

Secondary PSAV

Certification	VOC AGRI	@4	VOC AGRI	@4
	AGRI	@4	AGRI	@2 @4
	AGRICULTUR	1 @2	AGRICULTUR	1 @2
	AG SUPPLI	#7	AG SUPPLI	@7 G

Basic Skills	
Math	9
Language	9
Reading	9

- I. **PURPOSE:** The purpose of this program is to prepare students for employment or advanced training in the veterinary assisting industry. The program focuses on 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.

Listed below are the courses that comprise this program when offered at the secondary level:

8111510	Veterinary	Assisting	1 - 1	secondary	credit
8111540	Veterinary	Assisting	2 - 1	secondary	credit
8111550	Veterinary	Assisting	3 - 1	secondary	credit
8111520	Veterinary	Assisting	4 - 1	secondary	credit
8111530	Veterinary	Assisting	5 - 1	secondary	credit

- II. **LABORATORY ACTIVITIES:** Classroom, shop, and animal laboratory activities are an integral part of this cluster, including the safe use and care of animal health-care instruments, animal grooming equipment, basic tools, animal restraining equipment, and field equipment.

- III. **SPECIAL NOTE:** FFA (for secondary) and the National Postsecondary Agricultural Student Organization (for postsecondary) are the appropriate Career Technical Student Organizations for providing leadership training and for reinforcing specific vocational skills. Career Technical Student Organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643, F.S.

Planned and supervised instructional activities must be provided through one or more of the following: (1) directed laboratory experience, (2) student projects, (3) placement for experience, (4) cooperative experience.

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.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following are required for each student: a training plan that is signed by the student, teacher, and employer, including instructional objectives and a list of on-the-job and in-school learning experiences and a workstation that reflects the equipment, skills, and tasks that are relevant to the occupation that the student has chosen as a career goal. The student must be paid for work performed.

In accordance with Rule 6A-10.040, FAC, the minimum basic-skills grade levels required for postsecondary adult vocational students to exit the program are listed on the front page of this curriculum framework. These grade-level numbers correspond to grade-equivalent scores obtained on one of the state-designated basic-skills examinations. If a student does not meet the basic-skills level required for completion of the program, remediation should be provided concurrently in Vocational Preparation Instruction (VPI). Please refer to the Rule for exemptions.

When a secondary student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards which the student must master to earn credit must be specified on an individual basis. The job or jobs for which the student is being trained should be reflected in the student's desired post school outcome statement on the Transition Individual Educational Plan (Transition IEP).

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the

methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this program and is printed in a supplement to this document.

Florida Department of Education
INTENDED OUTCOMES

Program Title: Veterinary Assisting Program

INTENDED OUTCOMES: After successfully completing appropriate course(s) for each occupational completion point of this program, the student will be able to perform the following:

OCCUPATIONAL COMPLETION POINT - DATA CODE A

ASSISTANT ANIMAL CARETAKER - Industry Title

- 01.0 Describe the socioeconomic role of the veterinary sciences and companion animal industry.
- 02.0 Apply scientific and technological principles to the veterinary sciences and companion animal industry.
- 03.0 Practice safety.
- 04.0 Demonstrate the use of tools, equipment and instruments in the veterinary sciences and companion animal industry.
- 05.0 Demonstrate human-relations, communications, leadership, and employability skills.
- 06.0 Describe animal science and the role of animals in society.
- 07.0 Identify careers in the animal industry.
- 08.0 Practice animal and laboratory safety.
- 09.0 Demonstrate basic first aid for humans.
- 10.0 Identify parts and functions of various systems of selected animals.
- 11.0 Recognize normal and abnormal animal behaviors.
- 12.0 Identify the different digestive systems of animals and the nutritional requirements of selected species.
- 13.0 Explain the reproductive system and breeding of selected animals.
- 14.0 Demonstrate knowledge of preventive medicine and disease control.
- 15.0 Describe the internal and external parasites and the control methods.
- 16.0 Differentiate between animal welfare and animal rights.
- 17.0 Demonstrate knowledge of animal control and humane societies.
- 18.0 Discuss animal marketing techniques.
- 19.0 Maintain and analyze records.

OCCUPATIONAL COMPLETION POINT - DATA CODE B

ANIMAL CARETAKERS, EXCEPT FARM - OES Code 79017502

- 20.0 Restrain and control animals.
- 21.0 Demonstrate proper use of veterinary science terminology.
- 22.0 Demonstrate basic first aid for companion animals.
- 23.0 Identify breeds in each of the several species of companion animals.
- 24.0 Groom selected companion animals.
- 25.0 Describe the problems, causes, and solutions of animal overpopulation.
- 26.0 Describe exotic animals and the effects of captivity on them.

OCCUPATIONAL COMPLETION POINT - DATA CODE C

VETERINARY ASSISTANT - OES Code 79806000

- 27.0 Discuss the human-animal bond and its effects on human health.
- 28.0 Locate and interpret animal-related laws.

