



## Intro Animal Science AGRI 1419 – Dual Credit (Advanced Animal Science)

**Course Syllabus:** Fall 25' - Spring 26'

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*"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."*

**Instructor: Jennifer Carter**

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Office	Monday	Tuesday	Wednesday	Thursday	Friday
Hours	3:05 pm-3:54 pm				

*Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.*

**Course Description:** Three hours of lecture and three hours of lab each week.

Scientific animal agriculture. Importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of beef cattle, swine, sheep, goats and horses. (Also listed as: AGRI 1319 + AGRI 1119)

**Prerequisite(s):** None

**Student Learning Outcomes:** Upon successful completion of this course, students will:

1. Explain the role of animal agriculture in providing benefits for mankind.
2. Identify common livestock breeds and classes.
3. Define terminology specific to animal science disciplines.
4. Demonstrate understanding of fundamental animal science principles including selection, reproduction, nutrition, and health.
5. Apply animal science principles by solving common problems.
6. Identify animal issues of interest to society, and related responsibilities.
7. Apply scientific reasoning to investigate questions and utilize animal science tools to collect and analyze data and demonstrate methods.
8. Use critical thinking and scientific problem-solving to make informed decisions.
9. Communicate effectively the results of scientific investigations.

**Evaluation/Grading Policy:** Final course grades will be assigned as follows:

90-100 = A 80-89 = B 70-79 = C 60-69 = D 59 or Below = F

Grades will be calculated as follows:

Tests/Projects = 50%

Labs/Daily Grades = 50%

This course offers no re-testing opportunities as multiple test/project/research paper grades will be taken each grading period. Late work may be turned in, but will receive a 10% deduction of points earned per day late.

**Required Instructional Materials:**

No textbooks will be required. The Instructor may choose to use the following texts and resources for delivery of informational content

- *Scientific Farm Animal Production, 12 Edition, Thomas Field & Robert Taylor, Pearson*
  - ISBN-13: 978-0135187258, ISBN-10: 0135187257
- *Modern Livestock and Poultry Production, 9<sup>th</sup> Edition, Frank Flanders/James Gillespie, Cengage*
  - ISBN-13: 978-1133283508, ISBN-10: 1133283500
- *iCEV- 1419 Advanced Animal Science*

Instructional materials identified for this course will be made viewable through [www.icevonline.com](http://www.icevonline.com) and/or NTCC's Blackboard Ultra. Students will need to purchase an iCEV student subscription to access interactive elements, notes, and assignments.

**Optional Instructional Materials:** None**Minimum Technology Requirements:** None**Required Computer Literacy Skills:** Basic computer skills.**Course Structure and Overview:**

This dual credit course is a combination of face-to-face and online (blended) environment. All content and instruction will be available for access within Google Classroom, iCEV, and Blackboard Ultra. Please see more information about alternate course delivery in the syllabus below.

4 Credit Hours are earned by the student participating in a minimum of 96 hours of student engagement with course learning activities. This may include lectures, podcasts, videos, reading excerpts of provided textbook chapters, the study of lecture materials, participation in interactive activities and presentations, lab participation and skills assessments, lab write-ups and other associated projects, and additional review and study for examinations.

**Communications:** All students are required to check their email daily. This will be the primary communication vehicle utilized to disperse important announcements and updates for this course. Emails sent to the instructor will be answered within 24hrs on weekdays only while class is in session.

\*Reminder: NTCC email is the official form of communication used by the college. For CHISD Dual Credit student's you may also use your Chapel Hill ISD issued email address to communicate to the instructor.

**Institutional/Course Policy:** Attendance is expected and required per the Chapel Hill ISD District Policy. Tardiness on days labs where labs may be held off campus will be counted as an absence, as you will be unable to participate in lab activities that day. As stated above, this course offers no re-testing opportunities as multiple test/project/research paper grades will be taken each grading period. Late work may be turned in, but will receive a deduction of points by 10% per day late.

**NTCC Academic Honesty/Ethics Statement:**

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

**Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements**

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

**ADA Statement:**

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

**Family Educational Rights and Privacy Act (FERPA):**

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

## Tentative Course Timeline

**(\*note\* instructor reserves the right to make adjustments to this timeline at any point in the term)**  
All lessons will correspond back to concepts that will enhance a student's ability to proficiently address the Student Learning Outcomes listed previously. ICEV will be utilized to teach a majority of these topics.

# Course Outline:

## **Module 1:**

- Livestock Origins, History and Domestication
- Livestock Industry Trends and Marketing Practices
- Career and Entrepreneurship Opportunities
- SAE Planning & Project Development

## **Module 2:**

- Breeds of Livestock & Common Terminology
- Identification of Major Commercial Breeds
  - Cattle, Sheep, Goats, Swine, Horse & Poultry

## **Module 3:**

- Animal Anatomy
  - External System
  - Internal Systems
  - Organ ID, Function, & Purpose

## **Module 4:**

- Livestock Nutrition
  - Digestion and Absorption of Nutrients
  - Nutrients, Additives, & Growth Promoters
  - Balancing Rations & Calculating Least Cost

## **Module 5:**

- Animal Reproduction
  - Livestock Breeding Systems
  - Genetics and EPDs
    - Phenotypic vs Genotypic Traits
    - Heritability
  - Reproductive Technology
    - Cooled and Frozen Semen
    - Artificial Insemination
    - Embryo Transfer

## **Module 6:**

- Diseases of Livestock
- Vaccinations & Treatment Protocols
- Drug Residue and Withdrawal Times.
- Health and Herd Records

## **Module 7:**

- Livestock Behavior and Handling
  - Handling Systems: design and usage
  - Understanding Livestock behavior
  - Temple Grandin

## **Module 8:**

- Livestock Production Management
  - Cattle (Beef and Dairy)
  - Beef Quality Assurance
  - Swine Sheep & Goat
  - Equine
  - Poultry

## **Module 9:**

- Livestock Selection
  - Breeding vs Market Characteristics
  - Livestock Evaluations

## **Module 10:**

- Livestock Processing
  - Slaughter/Harvest Process
  - USDA Carcass Grading
  - Factors affecting Quality and Yield
  - Meat Wholesale and Retail Cuts

## **Final Exam**

## STUDENT LEARNING OBJECTIVES:

The SLO's are the specific course objectives that must be taught, measured through evaluations and reported each year for accreditation purposes.

Course ID	SLO	Skill/Knowledge	Evaluation	Report Rate
AGRI1419_1	Species names and common terminology	Students will be know the species name and common terminology used to describe cattle, horses, sheep, goats, pigs, and chickens.	Measured by standardized questions on the first exam. All students will be assessed.	70% of the students should be able to answer at least 75% of the standardized questions correctly.
AGRI1419_2	What influences phenotype	Students will know what influences phenotype.	Measured by standardized questions on the first exam. All students will be assessed.	70% of the students should be able to answer the standardized questions correctly.
AGRI1419_3	Identify breeds by pictures	Students will be able to identify by picture the common beef, dairy, sheep, goat, and swine breeds.	Measured by standardized questions on the second and final exam. All students will be assessed.	70% of the students should be able to answer at least 75% of the standardized questions correctly.
AGRI1419_4	Vaccination programs for livestock	Students will be able to understand the importance of vaccination programs in livestock and how to administer vaccines.	Students will be assessed administering vaccines to livestock during lab.	100% of the students should be able to administer vaccines properly.
AGRI1419_5	Hybrid vigor	Students will understand the importance of hybrid vigor in the livestock industry.	Measured by standardized questions on the final exam. All students will be assessed.	70% of the students should be able to answer the standardized questions correctly.