



Animal and Veterinary Science, B.S. (Equine Science Concentration)

This concentration is designed to provide a strong foundation in animal and equine science and its application to equine production and management for those interested in a career in the horse industry.

Degree Requirements

This degree requires 120 credits, 42 of which must be upper-division credits.

* = Grade of C or better required for degree completion.

University Studies Program

This degree requires that The University Studies Program 2015 requirements are met before graduation. Some of the courses required for this major fulfill USP requirements, but not all. Students should check their degree evaluations and consult with their assigned academic advisor to discuss their specific course plan.

Course Name	Credits	UW Course in Major	AA/AS/AB/ADN satisfies this USP
C 1-Communication 1 (COM1)	3		X
C 2-Communication 2 (COM2)	3		X
C 3-Communication 3 (COM3)	3	(Must be completed at UW)	
Q-Quantitative Reasoning (Q)	3		X
PN-Physical and Natural World (1) (PN)	3		X
PN-Physical and Natural World (2) (PN)	3		X
H-Human Culture (1) (H)	3		X
H-Human Culture (2) (H)	3		X
V-US & WY Constitution (V)	3		X
FYS or USP Elective-Any 3-credit hour of FYS or 3-credit hours of USP electives	3		X

Note: FYS courses have been paused. 3 hours from any additional USP designated courses is still required.

Animal and Veterinary Science Core

All students completing a degree in Animal & Veterinary Science will take the following courses as a core. These courses are designed to introduce shared animal science and pre-veterinary medicine disciplines and establish a strong baseline knowledge for students interested in animal fields.

Animal and Veterinary Science Required Courses

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
ANSC 1010 - Introduction to Animal Science	4	X	X	X	X	X	X	

Course Name	Credits	
ANSC 3010 - Domestic Animal Systems Physiology *	4	UW Course
ANSC 3100 - Principles of Animal Nutrition *	3	UW Course
ANSC 4120 - Principles of Mammalian Reproduction *	4	UW Course
ANSC 4630 - Topics and Issues in Animal Science C3 OR PATB 4130 - Mammalian Pathobiology *C3	3	UW Course
PATB 4110 - Diseases of Food Animals *	3	UW Course

Supporting Math/Science 15 Required Credits:

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
LIFE 1010 - General Biology * PN	4	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1
LIFE 2022 - Animal Biology *	4	X	X		X	X		X
MATH 1400 - College Algebra Q	3	X	X	X	X	X	X	X
STAT 2050 - Fundamentals of Statistics Q	4	X	X	X	X	X	X	X

Equine Science Concentration

Students declaring the Equine Science concentration are required to take the following courses:

Animal and Veterinary Science

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
ANSC 1030 - Equine Management	3	X	X		X	X		
ANSC 2020 - Feeds and Feeding	4	X	X	X	X	X	X	
ANSC 3150 - Equine Nutrition and Physiology	3		X					

Course Name	Credits	
ANSC 2000 - Equine Industry Career Preparation	3	UW Course
ANSC 3250 - Equine Behavior and Welfare	3	UW Course
ANSC 4132 - Equine Reproduction	3	UW Course
ANSC 4250 - Advanced Equine Production and Management	3	UW Course
ANSC 4540 - Principles of Animal Breeding *	3	UW Course
PATB 4500 - Veterinary Parasitology	4	UW Course

Supporting Agriculture/Math/Science

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
AGEC 1020 - Principles of Microeconomics H	3	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2
AGEC 2020 - Farm and Ranch Business Management	4	X	X	X	X	X	X	
ANSC 2010 - Domestic Animal Metabolism OR CHEM 2300 - Introductory Organic Chemistry	3-4	See Note 3	See Note 3	See Note 3	See Note 3	See Note 3	See Note 3	
CHEM 1000 - Introductory Chemistry PN	4	X	X	X	X	X	X	X
REWM 2000 - Principles of Rangeland Management	3	X	X	X	X	X	X	X

Additional Information

Agriculture, in its broadest definition, is the nation's largest industry. Livestock production is Wyoming's largest agricultural enterprise. Animal agriculture and its associated industries offer many opportunities for the interested student. Whether a student is interested in production livestock, allied fields such as meat science or animal health, or wants to apply to a college of veterinary medicine or graduate school, the degree concentrations offered will form the basis for an engaging career in animal agriculture/biology. The various concentrations provide maximum flexibility to meet the changing needs of students and their employers. For students interested in pursuing advanced research, M.S. and Ph.D. degrees are offered.

A grade of C or better must be earned in the following courses when the courses are required in the individual option for completion of the degree: ANSC 3010, ANSC 3100, ANSC 4120, ANSC 4540, ANSC 4630; FDSC 3060, PATB 4110, PATB 4111, LIFE 1010, LIFE 2022.

Students are encouraged to participate in activities related to their degree concentration. The university has competitive livestock, wool, and meat judging teams that travel to and participate in at least one major exposition a year. Laboratories and field trips, as practical teaching aids in many classes, are scheduled throughout the year. Internships are available to gain practical experience. Student organizations such as the Food Science Club, Pre-Vet Club, Wyoming Collegiate Cattlemens Association, Microbiology Club, Range Club, and the Ranch Horse Team provide additional educational and recreational opportunities.

Notes:

Note 1: All WYCCs offer BIOL 1010 which is equivalent to LIFE 1010.

Note 2: AGECE 1020 is offered at Casper, EWC, LCCC, Sheridan and Northwest. LCCC offers ECON 1000. ECON 1020 is cross listed with AGECE 1020.

Note 3: ANSC 2010 is offered at CWC and LCCC. CHEM 2300 is offered at Casper, CWC, EWC, Sheridan, and Northwest.

COURSE SUBSTITUTIONS: WyoTAGs reflect published equivalencies. UW academic departments occasionally arrange for course substitutions when indirect equivalencies exist. Please contact your UW Academic Advisor for details.

EFFECTIVE DATE: This document is in effect as of the 2026-2027 catalog year; it reflects the published UW curriculum as of that date. Any changes to the UW curriculum or the WYCC course equivalents will require this document to be updated. To request an updated document, faculty should contact transfer@uwyo.edu via email.