- 29.0 Explain the roles of animals in research.
- 30.0 Describe the principles of genetics and biotechnology in reproduction.
- 30.0 Demonstrate knowledge of enterprise management.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Veterinary Assisting
Secondary Number: 8115110
Postsecondary Number: A010512

OCCUPATIONAL COMPLETION POINT - DATA CODE A

ASSISTANT ANIMAL CARETAKER - Industry Title

01.0 DESCRIBE THE SOCIOECONOMIC ROLE OF THE VETERINARY SCIENCES AND COMPANION ANIMAL INDUSTRY--The student will be able to:

- 01.01 Prepare a report on the history of the veterinary sciences and companion animal industry.
- 01.02 Discuss the impact of veterinary sciences and companion animal products and services on the local, state, national, and global economy.
- 01.03 Investigate career opportunities in the veterinary sciences and companion animal industry and identify educational experiences that would prepare one for those careers.
- 01.04 Discuss the role of the veterinary sciences and companion animal industry in the interaction of population, food, energy, and the environment.
- 01.05 Describe the types of agribusiness by organizational structure (i.e. sole proprietorship, partnership, corporation).

02.0 APPLY SCIENTIFIC AND TECHNOLOGICAL PRINCIPLES TO THE VETERINARY SCIENCES AND COMPANION ANIMAL INDUSTRY --The student will be able to:

- 02.01 Discuss the importance of scientific classification in veterinary science.
- 02.02 Use the scientific method to solve problems in veterinary science.
- 02.03 Explain the use of genetics in animals, including probability applications.
- 02.04 Analyze the impact of recent technology on the animal industry.
- 02.05 Identify and describe the components of an ecosystem both biotic and abiotic.
- 02.06 Construct and analyze a diagram of a biological food web and subsequent food chains.
- 02.07 Describe and diagram the water, carbon, nitrogen, oxygen, sulfur, and phosphorus cycles.
- 02.08 Apply principles of waste management to environmental problems common to animals.

03.0 PRACTICE SAFETY--The student will be able to:

- 03.01 List the most common causes of animal related accidents.
- 03.02 Discuss the importance of following proper safety precautions in the animal industry.

- 03.03 Demonstrate safety procedures in the classroom, laboratory, and workplace.
 - 03.04 Discuss the proper procedures of basic first aid and cardiopulmonary resuscitation (CPR).
 - 03.05 Practice safe procedures when working with animal-related equipment in the laboratory setting.
 - 03.06 Practice safety precautions around animals.
 - 03.07 Discuss the impact of unsafe procedures.
 - 03.08 Define zoonosis.
 - 03.09 Describe selected zoonotic diseases.
 - 03.10 Discuss OSHA as it relates to the animal industry.
 - 03.11 Describe symptoms of pesticide poisoning.
 - 03.12 Extract pertinent information from a pesticide label and Material Safety Data Sheet (MSDS).
 - 03.13 Select, mix, and apply a non-restricted chemical according to the label (including EPA, MSDS, and Worker Protection Standard).
 - 03.14 Clean and store pesticide application equipment, safety clothing, and safety equipment.
 - 03.15 Identify the proper disposal of containers and residual pesticides.
- 04.0 DEMONSTRATE THE USE OF TOOLS, EQUIPMENT AND INSTRUMENTS IN THE VETERINARY SCIENCE AND COMPANION ANIMAL INDUSTRY--The student will be able to:
- 04.01 Choose the proper tools, equipment, and instruments for a specific job.
 - 04.02 Describe the principles of selected mechanical applications (e.g., levers, pulleys, hydraulics, internal combustion).
 - 04.03 Demonstrate the ability to use an equipment manual.
 - 04.04 Demonstrate the use of selected tools, equipment, and instruments.
 - 04.05 Service, maintain, and store tools, equipment, instruments, and supplies.
- 05.0 DEMONSTRATE HUMAN-RELATIONS, COMMUNICATIONS, LEADERSHIP AND EMPLOYABILITY SKILLS--The student will be able to:
- 05.01 Demonstrate acceptable work habits and attitudes.
 - 05.02 Follow oral and written directions with understanding; ask questions that clarify directions, as needed.
 - 05.03 Communicate effectively in verbal, written, and nonverbal modes; demonstrate effective telephone skills.
 - 05.04 Recognize and demonstrate listening skills and assertive communications skills in the workplace.
 - 05.05 Conduct small, informal, formal, and group meetings.
 - 05.06 Identify the opportunities for leadership development available through an appropriate student and/or professional organization.
 - 05.07 Demonstrate acceptable employee hygiene habits.
 - 05.08 Demonstrate appropriate responses to criticism from employer, supervisor, and peers.

- 05.09 Complete pertinent forms for employment, such as a resume, a job application, a W-4 form.
- 05.10 Demonstrate job interview techniques.
- 05.11 Explain the "Right-To-Know" law.

- 06.0 DESCRIBE ANIMAL SCIENCE AND THE ROLE OF ANIMALS IN SOCIETY--The student will be able to:
 - 06.01 Describe animal science.
 - 06.02 Describe the role of animals in society.
 - 06.03 Locate and obtain informational materials on animal-related topics or issues.

