

B.S. Animal Science & Technology - Pre-Veterinary Option

Effective Fall 2018

EL_ANSC_BS 120 Earned credits Total

Student: _____

Advisor: _____

	Course No.	Grade	Cr.
Knowledge			
A1. STEM	BIO 101		
A2. Social and Behavioral Sciences			
A3. Humanities			
A4. Arts and Design			
Competencies			
B1. Write effectively	WRT ____		
B2. Communicate effectively	COM 100		
B3. Mathematical, statistical, computation	MTH 131		
B4. Information literacy	WRT ____		
Responsibilities			
C1. Civic knowledge & responsibility	COM 100		
C2. Global responsibilities			
C3. Diversity and inclusion			
Integrate & Apply			
D1. Ability to Synthesize	AVS 472		
Grand Challenge			
G. Grand Challenge Course			

IV. PROFESSIONAL CONCENTRATION (31 cr). Minimum GPA 2.0 required.				
Course Description:	Course No.	Grade	Cr.	Offered
Foundation Course Requirements (5 cr):				
Introduction to Animal Science (A1)*	AVS 101*		3	F, S, Su, O
Intro. Animal Science Laboratory	AVS 102		1	F, S, Su
Freshman Seminar AVS	AVS 110		1	S
Concentration Course Requirements (25 cr):				
Anatomy & Physiology	AVS 331		3	F
Anatomy & Physiology Lab	AVS 333		1	F
Animal Diseases	AVS 332		3	S
Animal Nutrition	AVS 412		3	F
Physiology of Reproduction (D1)*	AVS 472*		3	S
Cell Biology	BIO 341		3	F
General Genetics	BIO/CMB 352		4	F, S
Additional concentration course				
Additional concentration course				
Additional concentration course				

Course Description:	Course No.	Grade	Cr.
Communication Fundamentals (B2)*	COM 100*		3
Wrt to Inform & Explain (WRT 104; B1, B4) or Intro to Research Wrt (WRT 106; B1, B4)*			3
Technical Writing (WRT 332) or Science Writing (WRT 334) (B1, B2)*			3

V. SUPPORTING ELECTIVES (11 cr):				
Course Description:	Course No.	Grade	Cr.	Offered
Animal Management Techniques	AVS 104		2	F, S
BUS or ECN			3	
Additional supporting elective course				
Additional supporting elective course				
Additional supporting elective course				
Additional supporting elective course				

Course Description:	Course No.	Grade	Cr.
Principles of Biology I (A1)*	BIO 101*		3
Principles of Biology I Lab (A1)*	BIO 103*		1
Principles of Biology II (A1)*	BIO 102*		3
Principles of Biology II Lab (A1)*	BIO 104*		1
General Chemistry Lecture I (A1)*	CHM 101*		3
Laboratory for Chemistry 101 (A1)*	CHM 102*		1
General Chemistry Lecture II	CHM 112		3
Laboratory for Chemistry 112	CHM 114		1
Organic Chemistry Laboratory	CHM 226		2
Organic Chemistry I	CHM 227		3
Organic Chemistry II	CHM 228		3
Introductory Microbiology	CMB 211		4
Introductory Biochemistry	CMB 311		3
Calculus (A1, B3)*	MTH 131*		3
Physics I (A1, B3)*	PHY 111*		3
Physics I Lab (A1, B3)*	PHY 185*		1
Physics II (A1, B3)*	PHY 112*		3
Physics II Lab (A1, B3)*	PHY 186*		1
Introductory Statistics	STA 308		4

VI. FREE ELECTIVES (2 Cr minimum)				
Course Description:	Course No.	Grade	Cr.	Offered
Planning for Academic Success	URI 101		1	F
Additional free elective course				
Additional free elective course				

NOTES:
**courses (38 cr) that also count towards 40 credit GenEd requirement. The only GenEd courses left to take are those whose GenEd outcomes have not been met (Sec I) by any of the required courses.*
 See AVS Advising Sheet for approved concentration, supporting electives and basic science course suggestions.
 Bolded course credits count toward GenEd total.
 Maximum 9 credits total of AVS 399, 491, 492 can be counted towards degree
 Maximum 3 credits total of AVS 491/492 can be counted as concentration course
 No internship course can be counted towards concentration credits

ADVISING NOTES:

