



Clemson University - Center for Corporate Learning
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Education & Training Plan **Veterinary Assistant Specialist Certificate Program with Externship**

Student Full Name: _____

Start Date: _____ End Date: _____

Program includes National Certification & an Externship Opportunity
Mentor Supported

Veterinary Assistant Specialist Certificate Program with Externship

Course Code: CLEM-L-VA
Program Duration: 6 Months
Course Contact Hours: 495
Student Tuition: \$3,999

The Veterinary Assistant Specialist

The Veterinary Assistant course prepares students for a new career in the field of veterinary medicine. Students will learn about the care of animals as well as how to recognize signs of illness and disease in a variety of animals from common pets to exotic species. This course also covers interpersonal communication, interaction with clients and their animals, as well as how to assist the veterinarian during examinations. Administrative duties, such as fee collection, banking, and accounts payable are also emphasized to provide the student with the skills necessary to maintain an efficient front office. This veterinary assisting course is a vital asset to the student who wishes to work in this exciting and rewarding career field.

The Veterinary Assistant Specialist Program

Employment of veterinary assistants and caretakers of laboratory animals is expected to grow 9 percent from 2014 to 2024, faster than average for this occupation. As more and more Americans are adopting pets, the pet population continues to increase at a steady pace. Additionally, technological and medical advancements veterinary medicine are helping to boost the our level of care for pets at a cost that used to be out of reach, further contributing to the rising demand for veterinary medicine generally, and veterinary assistants in particular. The veterinary assistant can expect to obtain a position mainly in clinics, animal hospitals and research laboratories but grooming facilities, pet day cares and boarding facilities would be in need of individuals with these skills as well.

Education and National Certifications

- Students should have or be pursuing a high school diploma or GED.
- There are no state approval and/or state requirements associated with this program.
- There is a National Certification exam available to students who successfully complete this program:
 - **National Association of Veterinary Technicians in America (NAVTA) Approved Veterinary Assistant (AVA) Designation Exam**
 - **Microsoft Office Specialist (MOS) Certification Exam.**

Program Objectives

At the end of this course, students will be able to:

- Explain how to dissect a medical term in terms of prefix, word root, combining forms, and suffixes
- Define general medical terms and abbreviations used veterinary medicine
- Define veterinary medical terms and abbreviations that apply to each body system including those for anatomy, physiology, diagnostic procedures, and pathological conditions
- Define terms that describe body parts and anatomy specific to various species of animals
- Define common terms that denote sex, age, birthing, grouping, and descriptions of animals
- Define veterinary medical terms and abbreviations associated with examination, pharmacology, pathology, surgery, dissection, and laboratory procedures
- Define specific veterinary terms and abbreviations used to describe canines, felines, equine, ruminants, swine, birds, and other species
- Explain the foundations of veterinary practice in terms of ethical, legal, safety, practice management, and professional communication
- Explain the concepts associated with veterinary diagnostics
- Explain the concepts associated with veterinary therapeutics
- Explain the concepts for animal nursing care and husbandry for different species

National Certification

Upon successful completion of the Clemson University Veterinary Assistant course, students would be eligible to sit for the NAVATA Approved Veterinary Assistant (AVA) Designation Exam as well as the Microsoft Office Specialist (MOS) exam. Although there are no state approval, state registration or other state requirements for this program, students who complete this program at Clemson University will be prepared and are eligible to sit for these national certification exams. Students who complete this program are encouraged to complete the externship option with their program. Students who complete this program can and do sit for the NAVATA AVA and MOS national certification exams and are qualified, eligible and prepared to do so. Clemson University works with each student to complete the exam application and register the student to take their national certification exam.

Externship / Hands on Training / Practicum

Although not a requirement, once students complete the program, they have the ability to participate in an externship and/or hands on practicum so as to practice the skills necessary to perform the job requirements of a professional in this field. Students will be assisted with completing a resume and/or other requirements necessary to work in this field. All students who complete this program are eligible to participate in an externship and will be placed with a participating organization near their location. Clemson University works with national organizations and has the ability to place students in externship opportunities nationwide.

Clemson University contact: If students have any questions regarding this program including national certification and externships, **they should call Juanita Durham of Clemson University at 864.656.3984 or via email at jdhrm@clemson.edu.**

Note: No refunds can be issued after the start date published in your Financial Award document.



About Clemson University!