- 07.0 IDENTIFY CAREERS IN THE ANIMAL INDUSTRY--The student will be able to:
 - 07.01 Locate and obtain information on animal-industry careers and career opportunities.
 - 07.02 Describe various careers in the animal industry.
 - 07.03 Describe training requirements for entry and advancement in animal-industry careers.
 - 07.04 Identify professional organizations and trade journals in the animal industry.

- 08.0 DEMONSTRATE BASIC FIRST AID FOR HUMANS--The student will be able to:
 - 08.01 Locate and use a first aid kit.
 - 08.02 Recognize allergic reactions.
 - 08.03 Describe proper use of eye wash solution.
 - 08.04 Control minor hemorrhage and/or trauma.
 - 08.05 Practice emergency procedures.

- 09.0 IDENTIFY PARTS AND FUNCTIONS OF VARIOUS SYSTEMS OF SELECTED ANIMALS--The student will be able to:
 - 09.01 Identify parts of the skeletal system of selected animals.
 - 09.02 Compare the human skeletal system to that of other animals.
 - 09.03 Identify parts and functions of the following systems of selected animals:
 - respiratory system
 - urinary system
 - digestive system
 - cardiovascular system
 - reproductive system
 - nervous system
 - 09.04 Employ correct terminologies for the variety of animal species and conditions within those species.

- 10.0 RECOGNIZE NORMAL AND ABNORMAL ANIMAL BEHAVIORS--The student will be able to:
 - 10.01 Distinguish between instinctive and learned behaviors.
 - 10.02 Recognize normal and abnormal behavioral characteristics of animals through observations.

- 10.03 Recognize signs of aggressive animal behaviors.
- 10.04 Identify behavioral problems.
- 11.0 IDENTIFY THE DIFFERENT DIGESTIVE SYSTEMS OF ANIMALS AND THE NUTRITIONAL REQUIREMENTS OF SELECTED SPECIES--The student will be able to:
 - 11.01 Differentiate between ruminants and non-ruminants.
 - 11.02 Differentiate between omnivorous, carnivores, and herbivores.
 - 11.03 Describe the basic nutritional requirements of selected species.
 - 11.04 Analyze different food labels.
 - 11.05 Formulate animal food products.
 - 11.06 Schedule feeding times for selected animals.
- 12.0 EXPLAIN THE REPRODUCTIVE SYSTEM AND BREEDING OF SELECTED ANIMALS--The student will be able to:
 - 12.01 Describe the male and female reproductive systems.
 - 12.02 Determine sex of animals.
 - 12.03 Determine appropriate age for breeding.
 - 12.04 Identify gestation length.
 - 12.05 Describe estrous cycle.
 - 12.06 Describe breeding techniques.
 - 12.07 Select male and female for breeding.
 - 12.08 Care of breeding stock.
 - 12.09 Care of newborn.
 - 12.10 Explain the differences and similarities between reproduction in animal species.
- 13.0 DEMONSTRATE KNOWLEDGE OF PREVENTIVE MEDICINE AND DISEASE CONTROL--The student will be able to:
 - 13.01 Describe the importance of preventive medicine for animal health.
 - 13.02 Recognize healthy animals.
 - 13.03 Describe common diseases of animals.
 - 13.04 Describe vaccinations available for disease prevention and vaccination procedures.
 - 13.05 Evaluate and report health conditions of animals.
 - 13.06 Collect urine and feces samples for analysis.
 - 13.07 Describe the process for collecting blood samples for analysis.
 - 13.08 Administer prescribed oral medications.
 - 13.09 Describe the process for administering medications by injection.
 - 13.10 Describe the procedure for safe disposal of medications.
 - 13.11 Discuss the terms immunology and active and passive immunity.
 - 13.12 Describe procedures for periodic health check-up.
- 14.0 DESCRIBE INTERNAL AND EXTERNAL PARASITES AND CONTROL METHODS--The student will be able to:
 - 14.01 Describe the internal and external parasites of selected animals.
 - 14.02 Describe the methods of parasite prevention.

