

# Equine Science

---

## Equine Science Major

The Equine Science major is designed to prepare students for careers in the equine industry and related fields. Course work includes practical husbandry and equitation skills, scientific principles related to management and study of equine industry and business practices.

## Equine Science Minor

Students from other majors may minor in Equine Science by completing a minimum of 16 credits. A minimum of eight credits must be completed at NDSU.

## Equine Science Certificate

The certificate program in Equine Science provides an opportunity for non-degree seeking students to enhance their horse knowledge. The program focuses on basic selection, management, and business concepts and requires completion of 16 credits. Prospective students are subject to the university's admission policies and procedures.

## Major Requirements

### Major: Equine Science

**Degree Type: B.S.**

**Required Degree Credits to Graduate: 128**

### General Education Requirements

#### First Year Experience (F):

AGRI 189	Skills for Academic Success (Students transferring in 24 or more credits do not need to take AGRI 189.)	1
----------	---	---

#### Communication (C):

ENGL 110	College Composition I	3
ENGL 120	College Composition II	3
COMM 110	Fundamentals of Public Speaking	3
One Course in Upper Level Writing. Select from current general education list		3

#### Quantitative Reasoning (R):

STAT 330	Introductory Statistics	3
----------	-------------------------	---

#### Science & Technology (S):

CHEM 117 & 117L	Chemical Concepts and Applications and Chem Concepts and Applications Lab	4
MICR 202 & 202L	Introductory Microbiology and Introductory Microbiology Lab	3
PLSC 110	World Food Crops	3

**Humanities & Fine Arts (A): Select from current general education list** 6

#### Social & Behavioral Sciences (B):

ECON 201	Principles of Microeconomics	3
Select from current general education courses		3

**Wellness (W): Select from current general education list** 2

**Cultural Diversity (D): Select from current general education list**

#### Global Perspective (G):

PLSC 110	World Food Crops	
----------	------------------	--

---

**Total Credits** 40

## Major Requirements

**General Education Requirements** 40

### Required Core Courses for Equine Science

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 480	Equine Industry and Production Systems	3
ANSC 478	Research and Issues in Animal Agriculture	3
RNG 336	Introduction to Range Management	3
or PLSC 320	Principles of Forage Production	
ANSC 393	Undergraduate Research	2
or ANSC 396	Field Experience	
ANSC/ZOO 463	Physiology of Reproduction	3
ANSC/ZOO 463L	Physiology of Reproduction Laboratory	1
ANSC	Electives	6
<b>Supporting Courses</b>		
AGEC 242	Introduction to Agricultural Management	3
AGEC 244	Agricultural Marketing	3
Select one of the following (Students transferring in 24 or more credits may be exempt from this requirement):		1
AGRI 150	Agriculture Orientation	
ANSC 150	Animal Science Orientation	
VETS 150	Introduction to the Veterinary Profession	
ANSC 370	Fundamentals/Animal Disease	3
CHEM 260	Elements of Biochemistry	4
MATH 103	College Algebra (or higher level; except MATH 104)	3
BIOL 111 & 111L	Concepts of Biology and Concepts of Biology Lab	4
or BIOL 150 & 150L	General Biology I and General Biology I Laboratory	
PLSC 315	Genetics	3
VETS 135	Anatomy and Physiology of Domestic Animals	3
<b>Degree Requirements: Potential of 23 credits to reach degree minimum of 128.</b>		<b>23</b>
<b>Total Credits</b>		<b>128</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****Equine Science Minor****Minor Requirements**

Required Credits: 16

**Required Courses**

ANSC 223	Introduction to Animal Nutrition	2
ANSC 260	Introduction to Equine Studies	2
ANSC 260L	Equine Care and Management Practicum	1
or ANSC 261	Basic Equitation & Horsemanship	
ANSC 360	Equine Nutrition	3
or ANSC 364	Equine Anatomy and Physiology	

**Elective Courses: Select a minimum of 8 credits from the following:** 8

ANSC 235	Equine Evaluation	
----------	-------------------	--

ANSC 300	Domestic Animal Behavior and Management
ANSC 357 or ANSC 358	Animal Genetics Equine Genetics
ANSC 361	Intermediate Horsemanship
ANSC 362	Colts in Training
ANSC 375	Methods of Horsemanship Instruction
ANSC 461	Advanced Horsemanship and Equitation
ANSC 463	Physiology of Reproduction
ANSC 480	Equine Industry and Production Systems
ANSC 496	Field Experience

**Total Credits****16****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.

**Certificate Requirements****Equine Science Certificate****Certificate Requirements****Required Credits: 16****Requirements**

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
AGEC 242	Introduction to Agricultural Management	3
ANSC 360	Equine Nutrition	3
ANSC 361	Intermediate Horsemanship	1
ANSC 364	Equine Anatomy and Physiology	3

**Total Credits****16**