

ANIMAL AND VETERINARY SCIENCES, BACHELOR OF SCIENCE (B.S.)

Pre-Veterinary Medicine Concentration

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: 01.0901

Major

Code	Title	Hours
University Graduation Requirements		
General Education (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/)		36
<i>Student Success Seminar</i>		
GSD 101	Foundations of Learning	3
Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories)		
Major Requirements		
<i>Core Courses</i>		48
AGR 125	Principles of Animal Science	3
AGR 126	Animal Science Laboratory	1
AGR 301	Directed Work Experience	3
or AGR 349	Applied Learning in Agriculture	

AGR 304	Pest Management	4
AGR 305	Professional Skills Seminar	1
AGR 308	Agricultural Economics	3
AGR 310	Principles of Agribusiness Management	3
or AGR 350	Agricultural Marketing	
AGR 321	Feeds and Feeding	4
AGR 374	Genetics of Livestock Improvement	3
AGR 375	Reproduction and Artificial Insemination of Domestic Animals	4
AGR 411	Senior Seminar	1
AGR 421	Animal Nutrient Metabolism	3
AGR 499	Agricultural Advocacy and Issues Capstone	3
or AGR 509	Agriculture Research Methods and Interpretation	
BIO 112 & 112L	Ecology and Evolution and Ecology and Evolution Lab	4
CHE 112 & 112L	General Chemistry II and General Chemistry Lab	4
CHE 361 & 361L	Organic Chemistry I and Organic Chemistry Lab I	4

Supporting Course Requirements

BIO 111 & 111L	Cell and Molecular Biology and Cell and Molecular Biology Lab (Element 4) ^G
CHE 111 & 111L	General Chemistry and General Chemistry Lab I (Element 4) ^G
ECO 120	Economic Reasoning and Issues (Element 5B) ^G
STA 215 or STA 270	Introduction to Statistical Reasoning (Element 2) ^G Applied Statistics

Choose one of the following: 3-4

MAT 112A & MAT 112B	Algebra: Polynomials and Algebra: Functions & Matrices (Element 2) ^G
MAT 114	College Algebra (Element 2) ^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

Choose two courses from the following science electives: 6-8

BIO 320	Principles of Microbiology
BIO 331	Cell Biology
BIO 348	Vertebrate Physiology
BIO 546	Histology
CHE 362 & 362L	Organic Chemistry II and Organic Chemistry Lab II
CHE 430	Biochemistry of Macromolecules
CHE 431	Metabolic Biochemistry
PHY 131	College Physics I (Element 4) ^G
PHY 132	College Physics II

Concentrations

Students must select one of the following Concentrations: 11-23

Animal Science	
Pre-Veterinary Concentration	
<i>Free Electives (Animal Science)</i>	0-6
<i>Free Electives (Pre-Veterinary)</i>	5-13
Total Hours	120-122

Animal Science Concentration

Code	Title	Hours
Concentration Courses		
AGR 225 or AGR 330	Evaluation and Selection of Livestock Animal Products	3
Choose two courses from the following animal science electives:		5-8
AGR 312	Ecology and Management of Grasslands and Pastures	
AGR 372	Topics and Laboratories in Animal Sciences	
AGR 373	Animal Diseases	
AGR 376	Domestic Animal Anatomy	
AGR 377	Livestock Behavior and Welfare	
Choose three courses from the following animal production electives:		10-12
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	
Total Hours		18-23

Pre-Veterinary Concentration

Code	Title	Hours
Concentration Courses		
Choose two courses from the following animal science electives:		5-8
AGR 312	Ecology and Management of Grasslands and Pastures	
AGR 372	Topics and Laboratories in Animal Sciences	
AGR 373	Animal Diseases	
AGR 376	Domestic Animal Anatomy	
AGR 377	Livestock Behavior and Welfare	
Choose two courses from the following animal production electives:		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	
Total Hours		11-16

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