- 14.03 Describe the methods of parasite control.
 - 14.04 Use a microscope for selected practices.
 - 14.05 Describe the process for fecal sample collection, slide preparation, and examination.
- 15.0 DIFFERENTIATE BETWEEN ANIMAL WELFARE AND ANIMAL RIGHTS--The student will be able to:
- 15.01 Define animal welfare and animal rights.
 - 15.02 Explain the differences between animal welfare and animal rights.
 - 15.03 Identify animal welfare and animal rights advocate groups.
 - 15.04 Debate current events concerning animal welfare and animal rights.
 - 15.05 Describe animal cruelty and the consequences of cruel treatment of animals.
- 16.0 DEMONSTRATE KNOWLEDGE OF ANIMAL CONTROL AND HUMANE SOCIETIES--The student will be able to:
- 16.01 Differentiate between animal control agencies and humane societies.
 - 16.02 Describe the responsibilities and goals of animal control agencies and humane societies.
 - 16.03 Explain the laws governing each organization.
 - 16.04 Identify and locate local animal control agencies and humane societies.
- 17.0 DISCUSS ANIMAL MARKETING TECHNIQUES--The student will be able to:
- 17.01 Demonstrate procedures for preparing, maintaining, and exhibiting animals.
 - 17.02 Collect and interpret market reports and identify market outlets for companion and food-producing animals.
- 18.0 MAINTAIN AND ANALYZE RECORDS--The student will be able to:
- 18.01 Maintain and analyze animal records.
 - 18.02 Discuss the legal requirements of maintaining animal health records, and maintain and analyze animal health records.
 - 18.03 Maintain and analyze basic business records (inventory, depreciation, receipts, expenses), using computer applications.
 - 18.04 Maintain supervised agricultural experience (SAE) records.
- OCCUPATIONAL COMPLETION POINT - DATA CODE B**
 ANIMAL CARETAKERS, EXCEPT FARM - OES Code 79017402
- 19.0 RESTRAIN AND CONTROL ANIMALS--The student will be able to:
- 19.01 Describe behavioral changes due to aging.
 - 19.02 Recognize signs of aggressive behaviors of companion animals.
 - 19.03 Determine the appropriate restraining methods for specified behaviors.
 - 19.04 Determine the level of restraint needed for the animal.

- 19.05 Verbally restrain animals.
- 19.06 Physically restrain animals.
- 19.07 Discuss chemical restraint of animals.
- 19.08 Describe complications encountered when restraining animals.
- 20.0 DEMONSTRATE PROPER USE OF VETERINARY SCIENCE TERMINOLOGIES--The student will be able to:
 - 20.01 Define common veterinary terminology.
 - 20.02 Define common medical terminology.
 - 20.03 Apply prefixes and suffixes for veterinary medical terminology.
 - 20.04 Define gender and species-related terminology.
- 21.0 DEMONSTRATE BASIC FIRST AID FOR COMPANION ANIMALS--The student will be able to:
 - 21.01 Evaluate emergency health (physical and behavioral) status.
 - 21.02 Restrain and move injured animals.
 - 21.03 Demonstrate hemorrhage control.
 - 21.04 Dress wounds and punctures.
 - 21.05 Demonstrate the correct emergency procedures for shock, burns, heatstroke, and fractures.
 - 21.06 Describe and access up-to-date information on animal health.
 - 21.07 Demonstrate animal CPR.
- 22.0 IDENTIFY BREEDS IN EACH OF THE SEVERAL SPECIES OF COMPANION ANIMALS--The student will be able to:
 - 22.01 Identify canine groups and breed characteristics.
 - 22.02 Identify feline groups and breed characteristics.
 - 22.03 Identify equine breeds and their primary use.
 - 22.04 Identify breeds of rabbits and their primary use.
 - 22.05 Identify avian species.
 - 22.06 Write a physical description of any companion animal.
- 23.0 GROOM SELECTED COMPANION ANIMALS--The student will be able to:
 - 23.01 Select, maintain, and demonstrate safe use of the grooming equipment.
 - 23.02 Groom companion animals.
 - 23.03 Clip animals.
 - 23.04 Show and exhibit selected animals.
 - 23.05 Read and interpret labels on grooming products.
- 24.0 DESCRIBE THE PROBLEMS, CAUSES, AND SOLUTIONS OF ANIMAL OVERPOPULATION--The student will be able to:
 - 24.01 Explain the concept of overpopulation of companion animals.
 - 24.02 Describe the causes of animal overpopulation and the problems it creates.
 - 24.03 Define euthanasia and describe its role in animal overpopulation.
 - 24.04 Identify organizations involved in the public education of animal overpopulation.

- 24.05 Explain the pet owner's and society's responsibilities concerning animal overpopulation.
- 25.0 DESCRIBE EXOTIC ANIMALS AND THE EFFECTS OF CAPTIVITY ON THEM--The student will be able to:
 - 25.01 Define exotic animal.
 - 25.02 Identify exotic animals native to Florida.
 - 25.03 Explain the effects of urbanization on the wildlife population.
 - 25.04 Describe the roles of the Florida Game and Fresh Water Fish Commission in wildlife management.
 - 25.05 Explain the effects of state, national, and international laws on the domestication of the exotic animals.
 - 25.06 Distinguish which exotic animals can and which cannot be domesticated.
 - 25.07 Debate consequences resulting from the domestication of exotic animals.

OCCUPATIONAL COMPLETION POINT - DATA CODE C

VETERINARY ASSISTANT - Industry Title

- 26.0 DISCUSS THE HUMAN-ANIMAL BOND AND ITS EFFECTS ON HUMAN HEALTH--The student will be able to:
 - 26.01 Explain the human-animal bond.
 - 26.02 Discuss the positive health effects on people resulting from their interaction with animals.
 - 26.03 Discuss programs that use human-animal interaction as a therapy tool.
 - 26.04 Describe the characteristics of animals used in the animal-facilitated therapy programs.
 - 26.05 Describe national and local programs that use animal-facilitated therapy.
 - 26.06 Discuss grief response and emotional impact of animal loss.
- 27.0 LOCATE AND INTERPRET ANIMAL-RELATED LAWS--The student will be able to:
 - 27.01 Describe local animal control laws.
 - 27.02 Demonstrate knowledge of local and state animal regulations.
 - 27.03 Determine the legal limitations of duties of an employee in the animal services industry.
 - 27.04 Identify when an Animal Health Certificate is required.
 - 27.05 Explain the laws governing the sale of animals and the disposal of animals.
- 28.0 EXPLAIN THE ROLE OF ANIMALS IN RESEARCH--The student will be able to:
 - 28.01 Describe the history of the role of animals in research.
 - 28.02 Discuss medical advances made possible through the use of animals in research.
 - 28.03 Define USDA and explain its roles in using animals for research.
 - 28.04 Describe the role of the Institute of Animal Care and Use Committee (IACUC) with regard to animal research facilities.

