

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

## Program Requirements

CIP Code: 01.0301

### Summary Checklist for General Education

Code	Title	Hours
<b>Element 1</b>		
A:	Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
B:	Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
C:	Oral Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
<b>Element 2</b>		
	Quantitative Reasoning ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/</a> )	3
<b>Element 3</b>		
A:	Arts ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )	3
B:	Humanities ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )	3
<b>Element 4</b>		
	Natural Sciences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/</a> )	6
<b>Element 5</b>		
A:	Historical Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )	3
B:	Social Behavioral Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )	3
<b>Element 6</b>		
	Diversity of Perspectives Experiences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/</a> )	6
<b>Total Hours</b>		<b>36</b>

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

## Major

Code	Title	Hours
<b>University Graduation Requirements</b>		
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)		
<b>Major Requirements</b>		
<i>Professional Skills Seminar</i>		
<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
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	
<b>Concentrations</b>		
Students must select one of the following Concentrations:		
Pre-Veterinary		
Animal Science		23-33
<i>Supporting Course Requirements</i>		
All Concentrations:		
BIO 111	Cell and Molecular Biology (Element 4) <sup>G</sup>	
BIO 112	Ecology and Evolution	4
CHE 111 & 111L	General Chemistry and General Chemistry Lab I (Element 4) <sup>G</sup>	
CHE 112 & 112L	General Chemistry II and General Chemistry Lab	4
CHE 361 & 361L	Organic Chemistry I and Organic Chemistry Lab I	4
ECO 120	Economic Reasoning and Issues (Element 5B) <sup>G</sup>	
<i>Free Electives</i>		

Choose from 4-16 hours of free electives	4-16
<b>Total Hours</b>	<b>120</b>

**G**

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

**Concentration**

Code	Title	Hours
<b>Concentration Courses</b>		
AGR 225 or AGR 330	Evaluation and Selection of Livestock Animal Products	3
Choose from four animal science courses of the following:		11-16
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	
AGR 421	Animal Nutrient Metabolism	
<i>Supporting Course Requirements</i>		
Choose from one of the following: <sup>G</sup>		
MAT 112A & MAT 112B	Algebra: Polynomials and Algebra: Functions & Matrices (Element 2) <sup>G</sup>	
MAT 114	College Algebra (Element 2) <sup>G</sup>	
MAT 120	Trigonometry (Element 2) <sup>G</sup>	
MAT 122	Precalculus Mathematics (Element 2) <sup>G</sup>	
MAT 211	Applied Calculus (Element 2) <sup>G</sup>	
MAT 234	Calculus I (Element 2) <sup>G</sup>	
STA 215 or STA 270	Introduction to Statistical Reasoning Applied Statistics	3-4
Choose from two of the following science electives:		6-10
AGR 374 or BIO 315	Genetics of Livestock Improvement Genetics	
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	
PHY 131 or PHY 132	College Physics I College Physics II	
<b>Total Hours</b>		<b>23-33</b>

**G**

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