AGRI 305 Reduce units

The Bachelor of Science in Animal Science

Total Course Requirements for the Bachelor's Degree: 120 units

See Bachelor's Degree Requirements in the University Catalog for complete details on general degree requirements. A minimum of 40 units, including those required for the major, must be upper division.

A suggested Major Academic Plan (MAP) has been prepared to help students meet all graduation requirements within four years. You can view MAPs on the Degree MAPs page in the University Catalog or you can request a plan from your major advisor.

General Education Pathway Requirements: 48 units

See General Education in the University Catalog and the Class Schedule for the most current information on General Education Pathway Requirements and course offerings.

This major has approved GE modification(s). See below for information on how to apply these modification(s).

- ANSC 101 is an approved major course substitution for Life Sciences (B2).
- AGRI 482 is an approved major course substitution for Upper-Division Social Sciences.
- AGRI 482 is also an approved GE Capstone substitution.

Diversity Course Requirements: 6 units

See Diversity Requirements in the University Catalog. Most courses taken to satisfy these requirements may also apply to General Education.

Literacy Requirement:

See Mathematics and Writing Requirements in the University Catalog. Writing proficiency in the major is a graduation requirement and may be demonstrated through satisfactory completion of a course in your major which has been designated as the Writing Proficiency (WP) course for the semester in which you take the course. Students who earn below a C- are required to repeat the course and earn a C- or higher to receive WP credit. See the Class Schedule for the designated WP courses for each semester. You must complete the GE Written Communication (A2) requirement before you may register for a WP course.

Course Requirements for the Major: 80–81 79-80 units
Completion of the following courses, or their approved transfer equivalents, is required of all candidates for this degree.

**Lower-Division Requirements: 33-34 units**

**4 courses required:**

- AGRI 180  The University Experience  1.0 FS
- ANSC 101  Introduction to Animal Science  3.0 FS
- ANSC 230  Animal Feeds and Nutrition  3.0 FS
- MATH 105  Statistics  3.0 FS GE

Prerequisites: Completion of ELM requirement.

**1 course selected from:**

- CHEM 107  General Chemistry for Applied Sciences  4.0 FS GE
  Prerequisites: Completion of ELM requirement, Intermediate Algebra.
- CHEM 111  General Chemistry  4.0 FS GE
  Prerequisites: Completion of ELM requirement; second-year high school algebra; one year high school chemistry. (One year of high school physics and one year of high school mathematics past Algebra II are recommended.)

**1 course selected from:**

- CHEM 108  Organic Chemistry for Applied Sciences  4.0 FS GE
  Prerequisites: CHEM 107 or CHEM 111 or equivalent.
- CHEM 112  General Chemistry  4.0 FS
  Prerequisites: CHEM 111 with a grade of C- or better.

**1 course selected from:**

- ABUS 101  Introduction to Agricultural Business and Economics  3.0 FS GE
- ABUS 261  Farm Accounting  3.0 FS

**1 course selected from:**

- BIOL 151  Principles of Cellular and Molecular Biology  4.0 FS GE
  Prerequisites: Recommend CHEM 111 or concurrent enrollment.
- PSSC 101  Introduction to Plant Science  3.0 FS GE
PSSC 250 Introduction to Soil Science 3.0 SP
Prerequisites: CHEM 107 or CHEM 111.

9 units selected from:

Any combination of lower division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant Science (PSSC), Agricultural Business (ABUS), BIOL 152, BIOL 153, CHEM 270, PHYS 202A and PHYS 202B.

