

Pathway: Animal Science

Course Title: Small and Large Animal Care

Course Description:

The Animal Science: Small and Large Animal Care Concentrator course is designed to provide students with a comprehensive understanding of the principles and practices involved in the care and management of both small and large animals. Through a combination of classroom instruction, hands-on laboratory experiences, and practical application in real-world settings, students will develop the knowledge, skills, and competencies necessary for successful careers in the field of animal care and management.

Areas of focus may include:

- Anatomy and physiology of small and large animals
- Nutrition and feeding management
- Health and disease management
- Reproduction and breeding techniques
- Handling, restraint, and grooming
- Housing and facilities design
- Ethical considerations and animal welfare standards

Students will have the opportunity to engage in experiential learning activities such as animal handling, grooming, and basic veterinary procedures under the supervision of qualified instructors. Additionally, guest speakers from various sectors of the animal industry may be invited to share their expertise and insights with students.

Throughout the course, emphasis will be placed on the development of critical thinking, problem-solving, and communication skills, as well as the application of scientific principles in animal care and management. Students will also explore career pathways within the animal industry and gain an understanding of the diverse opportunities available in areas such as veterinary medicine, animal agriculture, research, and animal welfare organizations.

Agriculture and Natural Resources

Pathway: Animal Science

Course Title: Advanced Animal Science/

Veterinary Medicine & Animal Science

Course Description:

Course Sequence: Capstone

The Advanced Animal Science: Veterinary Medicine and Animal Science Capstone course is the pinnacle of our CTE Animal Science program, designed to provide students with an in-depth exploration of advanced topics in veterinary medicine and animal science. Building upon the foundational knowledge acquired in previous courses, students will delve into specialized areas of study, preparing them for advanced academic pursuits or entry into the workforce in veterinary medicine, animal research, or related fields.

Areas of focus may include:

- Advanced anatomy and physiology of domestic and exotic animals
- Pathophysiology of common diseases and disorders in animals
- Pharmacology and medication administration
- Diagnostic techniques and laboratory procedures
- Surgical principles and techniques
- Emergency and critical care medicine
- Zoonotic diseases and public health implications
- Ethical considerations and professional standards in veterinary practice

Through a combination of classroom lectures, laboratory exercises, clinical rotations, and externship experiences, students will gain practical skills and hands-on experience in veterinary medicine and animal science. They will have the opportunity to work alongside licensed veterinarians, veterinary technicians, and other professionals in clinical settings, gaining valuable insights into the day-to-day responsibilities and challenges of veterinary practice.

In addition to technical skills, students will develop critical thinking, problem-solving, and communication skills essential for success in the field. They will engage in case studies, research projects, and presentations to deepen their understanding of complex veterinary concepts and demonstrate their proficiency in applying theoretical knowledge to real-world scenarios.