

**Pre-veterinary and Wildlife Care Option
Coursework Requirements - 2007-2009 Catalog
30 Total Credits**

Required Courses

AN S 214	Domestic Animal Physiology	3 cr
NREM 330	Interpretation of Natural Resources	3 cr

6 credits

Restricted Electives

A minimum of 24 credits*

Animal Behavior

AN S 336	Livestock Behavior and Well-Being	3 cr
BIOL 354	Animal Behavior	3 cr

Select three credits from list:

Natural History

A ECL 366	Natural History of Iowa Vertebrates	3 cr
A ECL 458	Ornithology	3 cr
A ECL 459	Mammalogy	3 cr

Select three credits from list below:

Vertebrate Anatomy

ANTHR 438	Primate Evolutionary Ecology and Behavior	3 cr
BMS 329	Anatomy and Physiology of Domestic Animals	3 cr
BIOL 155	Introduction to the Human Body	3 cr
BIOL 335	Principles of Animal Physiology	5 cr
BIOL 351	Comparative Chordate Anatomy	5 cr
BIOL 352	Vertebrate Histology	4 cr
BIOL 434	General Comparative Endocrinology	3-4 cr

Select one course from list:

Genetics/Development

AN S 331	Animal Reproduction	3 cr
BIOL 305, 305L	Embryology with Laboratory	3 cr
BIOL 313*	Principles of Genetics	3 cr
GEN 320*	Genetics, Agriculture and Biotechnology	3 cr

Select one course from list:

Health/Production

A ECL 401	Introductory Aquatic Animal Health and Medicine	1 cr
A ECL 442	Aquaculture	3 cr
AN S 319	Animal Nutrition	3 cr
AN S 493	Workshop in Animal Science	1-3 cr
BIOL 353	Introductory Parasitology	4 cr
MICRO 201, 201L	Introduction to Microbiology with Laboratory	3 cr

Select three to four credits from list:

Advanced Animal Ecology or NREM

Select three credits in 300-500 level A ECL or NREM courses

Additional Restricted Electives**

If needed, select additional credits from unused courses listed above or a 300-500 level A ECL or NREM course

* Students seeking admission to the ISU College of Veterinary Medicine are required to have Biochemistry (BBMB 301 or BIOL 314) prior to admission. One of these courses may be used to meet the credit requirements for this option.

** Pre-vet students should take BIOL 313 or GEN 320 in order to meet the ISU College of Veterinary Medicine admission requirements.

Suggested Sequence of Courses
Pre-veterinary and Wildlife Care Option*

Freshman Year

BIOL 211	Principles of Biology	3	BIOL 212	Principles of Biology	3
BIOL 211L	Prin. of Biology Lab.	1	BIOL 212L	Prin. of Biology Lab.	1
NREM 110	Orientation in NREM	R	NREM 120	Intro. Renew. Resources	3
Ethics/Humanities/Social Science Elective		3	ENGL 150	Critical Thinking & Comm	3
MATH 140	College Algebra**	3	MATH 142	Trig. & Analytic Geom.**	3
CHEM 163	General Chemistry#	4	CHEM 164	General Chemistry#	3
CHEM 163L	General Chemistry Lab.#	<u>1</u>	LIB 160	Library Instruction	<u>.5</u>
		<u>15</u>			<u>16.5</u>

Sophomore Year

A ECL 365	Vertebrate Biology	4	CHEM 231	Elem. Organic Chem.#	3
NREM 211	Careers in Nat. Res	1	CHEM 231L	Lab. Organic Chem.#	1
A ECL 312	Ecology	4	Stat 101/104	Statistics	3-4
Restricted Elective		3	Sp Cm 212	Fund. of Public Speaking	3
ENGL 250	W/O/V/E Communications	<u>3</u>	Ethics/Humanities/Social Science Elective		3
		<u>15</u>	Free Elective		<u>3</u>
					<u>16-17</u>

Junior Year***

PHYS 106	Physics Common Exper.#	4	NREM 330	Interpretation of Nat. Res.	3
AN S 214	Domestic Animal Physiology	3	Restricted Elective		3
Restricted Elective		3	Natural History Elective		3
Ethics/Humanities/Social Science Elective		3	Ethics/Humanities/Social Science Elective		3
Free Elective		<u>3</u>	Free Electives		<u>6</u>
		<u>16</u>			<u>18</u>

Senior Year***

AN S 336 or BIOL 354	Behavior Elective	3	Restricted Elective		6
Restricted Elective		3	Communications Elective		3
Genetics/Development Elective		3	Free Elective		<u>6</u>
Ethics/Humanities/Social Science Elective		3			<u>15</u>
Communications Elective		3			
Free Elective		<u>2</u>			
		<u>17</u>			

* To complete degree program in 4 years students must maintain an average of 16 credits per semester.

** Math 149 (Precalculus Mathematics) may be substituted for Math 140 and 142, providing ISU Math placement guidelines are met.

*** In scheduling coursework, students should pay particular attention to courses with limited offerings (e.g., offered only on alternate years) and to course sequences (i.e., where a course serves as a prerequisite for another course).

Admission to the ISU College of Veterinary Medicine requires a different set of Chemistry and Physics courses. Students should plan to enroll in Chemistry 177, 177L, 178, 331, 331L and 332. The Physics requirement is PHYS 111.