

Florida Department of Education  
Curriculum Framework

**Program Title:** Veterinary Assisting  
**Program Type:** Career Preparatory  
**Career Cluster:** Agriculture, Food and Natural Resources

**Secondary – Career Preparatory**

Program Number	8115110
CIP Number	0101830101
Grade Level	9-12
Standard Length	5 credits
Teacher Certification	Refer to the <b>Program Structure</b> section.
CTSO	FFA
SOC Codes (all applicable)	31-9096 -- Veterinary Assistants and Laboratory Animal Caretakers 29-2056 -- Veterinary Technologists and Technicians
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Agriculture, Food and Natural Resources (AFNR) career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Agriculture, Food and Natural Resources career cluster.

The content includes but is not limited to broad, transferable skills and stresses understanding and demonstration of the following elements of the veterinary assisting industry: planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues. The program also provides supplemental training for persons previously or currently employed as veterinary assistants.

**Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

**Program Structure**

This program is a planned sequence of instruction consisting of five courses. Planned and Supervised Agricultural Experiences (SAE) must be provided through one or more of the following: (1) foundational career exploration, (2) directed laboratory experience, (3) project ownership/entrepreneurship, (4) cooperative education/internship, (5) School Based Enterprise, or (6) Service Learning.

To teach the course(s) listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the secondary program structure:

Course Number	Course Title	Teacher Certification	Length	SOC Code	Level	Graduation Requirement
8111510	Veterinary Assisting 1	AGRICUTUR 1 @2 VET ASSIST 7G	1 credit	31-9096	3	
8111540	Veterinary Assisting 2		1 credit	31-9096	3	
8111550	Veterinary Assisting 3		1 credit	31-9096	3	
8111520	Veterinary Assisting 4		1 credit	31-9096	3	
8111530	Veterinary Assisting 5		1 credit	29-2056	3	

*(Graduation Requirement Abbreviations- EQ= Equally Rigorous Science, PA= Practical Arts, EC= Economics)*

**Common Career Technical Core – Career Ready Practices**

Career Ready Practices describe the career-ready skills that educators should seek to develop in their students. These practices are not exclusive to a Career Pathway, program of study, discipline or level of education. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

1. Act as a responsible and contributing citizen and employee.
2. Apply appropriate academic and technical skills.
3. Attend to personal health and financial well-being.
4. Communicate clearly, effectively and with reason.
5. Consider the environmental, social and economic impacts of decisions.
6. Demonstrate creativity and innovation.
7. Employ valid and reliable research strategies.
8. Utilize critical thinking to make sense of problems and persevere in solving them.
9. Model integrity, ethical leadership and effective management.
10. Plan education and career path aligned to personal goals.
11. Use technology to enhance productivity.
12. Work productively in teams while using cultural/global competence.

## **Standards**

After successfully completing this program, the student will be able to perform the following:

### **Veterinary Assisting 1**

- 01.0 Describe veterinary science and the role of animals in society.
- 02.0 Describe the socioeconomic role of veterinary sciences on the companion animal livestock industries.
- 03.0 Discuss the human-animal bond and its effects on human health.
- 04.0 Demonstrate the proper use of veterinary science terminology.
- 05.0 Identify careers in the animal industry.
- 06.0 Practice safety.
- 07.0 Recognize normal and abnormal animal behaviors.
- 08.0 Restrain and control companion and livestock animals.
- 09.0 Identify common breeds of companion animals and husbandry practices.
- 10.0 Demonstrate human-relations, communications and leadership through FFA activities.

### **Veterinary Assisting 2**

- 11.0 Demonstrate basic first aid for companion and livestock animals.
- 12.0 Demonstrate the use of tools, equipment, and instruments in the veterinary science and companion animal industry.
- 13.0 Demonstrate proper techniques in taking vital signs.
- 14.0 Investigate the common breeds and husbandry practices for species of livestock animals.
- 15.0 Identify parts and functions of various systems of common companion and livestock animals.
- 16.0 Explain the various methods of animal identification.

### **Veterinary Assisting 3**

- 17.0 Demonstrate knowledge of animal control and Human Society organizations.
- 18.0 Describe the problems, causes, and solutions of animal overpopulation.
- 19.0 Locate and interpret animal-related laws, in state statutes, or local ordinances
- 20.0 Identify the different nutritional requirements of selected species.
- 21.0 Explain the breeding practices of common companion and livestock animals.
- 22.0 Investigate the common husbandry practices and daily care of companion animals, exotic animals, and fish.
- 23.0 Demonstrate knowledge of preventive medicine and disease control.
- 24.0 Demonstrate human-relations, communications, leadership, and employability skills.

### **Veterinary Assisting 4**

- 25.0 Differentiate between animal welfare and animal rights.
- 26.0 Explain the role of animals in research.
- 27.0 Maintain and analyze records.
- 28.0 Explain proper sanitation for animal facilities.
- 29.0 Explain diagnostic testing and use of equipment.

- 30.0 Describe the process for handling a suspected rabies patient, and the process for other deceased animals.
- 31.0 Describe internal and external parasites and control methods.

**Veterinary Assisting 5**

- 32.0 Groom selected companion and livestock animals.
- 33.0 Describe exotic animals and the effects of captivity on them.
- 34.0 Assess techniques used in surgical assisting and surgical preparation.
- 35.0 Explain principles of pharmacology.
- 36.0 Explain proper methods of syringe and hypodermic needle use.

Florida Department of Education  
Student Performance Standards

**Course Title:** Veterinary Assisting 1  
**Course Number:** 8111510  
**Course Credit:** 1

**Course Description:**

This course is designed to develop competencies in areas such as the history of the animal industry; applied scientific and technological concepts; safety; terminology; careers; breed identification; animal care and human relations skills.

CTE Standards and Benchmarks	
01.0	Describe veterinary science and the role of animals in society. The student will be able to:
01.01	Define veterinary science.
01.02	Identify key components in the domestication of animals.
01.03	Choose current issues facing the animal industry today and describe the effect of each on society.
02.0	Describe the socioeconomic role of veterinary sciences on the companion animal and livestock industries. The student will be able to:
02.01	Summarize the history of the veterinary science, companion animal and livestock industry.
02.02	Discuss the role of companion animals on the veterinary science industry.
02.03	Discuss the role of livestock animals on the veterinary science industry.
03.0	Discuss the human-animal bond and its effects on human health. The student will be able to:
03.01	<i>Describe the human-animal bond and its influence on veterinary care.</i>
03.02	<i>Compare and contrast different types of human-animal bonds for companion animals, working animals and livestock.</i>
03.03	Discuss the positive health effects on people resulting from their interaction with animals.
03.04	Discuss local, state, and national programs that use human-animal interaction as a therapy tool.
03.05	Discuss stages of grief of animal loss.
04.0	Demonstrate the proper use of veterinary science terminology. The student will be able to:

<b>CTE Standards and Benchmarks</b>	
04.01	Define common veterinary and medical terms, including directional terminology.
04.02	<i>Compile a list of prefixes, suffixes, and root words for veterinary medical terminology.</i>
04.03	Categorize gender and species-related terminology.
04.04	<i>List common medical and veterinary abbreviations.</i>
05.0	Identify careers in the animal industry. The student will be able to:
05.01	Differentiate between entry and advanced level animal-industry careers.
05.02	Identify professional organizations and trade journals in the animal industry.
05.03	Investigate career opportunities in the veterinary science, companion animal, and large animal industry; also identify degree or credential needed to prepare for those careers.
05.04	Using national or state credentialing agencies as a reference, distinguish between a Veterinary Assistant, Credentialed Veterinary Assistant, Veterinary Technician, Credentialed Veterinary Technician, and Veterinary Technologist.
05.05	Investigate requirements necessary to earn and maintain Veterinary Assisting Certification.
06.0	Practice safety. The student will be able to:
06.01	Recognize and avoid potential safety hazards (physical, chemical, biological and zoonotic).
06.02	Utilize proper safety precautions and procedures when working in the hospital and/or animal handling areas.
06.03	Demonstrate knowledge on how to use personal protective equipment- PPE. (wears gloves, goggles, face mask, ear plugs, apron, gown, cap, and shoe covers when needed)
06.04	Locate and demonstrates use of an eye wash solution or station.
06.05	Locate first aid kit and fire extinguisher.
06.06	Explain OSHA (Occupational Safety and Health Act) and its regulations pertaining to a veterinary practice, including sanitation, safety of employees and the employee's right to know of potential work place hazards through SDS (Safety Data Sheets) and the written hazard communication plan.
06.07	Demonstrate knowledge of OSHA regulations regarding the handling, placement and disposition of sharps and bio-hazardous material.
06.08	Handle and use disposable "sharps" containers in a safe manner.
06.09	Explain correct labeling of secondary containers with appropriate safety information.

<b>CTE Standards and Benchmarks</b>	
06.10	Practice safety precautions around animals, list the most common causes of animal related accidents.
07.0	Recognize normal and abnormal animal behaviors. The student will be able to:
07.01	Identify instinctive and learned behaviors.
07.02	Differentiate between normal and abnormal behavioral characteristics of animals.
07.03	Recognize signs of aggressive animal behaviors.
07.04	Describe behavioral changes due to aging.
08.0	Restrain and control companion and livestock animals. The student will be able to:
08.01	Discuss the proper method for placing large animals in a stall, paddock, and trailer.
08.02	Safely handle and restrain dogs, cats, and other animals for exams, procedures, and treatment to prevent undue stress or harm to either animals or humans. <ul style="list-style-type: none"> <li>• Lifting positioning and restraining animals</li> <li>• Position an animal in sternal dorsal and lateral recumbency</li> <li>• restraint of a small dog on an exam table</li> <li>• restraint of a cat on an exam table</li> <li>• restraint of a large dog on an exam table, lift table, and on the floor</li> <li>• place a lead on a dog slip lead and standard leash</li> </ul>
08.03	Demonstrate verbal and physical restraint of animals.
08.04	Demonstrate how to match appropriate level of restraint for an individual animal's level of resistance and situation.
08.05	Explain appropriate methods for placing and removing animals from kennels.
08.06	Identify venipuncture sites and accepted restraint for companion and livestock animals; [ex. cephalic vein (cat & dog), jugular vein (cat & dog), femoral vein (cat), saphenous vein (dog)jugular (horse & goat), tail (cow & pig)]
08.07	Demonstrate use of muzzle on a dog using commercial, leash, and gauze muzzles of appropriate size.
08.08	Demonstrate currently accepted standards for restraint of the cat including towels, scruff technique, commercial muzzles, cat bags, leather gloves, and the squeeze cage.
08.09	Explain methods of restraint for exotic and avian animals.
08.10	Identify the appropriate restraining methods for the following: <ul style="list-style-type: none"> <li>• Halter, tie and lead horses and cattle</li> <li>• Application of twitch, nose tongs</li> </ul>



<b>CTE Standards and Benchmarks</b>	
	<ul style="list-style-type: none"> <li>• Restrain sheep, goats and swine</li> <li>• Restrain poultry</li> </ul>
08.11	Discuss chemical restraints of animals.
09.0	Identify common breeds of companion animals and husbandry practices. The student will be able to:
09.01	Identify canine breeds and list breed characteristics and husbandry practices.
09.02	Identify feline breeds and list breed characteristics and husbandry practices.
10.0	Demonstrate human-relations, communications and leadership through FFA activities. The student will be able to:
10.01	Identify the opportunities for leadership development available through the National FFA Organization and/or professional organizations.
10.02	Delineate the major events in the history of the FFA.
10.03	Develop, implement, and maintain work-based learning through a Supervised Agricultural Experience (SAE) program.
10.04	Collect, interpret, and analyze data using an organized record-keeping system.

Florida Department of Education  
Student Performance Standards

**Course Title:** Veterinary Assisting 2  
**Course Number:** 8111540  
**Course Credit:** 1

**Course Description:**

This course is designed to develop competencies in the areas such as basic first aid; scientific and technological; tools and equipment; breed identification; and functions of systems.

<b>CTE Standards and Benchmarks</b>	
11.0	Demonstrate basic first aid for companion and livestock animals. The student will be able to:
11.01	Recognize emergency health (physical and behavioral) status.
11.02	Describe procedures to restrain and move injured animals.
11.03	Demonstrate hemorrhage control.
11.04	Dress wounds and punctures.
11.05	Demonstrate the correct emergency procedures for shock, burns, heatstroke, and fractures.
11.06	Demonstrate companion animal CPR.
11.07	Recognize allergic reactions and toxicity.
12.0	Demonstrate the use of tools, equipment, and instruments in the veterinary science and companion animal industry. The student will be able to:
12.01	Identify, demonstrate and maintain the proper tools, equipment, and instruments for common veterinary procedures for: <ul style="list-style-type: none"> <li>• Small animal</li> <li>• Livestock</li> <li>• Exotics</li> </ul>
12.02	Demonstrate the ability to use an equipment or instrument manual.
13.0	Demonstrate proper techniques in taking vital signs. The student will be able to:
13.01	Obtain and record the TPR (temperature, pulse, and respiratory rate), MM (mucus membrane color), CRT(capillary refill time) with minimal discomfort to pet.

**CTE Standards and Benchmarks**

13.02	Demonstrate how to use, clean, and store thermometers.
13.03	Identify normal and abnormal range for each parameter (TPR, MM, and CRT).
14.0	Investigate the common breeds and husbandry practices for species of livestock animals. The student will be able to:
14.01	Identify bovine breeds and their characteristics, and husbandry practices.
14.02	Identify ovine breeds and their characteristics and husbandry practices.
14.03	Identify caprine breeds and their characteristics and husbandry practices.
14.04	Identify porcine breeds and their characteristics and husbandry practices.
14.05	Identify equine breeds and their characteristics and husbandry practices.
14.06	Identify poultry breeds and their characteristics and husbandry practices.
15.0	Identify parts and functions of various systems of common companion and livestock animals. The student will be able to:
15.01	Identify internal and external anatomy of common companion and livestock animals.
15.02	Identify parts, major organ, functions, and common diseases of the following systems of animals using correct terminology:
15.02.1	Identify the general function of the respiratory system and the major organs.
15.02.2	Identify the general function of the skeletal system and the major bones of the axial and appendicular skeleton.
15.02.3	Identify the general function of the muscular system and major groups of muscles.
15.02.4	Identify the general function of the digestive system; differentiate between ruminants and non-ruminants (monogastric and hind gut fermentors); and the major organs.
15.02.5	Identify the general function of the cardiovascular system and the major organs.
15.02.6	Identify the general function of the endocrine and the major organs.
15.02.7	Identify the general function of the urinary system and the major organs.
15.02.8	Identify the general function of the reproductive system and both male and female organs.
15.02.9	Identify the general function of the nervous system and the major organs.
15.02.10	Identify the general function of the integumentary system and the major organs.

**CTE Standards and Benchmarks**

15.02.11	Explain the differences in the teeth and eating habits for omnivores, carnivores and herbivores.
16.0	Explain the various methods of animal identification. The student will be able to:
16.01	Explain types of identification tags and their use.
16.02	Explain the use of microchips for animal identification.
16.03	Explain types of tattoos for animals and the use in both companion and production animals.
16.04	Explain the types of ear tags and their use in production animals per USDA laws and regulations (premise ID).
16.05	Explain types of ear notching and use for identification.

Florida Department of Education  
Student Performance Standards

**Course Title:** Veterinary Assisting 3  
**Course Number:** 8111550  
**Course Credit:** 1

**Course Description:**

This course is designed to develop competencies in the areas animal digestive systems; animal breeding; animal control; animal overpopulation; animal related laws; and breeds.

<b>CTE Standards and Benchmarks</b>	
17.0	Demonstrate knowledge of animal control and Human Society organizations. The student will be able to:
17.01	Differentiate between animal control agencies and Human Society organizations.
17.02	Describe the responsibilities and goals of animal control agencies and Human Society organizations.
17.03	Identify and locate local animal control agencies and Human Society organizations.
18.0	Describe the problems, causes, and solutions of animal overpopulation. The student will be able to:
18.01	Explain the cause and effect of overpopulation in animals.
18.02	Define euthanasia and describe its role in animal overpopulation.
18.03	Explain the pet owners' and societies' responsibilities concerning animal overpopulation.
18.04	Discuss the medical benefits of spaying and neutering.
19.0	Locate and interpret animal-related laws, in state statutes, or local ordinances. The student will be able to:
19.01	Describe local animal control laws.
19.02	Describe permitting requirements for exotic and wildlife animals.
19.03	Demonstrate knowledge of local and state animal regulations.
19.04	Determine the legal limitations of duties of an employee in the animal services industry.
19.05	Identify when an Animal Health Certificate is required.

**CTE Standards and Benchmarks**

19.06	Explain the laws governing the sale of animals.
19.07	List the legal options for euthanasia as it varies with species.
19.08	List the legal options for disposal of the animals body depending on the species.
19.09	Discuss the importance of presenting the body of the pet in a respectful and empathetic way.
20.0	Identify the different digestive systems of animals and the nutritional requirements of selected species. The student will be able to:
20.01	Describe the basic nutritional requirements of selected species.
20.02	Analyze different feed labels and identify feed ingredients.
20.03	Explain the appropriate storage for dry and canned dog or cat food.
20.04	Explain nutritional needs based on life stage and size of animal and choose appropriate food and amount for specific animals for general care.
20.05	Explain potential problems with feeding therapeutic foods incorrectly or to the wrong patient.
21.0	Explain the breeding practices of common companion and livestock animals. The student will be able to:
21.01	Determine appropriate age or weight for breeding.
21.02	Identify gestation length.
21.03	Describe estrous cycle.
21.04	Describe breeding techniques. (ex. Natural, artificial insemination etc.)
21.05	Identify selection criteria of males and females for reproduction.
21.06	Describe care of breeding stock.
22.0	Investigate the common husbandry practices and daily care of companion animals, exotic animals, and fish. The student will be able to:
22.01	Describe breeds, characteristics and husbandry and care of guinea pigs.
22.02	Describe breeds, characteristics and husbandry and care of chinchillas.
22.03	Describe breeds, characteristics and husbandry and care of ferrets.
22.04	Describe breeds, characteristics and husbandry and care of amphibians.

<b>CTE Standards and Benchmarks</b>	
22.05	Describe breeds, characteristics and husbandry and care of reptiles.
22.06	Describe breeds, characteristics and husbandry and care of common fresh and salt water fish.
22.07	Describe breeds, characteristics and husbandry and care of common avian species.
22.08	Describe breeds, characteristics and husbandry and care of rabbits.
22.09	Describe breeds, characteristics and husbandry and care of rodents.
23.0	Demonstrate knowledge of preventive medicine and disease control- the students will be able to:
23.01	Describe the importance of preventive medicine for animal health.
23.02	Differentiate between healthy and sick animals.
23.03	Describe common infectious and noninfectious diseases of animals to include bacterial, viral, fungal, prion and zoonotic.
23.04	Describe vaccinations available for disease prevention and vaccination procedures.
23.05	Describe isolation or quarantine procedures for new or sick animals. <ul style="list-style-type: none"> <li>Describe methods of preventive medicine and quarantine for disease control in a kennel, cattery, paddock, rabbitry, and zoo.</li> </ul>
23.06	Discuss the terms immunology and active and passive immunity as it applies to disease and vaccination.
23.07	Describe concepts for periodic health check-up.
23.08	List and discuss common zoonotic diseases.
24.0	Demonstrate human-relations, communications, leadership, and employability skills. The student will be able to:
24.01	Follow oral and written directions with understanding; ask questions that clarify directions as needed.
24.02	Communicate effectively and professionally in verbal, written, and nonverbal modes; demonstrate effective telephone skills.
24.03	Demonstrate acceptable employee hygiene habits.
24.04	Complete pertinent forms for employment, such as a resume, a job application, a W-4 form.
24.05	Demonstrate job interview techniques.
24.06	Student avoids misrepresentation, slander, violating client confidentiality, substandard patient care, substance abuse, or animal abuse/neglect.

<b>CTE Standards and Benchmarks</b>	
24.07	Explain the veterinarian-client-patient relationships.
24.08	Explain the importance of keeping their credentials current with continuing education credits.
24.09	Conforms to safety and professional dress code by dressing in well- fitting scrubs or uniforms, closed- toed shoes, avoids excessive or loose jewelry, or excessive and visible body-piercings or tattoos, avoids long or fake nails, and keeps hair short or tied back.
24.10	Actively observe his/her working environment and animals, promptly reporting observations and concerns to the veterinary technician or veterinarian as needed.
24.11	Demonstrate initiative to complete tasks.
24.12	Discuss ways to resolve complaints or conflicts with either pet owners/clients or co-workers in a professional manner.



Florida Department of Education  
Student Performance Standards

**Course Title:** Veterinary Assisting 4  
**Course Number:** 8111520  
**Course Credit:** 1

**Course Description:**

This course is designed to develop competencies in the areas of animal welfare and rights; research; record keeping; disease and parasites.

<b>CTE Standards and Benchmarks</b>	
25.0	Differentiate between animal welfare and animal rights. The student will be able to:
25.01	Define animal welfare and animal rights.
25.02	Compare and contrast between animal welfare and animal rights.
25.03	Identify animal welfare and animal rights advocate groups.
25.04	Debate current events concerning animal welfare and animal rights.
25.05	Describe animal cruelty and the consequences of cruel treatment of animals.
26.0	Explain the role of animals in research. The student will be able to:
26.01	Describe the history of the role of animals in research.
26.02	Discuss medical advances made possible through the use of animals in research.
26.03	Define USDA and explain its roles in using animals for research.
26.04	Describe the role of the Institutional Animal Care and Use Committee (IACUC) with regard to animal research facilities.
26.05	Explain the controversy over using animals in research.
26.06	Identify organizations that are in favor of and those that are against the use of animals in research.
26.07	Develop a personal position on the use of animals in research and support that position.
26.08	Explain how biotechnology has affected animal research.

**CTE Standards and Benchmarks**

26.09	Debate the use of cloning for research purposes.
27.0	Maintain and analyze records. The student will be able to:
27.01	Discuss the legal requirements of maintaining animal health records, and maintain and analyze animal health records.
27.02	Maintain and analyze basic business records (inventory, depreciation, receipts, expenses), using computer applications.
27.03	Explain the process of scheduling appointments.
27.04	Demonstrate admissions and discharges for boarders or non-medical cases.
27.05	Demonstrate filing and retrieving of records from both numerical and alphabetical filing systems.
27.06	Demonstrate computer and keyboarding skills.
27.07	Demonstrate data collection from organized records.
27.08	Discuss legal requirements of veterinary medical records to include: (1)establish veterinarian-client-patient relationship, (2)contain owner and patient information, (3)contain patient history, and (4) contain contemporaneously written medical procedures
27.09	Describe the duties of an office or hospital staff member as outlined by NAVTA which includes: <ul style="list-style-type: none"> <li>• Greet pet owner/client, identifies his/herself by name and as veterinary assistant in a professional manner.</li> <li>• Obtain or confirm pet owner/client and pet information including pet owner/client's name, address and phone numbers; pet's name, species, breed, color, sex and neutered/not neutered, and age or birth date.</li> <li>• Discuss process for recording new information and/or confirms existing information on medical record using appropriate medical terminology and concise notations. Include current date and reason for appointment.</li> <li>• Obtain and record the pet's vital signs (TPR, MM, &amp; CRT) and weight with minimal restraint to the pet.</li> <li>• Leave the exam room courteously indicating the veterinarian will be right in.</li> </ul>
27.10	Explain the importance of client/patient confidentiality.
28.0	Explain proper sanitation for animal facilities. The students will be able to:
28.01	Demonstrate proper sanitation techniques for an examination room, hospital facilities, surgical suites, kennel, cattery, paddock, rabbit hutch, and zoo.
28.01.01	Keep assigned work areas clean and organized.
28.01.02	Explain sanitary procedures including physical cleaning, disinfecting, and sterilizing.
28.01.03	Demonstrate proper cleaning protocols for kennels, runs, and enclosures including cleaning and disinfecting all sides of the kennel. (floor, ceiling, walls, & door) and all items in the kennel (bowls, blankets, toys, etc.)

<b>CTE Standards and Benchmarks</b>	
28.01.04	List precautions to take when mixing or using multiple cleaning and disinfecting agents i.e. NEVER mix bleach with ammonia containing cleaners or disinfectants.
28.01.05	Change bedding materials in a timely and efficient manner.
28.01.06	Demonstrate of the proper disposal of bedding and waste materials.
28.01.07	Notify supervisor of needed repair or maintenance on cages, kennels, or stalls.
29.0	Explain diagnostic testing and use of equipment. The student will be able to:
29.01	Explain the proper placement of a slide in the microscope and focus on 100X and 400X magnification.
29.02	Explain appropriate materials for cleaning the microscope.
29.03	Demonstrate the centrifugation of a sample.
29.04	Explain the purpose of the blood analyzer machine.
29.05	Explain a urinalysis including:
29.05.01	List methods for urine collection commonly used in the veterinary practice.
29.05.02	Collect a free-caught urine sample using proper techniques for dogs.
29.05.03	Identify time and storage parameters for urine samples.
29.05.04	List precautions and safety factors in handling urine samples including personal protection equipment.
29.06	Explain fecal test including:
29.06.01	Explain methods of collecting fecal samples.
29.06.02	Identify time and storage parameters for fecal samples.
29.06.03	Identify appropriate volume of feces for each method of testing.
29.06.04	Demonstrate the correct technique for handling and preparing the fecal samples for analysis by flotation, sedimentation, and direct smear.
29.06.05	Explain appropriate method of placing sample on microscope slide or cover slip.
29.06.06	List precautions and safety factors in handling fecal samples including personal protection equipment.

**CTE Standards and Benchmarks**

29.07	Examine radiology, electrocardiogram and ultrasound imaging techniques and safety.
29.07.01	Discuss restrictions from radiation exposure for pregnant women and minors.
29.07.02	Explain what a dosimeter badge does and who wears it and when.
29.07.03	Describe the area of exposure in the radiology room including direct beam and scatter radiation.
29.07.04	Explain the correct use of personal protection equipment including lead-shielded gowns, lead gloves, lead thyroid shield, lead glasses, and other lead protective wear.
29.07.05	Explain methods of restraint for positioning for radiographs including chemical restraint.
29.07.06	Explain the proper handling of radiographic film including safe light use.
29.07.07	Demonstrate the appropriate labeling of a radiograph including date, patient. name, view or side of patient, machine settings, and film developing
29.07.08	Maintain radiograph log and filing of films.
29.07.09	Explain how digital radiography differs from film.
30.0	Describe the process for handling a suspected rabies patient, and the process for other deceased animals.
30.01	<i>List the common species which may transmit rabies to humans.</i>
30.02	<i>Explain the methods of transmission of rabies to animals and humans.</i>
30.03	<i>List the symptoms associated with rabies.</i>
30.04	<i>Explain the proper safety measures to follow when handling an animal suspected of having rabies.</i>
31.0	Describe internal and external parasites and control methods. The student will be able to:
31.01	Set up fecal flotations or centrifuged fecal samples.
31.02	Identify ectoparasites fleas, ticks, lice, and mites;explain the life cycle,treatment, and prevention methods.
31.03	Identify ova of endoparasites roundworms, hookworms, whipworms, strongyles;explain the life cycle, treatment, and prevention methods
31.04	Identify adult endoparasites roundworms, hookworms, whipworms, strongyles and heartworms.
31.05	Identify giardia and coccidia in fecal samples.

**CTE Standards and Benchmarks**

31.06 Identify tapeworm segments in fecal sample or an animal.

Florida Department of Education  
Student Performance Standards

Course Title:        **Veterinary Assisting 5**  
 Course Number:    **8111530**  
 Course Credit:     **1**

**Course Description:**

This course is designed to develop competencies in the areas of grooming, effects of captivity of exotics; genetics and biotechnology in reproduction; diagnostic and therapeutic testing; surgical preparation; and pharmacology.

CTE Standards and Benchmarks	
32.0	Groom selected companion and livestock animals. The student will be able to:
32.01	<i>Discuss using a variety of brushes, combs, flea combs, mat splitters, undercoat rakes, etc. to groom animal hair/fur as needed for both cosmetic and therapeutic reasons.</i>
32.02	<i>Explain using clippers to cut animal hair/fur as needed for both cosmetic and therapeutic reasons.</i>
32.03	<i>Explain the necessity of following written and oral instructions and all label directions regarding shampoos for bathing and therapeutic or flea rinses (dips).</i>
32.04	<i>List precautions in bathing and dipping including avoiding soap or chemicals in the eyes, lathering the entire body, timing the shampoo application according to directions, and towel or blow drying.</i>
32.05	<i>Identify the area of blood and nerve supply of the nail in the dog and cat and common pets such as rabbits and ferrets.</i>
32.06	<i>Identify appropriate instrument or nail trimmer for small and large dogs and cats.</i>
32.07	<i>Demonstrate comfortable handling of paw or limb during nail trim for dog and cat.</i>
32.08	<i>Explain methods for hemostasis if nail is accidentally trimmed too short.</i>
32.09	<i>Notify supervisor of abnormalities including in-grown nails and abnormal growth or shape.</i>
32.10	Describe the steps in expressing anal sacs using the external method.
32.11	Discuss proper hoof care and hoof trimming needs.
33.0	Describe exotic animals and the effects of captivity on them. The student will be able to:
33.01	Define exotic animal, zoo animal, invasive and native animals.

**CTE Standards and Benchmarks**

33.02	Identify exotic animals native and invasive to Florida.
33.03	Explain the effects of urban sprawl on the wildlife population.
33.04	Describe the roles of the Florida Fish and Wildlife Conservation Commission in wildlife management.
33.05	Explain state, national, and international laws affecting the purchase and transport of exotic animals.
34.0	Assess techniques used in surgical assisting and surgical preparation. The student will be able to:
34.01	<p><i>Prepare and sterilize surgical equipment and supplies.</i></p> <ul style="list-style-type: none"> <li>• <i>Explain standard procedure for cleaning and lubricating all stainless steel instruments.</i></li> <li>• <i>Explain appropriate use of ultrasonic instrument cleaning and proper solutions.</i></li> <li>• <i>Explain cold sterilization trays and appropriate solutions.</i></li> <li>• <i>Demonstrate assembly and wrapping of surgical packs for sterilization.</i></li> <li>• <i>Demonstrate folding and wrapping a surgical gown for sterilization.</i></li> <li>• <i>Explain proper procedure for sterilizations methods including the autoclave and gas sterilization (ethylene oxide) including safety precautions with each.</i></li> </ul>
34.02	<p><i>Describe components of surgical assisting.</i></p> <ul style="list-style-type: none"> <li>• <i>Explain aseptic protocol for maintaining sterility of the surgical field</i></li> <li>• <i>Demonstrate what can and cannot be touched when assisting in a surgical environment.</i></li> <li>• <i>Demonstrate how suture material might be removed from its outer packaging and passed to the surgeon while maintaining sterility.</i></li> </ul>
34.03	<p><i>Summarize procedures necessary of patient preparation.</i></p> <ul style="list-style-type: none"> <li>• <i>Explain reason for pre-surgical fasting and appropriate time interval.</i></li> <li>• <i>List methods to identify animal for surgery and confirm identity.</i></li> <li>• <i>Demonstrate dorsal and sternal recumbancy positioning and securing animal in each on the surgery table under anesthesia as instructed by the veterinary technician or veterinarian.</i></li> <li>• <i>Demonstrate clipping or shaving surgical field as instructed by the veterinary technician or veterinarian.</i></li> <li>• <i>Demonstrate cleaning and disinfecting the surgical field using currently accepted standards for aseptic technique and surgical scrub.</i></li> </ul>
34.04	<p><i>Identify proper post-surgical care techniques.</i></p> <ul style="list-style-type: none"> <li>• <i>List parameters to monitor during recovery and signs of distress in the recovery period.</i></li> <li>• <i>Explain the swallow reflex and the appropriate time and method for endotracheal tube removal.</i></li> <li>• <i>Explain appropriate transfer of animal from surgery to recovery kennel, positioning in kennel, and precautions in kennel.</i></li> <li>• <i>Confirm “No food or water” or similar instructions on recovery kennel.</i></li> </ul>

<b>CTE Standards and Benchmarks</b>	
35.0	Explain principles of pharmacology. The student will be able to:
35.01	<i>Identify forms of medication including tablet, capsule, liquid, powder, granules, topical creams, liquids, and gels.</i>
35.02	<i>Explain the application of topical flea medication.</i>
35.03	<i>Demonstrate the reconstitution of vaccine using appropriate diluents and amounts of diluents.</i>
35.04	<i>List the components that must be present on a prescription label.</i>
35.05	<i>Observe and understand controlled substances logs and security.</i>
35.06	<i>Inventory pharmacy supplies and notify supervisor of low supplies.</i>
35.07	<i>Identify expiration date on labels and notify supervisor of expired drugs.</i>
35.08	<i>Maintain clean shelves and storage areas for pharmaceuticals.</i>
35.09	Describe the process for administering medications by injection, oral, nasal and topical on companion and livestock animals.
35.10	Describe the procedure for safe disposal of medications.
35.11	Determine methods to observe animals for medicine side effects or allergies.
36.0	Explain proper methods of syringe and hypodermic needle use. The student will be able to:
36.01	<i>Identify the appropriate gauge hypodermic needle per species and task (12 g, 18g, 20 g, 22 g,25 g, etc).</i>
36.02	<i>Identify the appropriate volume syringe for the task (3cc, 6cc, 12cc, 20cc, 35cc, 60cc, 1cc tuberculin or insulin syringe, etc).</i>
36.03	<i>Demonstrate the ability to read the precise volume of medication in a syringe and to fill a syringe with medication to a specified volume when requested.</i>
36.04	<i>Describe appropriate SQ, IM, and IV injection sites.</i>



## Additional Information

### **Laboratory Activities**

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

### **Florida Standards for English Language Development (ELD)**

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.ELL.SI.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. To access an ELL supporting document which delineates performance definitions and descriptors, please click on the following link: <http://www.cpalms.org/uploads/docs/standards/eld/SI.pdf>. For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition at [SALA@fldoe.org](mailto:SALA@fldoe.org).

### **Special Notes**

*Benchmarks that appear in italics within the framework are skills or competencies that have been taken directly from the Skills Competency Validation list. Contact the Florida Veterinary Medical Association for the most up to date skills list.*

The occupational standards and benchmarks outlined in this secondary program correlate to the standards and benchmarks of the postsecondary program with the same Classification of Instructional Programs (CIP) number.

Because of the production and marketing cycle of the animal industry, this program requires individual instruction and supervision of students for the entire period beyond the 180-day school year.

### **Career and Technical Student Organization (CTSO)**

FFA is the intercurricular career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered.

## **Cooperative Training – OJT**

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the OJT framework apply.

## **Accommodations**

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note: postsecondary curriculum and regulated secondary programs cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular course or a modified course. If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete a Career and Technical Education (CTE) course. The student should work on different competencies and new applications of competencies each year toward completion of the CTE course. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number for eligible students with disabilities.

## **Additional Resources**

For additional information regarding articulation agreements, Bright Futures Scholarships, Fine Arts/Practical Arts Credit and Equivalent Mathematics and Equally Rigorous Science Courses please refer to:

<http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml>.