

PRE-VET/PRE-GRAD AREA OF INTEREST

2024-2025 FOUR-YEAR PLAN

This document is an **example** schedule for planning purposes only and is meant to be a guide for students and advisors. 120 credits total needed to complete degree. For official degree information, refer to Degree Audit and speak with your advisor.

YEAR 1 • FALL	ANSC 1001 Introduction to Animal Science	3	YEAR 1 • SPRING	ANSC 1111 Principles of Animal Nutrition and Feeding	3
	BIOL 1107 Principles of Biology I	4		BIOL 1108 Principles of Biology II	4
	ENGL 1007 or 1010 Information Literacy	4		CHEM 1127 General Chemistry I	4
	UNIV 1810 Animal Science Learning Community	1		GEN ED/MATH/STAT	3-4
	GEN ED/MATH/STAT	3		GEN ED COURSE	3
	TOTAL CREDITS	15		TOTAL CREDITS	17-18
YEAR 2 • FALL	PATH 2100 Anatomy and Physiology of Animals	4	YEAR 2 • SPRING	ANSC 3122 Reproductive Physiology	4
	ANSC 3121 Principles of Animal Genetics	3		ANSC 3194 Seminar	1
	CHEM 1128 General Chemistry II	4		CHEM 2443 Organic Chemistry	3
	GEN ED/ANSC ELECTIVE (Group B/C)	3-4		ANSC ELECTIVE (Group B/C)	3-4
				GEN ED COURSE	3
	TOTAL CREDITS	14-15		TOTAL CREDITS	14-15
YEAR 3 • FALL	ANSC ELECTIVE (Group B/C)	3-4	YEAR 3 • SPRING	ANSC ELECTIVE (Group B/C)	3-4
	CHEM 2444 Organic Chemistry	3		CHEM 2445/ANSC ELECTIVE (Group B/C)	3-4
	CHEM 2445/ANSC ELECTIVE (Group B/C)	3		MCB 2610 or 2000 or ANSC 4341	3-4
	PHYS 1201Q General Physics I	4		PHYS 1202Q General Physics II	4
	ANSC W* or GEN ED	1-3		ANSC W* or GEN ED	1-3
	TOTAL CREDITS	14-17		TOTAL CREDITS	14-19
YEAR 4 • FALL	ANSC W* or ELECTIVE	1-3	YEAR 4 • SPRING	ANSC W* or ELECTIVE	1-3
	ANSC ELECTIVE (Group B/C)	3-4		ANSC ELECTIVE (Group B/C)	3-4
	2000-LEVEL RELATED or ELECTIVE	3		2000-LEVEL RELATED or ELECTIVE	3
	MCB 2610 or 2000 or ANSC 4341	3-4		2000-LEVEL RELATED or ELECTIVE	3
	2000-LEVEL RELATED or ELECTIVE	3		2000-LEVEL RELATED or ELECTIVE	3
	GEN ED COURSE	3		ELECTIVE	3
	TOTAL CREDITS	16-20		TOTAL CREDITS	16-19

*W course must be taken with the corresponding C course

Animal Science degree requirements are organized into five groups, Group A-1, A-2, A-3, B, and C.

- All courses in Group A-1 must be completed.
- Options exist for Group A-2 (General and Organic Chemistry depending on the student's interest area).
- One course from each of Group A-3, Group B, and Group C must be completed.
- Additionally, one course from either Group B or Group C must be completed.
- A single class cannot be used to satisfy more than one degree requirement.