Upper-Division Requirements: 26 25 units

7 courses required:

AGRI 305 Agricultural Genetics and Biotechnology 4.0 3.0 FS
Prerequisites: ANSC 101 or PSSC 101; CHEM 107 or CHEM 111.
AGRI 482 Agricultural Issues 3.0 FS WP
Prerequisites: ENGL 130 or JOUR 130 (or equivalent) with a grade of C- or higher, senior standing or instructor permission.
AGRI 490 Agricultural Experimental Research 4.0 FS
ANSC 330 Animal Nutrition 3.0 FS
Prerequisites: ANSC 101, ANSC 230.
ANSC 340 Reproductive Physiology of Domestic Animals 3.0 FS
Prerequisites: ANSC 101.
ANSC 360 Animal Health and Disease 3.0 FS
Prerequisites: ANSC 101.
ANSC 440 Anatomy and Physiology of Domestic Animals 3.0 FS
Prerequisites: ANSC 101, CHEM 107. CHEM 108 is recommended.

1 course selected from:

AGRI 331 Agricultural Ecology 3.0 FS
Prerequisites: Completion of lower-division core or faculty permission.
PSSC 330 Rangeland Resources and Management 3.0 FA
PSSC 363 Forage Crops 3.0 INQ
Prerequisites: PSSC 101 or PSSC 330.

Animal Science Electives in the Major: 21 units

9 units selected from:
Note: 6 units must be upper division.

ANSC 271 Principles of Beef Cattle Production 3.0 FA
ANSC 272 Principles of Sheep & Goat Production 3.0 F2
ANSC 273 Principles of Swine Production 3.0 SP
ANSC 274 Principles of Dairy Production 3.0 SP
ANSC 301 Intermediate Animal Systems 3.0 FA
Prerequisites: ANSC 101.
ANSC 350 Meat and the Consumer 3.0 FA
ANSC 374 Organic Dairy Production and Management 3.0 SP
Prerequisite: ANSC 101.
ANSC 450 Food Sanitation and Quality Control 3.0 SP
Prerequisites: ANSC 101; CHEM 107 or CHEM 111.
ANSC 471 Advanced Beef Cattle Management and Production 3.0 SP
Prerequisites: ANSC 101, ANSC 271 or faculty permission.
ANSC 474 Dairy Production and Management 3.0 FA
Prerequisites: ANSC 101.

12 units selected from:

Any combination of upper division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant Science (PSSC), Agricultural Business (ABUS), BIOL 360, BIOL 416, CHEM 370, CHEM 451. A minimum of three UD ABUS units are recommended.

Grading Requirement:

All courses taken to fulfill major course requirements must be taken for a letter grade except those courses specified by the department as Credit/No Credit grading only.

Advising Requirement:

Advising is mandatory for all majors in this degree program. Consult your undergraduate advisor for specific information.

Honors in the Major:

Honors in the Major is a program of independent work in your major. It requires 6 units of honors course work completed over two semesters.
The Honors in the Major program allows you to work closely with a faculty mentor in your area of interest on an original performance or research project. This year-long collaboration allows you to work in your field at a professional level and culminates in a public presentation of your work. Students sometimes take their projects beyond the University for submission in professional journals, presentation at conferences, or academic competition. Such experience is valuable for graduate school and professional life. Your honors work will be recognized at your graduation, on your permanent transcripts, and on your diploma. It is often accompanied by letters of commendation from your mentor in the department or the department chair.

Some common features of Honors in the Major program are:

1. You must take 6 units of Honors in the Major course work. All 6 units are honors classes (marked by a suffix of H), and at least 3 of these units are independent study (399H, 499H, 599H) as specified by your department. You must complete each class with a minimum grade of B.
2. You must have completed 9 units of upper-division course work or 21 overall units in your major before you can be admitted to Honors in the Major. Check the requirements for your major carefully, as there may be specific courses that must be included in these units.
3. Your cumulative GPA should be at least 3.5 or within the top 5% of majors in your department.
4. Your GPA in your major should be at least 3.5 or within the top 5% of majors in your department.
5. Most students apply for or are invited to participate in Honors in the Major during the second semester of their junior year. Then they complete the 6 units of course work over the two semesters of their senior year.
6. Your honors work culminates with a public presentation of your honors project.

While Honors in the Major is part of the Honors Program, each department administers its own program. Please contact your major department or major advisor to apply.