

# PRE-VET/PRE-GRAD AREA OF INTEREST

## 2024-2025 FOUR-YEAR PLAN

This document is an example schedule for planning purposes only. For official degree information, refer to Degree Audit and speak with your advisor.

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

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 1107 or 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 B	MCB 2610	Fundamentals of Microbiology	4	Fall, Spring	CHEM 2241 or 2443
	ANSC 4341	Food Microbiology and Safety	3	Spring	BIOL 1107
	ANSC 2251	Horse Science	3	Fall, Spring	
	ANSC 2271	Principles of Poultry Science	3	Spring	
GROUP C	ANSC 3261	Dairy Cattle Management	3	Fall	
	ANSC 3272	Laboratory Animal Science	3	Fall, Spring	BIOL 1108 or Eq.
	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	Prerequisites
COMM 1100	Principles of Public Speaking	3	Fall, Spring	
MATH 1131Q	Calculus I	4	Fall, Spring	
STAT 1100Q	Elementary Concepts of Statistics	4	Fall, Spring	BIOL 1107 or 1108
CHEM 1127Q	General Chemistry I	4	Spring	
CHEM 1128Q	General Chemistry II	4	Spring	CHEM 1127Q, 1137Q or 1147Q
PHYS 1201Q	General Physics I	4	Spring	MATH 1060Q or Eq.
PHYS 1202Q	General Physics II	4	Fall, Spring	PHYS 1201Q
CHEM 2443	Organic Chemistry	3	Fall, Spring	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
MCB 2610	Fundamentals of Microbiology	4	Fall, Spring	CHEM 2241 or 2443
MCB 2000	Introduction to Biochemistry	4	Fall, Spring	CHEM 2241 or 2444

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