

**CURRICULUM GUIDE**  
**Animal and Veterinary Sciences, BS (Pre-Veterinary Concentration)**  
**2021-2022**

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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		
<b>Freshman Year</b>	BTO 100	1	° CHE 111 (fulfills Gen. Ed. 4)	3
	AGR 125	3	CHE 111L	1
	AGR 126	1	° ECO 120 (fulfills Gen. Ed. 5B)	3
	BIO 112	4	Gen. Ed. 1B (ENG 102)	3
	MAT 120* <sup>(3)</sup> , 122* <sup>(5)</sup> , 211* <sup>(3)</sup> , <u>or</u> 235* <sup>(4)</sup> (fulfills Gen. Ed. 2)	3*	Gen. Ed. 1C (Oral Comm.)	3
	Gen. Ed. 1A (ENG 101)	3	Gen. Ed. 5A (History)	3
	<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>16</b>
<b>Sophomore Year</b>	AGR 321	4	AGR 301, 302* <sup>(3)</sup> , <u>or</u> 349	1*
	CHE 112	3	CHE 361	3
	CHE 112L	1	CHE 361L	1
	° BIO 111 (fulfills Gen. Ed. 4)	4	§ Animal Science Elective	3*
	Gen. Ed. 3B (Humanities)	3	†† Production Elective	4*
			Gen. Ed. 6 (Diversity) (writing intensive)	3
	<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>15</b>
<b>Junior Year</b>	AGR 305	1	AGR 301, 302* <sup>(3)</sup> , <u>or</u> 349	1
	AGR 308	3	AGR 421	3
	AGR 301, 302* <sup>(3)</sup> , <u>or</u> 349	1*	†† Production Elective	4*
	CHE 362	3	♣ Science Elective	3*
	CHE 362L	1	Gen. Ed. 6 (Diversity)	3
	♣ Science Elective	4*		
	Gen. Ed. 3A (Arts)	3		
<b>TOTAL</b>	<b>16</b>	<b>TOTAL</b>	<b>14</b>	
<b>Senior Year</b>	AGR 304	4	AGR 411	1
	BIO 331	3	AGR 499 <u>or</u> 509 (ACCT capstone)	3
	† AGR 310, 350, <u>or</u> 440	3	BTS 400	0
	§ Animal Science Elective	3*	PHY 131	5
	Free Elective	2*	§ Animal Science Elective	3*
			Free Elective	2*
	<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>14</b>
<b>TOTAL HOURS TO DEGREE COMPLETION</b>		<b>120-123*</b>		

Course Number	Course Name
<b>GENERAL EDUCATION &amp; UNIVERSITY REQUIREMENTS (37)</b>	
BTO 100	Business and Technology Orientation (1)
<b>COLLEGE REQUIREMENT (1)</b>	
AGR 305	Professional Skills Seminar (1)
BTS 400	College to Career Seminar (0) (spring only)
<b>CORE COURSE REQUIREMENTS (31-33)</b>	
AGR 125	Principles of Animal Science (3)
LAGR 126	Animal Science Laboratory (1)
AGR 304	Pest Management (4)
AGR 308	Agricultural Economics (3)
AGR 310 <u>or</u> AGR 350 <u>or</u> AGR 440	Principles of Agribusiness Management (3) Agricultural Marketing (3) (spring only) Agricultural Financing (3) (spring only)
AGR 321	Feeds and Feeding (4) (fall only)
AGR 411	Senior Seminar (1)
AGR 499 <u>or</u> AGR 509	Agricultural Advocacy and Issues Capstone (3) Agricultural Research Methods and Interpretation (3)
Bracketed items must be taken concurrently	
† PLUS THREE (3) HOURS selected from (core elective):	
AGR 301	Directed Work Experience (1-4)
AGR 302	Directed Work Experience – Management Practicum (3)
AGR 349	Applied Learning in Agriculture (.5-8)
†† PLUS TWO (2) COURSES selected from (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	Sheep and Goat Production (4)
AGR 332	Poultry Production and Management (3)
AGR 380	Technical Management of Dairy Cattle (4) (fall only)
<b>PRE-VETERINARY CONCENTRATION REQUIREMENTS (12-15)</b>	
AGR 421	Animal Nutrition (3) (spring only)
§ PLUS THREE (3) COURSES selected from: (animal science electives)	
AGR 312	Ecology and Management of Grasslands and Pastures (4)
AGR 372	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	Anatomy and Physiology of Domestic Animals (4)
AGR 377	Livestock Behavior and Welfare (3)
<b>SUPPORTING COURSE REQUIREMENTS (33-37)</b>	
° BIO 111	Cell and Molecular Biology (4)
BIO 112	Ecology and Evolution (4)
* BIO 331	Cell Biology (3) (fall only)
° CHE 111	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)
* CHE 362	Organic Chemistry II (3)
* CHE 362L	Organic Chemistry Lab II (1)
° ECO 120	Economic Reasoning and Issues (3)
° * MAT 120 <u>or</u> ° * MAT 122 <u>or</u> ° * MAT 211 <u>or</u> ° * MAT 234	Trigonometry (3) Precalculus Mathematics (5) Applied Calculus (3) Calculus I (4)
* PHY 131	College Physics I (5)
Bracketed items must be taken concurrently	
♣ PLUS TWO (2) COURSES selected from the following (science electives):	
AGR 374 <u>or</u> * BIO 315	Genetics of Livestock Improvement (3) (spring only) Genetics (4)
* BIO 320	Principles of Microbiology (4)
* BIO 348	Vertebrate Physiology (3)
* BIO 546	Histology (4) (spring only)
* CHE 430 <u>or</u> * PHY 132	Biochemistry of Macromolecules (3) College Physics II (5)
<b>FREE ELECTIVES (0-6)</b>	

° Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

\* **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 one possible combination that you can take and still meet requirements. You MUST have a total of 120 hours to meet degree requirements.

**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 <http://www.catalogs.eku.edu/> regarding University and General Education Requirements. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g. HUM 300W).

**Applied Critical & Creative Thinking (ACCT) Requirement:** Agriculture majors will fulfill ACCT with AGR 499 or AGR 509. (Credit hours are incorporated into program requirements.)