- 28.05 Explain the controversy over using animals in research.
- 28.06 Identify organizations that are in favor of and those that are against the use of animals in research.
- 28.07 Develop a personal position on the use of animals in research and support that position.

29.0 DESCRIBE THE PRINCIPLES OF GENETICS AND BIOTECHNOLOGY IN REPRODUCTION--
The student will be able to:

- 29.01 Define genetics and discuss genetic principles.
- 29.02 Explain biotechnology.
- 29.03 Discuss Mendelian genetics.
- 29.04 Develop a Mendel chart.
- 29.05 Define hereditary and environmental variation.
- 29.06 Explain the differences between purebreeding, inbreeding, linebreeding, outbreeding, selective breeding, linecrossing, and outcrossing.
- 29.07 Describe dominant and recessive genes.
- 29.08 Define and explain heritability estimates.

30.0 DEMONSTRATE KNOWLEDGE OF ENTERPRISE MANAGEMENT--The student will be able to:

- 30.01 Describe enterprise management.
- 30.02 Describe the economic principles that affect enterprise management.
- 30.03 Discuss the advantages and disadvantages of entrepreneurship.
- 30.04 Discuss common decision-making procedures in a particular animal-industry enterprise.
- 30.05 Investigate the economic and marketing aspects of kennels, catteries, paddocks, the rabbit industry, and exotic animal services.
- 30.06 Demonstrate proper sanitation techniques for a kennel, cattery, paddock, rabbitry, and zoo.
- 30.07 Describe methods of preventive medicine and quarantine for disease control in a kennel, cattery, paddock, rabbitry, and zoo.
- 30.08 Investigate the economic and marketing aspects in pet stores.

Program: Veterinary Assisting

July 2001

**Florida Department of Education
STUDENT PERFORMANCE STANDARDS**

Course Number: 8111510
Course Title: Veterinary Assisting 1
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; ecosystems; safety; and human relations skills

01.0 DESCRIBE THE SOCIOECONOMIC ROLE OF THE VETERINARY SCIENCES AND COMPANION ANIMAL INDUSTRY--The student will be able to:

- 01.01 Prepare a report on the history of the veterinary sciences and companion animal industry.
 - 01.02 Discuss the impact of veterinary sciences and companion animal products and services on the local, state, national, and global economy.
 - 01.03 Investigate career opportunities in the veterinary sciences and companion animal industry and identify educational experiences that would prepare one for those careers.
 - 01.04 Discuss the role of the veterinary sciences and companion animal industry in the interaction of population, food, energy, and the environment.
 - 01.05 Describe the types of agribusiness by organizational structure (i.e. sole proprietorship, partnership, corporation).
- 02.0 APPLY SCIENTIFIC AND TECHNOLOGICAL PRINCIPLES TO THE VETERINARY SCIENCES AND COMPANION ANIMAL INDUSTRY --The student will be able to:
- 02.01 Discuss the importance of scientific classification in veterinary science.
 - 02.02 Use the scientific method to solve problems in veterinary science.
 - 02.03 Explain the use of genetics in animals, including probability applications.
 - 02.04 Analyze the impact of recent technology on the animal industry.
 - 02.05 Identify and describe the components of an ecosystem both biotic and abiotic.
 - 02.06 Construct and analyze a diagram of a biological food web and subsequent food chains.
 - 02.07 Describe and diagram the water, carbon, nitrogen, oxygen, sulfur, and phosphorus cycles.
 - 02.08 Apply principles of waste management to environmental problems common to animals.
- 03.0 PRACTICE SAFETY--The student will be able to:
- 03.01 List the most common causes of animal related accidents.
 - 03.02 Discuss the importance of following proper safety precautions in the animal industry.
 - 03.03 Demonstrate safety procedures in the classroom, laboratory, and workplace.
 - 03.04 Discuss the proper procedures of basic first aid and cardiopulmonary resuscitation (CPR).
 - 03.05 Practice safe procedures when working with animal-related equipment in the laboratory setting.
 - 03.06 Practice safety precautions around animals.
 - 03.07 Discuss the impact of unsafe procedures.
 - 03.08 Define zoonosis.
 - 03.09 Describe selected zoonotic diseases.
 - 03.10 Discuss OSHA as it relates to the animal industry.
 - 03.11 Describe symptoms of pesticide poisoning.
 - 03.12 Extract pertinent information from a pesticide label and Material Safety Data Sheet (MSDS).