Clemson Online, a unit reporting directly to the Provost, works closely with leadership teams across the University to develop, market, and deliver top-quality courses and programs in blended and online formats. The office provides vision, leadership, coordination, and expertise in support of faculty design, delivery, and evaluation of technology-enhanced, blended, and fully online courses and instructional materials. Dynamic, transformative, and unique eLearning opportunities characterize Clemson's approach to online teaching and learning.

Our Mission: Clemson Online provides strategic leadership for online education, emphasizing innovative teaching and superior learning outcomes to maximize student success in 21st-century academic and professional contexts.

Our Vision: Clemson Online will define the public web-grant university through measurable achievements in online education, research, and service.

The office is committed to pursuing strategic opportunities, providing supportive resources, promoting superior educational quality, and ensuring faculty involvement and responsibility in shaping Clemson's online future.



Clemson University and Pearson Education

The Clemson University's Office of Professional and Continuing Education eLearning programs were developed in partnership with Pearson Education to produce the highest quality, best-in-class content and delivery necessary to enhance the overall student learning experience, boost understanding and ensure retention. Pearson Education is the premier content and learning company in North America offering solutions to the higher education and career training divisions of colleges and universities across the country aimed at driving quality education programs to ensure student success. Please visit us at www.pearson.com.

About Pearson Education

Welcome to Pearson. We have a simple mission: to help people make more of their lives through learning. We are the world's leading learning company, with 40,000 employees in more than 80 countries helping people of all ages to make measurable progress in their lives. We provide a range of education products and services to institutions, governments and direct to individual learners, that help people everywhere aim higher and fulfil their true potential. Our commitment to them requires a holistic approach to education. It begins by using research to understand what sort of learning works best, it continues by bringing together people and organizations to develop ideas, and it comes back round by measuring the outcomes of our products.

Veterinary Assistant Specialist Program Detailed Student Outline:

Basic Medical Terminology

- Identify the word parts that make up a medical term
- Define the common word parts used in medical and veterinary terminology
- Explain the importance of proper pronunciation and correct spelling in medical fields
- Define commonly used medical and veterinary terminology associated with numbering
- Define terms used for body position, location, and movement for animals
- Explain the structure and function of the cell
- Define terminology associated with body tissues and systems

The Musculoskeletal System

- Describe the anatomy and physiology of each body system
- Describe terms used to describe diagnostic procedures, pathological conditions, and therapeutic procedures of each body system

Common Animal Terms and Animal Names

- Define terms that describe body parts and anatomical landmarks specific to horses, cattle, goats, sheep, swine, dogs, and cats
- Define common terms denoting sex, age, birthing, grouping, and general descriptions of dogs, cats, rabbits, ferrets, guinea pigs, mice and rats, parrot and parrot-like birds, turkeys, chicken, geese, ostrich-related animals, swine, equine, sheep, goats, llama-related animals, cattle, and deer-related animals

The Gastrointestinal System

- Anatomy and physiology of the mouth
- Anatomy and physiology of the pharynx, gullet, and stomach
- Anatomy and physiology of the intestines and accessory organs
- Terms for testing, pathology, and procedures of the digestive system
- Describe terms used to describe diagnostic procedures, pathological conditions, and therapeutic procedures of each body system

The Urinary System

- Anatomy and physiology of the urinary system
- Terms for testing, pathology, and procedures of the urinary system

The Cardiovascular System

- Anatomy and physiology of the heart and blood vessels
- Terms for testing, pathology, and procedures of the cardiovascular system

The Respiratory System

- Anatomy and physiology of the respiratory system
- Breathing
- Terms for testing, pathology, and procedures of the respiratory system

The Integumentary System

- Anatomy and physiology of the integumentary system
- Terms for testing, pathology, and procedures of the integumentary system

The Endocrine System

- Anatomy and physiology of the endocrine system
- Terms for testing, pathology, and procedures of the endocrine system

The Reproductive System

- Anatomy and physiology of the male reproductive system
- Anatomy and physiology of the female reproductive system
- The estrous cycle, mating, and pregnancy
- Terms for testing, pathology, and procedures of the reproductive system

The Nervous System and Special Senses

- Anatomy and physiology of nerve cells and tissues
- Anatomy and physiology of the nervous system
- Terms for testing, pathology, and procedures of the nervous system
- Describe terms used to describe diagnostic procedures, pathological conditions, and therapeutic procedures of each body system
- Anatomy and physiology of the eye and ear
- Terms for testing, pathology, and procedures of the eye and ear

