

**BACHELOR OF SCIENCE DEGREE in ANIMAL AND VETERINARY SCIENCES**

**Equine Science Concentration**

Total Credit Hours Required: 120

(Effective Fall 2023)

<b>First Year - Fall</b>		<b>First Year - Spring</b>	
AVS 145 - Introduction to Animal Science	3	AVS 196 - Introduction to Equine Cooperative	1
AVS 146 - Introduction to Animal Science Lab	1	BIO 200 - Biology of Organisms	4
BIO 100 - Basic Biology	4	CMJ 103 - Public Speaking	3
ENG 101 - College Composition	3	ECO 120 - Principles of Microeconomics	3
MAT 116 - Introduction to Calculus	3	STS 132 - Principles of Statistical Inference	3
NFA 117 - First-Year Success Seminar	1		
	<b>15</b>		<b>14</b>
<b>Second Year - Fall</b>		<b>Second Year - Spring</b>	
AVS 254 - Introduction to Animal Microbiomes	3	AVS 203 - Equine Management (even yrs)	3
AVS 303 - Equine Management Cooperative	2	AVS 249 - Laboratory and Companion Animal Science	3
<b>or</b>		AVS 303 - Equine Management Cooperative	2
AVS 347 - Dairy Cattle Technology Laboratory	2	<b>or</b>	
AVS 346 - Dairy Cattle Technology	3	AVS 347 - Dairy Cattle Technology Laboratory	2
AVS 393 - Training the Standardbred Horse	3	BMB 208 - Elementary Physiological Chemistry	3
BMB 207 - Fundamentals of Chemistry	3	BMB 210 - Elementary Physiological Chemistry Laboratory	1
BMB 209 - Fundamentals of Chemistry Laboratory	1	<b>or</b>	
<b>or</b>		CHY 122 - General Chemistry	3
CHY 121 - General Chemistry I	3	CHY 124 - General Chemistry Laboratory II	1
CHY 123 - General Chemistry Laboratory I	1	ECO 154 - Small Business Economics and Management	3
	<b>15</b>		<b>15</b>
<b>Third Year - Fall</b>		<b>Third Year - Spring</b>	
AVS 405 - Livestock and Companion Animal Behavior	3	AVS 353 - Equine Reproduction and Breeding Management	3
AVS 455 - Animal Nutrition	3	AVS 401 - Capstone in Animal Science I	2
BIO 377 - Medical Physiology	3	AVS 437 - Animal Diseases	3
Business course	3	ENG 315 - Research Writing in the Disciplines	3
Animal Science Elective	3	<b>or</b>	
		ENG 317 - Business and Technical Writing	3
		General Education: Cultural Diversity and International Perspectives	3
	<b>15</b>		<b>14</b>
<b>Fourth Year - Fall</b>		<b>Fourth Year - Spring</b>	
AVS 397 - Equine Internship	4	AVS 402 - Capstone in Animal Science II	2
AVS 480 - Physiology of Reproduction	3	AVS 433 - Equine Exercise Physiology	3
BIO 350 - Concepts and Applications of Genetics	3	AVS 446 - Forage Science and Range Management	3
General Education: Western Cultural Tradition	3	AVS 466 - Livestock Feeds and Feeding	2
General Education: Ethics	3	General Education: Artistic and Creative Expression	3
		Animal Science Elective	3
	<b>16</b>		<b>16</b>

**Animal Science Electives** - Choose from list below

<b>(S = Spring; B = Both semesters)</b>	<b>Credits</b>
AVS 211 (F) Introduction to Aquaculture	3
AVS 267 (F, odd yrs) Swine Production	1
AVS 268 (F, even yrs) Pasture Poultry Production	1
AVS 454 (S) DNA Sequencing Analysis Laboratory	2
AVS 456 (F) Animal Nutrition Laboratory	1
AVS 477 (F) Zoonoses and Animal Health	3

**Business Course** - Choose from list below

<b>(S = Spring; B = Both semesters)</b>	<b>Credits</b>
ACC 201 (B) Principles of Financial Accounting	3
BIS 235 (B) Digital Business Transformation	3
MGT 101 (B) Introduction to Business	3
MGT 342 (S) Small Business Management	3

**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 254 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>	<b>Credits</b>
Ethics Course		3

**Revised: March 24, 2023**