**Program Concentration: Agriculture**

**Career Pathway: Agriscience**

**Course Title: Animal Science and Biotechnology**

**Teacher: Mrs. Chansi Coleman**

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This course is designed to introduce students to the scientific principles that underlie the breeding and husbandry of agricultural animals, and the production, processing, and distribution of agricultural animal products. Introduces scientific principles applied to the animal industry; covers reproduction, production technology, processing, and distribution of agricultural animal products. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**AG-ASB-1: The student demonstrates the application of scientific methods in agricultural animal research and production.**

**AG-ASB-2: The student describes the various phases, segments, trends, consumption and economic scope of the large animal industry.**

**AG-ASB-3: The student describes the various phases, segments, trends, consumption and economic scope of the poultry industry.**

**AG-ASB-4: The student describes the various phases, segments, trends, consumption and economic scope of the dairy industry.**

**AG-ASB-5: The student evaluates trends in the aquaculture industry and the scientific principles involved in the production of aquatic animals.**

**AG-ASB-6: The student describes the various phases, segments, trends, demand, consumption and economic scope of the alternative and laboratory animals.**

**AG-ASB-7: The student classifies animals using scientific binomial nomenclature as well as classifies agriculture animals by breed and use.**

**AG-ASB-8: The student describes and addresses the general public’s food safety and environmental concerns.**

**AG-ASB-9: The student describes crucial animal welfare issues and explains the benefits of treating animals in a human manner and providing for the animals needs.**

**AG-ASB-10: The student observes and interprets the natural behavior of agricultural animals and relates these behaviors to production practices yielding more content, healthier, and productive animals.**

**AG-ASB-11: The student applies genetic principles to animal selection, breeding, and production.**

**AG-ASB-12: The student applies scientific methods of animal selection and explains the advantages and disadvantages.**

**AG-ASB-13: The student demonstrates an understanding of the reproductive anatomy and biological processes involved in the reproduction of agricultural animals.**

**AG-ASB-14: The student describes the physiological processes involved in prenatal and postnatal growth and development of agricultural animals.**

**AG-ASB-15: The student describes nutrient sources and functions as they relate to monogastric and ruminant agricultural animals.**

**AG-ASB-16: The student investigates the physiological and chemical properties of meat products and preservation.**

**AG-ASB-17: The student describes the effects, development, and control of parasites in agricultural animals.**

**AG-ASB-18: The student identifies and describes animal diseases, animal immune systems, and disease prevention and control programs.**

**AG-ASB-19: The student becomes oriented to the comprehensive program of agricultural education, learns to work safely in the agriculture lab and work sites, demonstrates selected competencies in leadership through the FFA and agricultural industry organizations, and develops plans for a supervised agricultural experience program.**

**Suggested Materials: 1” three ring binder or pronged folder with pockets**

**-Paper**

**-Blue and or Black Pens**

**-Pencils**

**Special Assignments and Projects:** Students are required to spend 20 hours **outside** of class per semester developing a Supervised Agricultural Experience Project. This will account for 15% of their overall grade and is due at the end of the semester.

**Classroom Rules and Discipline Procedures:**

1. Come to class prepared each day. Bring notebook, pen or pencil, and paper.
2. Do not request hall passes except in cases of emergencies.
3. Respect the facilities and equipment that we have to work with. Return all materials to the proper place when finished with them. Notify Mrs. Coleman of any damaged or broken materials and equipment immediately.
4. Students are to remain with the class group when moving to or working in other instructional areas. Leaving the greenhouse or outdoor classroom without permission is the same as leaving class without permission.

The student handbook will be followed where applicable. Otherwise, the following will be used:

##  *-First Infraction— Warning*

##  *-Second Infraction— Parent Contact*

#### *-Third Infraction— Detention (before or after school) Parent Contact*

 *-Fourth Infraction— Office Referral*

**Make-up Policy:** It is the student’s responsibility to make arrangements to catch up on work missed due to **excused** absences. Work needs to be made up within 3 days of your return to school. Failure to meet the deadline will result in a zero for each assignment missed.

**Grading System:**

 **Classroom 20%**

1. Daily Assignments
2. Lab Activities
3. Notebook
4. Quizzes
5. Work Ethic

**Laboratory 25%**

 **Unit Tests/Performance Assessment 40%**

**Individual Project (SAE) 15%**

1. SAE Plan
2. Records
3. Presentation

 **Final Exam 20%**

I have read and understand all of the objectives, requirements, and expectations for the course in Animal Science taught by Mrs. Coleman.

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**Student name Date**

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**Parent signature Date**