Blood, The Lymphatic System, and immunity

- Terms for testing, pathology, and procedures of the blood
- Anatomy and physiology of the lymphatic system
- Explain how immunity works in the body
- Terms for testing, pathology, and procedures of the lymphatic and immune systems
- Describe terms used to describe diagnostic procedures, pathological conditions

Testing, Pharmacology, and Surgery Terminology

- Define the terms associated with conducting a physical examination of an animal
- Define the terms associated with common laboratory procedures in veterinary medicine
- Define terms associated with common pathogens and diseases of animals
- Define common terms associated with endoscopy and imaging
- Define common terms associated with pharmacology
- Define common terms associated with surgery

Veterinary Concepts for Canines and Felines

- Define terms and abbreviations associated with canines, felines, birds, ratites, reptiles, and amphibians

Veterinary Concepts for Equine

- Define terms and abbreviations associated with livestock
- Equine equipment and management

Veterinary Concepts for Ruminants

- Ruminant terminology
- Define terms and abbreviations associated with milk, feeding, and vaccination of ruminants
- Goat, Sheep, and Camelid terminology

Veterinary Concepts for Swine

- Swine terminology and abbreviations
- Explain vaccinations used for pigs
- Swine management

Veterinary Concepts for Birds and Other Species

- Bird anatomy and physiology
- Poultry terminology
- Pet bird and ratite terminology
- Terminology for laboratory animals and pocket pets
- Define terms and abbreviations associated with rodents, ferrets, rabbits, pocket pets, and laboratory animals
- Terminology for reptiles and amphibians

Veterinary Professional, Legal, Ethical, Safety, and Communication Issues

- Explain the various positions, credentialing, and career opportunities within the veterinary medicine arena
- Ethics and laws in veterinary medicine
- Explain common ethical, legal, and safety issues associated with veterinary medicine
- Safety in veterinary medicine
- Describe important communication skills that should be used in the veterinary environment with coworkers and clients
- Explain human-animal bonding and grief including how to communicate with a client who is experiencing grief

Veterinary Practice

- Explain the processes and procedures used in management of a veterinary practice
- Practice management

Diagnostic Imaging

- Describe the use of x-ray technology for veterinary diagnostics including quality control, x-ray procedures, and safety
- Describe endoscopy and other imaging diagnostic procedures
- Other Types of Imaging

Veterinary Laboratory Techniques

- Describe laboratory equipment, safety, and procedures for common hematology and hemostasis tests
- Describe the clinical chemistry and serology laboratory equipment and procedures for animals

The Study of Pathogens

- Describe the various diagnostic procedures used to study pathogens including lab equipment and safety precautions
- Describe the procedures, equipment, and purposes involved in urinalysis
- Describe the common internal and external parasites of domestic animals including the procedures for diagnosing them

Pharmacology and Pharmacy

- Drug names, forms, and prescriptions
- Explain the concepts of pharmacology including the various categories of drugs and their clinical uses, dosage forms, dosages, routes of drug administration, drug action, and safe storage and handling of drugs

Pathology, Response to Disease, and Prevention

- Describe common pathogens that affect domestic animals including associated terminology, specific pathogens, the body's response to pathogens, associated diseases, and preventative measures

Wounds, Fractures, and Injuries

- Wound Closure, Bandaging, and Immobilization
- Explain the process of wound healing including how to manage a wound so that it heals properly
- Management of Specific Wounds

Anesthesia, Analgesia, and Anesthetic Nursing

- Veterinary anesthesia fundamentals
- Explain the veterinary use of anesthesia and analgesics

Surgery

- Explain common terms, equipment, and procedures associated with surgical nursing of animals
- Explain the concepts and procedures associated with asepsis and maintenance of equipment
- Explain how to properly assist with surgery

Fluid Therapy and Blood Transfusion

- Explain the concepts, procedures, and precautions related to fluid therapy and blood transfusions
- Blood collection, storage, and transfusion

Emergencies and Critical Care

- Explain how to prepare for and handle veterinary emergencies
- Veterinary critical care

Dentistry

- Oral anatomy and periodontal disease
- Describe veterinary dental issues including related care and preventive procedures
- Dental equipment and procedures

Physical Therapy, Rehabilitation, and Complementary Medicine

- Describe the goals and procedures of physical therapy, rehabilitation, and complementary medicine

