSC 496	Field Experience	

\*

If both courses are completed successfully, the second course will apply towards Elective Courses category.

**Minor Requirements and Notes:**

- A minimum of 8 credits must be taken at NDSU.
- Students must earn a minimum 2.00 GPA for the minor requirements.