CURRICULUM GUIDE

Animal and Veterinary Sciences, B.S. (Animal Science Concentration) 2023-2024

Website: www.agriculture.eku.edu Email Contact: agriculture@eku.edu Department of Agriculture 521 Lancaster Ave. 2 Carter Bldg. Richmond, KY 40475 859-622-2228

Course Name

Course

The schedule below is an **EXAMPLE** of how you can arrange your class schedule. Please consult your advisor for specific changes that may need to be made.

	Fall Semester		Spring Semester	
Freshman Year	SCO 100 AGR 125 AGR 126 G BIO 112 (fulfills Gen. Ed. 4) G MAT 112 (or higher) (fulfills Gen. Ed. 2) Gen. Ed. 1A (ENG 101) TOTAL	1 3 1 4 3 3	G CHE 111 (fulfills Gen. Ed. 4) CHE 111L G ECO 120 (fulfills Gen. Ed. 5B) Gen. Ed. 1B (ENG 102) Gen. Ed. 1C (Oral Comm.) Gen. Ed. 5A (History)	3 1 3 3 3 3
Sophomore Year	AGR 321 (fall only) CHE 112 CHE 112L BIO 111 Gen. Ed. 3B (Humanities)	4 3 1 4 3	AGR 225 (spring only) <u>or</u> 330 ^{†(2)} † AGR 301, 302, <u>or</u> 349 CHE 361 CHE 361L § Animal Science Elective Gen. Ed. 6 (Diversity) (writing intensive) TOTAL	3* 1 3 1 3* 3
Junior Year	AGR 308 § Animal Science Elective †† Animal Production Elective * Science Elective Gen. Ed. 3A (Arts)	3 3* 4* 3* 3	AGR 305 † AGR 301, 302, or 349 STA 215 or 270* (4) § Animal Science Elective * Science Elective Gen. Ed. 6 (Diversity) TOTAL	1 1 3* 3* 4* 3
Senior Year	AGR 304 AGR 310, 350, <u>or</u> 440 (spring only) † AGR 301, 302*(3), <u>or</u> 349 †† Animal Production Elective Free Elective	4 3 1 ⁴ 4 ⁵ 3	AGR 411 AGR 499 or 509 (ACCT capstone) § Animal Science Elective Free Elective Free Elective Free Elective	1 3 3* 3 3 1
	TOTAL	15	TOTAL	14
		TOTAL	HOURS TO DEGREE COMPLETION	120

^{*} PREREQUISITES: Consult with your advisor and/or the University catalog regarding prerequisites for upper division AGR core and concentration courses and supporting courses outside the department.

Total hours may vary depending on elective choices. These class choices are labeled using a diamond (♠). The planner above has been designed based on <u>one</u> possible combination that you can take and still meet requirements. <u>You MUST have a total of 120 hours to meet degree requirements</u>.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division (300-level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories.

Refer to the University Catalog at $\underline{http://www.catalogs.eku.edu/}$ regarding University and General Education Requirements.

