Ms. Nikki Smith
Phone: 229.225.5050
nsmith@tcjackets.net

ANIMAL SCIENCE AND BIOTECHNOLOGY
2022-2023

Cluster: Agriculture, Food and Natural Resources
Pathway: Veterinary Science

Course Description: This course is designed to introduce students to the scientific principles that underlie the breeding and husbandry of agriculture animals. Introduces scientific principles applied to the animal industry; covers reproduction, production technology, processing, and distribution of agriculture animal products. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities. In addition to content standards, students will be responsible for showing mastery of the Common Core literacy standards. These standards will be taught using reading and writing activities related to the content area. Reading materials may include novels, technical manuals, articles or other appropriate materials as determined by the instructor.

Course of Study:

Topic:	**Standards:**
EMPLOYABILITY SKILLS REQUIRED BY BUSINESS AND INDUSTRY	AG-ASB-1
AGRICULTURE EDUCATION, SAFETY, AND LEADERSHIP	AG-ASB-2
SCIENTIFIC METHODS IN AGRICULTURE ANIMAL RESEARCH	AG-BAS-3
INTRODUCTION TO THE LARGE ANIMAL INDUSTRY	AG-ASB-4
INTRODUCTION TO THE POULTRY INDUSTRY	AG-ASB-5
INTRODUCTION TO THE DAIRY INDUSTRY	AG-ASB-6
INTRODUCTION TO AQUACULTURE	AG-ASB-7
INTRODUCTION TO LABORATORY ANIMALS	AG-ASB-8
CLASSIFICATION OF ANIMALS	AG-ASB-9
FOOD SAFETY AND THE ENVIRONMENT	AG-ASB-10
ANIMAL WELFARE	AG-ASB-11
ANIMAL BEHAVIOR	AG-ASB-12
GENETIC PRINCIPLES	AG-ASB-13
SCIENTIFIC METHOD	AG-ASB-14
REPRODUCTION AND PHYSIOLOGY	AG-ASB-15
PRENATAL AND POSTNATAL GROWTH	AG-ASB-16
NUTRIENTS	AG-ASB-17
MEAT PROCESSING AND PRODUCTION	AG-ASB-18
ANIMAL PARASITES	AG-ASB-19
ANIMAL DISEASES	AG-ASB-20

In addition to content standards, students will be responsible for showing mastery of the Common Core literacy standards. These standards will be taught using reading and writing activities related to the content area. Reading materials may include novels, technical manuals, articles or other appropriate materials as determined by the instructor.

P.R.E.P Academy Grading Policy:

Daily Grades/In Class Assignments	25%
Supervised Agriculture Experience	5%
Tests	20%
Projects/Lab Work	30%
Benchmark (Final)	20%

Textbook:
Students will not be issued a textbook for this class, but one will be available for classroom use.
Delmar MODERN ANIMAL AND POULTRY PRODUCTION

Students will need paper and a notebook for this course.

Classroom Rules/Conduct:
All students are expected to abide by the rules of the Agriculture Department and those of TCCHS at all times.

1. **Respect your classroom environment, teacher, classmates, and teaching animals.**
2. **NO HORSEPLAY!**
3. **No food or drinks in class.**
4. **No personal electronic devices in class.**
5. **Come to class prepared and ready to learn.**
6. **Do not leave class without being dismissed.**

Computer Use:
Students will be required to access the Internet for some assignments and projects. Each student must have an Acceptable Use Policy (AUP) on file at the school. All policies in the AUP will be followed.

Students should only use the Internet when instructed for classroom purposes. Students who are caught downloading/streaming music, on inappropriate websites, attempting to bypass the server, or participating in other questionable activities will receive a referral and their computer privileges may be revoked.

Make Up Work:
It is the student's responsibility to check with the teacher about any missed work or tests. The student will have <u>three days</u> to contact me before or after class about completing make up work. Any work not completed or scheduled to complete after three days will be counted as a zero.

Late Work:
Late work is accepted HOWEVER, each day late is minus 10 points from the assignment's overall grade.

Google Classroom:
Join the Animal Science google classroom. Each class period has a DIFFERENT classroom code.

