

Animal Science BS Pre-Vet Basic Science Emphasis Curriculum Guide For Students Beginning Fall 2012

Name:	ID:	Term/Year of Program Entry:
Advisor(s):	Minors (if applicable):	Anticipated Graduation Date:

All courses required within the Animal Science major must be taken A-F graded unless only offered as S-N.

Foundation Courses			
Course & Credits	Term(s) Offered	LE Status*	Term Completed/Grade
ApEc 1101 Prin. Of Microeconomics (4)	F, S	SSci, GP	
Biol 1009 General Biology (4)*	F, S, SS	Biol	
AFEE 3221 Communication for Ag, Food and the Environment (3)	F		
or Comm 1101 Intro. to Public Speaking (3)	F,S,SS	CLE	
Writ 3562W Technical & Professional Writing	F,S,SS	WI (meets both upper level req. in the major)	
Math 1031 College Algebra (3)	F, S, SS	Math	
or Math 1142 Short Calculus (4)*	F, S, SS	Math	
or Math 1271 Calculus (4)*	F, S, SS	Math	
Professional Courses			
AnSc 1101 Introductory Animal Science (4)	S		
AnSc 2401 Animal Nutrition (3)	F		
AnSc 3011 Statistics for Animal Scientists (4)	F, S		
AnSc 3221 Animal Breeding (4)	F		
AnSc 3301 Human & Animal Physiology Lecture (3)	F, S		
AnSc 3302 Human & Animal Physiology Lab (1)	F, S		
AnSc 4096 Professional Internship (3) <i>(up to 6 credits; separate registration semester(s) required)</i>	F, S, SS		
or AnSc 4009W Undergraduate Research Thesis (6) <i>(must be taken over two or more semesters; credits are split)</i>	F, S, SS		

Required Coursework for Pre-Vet Students Students in this emphasis must complete all courses below			
Course & Credits	Term(s) Offered	LE Status*	Term Completed/Grade
Chem 1061 Chemistry Principles I Lecture (3) and Chem 1065 Chemistry Principles I Lab (1) <i>Concurrent enrollment required in lecture & lab Chem 1071 and 1075 are acceptable substitutions</i>	F,S,SS F,S,SS	Phys	
Chem 1062 Chemistry Principles II Lecture (3) and Chem 1066 Chemistry Principles II Lab (1) <i>Concurrent enrollment required in lecture & lab Chem 1072 and 1076 are acceptable substitutions</i>	F,S,SS F,S,SS	Phys	
Chem 2301 Organic Chemistry (3)	F,S,SS		
Chem 2302 Organic Chemistry II (3) <i>This course is a prerequisite for enrollment in Chem 2311. Concurrent registration is allowed. This course does not appear on the APAS report as it is not required for the degree. This course may be taken S/N graded.*</i>	F,S,SS		
Chem 2311 Organic Chemistry Lab (4)	F,S,SS		
FScN 2021 Introductory Microbiology (4) or VBS 2032 General Microbiology (5)	F,S F,S		
BioC 3021 Biochemistry (3)	F,S,SS		
GCD 3022 Genetics (3)	F,S,SS		
Phys 1101W Introductory College Physics I (4) and Phys 1102W Introductory College Physics II (4)	F,S S	Phys, WI Phys, WI	

Choose 12 credits minimum of approved elective courses. Electives may vary from year to year; see online course guide for available classes or check with your advisor.

AnSc elective courses may not be used to fulfill other major requirements.

Course & Credits	Term(s) Offered	LE Status*	Term Completed/Grade

Choose 1 course or course grouping from:

Course & Credits	Term(s) Offered	Term Completed/Grade
AnSc 4601 Pork Production Systems Mgmt. (4)	S	
AnSc 4602 Sheep Production Systems Mgmt. (4)	S	
AnSc 4603 Beef Production Systems Mgmt. (4)	F	
AnSc 4604 Dairy Production Systems Mgmt. (4)	S	
VCS 4606 Small Animal Mgmt. (3)	S	
AnSc 2055 Horse Management (2)	F	
and		
AnSc 2056 Horse Management Practicum (2)	F	
Approved course through the Midwest Poultry Consortium	SS	

Liberal Education Requirements-University Wide

Liberal Education (LE) courses are required by all students.

The following **CORE** requirements will not automatically be met by courses within this emphasis. Students should consult the online class schedule to find courses that satisfy the missing areas. Each course must be a minimum of 3 credits. Consult your advisor with questions.

Requirement	Course Title	Term Completed/Grade
Other Humanities (OH)		
Literature (Lit)		
Historical Perspectives (HP) <i>(suggestion: AnSc 1701)</i>		
University Writing-by placement	Writ 1301 or 1401 or AP or approved transfer course	

The following liberal education **theme** requirements will not automatically be met by courses within this emphasis. Students are required to *select two out of the following three*. Consult your advisor with questions.

Diversity & Social Justice (DSJ)		
Environment (Envt)		
Technology & Society (TS)		

*This emphasis includes the prerequisite requirements for admission to the University of Minnesota Vet School. Be advised that some veterinary schools have prerequisites requiring calculus, additional biology and organic chemistry as well as other courses not required within this emphasis. See your advisor for more information and/or visit: <http://aavmc.org/Member-Institutions.aspx> Students are encouraged to view requirements of additional schools early in their undergraduate career.

Animal Science Elective Courses

Please note that certain courses have prerequisites or require instructor permission for enrollment. Some courses are only offered every other semester listed. Consult the online course guide or see your advisor for the most updated information.

All classes subject to change/cancellation as merited by the Department.