- 03.13 Select, mix, and apply a non-restricted chemical according to the label (including EPA, MSDS, and Worker Protection Standard).
- 03.14 Clean and store pesticide application equipment, safety clothing, and safety equipment.
- 03.15 Identify the proper disposal of containers and residual pesticides.
- 04.0 DEMONSTRATE THE USE OF TOOLS, EQUIPMENT AND INSTRUMENTS IN THE VETERINARY SCIENCE AND COMPANION ANIMAL INDUSTRY--The student will be able to:
 - 04.01 Choose the proper tools, equipment, and instruments for a specific job.
 - 04.02 Describe the principles of selected mechanical applications (e.g., levers, pulleys, hydraulics, internal combustion).
 - 04.03 Demonstrate the ability to use an equipment manual.
 - 04.04 Demonstrate the use of selected tools, equipment, and instruments.
 - 04.05 Service, maintain, and store tools, equipment, instruments, and supplies.
- 05.0 DEMONSTRATE HUMAN-RELATIONS, COMMUNICATIONS, LEADERSHIP AND EMPLOYABILITY SKILLS--The student will be able to:
 - 05.01 Demonstrate acceptable work habits and attitudes.
 - 05.02 Follow oral and written directions with understanding; ask questions that clarify directions, as needed.
 - 05.03 Communicate effectively in verbal, written, and nonverbal modes; demonstrate effective telephone skills.
 - 05.04 Recognize and demonstrate listening skills and assertive communications skills in the workplace.
 - 05.05 Conduct small, informal, formal, and group meetings.
 - 05.06 Identify the opportunities for leadership development available through an appropriate student and/or professional organization.
 - 05.07 Demonstrate acceptable employee hygiene habits.
 - 05.08 Demonstrate appropriate responses to criticism from employer, supervisor, and peers.
 - 05.09 Complete pertinent forms for employment, such as a resume, a job application, a W-4 form.
 - 05.10 Demonstrate job interview techniques.
 - 05.11 Explain the "Right-To-Know" law.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

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

COURSE DESCRIPTION:

This course is designed to develop competencies in the areas such as global importance of the animal industry; career opportunities; animal behavior; animal welfare; and animal control.

06.0 DESCRIBE ANIMAL SCIENCE AND THE ROLE OF ANIMALS IN SOCIETY--The student will be able to:

- 06.01 Describe animal science.
- 06.02 Describe the role of animals in society.
- 06.03 Locate and obtain informational materials on animal-related topics or issues.

07.0 IDENTIFY CAREERS IN THE ANIMAL INDUSTRY--The student will be able to:

- 07.01 Locate and obtain information on animal-industry careers and career opportunities.
- 07.02 Describe various careers in the animal industry.
- 07.03 Describe training requirements for entry and advancement in animal-industry careers.
- 07.04 Identify professional organizations and trade journals in the animal industry.

08.0 DEMONSTRATE BASIC FIRST AID FOR HUMANS--The student will be able to:

- 08.01 Locate and use a first aid kit.
- 08.02 Recognize allergic reactions.
- 08.03 Describe proper use of eye wash solution.
- 08.04 Control minor hemorrhage and/or trauma.
- 08.05 Practice emergency procedures.

09.0 IDENTIFY PARTS AND FUNCTIONS OF VARIOUS SYSTEMS OF SELECTED ANIMALS--The student will be able to:

- 09.01 Identify parts of the skeletal system of selected animals.
- 09.02 Compare the human skeletal system to that of other animals.
- 09.03 Identify parts and functions of the following systems of selected animals:
 - respiratory system
 - urinary system
 - digestive system
 - cardiovascular system
 - reproductive system

- nervous system
- 09.04 Employ correct terminology for the variety of animal species and conditions within those species.
- 10.0 RECOGNIZE NORMAL AND ABNORMAL ANIMAL BEHAVIORS--The student will be able to:
 - 10.01 Distinguish between instinctive and learned behaviors.
 - 10.02 Recognize normal and abnormal behavioral characteristics of animals through observations.
 - 10.03 Recognize signs of aggressive animal behaviors.
 - 10.04 Identify behavioral problems.
- 15.0 DIFFERENTIATE BETWEEN ANIMAL WELFARE AND ANIMAL RIGHTS--The student will be able to:
 - 15.01 Define animal welfare and animal rights.
 - 15.02 Explain the differences between animal welfare and animal rights.
 - 15.03 Identify animal welfare and animal rights advocate groups.
 - 15.04 Debate current events concerning animal welfare and animal rights.
 - 15.05 Describe animal cruelty and the consequences of cruel treatment of animals.
- 16.0 DEMONSTRATE KNOWLEDGE OF ANIMAL CONTROL AND HUMANE SOCIETIES--The student will be able to:
 - 16.01 Differentiate between animal control agencies and humane societies.
 - 16.02 Describe the responsibilities and goals of animal control agencies and humane societies.
 - 16.03 Explain the laws governing each organization.
 - 16.04 Identify and locate local animal control agencies and humane societies.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

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

COURSE DESCRIPTION:

This course is designed to develop competencies in the areas animal digestive systems; animal breeding; preventive medicine and disease control; control of parasites; animal marketing; and analyzing records.

