



EXAM INFORMATION

Items

48

Points

57

Prerequisites

BIOLOGY

Grade Level

11-12

Course Length

ONE YEAR

Career Cluster

AGRICULTURE, FOOD AND NATURAL
RESOURCES

Performance Standards

INCLUDED

Certificate Available

YES

DESCRIPTION

This course provides the opportunity for students to explore different avenues of the veterinary profession. Students will be exposed to veterinary science and principles, which include anatomy, physiology, chemistry, animal health and disease, dentistry and laboratory procedures. Students will provide hands-on care as they develop skills in the areas of surgical assisting, bandaging, wound care, oral care, and general nursing care.

EXAM BLUEPRINT

STANDARD	PERCENTAGE OF EXAM
1- Medical Terminology	16%
2- Animal Anatomy and Physiology	14%
3- Health Management and Disease	17%
4- Fundamentals of Veterinary Medicine	19%
5- Medication Administration	5%
6- Office Procedures	9%
7- Surgical Procedures	14%
8- Laboratory Procedures	1%
9- Exotic and Laboratory Animals	1%
10- Career Opportunities	4%



STANDARD 1

STUDENTS WILL DEMONSTRATE AN UNDERSTANDING OF MEDICAL TERMINOLOGY IN ORDER TO BE ABLE TO APPROPRIATELY DISCUSS AND READ MEDICAL INFORMATION

- Objective 1 Students will be able to define medical terms related to each body system and directional anatomy.
- Objective 2 Students will be able to identify prefixes, suffixes, and root words, in order to define medical terms.
- Objective 3 Students will be able to interpret and extract information from realistic medical documents.
- Objective 4 Students will interpret and apply medical abbreviations and symbols.

Standard 1 Performance Evaluation included below (Optional)

STANDARD 2

STUDENTS WILL DEMONSTRATE AN UNDERSTANDING OF ANIMAL ANATOMY AND PHYSIOLOGY

- Objective 1 Students will dissect preserved cats, or other appropriate animals, in order to gain an understanding of animal anatomy and physiology.
- Objective 2 Students will be able to correctly identify superficial muscles that are involved in the movement of an animal.
- Objective 3 Students will learn the bones in the body and be able to identify them on skeletal models.
- Objective 4 Students will be able to identify various body parts and organs.
- Objective 5 Students will be able to compare the anatomy of different species of animals, to include small animals, large animals, laboratory animals, and exotic animals.
- Objective 6 Students will be able to describe the basic physiology involved in the functioning of each body system.

Standard 2 Performance Evaluation included below (Optional)

STANDARD 3

STUDENTS WILL EXPLORE CONCEPTS IN HEALTH MANAGEMENT AND DISEASE

- Objective 1 Students will know the common vaccines, and how and when to administer them.
- Objective 2 Students will identify and describe common animal diseases and how they are transmitted.
- Objective 3 Students will understand the purposes of basic treatments for common animal diseases.
- Objective 4 Students will demonstrate the ability to provide treatments for common animal diseases.
- Objective 5 Students will identify medications used to treat common animal diseases.
- Objective 6 Students will know the common zoonotic diseases and the precautions needed to prevent these diseases.

Standard 3 Performance Evaluation included below (Optional)

STANDARD 4

STUDENTS WILL EXPRESS AN UNDERSTANDING OF THE FUNDAMENTAL PRINCIPLES OF VETERINARY MEDICINE AND BE ABLE TO DEMONSTRATE PROFICIENCY IN EACH AREA

- Objective 1 Students will study and develop an understanding of animal behavior.



- Objective 2 Students will understand the principles of restraint/handling techniques and be able to demonstrate safe restraint/handling practices on small, exotic, and large animals.
- Objective 3 Students will be able to correctly perform breed identification.
- Objective 4 Students will be able to accurately take a preliminary history from a client and perform a basic physical examination, to include vital signs and other necessary assessments.
- Objective 5 Students will know the basic nutritional requirements for each species of animal.
- Objective 6 Students will be able to accurately assess wounds and provide appropriate wound care and management.
- Objective 7 Students will know the materials needed and how to apply common splints, casts, and bandages on animals.

