

# BACHELOR OF SCIENCE DEGREE in ANIMAL AND VETERINARY SCIENCES

## Pre-Veterinary Science Concentration

Total Credit Hours Required: 120

(Effective Fall 2024)

First Year - Fall		First Year - Spring	
AVS 145 - Introduction to Animal Science	3	BIO 200 - Biology of Organisms	4
AVS 146 - Introduction to Animal Science Lab	1	CHY 122 - General Chemistry II	3
BIO 100 - Basic Biology	4	CHY 124 - General Chemistry Laboratory II	1
CHY 121 - General Chemistry I	3	ENG 101 - College Composition	3
CHY 123 - General Chemistry Laboratory I	1	STS 132 - Principles of Statistical Inference	3
MAT 116 - Introduction to Calculus	3		
<b>or</b>			
MAT 126 - Calculus I	4		
ELH 117 - First-Year Success Seminar	1		
	<b>16</b>		<b>14</b>
Second Year - Fall		Second Year - Spring	
AVS 254 - Introduction to Animal Microbiomes	3	AVS 249 - Laboratory and Companion Animal Science	3
AVS 303 - Equine Management Cooperative	2	AVS 303 - Equine Management Cooperative	2
<b>or</b>		<b>or</b>	
AVS 347 - Dairy Cattle Technology Laboratory	2	AVS 347 - Dairy Cattle Technology Laboratory	2
AVS 346 - Dairy Cattle Technology	3	CMJ 103 - Public Speaking	3
BIO 377 - Medical Physiology	3	PHY 112 - General Physics II	4
PHY 111 - General Physics I	4	Animal Science Elective	3
FSN 230 Medical and Nutritional Terminology	1		
	<b>16</b>		<b>15</b>
Third Year - Fall		Third Year - Spring	
AVS 455 - Animal Nutrition	3	AVS 401 - Capstone in Animal Science I	3
BMB 300 - General Microbiology	3	AVS 437 - Animal Diseases	3
BMB 305 - General Microbiology Laboratory	2	BMB 322 - Biochemistry	3
CHY 251 - Organic Chemistry I	3	BMB 323 - Biochemistry Laboratory	2
CHY 253 - Organic Chemistry Laboratory I	2	CHY 252 - Organic Chemistry II	3
ENG 315 - Research Writing in the Discipline	3	CHY 254 - Organic Chemistry Laboratory II	2
<b>or</b>			
ENG 317 - Business and Technical Writing	3		
	<b>16</b>		<b>16</b>
Fourth Year - Fall		Fourth Year - Spring	
AVS 480 - Physiology of Reproduction	3	AVS 402 - Capstone in Animal Science II	1
BIO 250 - Concepts and Applications of Genetics	3	AVS 466 - Livestock Feeds and Feeding	2
ECO 154 - Small Business Economics and Management	3	General Education: Artistic and Creative Expression	3
General Education: Western Cultural Tradition	3	General Education: Cultural Diversity and International Perspectives	3
General Education: Ethics	3	General Electives	3
	<b>15</b>		<b>12</b>

**Animal Science Electives** - Choose at least 3 credits

<b>(S = Spring; F = Fall; Su = Summer; B = Both semesters)</b>	<b>Credits</b>
AVS 196 (B, Su) Introduction to Equine Cooperative	1
AVS 203 (S) Equine Management (even yrs)	3
AVS 211 (F) Introduction to Aquaculture	3
AVS 353 (S) Equine Reproduction and Breeding Management	3
AVS 393 (F) Training the Standardbred Horse	3
AVS 405 (F, even yrs) Livestock and Companion Animal Behavior	3
AVS 433 (S, even yrs) Equine Exercise Physiology	3
AVS 446 (S) Forage Science and Range Management	3
AVS 454 (S) DNA Sequencing Analysis Laboratory	2
AVS 477 (F) Zoonoses and Animal Health	3

**Notes:**

<sup>1</sup>Most of our recent graduates who were accepted to colleges of veterinary medicine had accumulated at least 300 hours of experience under the supervision of a veterinarian.

<sup>2</sup>Several American Veterinary Medical Association-accredited veterinary colleges require BIO 335 - Human Anatomy, 4 credits and/or BIO 480 - Cell Biology, 3 credits. Check the specific requirements of the veterinary colleges that are on your preferred list.

**General Education Requirements** - 18 total credits required

<b>Human Values and Social Contexts Sub-Categories</b>	<b>Course Taken</b>	<b>Credits</b>
1. Western Cultural Tradition		3
2. Social Contexts and Institutions	CMJ 103 Public Speaking	3
	ECO 154 Small Business Economics and Management	3
3. Cultural Diversity and International Perspectives		3
4. Population and the Environment	AVS 254 Introduction to Animal Microbiomes	3
5. Artistic and Creative Expression		3

<b>Ethics</b>	<b>Course Taken</b>	
Ethics Course		3

**Revised: May 8, 2024**

*Curriculum is updated annually and is subject to change.*