Animal Management

- Animal Behavior
- Describe strategies for restraining and handling various types of animals

- Restraining and handling dogs, cats, and small mammals
- Restraining and handling horses
- Restraining and handling cattle, goats, sheep, and pigs

Patient History and Physical Examination

- Client relations and patient history
- Explain how to take a patient history and perform a physical examination

Nutrition

- Explain the nutrition needs, feeding procedures, considerations, and peculiarities of nutritional needs for different animals
- Nutrition and feeding of livestock

Nursing Care of Dogs and Cats

- Describe the procedures and considerations for nursing care of various types of animals
- Medication administration
- Nursing care in specific situations
- Nursing care for geriatric patients

Nursing Care of Horses

- General nursing care for horses
- Bandaging horses
- Collecting blood and administering medications

Nursing Care of Food Animals, Camelids, and Ratites

- General nursing care for cattle, sheep, goats, and swine
- Common diagnostic and therapeutic techniques
- Nursing care for camelids
- Nursing care for ratites

Nursing Care of Companion Birds, Reptiles, and Amphibians

- Bird anatomy
- Basic pet bird behavior, client education, and physical examination of birds
- Describe the procedures and considerations for nursing care of various types of animals
- Diagnostic techniques, husbandry responsibilities, and bird anesthesia
- Common bird emergencies and presentations
- Handling and diagnostic techniques for reptiles
- General nursing for reptiles and amphibians
- Explain the nutrition needs, feeding procedures, considerations, and peculiarities of nutritional needs for different animals
- Explain how to take a patient history and perform a physical examination

Nursing Care of Orphaned and Injured Wild Animals

- Capturing, restraining, and caring for wild animals
- Describe the procedures and considerations for care of wild and laboratory animals
- Sample collection and diagnostic techniques for wild animals
- Administering medications and fluids
- Supportive and nursing care of wild animals
- Rehabilitation and ethical treatment of wild animals

- Addressing common diseases and injuries in wild animals

Nursing Care of Laboratory Animals

- Veterinary issues related to laboratory animals
- Housing and caring for various types of laboratory animals

Note: This program can be completed in 6 months. However, students will have online access to this program for a 24-month period.

MICROSOFT OFFICE Module

- Use an integrated software package, specifically the applications included in the Microsoft Office suite
- Demonstrate marketable skills for enhanced employment opportunities
- Describe proper computer techniques for designing and producing various types of documents
- Demonstrate the common commands & techniques used in Windows desktop
- List the meaning of basic PC acronyms like MHz, MB, KB, HD and RAM
- Use WordPad and MSWord to create various types of documents
- Create headings and titles with Word Art
- Create and format spreadsheets, including the use of mathematical formulas
- Demonstrate a working knowledge of computer database functions, including putting, processing, querying and outputting data
- Define computer terminology in definition matching quizzes
- Use the Windows Paint program to alter graphics
- Use a presentation application to create a presentation with both text and graphics
- Copy data from one MS Office application to another application in the suite
- Use e-mail and the Internet to send Word and Excel file attachments
- Demonstrate how to use the Windows Taskbar and Windows Tooltips
- Explain how copyright laws pertain to data and graphics posted on the Internet
- Take the college computer competency test after course completion
- Follow oral and written directions and complete assignments when working under time limitations

Note: Although the Microsoft Office Module is not required to successfully complete this program, students interested in pursuing free Microsoft MOS certification may want to consider completing this Microsoft Office Module at no additional cost.

System Requirements:

Windows Users:

- Windows 8, 7, XP or Vista
- 56K modem or higher
- Soundcard & Speakers
- Firefox, Chrome or Microsoft Internet Explorer

Mac OS User:

- Mac OS X or higher (in classic mode)
- 56K modem or higher
- Soundcard & Speakers
- Apple Safari

iPad Users:

- Due to Flash limitations, eLearning programs are NOT compatible with iPads

Screen Resolution:

- We recommend setting your screen resolution to 1024 x 768 pixels.

Browser Requirements:

- System will support the two latest releases of each browser. When using older versions of a browser, users risk running into problems with the course software.
- Windows Users: Mozilla Firefox, Google Chrome, Microsoft Internet Explorer
- Mac OS Users: Safari, Google Chrome, Mozilla Firefox

Suggested Plug-ins:

- Flash Player
- Real Player
- Adobe Reader
- Java