11.0 IDENTIFY THE DIFFERENT DIGESTIVE SYSTEMS OF ANIMALS AND THE NUTRITIONAL REQUIREMENTS OF SELECTED SPECIES--The student will be able to:

- 11.01 Differentiate between ruminants and non-ruminants.
- 11.02 Differentiate between omnivorous, carnivores, and herbivores.
- 11.03 Describe the basic nutritional requirements of selected species.
- 11.04 Analyze different food labels.
- 11.05 Formulate animal food products.
- 11.06 Schedule feeding times for selected animals.

12.0 EXPLAIN THE REPRODUCTIVE SYSTEM AND BREEDING OF SELECTED ANIMALS--The student will be able to:

- 12.01 Describe the male and female reproductive systems.
- 12.02 Determine sex of animals.
- 12.03 Determine appropriate age for breeding.
- 12.04 Identify gestation length.
- 12.05 Describe estrous cycle.
- 12.06 Describe breeding techniques.
- 12.07 Select male and female for breeding.
- 12.08 Care of breeding stock.
- 12.09 Care of newborn.
- 12.10 Explain the differences and similarities between reproduction in animal species.

13.0 DEMONSTRATE KNOWLEDGE OF PREVENTIVE MEDICINE AND DISEASE CONTROL--The student will be able to:

- 13.01 Describe the importance of preventive medicine for animal health.
- 13.02 Recognize healthy animals.
- 13.03 Describe common diseases of animals.
- 13.04 Describe vaccinations available for disease prevention and vaccination procedures.
- 13.05 Evaluate and report health conditions of animals.
- 13.06 Collect urine and feces samples for analysis.
- 13.07 Describe the process for collecting blood samples for analysis.
- 13.08 Administer prescribed oral medications.

- 13.09 Describe the process for administering medications by injection.
- 13.10 Describe the procedure for safe disposal of medications.
- 13.11 Discuss the terms immunology and active and passive immunity.
- 13.12 Describe procedures for periodic health check-up.
- 14.0 DESCRIBE INTERNAL AND EXTERNAL PARASITES AND CONTROL METHODS--The student will be able to:
 - 14.01 Describe the internal and external parasites of selected animals.
 - 14.02 Describe the methods of parasite prevention.
 - 14.03 Describe the methods of parasite control.
 - 14.04 Use a microscope for selected practices.
 - 14.05 Describe the process for fecal sample collection, slide preparation, and examination.
- 17.0 DISCUSS ANIMAL MARKETING TECHNIQUES--The student will be able to:
 - 17.01 Demonstrate procedures for preparing, maintaining, and exhibiting animals.
 - 17.02 Collect and interpret market reports and identify market outlets for companion and food-producing animals.
- 18.0 MAINTAIN AND ANALYZE RECORDS--The student will be able to:
 - 18.01 Maintain and analyze animal records.
 - 18.02 Discuss the legal requirements of maintaining animal health records, and maintain and analyze animal health records.
 - 18.03 Maintain and analyze basic business records (inventory, depreciation, receipts, expenses), using computer applications.
 - 18.04 Maintain supervised agricultural experience (SAE) records.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

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

COURSE DESCRIPTION:

This course is designed to develop competencies in the areas of animal restraint and control; veterinary science terminology; basic first aid; animal overpopulation and exotic animals.

19.0 RESTRAIN AND CONTROL ANIMALS--The student will be able to:

- 19.01 Describe behavioral changes due to aging.
- 19.02 Recognize signs of aggressive behaviors of companion animals.
- 19.03 Determine the appropriate restraining methods for specified behaviors.
- 19.04 Determine the level of restraint needed for the animal.
- 19.05 Verbally restrain animals.
- 19.06 Physically restrain animals.
- 19.07 Discuss chemical restraint of animals.
- 19.08 Describe complications encountered when restraining animals.

20.0 DEMONSTRATE PROPER USE OF VETERINARY SCIENCE TERMINOLOGIES--The student will be able to:

- 20.01 Define common veterinary terminology.
- 20.02 Define common medical terminology.
- 20.03 Apply prefixes and suffixes for veterinary medical terminology.
- 20.04 Define gender and species-related terminology.

21.0 DEMONSTRATE BASIC FIRST AID FOR COMPANION ANIMALS--The student will be able to:

- 21.01 Evaluate emergency health (physical and behavioral) status.
- 21.02 Restrain and move injured animals.
- 21.03 Demonstrate hemorrhage control.
- 21.04 Dress wounds and punctures.
- 21.05 Demonstrate the correct emergency procedures for shock, burns, heatstroke, and fractures.
- 21.06 Describe and access up-to-date information on animal health.
- 21.07 Demonstrate animal CPR.

22.0 IDENTIFY BREEDS IN EACH OF THE SEVERAL SPECIES OF COMPANION ANIMALS--The student will be able to:

- 22.01 Identify canine groups and breed characteristics.
- 22.02 Identify feline groups and breed characteristics.
- 22.03 Identify equine breeds and their primary use.
- 22.04 Identify breeds of rabbits and their primary use.