Course may not count for two areas, unless meeting a liberal education theme or core.

<u>Course</u>	<u>Credits</u>	<u>Term</u>	<u>Title of Course</u>
AnSc 1001	(1)	F	Orientation to Animal Science (<i>designed for freshman</i>)
AnSc 1007	(2)	F	Horse in Your Backyard
AnSc 1011	(3)	F	Animals and Society (<i>meets lib ed of Civic Life & Ethics</i>)
AnSc 1403	(3)	S	Companion Animal Nutrition & Care
AnSc 1511	(3)	F	Food Animal Products for Consumers
AnSc 1701	(3)	F	Historical Influence of the Horse on Society (<i>meets lib ed of History</i>)
AnSc 2012	(3)	S	Livestock and Carcass Evaluation
AnSc 2055	(2)	F	Horse Management
AnSc 2056	(2)	F	Horse Management Practicum
AnSc 3007	(3)	S	Equine Nutrition
AnSc 3203W	(3)	S	Environ, Global Food Prod & Citizen
AnSc 3305	(4)	F	Repro Biology in Health & Disease
AnSc 3307	(1)	F,S	Artificial Insemination Techniques
AnSc 3403	(3)	F	Companion Animal Hot Button Issues
AnSc 3501	(3)	S	Farm Animal Environment
AnSc 3509	(3)	S	Animal Biotechnology
AnSc 3511	(3)	S	Animal Growth and Development
AnSc 3521	(3)	F	Biotech. Appl. in Pharm. Res. & Devel
AnSc 3609	(2)	F	Bus. Planning for Livestock Enterprises
AnSc 3801	(3)	S	Livestock Merchandising
AnSc 4011	(3)	S	Dairy Cattle Breeding
AnSc 4305	(2)	S	Companion and Wild Species Reproduction
AnSc 4401	(3)	F	Swine Nutrition
AnSc 4403	(3)	S	Ruminant Nutrition
AnSc 4404	(2)	F	Applied Dairy Nutrition
AnSc 4601	(4)	S	Pork Production Systems Mgmt
AnSc 4602	(4)	S	Sheep Production Systems Mgmt
AnSc 4603	(4)	F	Beef Production Systems Mgmt
AnSc 4604	(4)	S	Dairy Production Systems Mgmt
AnSc 4611	(2)	S	Advanced Pork Prod Systems Mgmt
AnSc 4612	(2)	S	Tools for Dairy Consult. in the 21 st Century
AnSc 4613	(2)	F	Advanced Beef Prod Systems Mgmt
AnSc 4614	(2)	S	Advanced Dairy Prod Systems Mgmt
CFAN 1501	(3)	S	Biotechnology, People & the Environ
Ent 3281	(3)	F	Veterinary Entomology
VPM 3700	(2)	S	Equine Reproduction and Breeding Mgmt
VCS 4606	(3)	S	Small Animal Management

Midwest Poultry Consortium Summer Courses—Madison, WI (varies; see advisor for more information)

Any CFANS major learning/study abroad course (contact advisor for more information)

Example Plan of Study

Animal Science Pre-Vet Emphasis/Basic Science Option

Your particular outline of study may differ based upon availability and previous courses/credits.

Fall 1	Credits	Spring 1	Credits
AnSc 1001 Orientation to Animal Science	1	AnSc 1101 Intro. to Animal Science	4
Math 1031 College Algebra & Probability	3	Chem 1061/65 Chemical Principles I	4
Writ 1301 University Writing (by placement)	4	or	
Chem 1015 Introductory Chemistry (by placement)	3	Chem 1062/66 Chemical Principles II	4
or		Lib Ed or AnSc	6-8
Chem 1061/65 Chemical Principles I (by placement)	4	<i>Suggestions: AnSc 1403, AnSc 2012, CFAN 1501</i>	
Lib Ed Requirement or AnSc elective	3-6		
<i>Suggestions: AnSc 1011, AnSc 1701</i>			
	13-16		14-16
Fall 2	Credits	Spring 2	Credits
Chem 1062/66 Chemical Principles II	4	Biol 1009 General Biology	4
or		Comm 1101 Intro. to Public Speaking	3
Biol 1009 General Biology	4	ApEc 1101 Principles of Microeconomics	3
AnSc 2401 Animal Nutrition	3	AnSc 3011 Stats. for Animal Scientists	4
Lib Ed or AnSc	7-10	Lib Ed or AnSc	3
<i>Suggestions: AnSc 1007, 3403</i>			
	14-17		17
Fall 3	Credits	Spring 3	Credits
Chem 2301 Organic Chemistry I	3	Chem 2302 Organic Chemistry II	3
AnSc 3221 Animal Breeding	4	Chem 2311 Organic Lab	4
Writ 3562W Tech. & Prof. Writing	4	FScN 2021 Introductory Microbiology	4
AnSc Management Course	3-4	Or VBS 2032 General Microbiology	5
Or Lib Ed or AnSc	3	AnSc Management Course	4
		Or Lib Ed or AnSc elective	3
	14-17		15-18
Fall 4	Credits	Spring 4	Credits
AnSc 3301/02 Human & An. Physiology	4	BioC 3021 Biochemistry	3
GCD 3022 Genetics	3	Phys 1102W Introduction to College Physics II	4
Phys 1101W Introduction to College Physics I	4	Missing Lib Ed or AnSc elective	6-9
AnSc 4096 Professional Internship	3		
Missing Lib Ed or AnSc elective	2-4		
	16-18		13-16

Internship: Students should be planning for internship(s) between their sophomore and junior year(s). Students may take up to six credits of internship.