Course Titles, Credits, and Semester Offered

	Course	Title	Credits	Offered	Prerequisites
GROUP A-1	ANSC 1001	Introduction to Animal Science	3	Fall	
	ANSC 1111	Principles of Animal Nutrition and Feeding	3	Spring	
	ANSC 3121	Principles of Animal Genetics	3	Fall	BIOL 1108
	ANSC 3122	Reproductive Physiology	4	Spring	
	ANSC 3194	Seminar	1	Spring	
	BIOL 1107	Principles of Biology I	4	Fall, Spring	
	BIOL 1108	Principles of Biology II	4	Fall, Spring	
GROUP A-2	PATH 2100	Anatomy and Physiology of Animals	4	Fall	BIOL 1107 or Eq.
	CHEM 1122	Chemical Principles and Applications	4	Fall, Spring	
	CHEM 1124Q	Fundamentals of General Chemistry I	4	Fall, Spring	MATH 1011Q or Eq.
	CHEM 1125Q	Fundamentals of General Chemistry II	3	Fall, Spring	CHEM 1124Q
	CHEM 1127Q	General Chemistry I	4	Fall, Spring	
GROUP A-3	CHEM 2241	Organic Chemistry	3	Fall, Spring	CHEM 1122, 1124Q, 1127Q, 1137Q, or 1147Q
	CHEM 2443	Organic Chemistry	3	Fall, Spring	CHEM 1128Q, 1138Q, 1148Q, or 1126Q
	MCB 2000	Introduction to Biochemistry	4	Fall, Spring	CHEM 2241 or 2444
GROUP A-3	MCB 2610	Fundamentals of Microbiology	4	Fall, Spring	CHEM 2241 or 2443
	ANSC 4341	Food Microbiology and Safety	3	Spring	BIOL 1107
GROUP B	ANSC 2251	Horse Science	3	Fall, Spring	
	ANSC 2271	Principles of Poultry Science	3	Spring	
	ANSC 3261	Dairy Cattle Management	3	Fall	
	ANSC 3272	Laboratory Animal Science	3	Fall, Spring	BIOL 1108 or Eq.
GROUP C	ANSC 3273	Livestock Management	4	Fall	
	ANSC 3311	Comparative Exercise Physiology	3	Spring	PATH 2100 or PNB 2265 or 2275
	ANSC 3313	Growth Biology & Metabolism in Domestic Livestock	3	Fall	PATH 2100
	ANSC 3316	Endocrinology of Farm Animals	3	Spring	PATH 2100 or Eq.
	ANSC 3323	Animal Embryology and Biotechnology	3	Fall	ANSC 3122 or MCB 4219
	ANSC 3343	Animal Food Products	3	Fall	
	ANSC 3641	Animal Food Products: Dairy Technology	3	Spring	
	ANSC 4311	Advanced Animal Nutrition	3	Fall	ANSC 1111

If you are interested in Pre-Vet/Pre-Grad, recommended courses are*:

Course	Title	Credits	Offered	Group	Prerequisites
CHEM 1127Q	General Chemistry I	4	Spring	A-2	
CHEM 1128Q	General Chemistry II	4	Spring		CHEM 1127Q, 1137Q or 1147Q
CHEM 2443	Organic Chemistry	3	Fall, Spring	A-2	CHEM 1128Q, 1138Q, 1148Q, or 1126Q
CHEM 2444	Organic Chemistry	3	Fall, Spring		CHEM 2443
CHEM 2445	Organic Chemistry Laboratory	3	Fall, Spring		CHEM 2444
COMM 1100	Principles of Public Speaking	3	Fall, Spring		
MATH 1131Q	Calculus I	4	Fall, Spring		
MCB 2000	Introduction to Biochemistry	4	Fall, Spring	A-3	CHEM 2241 or 2444
MCB 2610	Fundamentals of Microbiology	4	Fall, Spring	A-3	CHEM 2241 or 2443
PHYS 1201Q	General Physics I	4	Spring		MATH 1060Q or Eq.
PHYS 1202Q	General Physics II	4	Fall, Spring		PHYS 1201Q
STAT 1100Q	Elementary Concepts of Statistics	4	Fall, Spring		BIOL 1107 or 1108

*Check with advisor or the VMCAS website for requirements of particular veterinary schools.