Standard 4 Performance Evaluation included below (Optional)

STANDARD 5

STUDENTS WILL DEVELOP A BASIC UNDERSTANDING OF MEDICATION ADMINISTRATION

- Objective 1 Students will be able to name common medications used in veterinary practice.
- Objective 2 Students will be able to demonstrate appropriate administration of oral, topical, and injectable medications.
- Objective 3 Students will be able to demonstrate how to determine appropriate medication dosages correctly.
- Objective 4 Students will be able to recognize and know how to treat adverse effects of medications.
- Objective 5 Students will be able to identify contraindications for administering certain medications.

Standard 5 Performance Evaluation included below (Optional)

STANDARD 6

STUDENTS WILL DEMONSTRATE PROFICIENCY IN THE OFFICE PROCEDURES RELATED TO VETERINARY PRACTICE

- Objective 1 Students will correctly demonstrate infection control practices, such as hand washing, gowning, gloving, and masking.
- Objective 2 Students will learn to follow OSHA Standards/safe practices at all times to avoid injury to themselves or others including the handling and disposal of biohazardous waste and sharps.
- Objective 3 Students will appropriately demonstrate communication skills and client education.
- Objective 4 Students will demonstrate the ability to accurately complete and file health certificates and medical forms.
- Objective 5 Students will understand the laws that govern veterinary medicine including veterinary-client-patient relationship and animal abuse.
- Objective 6 Students will be able to identify the various associations available in the veterinary field.

Standard 6 Performance Evaluation included below (Optional)



STANDARD 7

STUDENTS WILL STUDY AND DEMONSTRATE THE ABILITY TO PERFORM SURGICAL PROCEDURES WHILE MAINTAINING STERILE TECHNIQUE

- Objective 1 Students will verbalize understanding of surgical and aseptic principles.
- Objective 2 Students will be able to identify surgical instruments accurately.
- Objective 3 Students will correctly demonstrate preparation for surgical procedures, to include preparing and sterilizing equipment and preparing the patient for surgery.
- Objective 4 Students will demonstrate an understanding of how to maintain a sterile zone during surgery.
- Objective 5 Students will demonstrate the ability to assist with common surgical procedures.
- Objective 6 Students will be able to perform basic suture patterns.

Standard 7 Performance Evaluation included below (Optional)

STANDARD 8

STUDENTS WILL STUDY AND DEMONSTRATE THE ABILITY TO PERFORM LABORATORY PROCEDURES

- Objective 1 Students will demonstrate an understanding of concepts and the ability to perform skills related to microbiology and mycology.
- Objective 2 Students will demonstrate an understanding of concepts and the ability to perform skills related to hematology.
- Objective 3 Students will demonstrate an understanding of concepts and the ability to perform skills related to parasitology.
- Objective 4 Students will demonstrate an understanding of concepts and the ability to perform skills related to urinalyses and other animal laboratory tests.

Standard 8 Performance Evaluation included below (Optional)

STANDARD 9

STUDENTS WILL DEMONSTRATE AN ABILITY TO IDENTIFY, TREAT, AND MANAGE EXOTIC AND LABORATORY ANIMALS

- Objective 1 Students will correctly identify exotic and laboratory animals.
- Objective 2 Students will be able to identify the care required by various exotic and laboratory animals.
- Objective 3 Students will know the husbandry requirements for common exotic and laboratory animals.
- Objective 4 Students will be able to identify common problems seen in the exotic and laboratory species.

STANDARD 10

STUDENTS WILL STUDY AND PREPARE FOR CAREER OPPORTUNITIES IN VETERINARY SCIENCE

- Objective 1 Students will match interests and aptitudes to an occupational area.
- Objective 2 Students will develop goals related to future employment.
- Objective 3 Students will obtain education needed for a job.
- Objective 4 Students will identify occupational competencies.