- 22.05 Identify avian species.
- 22.06 Write a physical description of any companion animal.
- 23.0 GROOM SELECTED COMPANION ANIMALS--The student will be able to:
 - 23.01 Select, maintain, and demonstrate safe use of the grooming equipment.
 - 23.02 Groom companion animals.
 - 23.03 Clip animals.
 - 23.04 Show and exhibit selected animals.
 - 23.05 Read and interpret labels on grooming products.
- 24.0 DESCRIBE THE PROBLEMS, CAUSES, AND SOLUTIONS OF ANIMAL OVERPOPULATION--The student will be able to:
 - 24.01 Explain the concept of overpopulation of companion animals.
 - 24.02 Describe the causes of animal overpopulation and the problems it creates.
 - 24.03 Define euthanasia and describe its role in animal overpopulation.
 - 24.04 Identify organizations involved in the public education of animal overpopulation.
 - 24.05 Explain the pet owner's and society's responsibilities concerning animal overpopulation.
- 25.0 DESCRIBE EXOTIC ANIMALS AND THE EFFECTS OF CAPTIVITY ON THEM--The student will be able to:
 - 25.01 Define exotic animal.
 - 25.02 Identify exotic animals native to Florida.
 - 25.03 Explain the effects of urbanization on the wildlife population.
 - 25.04 Describe the roles of the Florida Game and Fresh Water Fish Commission in wildlife management.
 - 25.05 Explain the effects of state, national, and international laws on the domestication of the exotic animals.
 - 25.06 Distinguish which exotic animals can and which cannot be domesticated.
 - 25.07 Debate consequences resulting from the domestication of exotic animals.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

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

COURSE DESCRIPTION:

This course is designed to develop competencies in the areas of human-animal bond; animal-related laws; animal research; genetics and biotechnology in reproduction; and enterprise management.

26.0 DISCUSS THE HUMAN-ANIMAL BOND AND ITS EFFECTS ON HUMAN HEALTH--The student will be able to:

- 26.01 Explain the human-animal bond.
- 26.02 Discuss the positive health effects on people resulting from their interaction with animals.
- 26.03 Discuss programs that use human-animal interaction as a therapy tool.
- 26.04 Describe the characteristics of animals used in the animal-facilitated therapy programs.
- 26.05 Describe national and local programs that use animal-facilitated therapy.
- 26.06 Discuss grief response and emotional impact of animal loss.

27.0 LOCATE AND INTERPRET ANIMAL-RELATED LAWS--The student will be able to:

- 27.01 Describe local animal control laws.
- 27.02 Demonstrate knowledge of local and state animal regulations.
- 27.03 Determine the legal limitations of duties of an employee in the animal services industry.
- 27.04 Identify when an Animal Health Certificate is required.
- 27.05 Explain the laws governing the sale of animals and the disposal of animals.

28.0 EXPLAIN THE ROLE OF ANIMALS IN RESEARCH--The student will be able to:

- 28.01 Describe the history of the role of animals in research.
- 28.02 Discuss medical advances made possible through the use of animals in research.
- 28.03 Define USDA and explain its roles in using animals for research.
- 28.04 Describe the role of the Institute of Animal Care and Use Committee (IACUC) with regard to animal research facilities.
- 28.05 Explain the controversy over using animals in research.

- 28.06 Identify organizations that are in favor of and those that are against the use of animals in research.
- 28.07 Develop a personal position on the use of animals in research and support that position.
- 29.0 DESCRIBE THE PRINCIPLES OF GENETICS AND BIOTECHNOLOGY IN REPRODUCTION--The student will be able to:
 - 29.01 Define genetics and discuss genetic principles.
 - 29.02 Explain biotechnology.
 - 29.03 Discuss Mendelian genetics.
 - 29.04 Develop a Mendel chart.
 - 29.05 Define hereditary and environmental variation.
 - 29.06 Explain the differences between purebreeding, inbreeding, linebreeding, outbreeding, selective breeding, linecrossing, and outcrossing.
 - 29.07 Describe dominant and recessive genes.
 - 29.08 Define and explain heritability estimates.
- 30.0 DEMONSTRATE KNOWLEDGE OF ENTERPRISE MANAGEMENT--The student will be able to:
 - 30.01 Describe enterprise management.
 - 30.02 Describe the economic principles that affect enterprise management.
 - 30.03 Discuss the advantages and disadvantages of entrepreneurship.
 - 30.04 Discuss common decision-making procedures in a particular animal-industry enterprise.
 - 30.05 Investigate the economic and marketing aspects of kennels, catteries, paddocks, the rabbit industry, and exotic animal services.
 - 30.06 Demonstrate proper sanitation techniques for a kennel, cattery, paddock, rabbitry, and zoo.
 - 30.07 Describe methods of preventive medicine and quarantine for disease control in a kennel, cattery, paddock, rabbitry, and zoo.
 - 30.08 Investigate the economic and marketing aspects in pet stores.