



# BIO-VETERINARY

DEPARTMENT OF BIOLOGICAL SCIENCES  
AT EASTERN ILLINOIS UNIVERSITY

NAME	
E NUMBER	
CATALOG	

SP20

## GENERAL EDUCATION: 30-38 HRS

### LANGUAGE: 9 HRS

Course	Hours	Grade	Semester
ENG 1001G Composition & Language	3		
ENG 1002G Composition & Literature	3		
CMN 1310G Intro to Speech	3		

Grade of "C" or better is required

### SCIENCE AWARENESS: 7HRS

Completed in major.

### MATHEMATICS: 3-5 HRS

Completed in major.

### HUMANITIES/FINE ARTS\*: 9 HRS

Course	Hours	Grade	Semester
Humanities	3		
Fine Arts	3		
Humanities / Fine Arts	3		

### SOCIAL/BEHAVIORAL SCIENCES\*: 9 HRS

Course	Hours	Grade	Semester
PSY 1879G Intro to Psychology	3		
PHI 2500G* Intro to Ethics (suggested)	3		
	3		

### SENIOR SEMINAR: 3 HRS

Course	Hours	Grade	Semester
EIU _____	3		

Seminar topic must be outside the major area. See Undergraduate Catalog for Senior Seminars that exclude Biological Sciences majors.

### FOREIGN LANGUAGE: 0-8 HRS

EXEMPT?  YES  NO

Exempt if 2yrs in high school of a single foreign language with average grade of "C" or better.

Course	Hours	Grade	Semester

\* One course must meet Cultural Diversity requirement.

## SCIENCE CORE: 51-53 HRS

Biology Courses	Hours	Grade	Semester
BIO 1150 Biology Forum	1		
BIO 1500 General Biology I	4		
BIO 1550G* General Biology II	4		
BIO 3120* Molecular & Cell Biology	4		
BIO 3200* Genetics	4		
BIO 3520* Animal Physiology	4		
BIO 3180* Ecology and Evolution	4		
Physics Courses	Hours	Grade	Semester
PHY 1151G* Principles Physics I	3		
PHY 1152G* Principles Physics I Lab	1		
PHY 1161G* Principles Physics II	3		
PHY 1162G* Principles Physics II Lab	1		

Math Courses	Hours	Grade	Semester
MAT 2110G Brief Calculus	3		
BIO 4750 Statistical Anly of Sci Data OR MAT 2250G* Elementary Statistics	4		
Chemistry Courses	Hours	Grade	Semester
CHM 1310G General Chemistry I	3		
CHM 1315G General Chemistry I Lab	1		
CHM 1410* General Chemistry II	3		
CHM 1415* General Chemistry II Lab	1		
CHM 2440* Organic Chemistry I	3		
CHM 2445* Organic Chemistry I Lab	1		

\*Additional prerequisite classes may be required. See Undergraduate Catalog

\*Required by some veterinary medical schools

\*Recommended by some veterinary medical schools

Additional Requirements for SOME schools: Medical Terminology, Biochemistry Lab; Animal Nutrition (not offered at EIU - offered online at other universities)

Departmental Exit Interview is also required prior to leaving EIU.

## MAJOR ELECTIVES: 21 HRS

21 hours of course work in Biological Sciences (with the exception of BIO 3400, workshops, and courses designed for General Education) or Mathematics or Physical Sciences courses above 2000 (with the exception of general education and CHM 2310). A minimum of 15 hrs must be taken in Biological Sciences.

Course	Hours	Grade	Semester
BIO 3300* Microbiology	3		
BIO 3620 Funct. Comp. Anatomy	4		
BIO 4958* Parasitology	4		
CHM 2840 Organic Chemistry II	3		
CHM 3845 Organic Chemistry II Lab	1		
CHM 3450* Biochemistry	3		

- BIO 2210 (4) Anatomy and Physiology I
- BIO 3210 (4) Immunology
- BIO 3300 (4) General Microbiology
- BIO 3312 (3) Horticulture
- BIO 3322 (3) Dendrology
- BIO 3450 (1-3) Independent Study
- BIO 3451 (1-3) Undergraduate Research
- BIO 3610 (3) Survey of Algae & Fungi
- BIO 3612 (3) Plant Evolution & Diversity
- BIO 3620 (4) Funct. Comp. Anatomy
- BIO 3622 (4) Embryology
- BIO 3624 (3) Histology
- BIO 3628 (4) Evolutionary Medicine
- BIO 3690 (4) Clinical Rotation
- BIO 3710 (3) Plant-Animal Interactions
- BIO 3720 (4) Entomology
- BIO 3740 (3) Clinical Mycology
- BIO 3810 (3) Freshwater Ecology
- BIO 3850 (3) Environmental Biology
- BIO 3888G (3) Tropical/Marine Ecology
- BIO 3950 (3) Vertebrate Natural History