- Objective 5 Students will identify schooling requirements that must be met in order to prepare for future employment.
- Objective 6 Students will create a resume and develop interviewing skills, essential to obtaining a position in the veterinary field.

Standard 10 Performance Evaluation included below (Optional)

STANDARDS BRIEF

THE FOLLOWING WILL ASSIST IN FOCUSING INSTRUCTION IN REGARD TO CORE DISEASES, EQUIPMENT, AND MATERIALS, PARASITES, AND BREEDS/SPECIES

Canine Core Diseases: Distemper, Parvovirus, Adenovirus -2 (Hepatitis), Rabies

Feline Core Diseases: Herpes virus 1 (Rhino tracheitis), Caliciviral, Panleukopenia (Distemper), Rabies

Equine Core Diseases: Tetanus, Eastern/Western Equine Encephalomyelitis, West Nile, Rabies

Bovine Core Diseases: Clostridial diseases (Clostridium chauvoei—Blackleg; Clostridium septicum—Malignant edema; Clostridium perfringens—Enterotoxemia; Clostridium sordellii—Sudden death; Clostridium novyi—Sudden death; Clostridium haemolytica—Redwater), IBR (infectious bovine rhino-tracheitis), BVD (bovine virus diarrhea), PI-3 (parainfluenza-3), BRSV (bovine respiratory syncytial virus)

Ovine/Caprine Core Diseases: Clostridium perfringens C and D toxoid, Tetanus

Porcine Core Diseases: Erysipelas (Diamond Skin Disease), Leptospirosis, Parvovirus

Camelid Core Diseases: Clostridium perfringens type C, D, C. tetani

Ferret Core Diseases: Rabies, Distemper

The National FFA Career Development Event Handbook will be used as a reference for this course specifically in regard to Equipment and Materials identification, Parasite identification, and Breeds/Species identification.



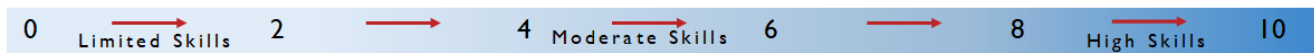
Veterinary Assistant Performance Standards (Optional)

Performance assessments may be completed and evaluated at any time during the course. The following performance skills are to be used in connection with the associated standards and exam. To pass the performance standard the student must attain a performance standard average of **8 or higher** on the rating scale. Students may be encouraged to repeat the objectives until they average **8 or higher**.

Students Name _____

Class _____

PERFORMANCE RATING SCALE



STANDARD 1 Medical Terminology

Score:

- The student will interpret and apply medical abbreviations and symbols

STANDARD 2 Animal Anatomy and Physiology

Score:

- Dissect preserved cats, or other appropriate animals

STANDARD 3 Medication Administration

Score:

- Demonstrate appropriate use and disposal of needles and other sharps

STANDARD 4 Fundamental Principles of Veterinary Medicine

Score:

- Interpret and extract information from realistic medical documents
- The student will demonstrate animal restraint/handling techniques on small, exotic, and large animals.

STANDARD 5 Medication Administration

Score:

- Demonstrate appropriate administration of oral, topical, and injectable medications

STANDARD 6 Office Procedures

Score:

- Appropriately demonstrate the ability to communicate with and educate clients

STANDARD 7 Surgical Procedures

Score:

- Assist in providing prescribed treatments for common animal diseases
- Student will learn aseptic techniques



STANDARD 8 Laboratory Procedures

Score:

- Demonstrate the ability perform skills related to laboratory tests, including
 - Urinalyses
 - Microbiology
 - Mycology
 - Hematology
 - Parasitology

STANDARD 10 Career Opportunities

Score:

- Students will create a resume and develop interviewing skills essential to obtaining a position in the veterinary field

PERFORMANCE STANDARD AVERAGE SCORE: