

**CURRICULUM GUIDE**  
**Animal and Veterinary Sciences, BS (Animal Science 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 (fulfills Gen. Ed. 4)                | 4               | Gen. Ed. 1B (ENG 102)                      | 3         |
|   | ° MAT 112 (or higher)<br>(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 (fall only)                            | 4               | AGR 225 (spring only) <i>or</i> 330* (2)   | 3♦        |
|   | CHE 112  | 3               | † AGR 301, 302, <i>or</i> 349              | 1         |
|   | CHE 112L                                       | 1               | CHE 361                                    | 3         |
|   | BIO 111  | 4               | CHE 361L                                   | 1         |
|   | Gen. Ed. 3B (Humanities)                       | 3               | § Animal Science Elective                  | 3♦        |
|   |  |                 | Gen. Ed. 6 (Diversity) (writing intensive) | 3         |
|   | <b>TOTAL</b>                                   | <b>15</b>       | <b>TOTAL</b>                               | <b>14</b> |
| <b>Junior Year</b>                      | AGR 308  | 3               | AGR 305                                    | 1         |
|   | § Animal Science Elective                      | 3♦              | † AGR 301, 302, <i>or</i> 349              | 1         |
|   | †† Animal Production Elective                  | 4♦              | STA 215 <i>or</i> 270* (4)                 | 3♦        |
|   | ♣ Science Elective                             | 3♦              | § Animal Science Elective                  | 3♦        |
|   | Gen. Ed. 3A (Arts)                             | 3               | ♣ Science Elective                         | 4♦        |
|   |  |                 | Gen. Ed. 6 (Diversity)                     | 3         |
|   | <b>TOTAL</b>                                   | <b>16</b>       | <b>TOTAL</b>                               | <b>15</b> |
| <b>Senior Year</b>                      | AGR 304  | 4               | AGR 411                                    | 1         |
|   | AGR 310, 350, <i>or</i> 440 (spring only)      | 3               | AGR 499 <i>or</i> 509 (ACCT capstone)      | 3         |
|   | † AGR 301, 302* (3), <i>or</i> 349             | 1♦              | BTS 400                                    | 0         |
|   | †† Animal Production Elective                  | 4♦              | § Animal Science Elective                  | 3♦        |
|   | Free Elective                                  | 3               | Free Elective                              | 3         |
|   |  |                 | Free Elective                              | 3         |
|   |  |                 | Free Elective                              | 1         |
| <b>TOTAL</b>                            | <b>15</b>                                      | <b>TOTAL</b>    | <b>14</b>                                  |           |
| <b>TOTAL HOURS TO DEGREE COMPLETION</b> |  | <b>120</b>      |  |           |

\* **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.)

| 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 Careers Seminar (0)  |
| <b>CORE COURSE REQUIREMENTS (31-33)</b>  |   |
| AGR 125  | Principles of Animal Science (3)  |
| AGR 126  | Animal Science Laboratory (1)   |
| AGR 304  | Pest Management (4)   |
| AGR 308  | Agricultural Economics (3)  |
| AGR 310 <i>or</i><br>AGR 350 <i>or</i><br>AGR 440                              | Principles of Agribusiness Management (3)<br>Agricultural Marketing (3)<br>Agricultural Financing (3) (spring only) |
| AGR 321  | Feeds and Feeding (4) (fall only)   |
| AGR 411  | Senior Seminar (1)  |
| AGR 499 <i>or</i><br>AGR 509   | Agricultural Advocacy and Issues Capstone (3)<br>Agricultural Research Methods and Interpretation (3)               |
| Bracketed items must be taken concurrently                                     |   |
| † <b>PLUS THREE (3) HOURS</b> selected from:                                   |   |
| AGR 301  | Directed Work Experience (1-4)  |
| AGR 302  | Directed Work Experience – Management Practicum (3)   |
| AGR 349  | Applied Learning in Agriculture (.5-8)  |
| †† <b>PLUS TWO (2) COURSES</b> 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  | Sheep and Goat Production (4)   |
| AGR 332  | Poultry Production and Management (3)   |
| AGR 380  | Technical Management of Dairy Cattle (4) (fall only)  |
| <b>ANIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)</b>                       |   |
| AGR 225 <i>or</i><br>AGR 330   | Evaluation and Selection of Livestock (3) (spring only)<br>Animal Products (2)                                      |
| § <b>PLUS FOUR (4) COURSES</b> 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)  |
| AGR 421  | Animal Nutrition (3) (spring only)  |
| <b>SUPPORTING COURSE REQUIREMENTS (24-30)</b>                                  |   |
| ° BIO 111  | Cell and Molecular Biology (4)  |
| BIO 112  | Ecology and Evolution (4)   |
| ° 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)   |
| ° ECO 120  | Economic Reasoning and Issues (3)   |
| STA 215 <i>or</i><br>* STA 270   | Introduction to Statistical Reasoning (3)<br>Applied Statistics (4)   |
| Bracketed items must be taken concurrently                                     |   |
| PLUS ONE (1) MAT COURSE selected from the following (MAT elective):            |   |
| ° MAT 112A <i>and</i><br>° MAT 112B  | Algebra: Polynomials (1.5)<br>Algebra: Functions and Matrices (1.5)   |
| * MAT 114  | College Algebra (3)   |
| * MAT 120  | Trigonometry (3)  |
| * MAT 122  | Precalculus Mathematics (5)   |
| * MAT 211  | Applied Calculus (3)  |
| * MAT 234  | Calculus I (4)  |
| ♣ <b>PLUS TWO (2) COURSES</b> selected from the following (science electives): |   |
| AGR 374 <i>or</i><br>* BIO 315   | Genetics of Livestock Improvement (3) (spring only)<br>Genetics (4)   |
| * BIO 320  | Principles of Microbiology (4)  |
| * BIO 331  | Cell Biology (3) (fall only)  |
| * BIO 348  | Vertebrate Physiology (3)   |
| * BIO 546  | Histology (4) (spring only)   |
| CHE 362 <i>and</i><br>CHE 362L   | Organic Chemistry II (3)<br>Organic Chemistry Lab II (1)  |
| * CHE 430  | Biochemistry of Macromolecules (3)  |
| PHY 131  | College Physics I (5)   |
| * PHY 132  | College Physics II (5)  |
| <b>FREE ELECTIVES (3-13)</b>   |   |

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