2nd Period Animal Science Classroom code: 56eze3d

3rd Period Animal Science Classroom code: yw2mlpu

4th Period Animal Science Classroom code: lbobglk

7th Period Animal Science Classroom code: kfomnma

<u>Additional Information:</u> All Animal Science classes will participate in labs that are relevant and industry specific. As a part of our curriculum dissections will be a part of this course work. All lab work will be scientifically based and anatomically correct terminology will be used.

In addition to dissections, there will be LIVE ANIMALS in class throughout the year. Please be mindful of their well-being as well as yours. If you have any pet dander allergies or fear of animals, please take this into consideration during class selection.

P.R.E.P. Academy **36 Week Topic Outline**

Course: ANIMAL SCIENCE AND BIOTECHNOLOGY **Instructor: N. SMITH**

Week	Topic/Standard	Essential Question(s)
WEEK 1-2	AG-ASB-2 AGRICULTURE EDUCATION, SAFETY, AND LEADERSHIP	WHAT IS AGRICULTURE EDUCATION, AND HOW CAN IT HELP ME TO BECOME A LEADER?
WEEK 3-4	AG-ASB-3, AG-ASB-4, AG-ASB-14, AG-ASB-12 INTRODUCTION TO ANIMAL SCIENCE AND THE LARGE ANIMAL INDUSTRY	HOW IS LIVESTOCK USED IN THE UNITED STATES?
WEEK 5-7	AG-ASB-4, AG-ASB-9, AG-ASB-18 INTRODUCTION TO THE SWINE INDUSTRY	HOW ARE SWINE PRODUCED IN THE UNITED STATES?
WEEK 8	AG-ASB-4, AG-ASB-9, INTRODUCTION TO THE SHEEP INDUSTRY	HOW ARE SHEEP PRODUCED IN THE UNITED STATES?
WEEK 9	Benchmark Week	
WEEK 10	AG-ASB-4/9 INTRODUCTION TO THE GOAT INDUSTRY	HOW ARE GOATS PRODUCED IN THE UNITED STATES?
WEEK 11-15	AG-ASB-4, AG-ASB-9, AG-ASB-18 INTRODUCTION TO THE BEEF INDUSTRY	HOW IS BEEF PROCESSED AND MARKETED IN THE UNITED STATES?
WEEK 16-17	AG-ASB-4, AG-ASB-9, AG-ASB-8 INTRODUCTION TO ALTERNATIVE ANIMAL AGRICULTURE	HOW ARE ALTERNATIVE ANIMALS USED IN TODAY'S SOCIETY?
WEEK 18	Benchmark Week	
WEEK 19-22	AG-ASB-6, AG-ASB-9, AG-ASB-10 INTRODUCTION TO THE DAIRY INDUSTRY	HOW ARE DAIRY CATTLE MANAGED AND USED IN THE U.S.?
WEEK 23-26	AG-ASB-5, AG-ASB-9, AG-ASB-16 INTRODUCTION TO THE POULTRY INDUSTRY	HOW IS THE POULTRY INDUSTRY SIGNIFICANT TO THE UNITED STATES?
WEEK 27	AG-ASB-7 INTRODUCTION TO AQUACULTURE	HOW IS THE AQUACULTURE INDUSTRY SIGNIFICANT TO THE US ECONOMY?
WEEK 29-30	AG-ASB-13 GENETICS	HOW DO GENETICS AFFECT ANIMAL PRODUCTION?
WEEK 31	AG-ASB-15 ANIMAL REPRODUCTION	HOW DO PRODUCERS IMPROVE THE PROCESSES OF ANIMAL REPRODUCTION AND WHAT ARE THE BENEFITS?
WEEK 32	AG-ASB-10, AG-ASB-11 FOOD SAFETY AND THE ENVIRONMENT	HOW DOES THE USDA PROTECT OUR FOOD SOURCES?

WEEK 33-34	AG-ASB-17 AG-ASB-19, AG-ASB-20 NUTRITION, DISEASES AND PARASITES	WHAT ARE THE FACTORS OF ANIMAL HEALTH
WEEK 35	AG-ASB-1 EMPLOYABILITY SKILLS/CAREERS	HOW CAN YOU BECOME A VALUABLE EMPLOYEE?
WEEK 36	Benchmark Week	