Number				
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)				
SCO 100 Student Success Seminar (1)				
COLLEGE REQUI				
AGR 305	Professional Skills Seminar (1)			
CORE COLURSE D	FOLUBENTS (24, 22)			
AGR 125	EQUIREMENTS (31-33) Principles of Animal Science (3)			
AGR 126	Animal Science Laboratory (1)			
AGR 304	Pest Management (4)			
AGR 308	Agricultural Economics (3)			
AGR 310 <u>or</u>	Principles of Agribusiness Management (3)			
AGR 350 <u>or</u>	Agricultural Marketing (3)			
AGR 440 AGR 321	Agricultural Financing (3) (spring only) Feeds and Feeding (4) (fall only)			
AGR 411	Senior Seminar (1)			
AGR 499 or	Agricultural Advocacy and Issues Capstone (3)			
AGR 509	Agricultural Research Methods and Interpretation (3)			
-	Developed the second by Anthony and Second			
	Bracketed items must be taken concurrently HOURS selected from:			
AGR 301	Directed Work Experience (1-4)			
AGR 301 AGR 302	Directed Work Experience (1-4) Directed Work Experience – Management Practicum (3)			
AGR 349	Applied Learning in Agriculture (.5-8)			
++PI [IS TWO (2) (COURSES selected from (animal production elective):			
AGR 255	Companion Animal Management (3)			
AGR 326	Light Horse Production and Management (4)			
AGR 327	Beef Production (4) (fall only)			
AGR 328	Swine Production (4)			
AGR 329	Small Ruminant Production (4)			
AGR 332	Poultry Production and Management (3)			
AGR 380	Technical Management of Dairy Cattle (4) (fall only)			
	E CONCENTRATION REQUIREMENTS (14-18)			
AGR 225 <u>or</u>	Evaluation and Selection of Livestock (3) (spring only)			
AGR 330	Animal Products (2)			
	COURSES selected from: (animal science electives)			
AGR 312 AGR 372	Ecology and Management of Grasslands and Pastures (4) Topics and Laboratories in Animal Sciences (3)			
AGR 373	Animal Diseases (4) (fall only)			
AGR 374	Genetics of Livestock Improvement (3) (spring only)			
AGR 375	Reproduction and Artificial Insemination of Domestic			
	Animals (4)			
AGR 376	Domestic Animal Anatomy (4)			
AGR 377	Livestock Behavior and Welfare (3)			
AGR 421	Nutrient Metabolism (3) (spring only)			
	DURSE REQUIREMENTS (24-30)			
⁶ BIO 111 BIO 112	Cell and Molecular Biology (4)			
SIO 112 ∫6 CHE 111	Ecology and Evolution (4) General Chemistry I (3)			
CHE 111L	General Chemistry Lab I (1)			
* CHE 112	General Chemistry II (3)			
* CHE 112L	General Chemistry Lab II (1)			
∫ * CHE 361	Organic Chemistry I (3)			
【 * CHE 361L	Organic Chemistry Lab I (1)			
^G ECO 120	Economic Reasoning and Issues (3)			
STA 215 <u>or</u>	Introduction to Statistical Reasoning (3)			
* STA 270	Applied Statistics (4) Bracketed items must be taken concurrently			
	Bracketed items must be taken concurrently T COURSE selected from the following (MAT elective):			
⁶ MAT 112A <u>and</u>				
^G MAT 112B	Algebra: Functions and Matrices (1.5)			
^G * MAT 114	College Algebra (3)			
^G * MAT 120	Trigonometry (3)			
^G * MAT 122	Precalculus Mathematics (5)			
^G * MAT 211	Applied Calculus (3)			
^G * MAT 234	Calculus I (4)			
	COURSES selected from the following (science electives):			
AGR 374 <u>or</u>	Genetics of Livestock Improvement (3) (spring only)			
	Genetics (4) Principles of Microbiology (4)			
* BIO 315 * BIO 320				
* BIO 320				
* BIO 320 * BIO 331	Cell Biology (3) (fall only) Vertebrate Physiology (3)			
* BIO 320 * BIO 331 * BIO 348	Vertebrate Physiology (3)			
* BIO 320 * BIO 331 * BIO 348 * BIO 546	Vertebrate Physiology (3) Histology (4) (spring only)			
* BIO 320 * BIO 331 * BIO 348	Vertebrate Physiology (3)			
* BIO 320 * BIO 331 * BIO 348 * BIO 546 CHE 362 <u>and</u>	Vertebrate Physiology (3) Histology (4) (spring only) Organic Chemistry II (3)			
* BIO 320 * BIO 331 * BIO 348 * BIO 546 CHE 362 <u>and</u> CHE 362L * CHE 430 PHY 131	Vertebrate Physiology (3) Histology (4) (spring only) Organic Chemistry II (3) Organic Chemistry Lab II (1) Biochemistry of Macromolecules (3) College Physics I (5)			
* BIO 320 * BIO 331 * BIO 348 * BIO 546 CHE 362 <u>and</u> CHE 362L * CHE 430	Vertebrate Physiology (3) Histology (4) (spring only) Organic Chemistry II (3) Organic Chemistry Lab II (1) Biochemistry of Macromolecules (3) College Physics I (5) College Physics II (5)			