- BIO 3952 (3) Invertebrate Natural History
- BIO 3960 (1-4) Special Topics
- BIO 4400 (1) Teaching in the Lab
- BIO 4751 (3) Adv. Molec. & Cell Biol.
- BIO 4800 (2) Research Techniques
- BIO 4810 (4) Plant Ecology
- BIO 4812 (3) Fisheries Ecology & Mgmt
- BIO 4814 (3) Conservation Biology
- BIO 4816 (3) Biotic Communities
- BIO 4818 (4) Environmental Microbiology
- BIO 4820 (4) Spatial Analysis for Environmental Sciences
- BIO 4830 (3) Comp. Vertebrate Physiology
- BIO 4832 (4) Animal Behavior
- BIO 4833 (4) Neurobiology of Diseases
- BIO 4834 (3) Neurobiology
- BIO 4835 (3) Advanced Neurobiology
- BIO 4836 (4) Pathogenic Microbiology
- BIO 4892 (4) Intro. Paleobotany

- BIO 4914 (3) Plant Anatomy
- BIO 4920 (3) Medicinal Plants
- BIO 4940 (3) Phycology
- BIO 4942 (3) Mycology
- BIO 4944 (3) Lichens
- BIO 4946 (3) Bryology
- BIO 4948 (3) Plant Taxonomy
- BIO 4950 (3) Ichthyology
- BIO 4952 (3) Herpetology
- BIO 4954 (3) Ornithology
- BIO 4956 (3) Mammalogy
- BIO 4958 (4) Parasitology
- BIO 4960 (3) Wetland & Aqua. Vasc. Plants
- BIO 4984 (3) Organic Evolution

Courses numbered 5000-5499 inclusive, may be taken by a senior whose graduation requirements average 2.75 or higher, with the permission of the instructor and the Dean of the Graduate School.

**BE PREPARED: UPDATE THIS FORM BEFORE MEETING WITH YOUR ADVISOR**

Admission into veterinary school is very competitive. Although many of the veterinary medical colleges do not require a bachelor's degree for entrance, most students admitted will have completed a bachelor's degree. Students should maintain a grade point average near or above 3.50/4.00, acquire leadership skills, extensive/diverse experience in veterinary medicine, and obtain 63% on the Graduate Record Exam (GRE) to be competitive. Students apply through a centralized application service Veterinary Medical College Application Service (VMCAS) in June between the junior and senior years. Apply Early! At least three letters of recommendation are required, typically 1 from a science professor and 1 from a veterinarian. The last letter can be from the student's choosing.

Each of the 30 veterinary programs have different requirements, it is very important to identify early which programs you plan to apply and plot out their requirements accordingly.

## WHAT MAKES YOU UNIQUE FROM OTHER APPLICANTS?

### Animal Care Experience

- Seek out volunteer or work experience that affords you the opportunity to work with animals: zoos, refuges, veterinary clinics, agribusiness, etc.
- Handling diversification: Large and small animals, exotics, reptiles, etc.

### Leadership Experience

Veterinarians are leaders in their communities and demonstrated leadership skills are a must. Campus, church and community organizations provide excellent leadership opportunities.

## RESOURCES:

### Association of American Veterinary Medical Colleges

[www.aavmc.org](http://www.aavmc.org)

### American Vet Medical

[www.avma.org](http://www.avma.org)

### Veterinary Medical College Application Serv

[www.vmcas.org](http://www.vmcas.org)

### University of Illinois

[www.vetmed.illinois.edu](http://www.vetmed.illinois.edu)

### University of Missouri

[www.cvm.missouri.edu](http://www.cvm.missouri.edu)

## SAMPLE COURSE SEQUENCE:

The suggested schedule assumes that the foreign language requirement has been completed.

FRESHMAN	
FALL	SPRING
<b>ENG 1001G</b> <b>CHM 1310G/1315G</b> <b>BIO 1500</b> <b>BIO 1150</b> <b>Gen Ed Elective</b>	<b>ENG 1002G</b> <b>CHM 1410G/1415G</b> <b>BIO 1550G</b> <b>Gen Ed Elective</b> <b>MAT Prereq or Stats</b>
SOPHOMORE	
FALL	SPRING
<b>BIO 3120</b> <b>CHM 2440/2445</b> <b>MAT 2110G</b> <b>Gen Ed Elective</b>	<b>CHM 2840/2845</b> <b>BIO 3200</b> <b>BIO Elective &gt;3000</b> <b>Gen Ed Elective</b>
JUNIOR	
FALL	SPRING
<b>CHEM 3450</b> <b>PHY 1151G/1152G</b> <b>BIO 3520</b> <b>BIO Elective &gt;3000</b> <b>GRE Prep</b>	<b>PHY 1161/1162</b> <b>BIO 4750 OR MAT 2250G</b> <i>(if not taken in FRESHMAN SPR)</i> <b>BIO 3620</b> <b>Free Elective</b> <b>GRE Exam/Apply to Vet Med School</b>
SENIOR	
FALL	SPRING
<b>EIU 4***</b> <b>CMN 1310G</b> <b>BIO Elective &gt;3000</b> <b>Gen Ed Elective</b> <b>Free Elective</b> <b>Vet Med School Admission Interviews</b>	<b>BIO 3180</b> <b>BIO Elective &gt;3000</b> <b>Gen Ed Elective</b> <b>Free Elective</b> <b>Exit Interview</b>