

Animal Science Major

PRE-VET EMPHASIS

LIBERAL EDUCATION REQUIREMENTS

8 Credits (min. 2 courses)

Biological Science with Lab

Physical Science with Lab

12 Credits (6 credits in each area)

Social Sciences, Arts and Humanities (1 literature, 1 in "other")

18 Credits (3 credits in each area)

Historical Perspective, Cultural Diversity, International Perspective, Environment, Citizenship and Public Ethics, Mathematical Thinking

FOUNDATION COURSES

ApEc	1101	Principles of Microeconomics (3)	F, S
Biol	1009	General Biology (4)	F, S, SS
Writ	1301	University Writing (4) <i>(by placement)</i>	F, S
or Writ	1401	University Writing (4) <i>(by placement)</i>	F, S
Comm	1101	Intro. to Public Speaking (3)	F, S, SS
Writ	3562W	Technical & Prof. Writing (4)	F, S, SS
<i>(This class counts as two upper division writing intensive courses)</i>			
Math	1031	College Algebra (3)	F, S, SS
or Math	1142	Short Calculus (4)	F, S, SS
or Math	1271	Calculus I &/or Math 1272 (4)	F, S, SS
or Math	1281	Calculus I &/or Math 1282 (4)	F, S
<i>(calculus is required in the biotechnology option)</i>			

PROFESSIONAL COURSES

AnSc	1001	Orientation to Animal Science (1)	F
AnSc	1101	Introductory Animal Science (4)	S
AnSc	2211	Biometrics for Livestock (3)	S
AnSc	2401	Animal Nutrition (3)	F
AnSc	3221	Animal Breeding (4)	F
AnSc	3301	Systemic Physiology (4)	F
AnSc	4096	Prof. Ext Program: Internship (3)	F, S, SS
or CFAN	4009W	Undergrad Research Thesis (6)	F, S, SS

REQUIRED COURSEWORK

Students in the Science/Pre-Vet emphasis must choose *either* the Basic Science or Biotechnology option of study.

Chem	1021	Chemistry Principles I (4)	F, S, SS
Chem	1022	Chemistry Principles II (4)	F, S, SS
Chem	2301	Organic Chemistry I (3)	F, S, SS
Chem	2311	Organic Chemistry Lab (4)	F, S, SS
<i>(prereq Chem 2302 or concurrent enrollment, may take 2302 S-N)</i>			
BioC	3021	Biochemistry (3)	F, S
GCD	3022	Genetics <i>(ONLY for Basic Sci. Option)</i> (3)	F, S
or Biol	4003	Genetics <i>(ONLY for Biotech Option)</i> (3)	F, S
VBS	2032	Microbiology with Lab (4)	F, S, SS

and choose one of the following pairs

Phys	1101W	Introductory College Physics I (4)	F, S, SS
Phys	1102W	Introductory College Physics II (4)	S
or			
Phys	1201W	Intro Physics: Pre-Med & Bio I (5)	F, S, SS
Phys	1202W	Intro Physics: Pre-Med & Bio II (5)	F, S, SS

Basic Science Option:

Choose **12 Credits** (minimum) of Animal Science Electives (Students must take 6 credits of 1xxx-2xxx level courses and 6 credits of 3xxx-4xxx level courses)

Choose 1 Course from this group

(except for Equine Management: students must take *both* AnSc 2055 & AnSc 3007):

AnSc	4601	Pork Prod. Systems Mgmt (4)	S
AnSc	4602	Sheep Prod. Systems Mgmt (4)	S
AnSc	4603	Beef Prod. Systems Mgmt (4)	F
AnSc	4604	Dairy Prod. Systems Mgmt (4)	S
AnSc	4605	Poultry Prod. Systems Mgmt (4)	F
VCS	4606	Small Animal Mgmt (3)	S
AnSc	2055	Horse Health Management (2)	F
and AnSc	3007	Equine Nutrition (3)	S

Biotechnology Option:

(1 semester of calculus required in this option)

CFAN	1501	Biotech, People & Environment (3)	S
AnSc	3509	Animal Biotechnology (3)	S

Choose 11 Credits *(at least 2 credits must be a laboratory)*

AnSc	3511	Animal Growth & Development (3)	S
AnSc	3305	Repro Bio in Health & Disease (4)	F
Biol	4004	Cell Biology (3)	F, S
BioC	4025	Laboratory in Biochemistry (2)	F, S
BioC	4125	Lab: Molecular & Cellular Bio (3)	S
BioC	5001	Biochem., Mol & Cellular Bio (5)	F
GCD	4015	Genetics Laboratory (2)	F
GCD	4025	Cell Biology Laboratory (2)	S
GCD	4034	Molecular Genetics (3)	S
GCD	4143	Human Genetics (3)	S
GCD	4151	Molecular Biology of Cancer (3)	F
GCD	4161	Developmental Biology (3)	S
GCD	5036	Molecular Cell Biology (3)	F
MicB	3301	Biology of Microorganisms (5)	F, S
MicB	4131	Immunology (3)	F, S
MicB	4141W	Bio Genetics & Patho. Viruses (3)	S
MicB	4151	Mol & Genetic Micro Diseases (3)	S
MicB	4235	Virology, Immun. & Micro. Genetics (3)	S

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ELECTIVE COURSES (CLASSES CANNOT FULFILL REQUIREMENTS IN TWO AREAS)

AnSc 1007	(2)	F	Horse in Your Backyard
AnSc 1011	(3)	F	Animals and Society
AnSc 1021	(1)	S	Avian Sampler
AnSc 1403	(3)	S	Companion Animal Nutrition & Care
AnSc 1511	(3)	F	Food Animal Products for Consumers
AnSc 2012	(3)	S	Livestock and Carcass Evaluation
AnSc 2055	(2)	F	Horse Health Management
AnSc 3007	(3)	S	Equine Nutrition
AnSc 3052	(4)	F	Equine Anatomy & Exercise Physiology
AnSc 3203W	(3)	S	Environment Global Food Production & the Citizen
AnSc 3305	(4)	F	Reproductive Biology in Health & Disease
AnSc 3307	(1)	F,S	Artificial Insemination Techniques
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 Pharmaceutical Research & Development
AnSc 3609	(2)	F	Animal Production Systems
AnSc 3801	(3)	S	Livestock Merchandising
AnSc 4011	(3)	S	Dairy Cattle Breeding
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 Management
AnSc 4602	(4)	S	Sheep Production Systems Management
AnSc 4603	(4)	F	Beef Production Systems Management
AnSc 4604	(4)	S	Dairy Production Systems Management
AnSc 4605	(4)	F	Poultry Production Systems
AnSc 4611	(2)	S	Advanced Pork Prod Systems Management
AnSc 4613	(2)	F	Advanced Beef Prod Systems Management
AnSc 4614	(2)	S	Advanced Dairy Prod Systems Management
CFAN 1501	(3)	S	Biotechnology, People & the Environment
Ent 3281	(3)	F	Veterinary Entomology
VPM 3502	(3)	F	Animal Health and Disease
VPM 3700	(2)	S	Equine Reproduction and Breeding Management
VCS 4600	(3)	F	Small Animal and Equine Behavior
VCS 4606	(3)	S	Small Animal Management

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