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

# **Equine Science Concentration**

Total Credit Hours Required: 120 (Effective Fall 2024)

First Year - Fall		First Year - Spring	
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
ELH - First-Year Success Seminar	1	·	
	15		14
Second Year - Fall		Second Year - Spring	
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
or		AVS 303 - Equine Management Cooperative	2
AVS 347 - Dairy Cattle Technology Laboratory	2	or	
AVS 346 - Dairy Cattle Technology	3	AVS 347 - Dairy Cattle Technology Laboratory	2
AVS 393 - Training the Standardbred Horse	3	Business course	3
BMB 207 - Fundamentals of Chemistry	3	General Electives	4
BMB 209 - Fundamentals of Chemistry Laboratory	1		
or			
CHY 121 - General Chemistry I	3		
CHY 123 - General Chemistry Laboratory I	1		
	15		15
Third Year - Fall		Third Year - Spring	
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	3
BIO 377 - Medical Physiology	3	AVS 437 - Animal Diseases	3
ECO 154 - Small Business Economics and Management	3	ENG 315 - Research Writing in the Disciplines	3
Animal Science Elective	3	or	
		ENG 317 - Business and Technical Writing	3
		General Education: Cultural Diversity and International Perspectives	3
	15		15
Fourth Year - Fall		Fourth Year - Spring	
AVS 397 - Equine Internship	4	AVS 402 - Capstone in Animal Science II	1
AVS 480 - Physiology of Reproduction	3	AVS 433 - Equine Exercise Physiology	3
BIO 250 - 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
	16		15

# Animal Science Electives - Choose from list below

(S = Spring; F = Fall; B = Both semesters)	Credits
AVS 211 (F) Introduction to Aquaculture	3
AVS 454 (S) DNA Sequencing Analysis Laboratory	2
AVS 477 (F) Zoonoses and Animal Health	3

### **Business Course** - Choose from list below

Course Name (S = Spring; B = Both semesters)	Credits
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

Human Values and Social Contexts Sub- Categories	Course Taken	Credits
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

Ethics	Course Taken	
Ethics Course		3

Revised: May 8, 2024

Curriculum is updated annually and is subject to change.