

ANIMAL AND VETERINARY SCIENCES, BACHELOR OF SCIENCE WITH A CONCENTRATION IN PRE#VETERINARY (B.S.)

Pre-Veterinary Medicine

For students who have a strong interest in veterinary medicine, The Department of Agriculture offers a program of study that will provide an abundance of hands-on experience with both large and small animals while fulfilling admission requirements of veterinary schools.

Students in the Pre-Veterinary concentration of Animal and Veterinary Sciences will work directly with a knowledgeable faculty advisor throughout their academic career and the application process. Although Kentucky does not have a veterinary school, Auburn University College of Veterinary Medicine and Tuskegee University College of Veterinary Medicine have seats specifically designated for Kentucky residents.

Admission to Auburn or Tuskegee Colleges of Veterinary Medicine Kentucky is a member of the Southern Regional Educational Board Plan under which legal Kentucky residents attend Auburn University College of Veterinary Medicine or Tuskegee University College of Veterinary Medicine. The program is funded by an appropriation of the General Assembly to the Kentucky Council on Post-Secondary Education. A limited number of students who have completed pre-veterinary requirements are selected on a competitive basis by Auburn or Tuskegee each year and are exempt from out-of-state tuition. Both veterinary colleges have similar entrance requirements, including a GRE examination.

Students should have a grade point average of 3.4 to be competitive. Students need to pass all pre-veterinary required courses with a grade of "C" or better. Courses in organic chemistry and physics must have been completed within six years of entry into the college of veterinary medicine. Students applying to Auburn or Tuskegee use the Veterinary Medical College Application Service (VMCAS). Application deadlines for both are September 15. Students are expected to gain veterinary experience by working directly with a D.V.M.

Program Requirements

CIP Code: 01.0301

Summary Checklist for General Education

Code	Title	Hours
Element 1		
A:	Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3
B:	Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3
C:	Oral Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)	3

Element 2		
	Quantitative Reasoning (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/)	3
Element 3		
A:	Arts (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)	3
B:	Humanities (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)	3
Element 4		
	Natural Sciences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/)	6
Element 5		
A:	Historical Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)	3
B:	Social Behavioral Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)	3
Element 6		
	Diversity of Perspectives Experiences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/)	6
Total Hours		36

Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

Major

Code	Title	Hours
University Graduation Requirements		
General Education		36
<i>Student Success Seminar</i>		
SCO 100	Student Success Seminar	1
Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories)		
Major Requirements		
<i>Core Courses</i>		
AGR 125	Principles of Animal Science	3
AGR 126	Animal Science Laboratory	1
AGR 304	Pest Management	4
AGR 305	Professional Skills Seminar	1
AGR 308	Agricultural Economics	3
AGR 321	Feeds and Feeding	4
AGR 411	Senior Seminar	1
AGR 499	Agricultural Advocacy and Issues Capstone	3
	or AGR 509	Agriculture Research Methods and Interpretation
Choose from three hours of the following:		3
	AGR 301	Directed Work Experience
	AGR 302	Directed Work Experience- Management Practicum
	AGR 349	Applied Learning in Agriculture
Choose from one of the following:		3
	AGR 310	Principles of Agribusiness Management
	AGR 350	Agricultural Marketing
	AGR 440	Agricultural Financing

Choose from two of the following production classes:	6-8
AGR 255 Companion Animal Management	
AGR 326 Light Horse Production and Management	
AGR 327 Beef Production	
AGR 328 Swine Production	
AGR 329 Small Ruminant Production	
AGR 332 Poultry Production and Management	
AGR 380 Technical Management of Dairy Cattle	

Concentrations

Students must select one of the following Concentrations:

Pre-Veterinary	30-33
Animal Science	

Supporting Course Requirements

All Concentrations:

BIO 111 Cell and Molecular Biology (Element 4) ^G	
BIO 112 Ecology and Evolution	4
CHE 111 General Chemistry and General Chemistry Lab I (Element 4) ^G	
CHE 112 General Chemistry II and General Chemistry Lab & 112L	4
CHE 361 Organic Chemistry I and Organic Chemistry Lab I & 361L	4
ECO 120 Economic Reasoning and Issues (Element 5B) ^G	

Free Electives

Choose from 4-9 Free Electives	4-9
Total Hours	120

G

Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.

Concentration

Code	Title	Hours
------	-------	-------

Concentration Courses

AGR 421 Animal Nutrient Metabolism	3
Choose from three animal science courses of the following:	9

AGR 312 Ecology and Management of Grasslands and Pastures	
AGR 372 Topics and Laboratories in Animal Sciences	
AGR 373 Animal Diseases	
AGR 374 Genetics of Livestock Improvement	
AGR 375 Reproduction and Artificial Insemination of Domestic Animals	
AGR 376 Domestic Animal Anatomy	
AGR 377 Livestock Behavior and Welfare	

Supporting Course Requirements ¹

Choose from one of the following: ^G

MAT 120 Trigonometry (Element 2) ^G	
MAT 122 Precalculus Mathematics (Element 2) ^G	
MAT 211 Applied Calculus (Element 2) ^G	
MAT 234 Calculus I (Element 2) ^G	
BIO 331 Cell Biology	3
CHE 362 Organic Chemistry II and Organic Chemistry Lab II & 362L	4

PHY 131 College Physics I	5
---------------------------	---

Choose from two of the following science electives: 6-9

AGR 374 Genetics of Livestock Improvement	
or BIO 315 Genetics	
BIO 320 Principles of Microbiology	
BIO 348 Vertebrate Physiology	
BIO 546 Histology	
CHE 430 Biochemistry of Macromolecules	
or PHY 132 College Physics II	

Total Hours	30-33
--------------------	--------------

G

Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.

1

Courses listed will meet requirements for Auburn College of Veterinary Medicine for students with a Baccalaureate degree prior to starting veterinary school.