B.S. Animal Science & Technology

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Approved Concentration Courses (300+)					
Course Code	GenEd Outcome	Course (Semester offered, credits)	Focus Area		
			Livestock*	Exotic*	Pre-Vet and Technology*
AVS 301/302		Seminar in Animal and Veterinary Science (F/S, 1 cr)	X	X	X
AVS 323		Animal Management I (F, 3 crs)	X		
AVS 324		Animal Management II (S, 3 crs)	X		
AVS 325		Animal Management III (S, 3 crs)		X	
AVS 326		Equine Management (S, 3 crs)	X		
AVS 327X		Zoo Animal Management (F, 3 crs)		X	
AVS 343		Behavior of Domestic Animals (S, 3 crs)		X	
AVS 344		Behavior of Domestic Animal Laboratory (S, 2 crs)	X	X	X
AVS 390		Wildlife and Human Disease (S, 3 crs)		X	
AVS 399		Animal Science Internship (F,S, 1-6 crs)			
AVS 404	D1	Food Systems, Sustainability and Health	X		
AVS 412		Animal Nutrition (F, 3 crs)^			
AVS 420		Animal Breeding & Genetics (S, 3 crs)	X		
AVS 440		Seminar on Marine Mammals (F, 3 crs)		X	
AVS 442		Marine Mammal Behavior and Physiology (J, additional fee) required, 3 crs)		X	X
AVS 443	D1	Advanced Methods in Applied Animal Behavior	X	X	X
AVS 462		Laboratory Animal Techniques (S, 4 crs)			X
AVS 463		Animal Veterinary Technology (S, 3 crs)			X
AVS 472	D1	Physiology of Reproduction (S, 3 crs)^	X		
AVS 473		Physiology of Reproduction Lab (S, 1 cr)	X		
AVS 491/492		Special Projects (F,S, 1-6 crs)			
AVS 504		Food Systems, Sustainability and Health - graduate level			
AFS 505		Pathobiology (S alternate years (even), 3 crs)^			X
BIO 341		Cell Biology (F, 3 crs)^			X
BIO/CMB 352		General Genetics (F, S, Su, 4 crs)^			X
BIO 437		Molecular Biology (S, 4 crs)^			X
CMB 333		Immunology and Serology (F, 3 crs)^			X
SAFS 400G	D1, G	Reimagining Food Systems Through Agroecology (F, 3 crs)	X		
NRS		Any 300 or 400 level course		X	
		Any 300 or 400 level course in CELS			
Approved Supporting Elective Courses					
ALL OF THE ABOVE COURSES PLUS:					
AVS 104		Advance Animal Management Techniques (F, S, 2 crs)^	X		X
AVS 132G	A2, G	Sustainable Agriculture, Food Systems and Society (S, 3 crs)	X	X	X
AFS 190	A1	Issues in Biotechnology (F, S, online, 3 crs)			X
AVS 201		Companion Animal Management (F, 3 crs)			X
AVS 275		Pasture and Grazing Management (F, Su, 4 crs)	X		
BUS 140		Introduction to Business	X		
BUS 149		Introduction to Entrepreneurship	X		
ECN 201	A2	Principles of Economics, Microeconomics	X		
EEC 105	A2	Introduction to Resource Economics	X		
NRS 100	A1	Natural Resource Conservation (F, S, 3 crs ,A1)		X	
NRS 223		Conservation Biology (S, 4 crs)		X	
Approved Basic Science Courses or Supporting Electives for Animal Science Option					
Any course taught in CELS or College of Business or with the prefix APG, CHM, CSC, ECN/EEC, MTH, PHY, STA					
BIO 341		Cell Biology^			
BIO/CMB 352		General Genetics^			
BIO 437		Molecular Biology^			
CHM 124/126		Introduction to Organic Chemistry & Lab^			
CMB 311		Introductory Biochemistry^			
CMB 333		Immunology and Serology^			
MIC 201/211		Introductory Medical Microbiology/Intro Micro^			
MTH 131	A1,B3	Calculus^			
STA 220	B3	Statistics in Modern Society			
STA 308		Introductory Statistics^			
PHY 111/185		Physics I			

*Suggested courses for each focus area

^Recommended courses for students interested in Graduate School, dependent upon area of interest

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Sample 4 Year Plan
College of the Environment and Life Sciences

Freshman Year Fall Semester

Course Code	Description	Cr	
AVS 101,102	Introduction to Animal Science, Lab	4	
BIO 101,103	Principles of Biology I, Lab	4	
MTH103/131	Pre-calculus or Calculus I	3	
COM 100	COM Fundamentals	3	
URI 101	Planning for Academic Success	1	
		15	

Freshman Year Spring Semester

Course Code	Description	Cr	
AVS 110	AVS Freshman Seminar	1	
BIO 102,104	Principles of Biology II, Lab	4	
CHM 101, 102	General Chemistry and Lab	4	
WRT 104 OR 106	Writing Gen Ed (B4)	3	
MTH 131	Calculus I or Concentration	3	
		15	

Year 1 Milestones: Earn 30 credits and a GPA of 2.0 or higher. Meet with your Advisor for ANSC option discussion.

Sophomore Year Fall Semester

Course Code	Description	Cr	
AVS 331/333	Anatomy and Physiology Lecture & Lab	4	
CHM 112/114	General Chemistry II and Lab	4	
PHY 111, 185	Physics I and Lab	4	
	General Education Course	3	
	Supporting Elective	3	
		15-18	

Sophomore Year Spring Semester

Course Code	Description	Cr	
AVS 332	Animal Diseases	3	
PHY 112, 186	Physics II and Lab	4	
WRT 332 or 334	WRT course	3	
STA 308	Introductory Statistics	4	
	General Education Course	3	
		17	

Year 2 Milestones: Earn 60 credits and a GPA of 2.0 or higher. Meet with your Advisor to discuss major and experiential learning opportunities.

Junior Year Fall Semester

Course Code	Description	Cr	
	Concentration or Supporting Elective	6	
CMB 211	Introductory Microbiology	4	
CHM 227	Organic Chemistry 1	3	
BUS or ECN		3	
		16	

Junior Year Spring Semester

Course Code	Description	Cr	
	Concentration or Supporting Elective	3-6	
BIO/CMB 352	General Genetics	4	
CHM 228,226	Organic Chemistry 2, Lab	4	
	General Education Course	3	
		14-17	

Year 3 Milestones: Earn 90 credits and a GPA of 2.0 or higher. Meet with your Advisor to prepare intent to graduate application for fall submission.

Senior Year Fall Semester

Course Code	Description	Cr	
AVS 412	Animal Nutrition	3	
BIO 341	Cell Biology	3	
	Concentration or Supporting Electives	6	
	General Education or Free Electives	3	
		15	

Senior Year Spring Semester

Course Code	Description	Cr	
AVS 472	Physiology of Reproduction	3	
CMB 311	Introductory Biochemistry	3	
	Concentration or Supporting Electives	6	
	General Education or Free Electives	3	
		15	

Year 4 Milestones: Earn 120 credits and a GPA of 2.0 or higher in CUM and CON. Complete all remaining required courses.

Total Credits to Graduate = 120

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