

Syllabus

RCAS Policies/Procedures

Students will be required to follow all RCAS policies and procedures. To view the RCAS High School Student Handbook, click [handbook](#).

Course Description

This course addresses the advanced knowledge and skills necessary to care for animals. Topics covered include animal health care practices, nutrition management, reproductive practices, medical terminology, animal classification, surgical techniques, and employability skills. Advanced Animal Science has an increased focus on the veterinary portion of animal husbandry. Utilizing appropriate equipment and technology should enhance classroom and laboratory content.

Grading

Grading: All grades are based on a 10 point grading scale.

Grading Scale: (100% - 90% A) (89% - 80% B) (79% - 70% C) (69% - 60% D) (59% - 0% F)

Grades will be based on student learning evaluation using performance objectives, rubrics, check for understanding, labs & student notebooks with daily work.

Textbook

Reading

Optional Reading

Instructional Resources

Veterinary Science Preparatory Training for the Veterinary Assistant

Canvas

Essential Questions

- Explain livestock production regions and characteristics across the United States.
- Identify primary purposes of production of animals and their key products.
- Understand product grading systems and labeling standards of common animal products.
- Identify the 11 major body systems and the interrelated role they play in maintaining an animal's homeostasis.
- Examine animal nutrition, feeds, requirements and formulation of animal rations.
- Understand reproductive structures and processes needed to make management decisions for multiple livestock species.

- Use genetics and genetics-based information to describe how breed decisions are made and utilized in the animal science industry.
- Examine key components of animal health management, maintenance, and disease prevention for both small and large animals.
- Develop skills in animal handling, care, and basic surgical assisting techniques.
- Create an animal management handbook for a species of the students choosing, or work toward an animal science certification through iCEV certifications or Texas A&M University veterinary assistant program.

Essential Learning Intentions

- Demonstrate safe use and knowledge of tools and equipment used in animal science.
- Demonstrate workplace/worksites safety procedures and protocols.
- Select proper health care practices for animals.
- Choose prevention and treatment programs for animal diseases, parasites, and disorders.
- Discuss how to provide biosecurity for animals, people, and facilities.
- Develop proper nutrition management practices to optimize animal performance.
- Assess nutritional elements as they affect animal performances.
- Develop feed rations to provide for animals' nutritional needs.
- Select reproductive practices to optimize animal production.
- Identify management practices in breeding that account for high quality animals.
- Articulate medical terminology as it relates to animals.
- Recognize relevant medical terminology related to animals.
- Apply medical terminology in the correct context.
- Classify, evaluate, and select animals based on anatomical and physiological characteristics.
- Apply principles of anatomy and physiology to uses within various animal systems.
- Analyze information and make connections pertaining to the interrelatedness of various body systems.
- Utilize principles of veterinary tools and techniques.
- Identify veterinary tools and practices.
- Apply proper veterinary techniques to medical situations.

- Develop employability skills related to the Animal Systems Pathway.
- Develop soft skills to enhance employability.
- Develop employability skills related to the Animal Systems Pathway.
- Develop an individual project plan with goals and timeline.
- Explore opportunities within AFNR industries.
- Apply concepts of financial management appropriate to agricultural projects and personal finances.
- Develop and document knowledge and skills to ensure workplace safety regarding personal health and environmental management.
- Research and analyze how public policy, laws, and advocacy impact agricultural systems and agricultural literacy.