

Veterinary Assistant

This course introduces students to the general concepts and principles related to Veterinary Science and associated processes, industries, and occupations. It is designed as a culminating course of the animal industry following introductory animal science in Agriscience I. Emphasis is placed on career opportunities, animal nutrition and husbandry, pharmacology, and health and management of animals. Critical thinking and reasoning, and oral and written communication skills are reinforced in this course. Work-based learning strategies appropriate for this course are field trips, job shadowing, school-based enterprises, and cooperative education. Supervised agricultural experience (SAE) programs and the FFA leadership activities are integral components of the course and provide many opportunities for practical application of instructional competencies. *Italicized objectives are the minimum requirements for the ½ credit course.*

Prerequisite: Agriscience I or Jr/Sr

Credits: ½ or 1

Table of Contents

Louisiana Agricultural Education Related Content Standards

Louisiana Science Grade Level Expectations

Louisiana Mathematics Grade Level Expectations

Louisiana English Language Arts Grade Level Expectations

Louisiana Social Studies Grade Level Expectations

Content Guideline

Foundation

Animal Health Careers

Basic Animal Anatomy

Nutrition

Animal Husbandry

Diseases

Genetics

Handling and Restraints

Pharmacy and Pharmacology

Human Animal Bond

Professionalism and Job Seeking Skills

Resources

Internet Sit

Veterinary Assistant Content Guideline

(The student will be able to....)

Unit One Foundation

1. *Describe the components of the total agriscience program.*
 - a. *Classroom/laboratory instruction*
 - b. *Student leadership development (FFA)*
 - c. *Supervised Agricultural Experience (SAE)*
2. *Develop a personal plan.*
 - a. *Career path*
 - b. *FFA participation*
 - c. *SAE*
3. *Investigate various animal health careers and describe potential career advancement in veterinary medicine.*
4. *Analyze the impact of the animal rights movement on the veterinary industry.*

Unit Two Animal Health Careers

1. *Demonstrate a basic knowledge of the history of veterinary medicine.*
2. *Explain various career opportunities in the veterinary profession.*
3. *Identify the career development of the veterinarian, including educational requirements and career pathways after graduation and licensing.*
4. *Identify the career development of the veterinary technician, including educational and licensing requirements and career pathways after graduation.*
5. *Identify the career development of the veterinary assistant, including educational requirements and career pathways after graduation.*
6. *Identify the career development of various animal-related careers including educational requirements, licensing requirements if applicable, and career pathways after graduation.*
7. *Understand the ethical obligation of veterinary professionals.*
8. *Describe animal health care teams and team dynamics.*
9. *Discuss the duties and roles of animal health care team members.*
10. *Discuss professional organizations and their role and/or purpose in the veterinary profession.*

Unit Three Basic Animal Anatomy

1. *Describe animal cells and tissues.*
2. *Identify the major body parts.*
 - a. *Skeletal*

- b. *Muscles*
- c. *External*
- 3. *Describe the purpose and function of the circulatory system.*
- 4. *Describe the purpose and function of the respiratory system.*
- 5. *Describe the purpose and function of the renal system.*
- 6. *Determine the age of various animals.*
- 7. *Discuss the cause and effects of imperfections*
 - a. *Defects*
 - b. *Blemishes*
 - c. *Injuries*
- 8. *Demonstrate appropriate hoof and paw care for both small and large animals.*
 - a. *Trimming*
 - b. *Shoeing*
- 9. *Analyze body conformation of various small and large animals by form and function.*

Unit Four

Nutrition

- 1. *Compare and contrast the nutritional requirements of various small and large animals including reptiles and birds.*
- 2. *Discuss the role of each of the primary nutrients.*
 - a. *Proteins*
 - b. *Carbohydrates*
 - c. *Fats/lipids*
 - d. *Water*
 - e. *Minerals*
 - f. *Vitamins*
 - i. *Fat soluble*
 - ii. *Water soluble*
- 3. *Explain the nutritional requirements of various small and large animals including reptiles and birds.*
 - a. *Age*
 - b. *Use/Work*
- 4. *Determine the relationship between nutritional deficiencies and ailments.*
 - a. *Diseases*
 - b. *Parasites*
- 5. *Describe the role of roughages in the diets of ruminants and non-ruminants.*

Unit Five

Animal Husbandry

- 1. *Identify common domestic animals using breed standards and marking patterns for the following:*
 - a. *Equine*
 - b. *Bovine*
 - c. *Caprine*

- d. *Porcine*
 - e. *Canine*
 - f. *Feline*
 - g. *Pocket pets*
 - h. *Birds*
2. *Utilize various aspects of animal behavior for approaching and caring for domestic animals for the safety of the animal and personnel.*
 3. *Demonstrate an understanding of the basic reproductive cycles of common domestic animals including reptiles and birds.*
 4. *Differentiate between the common breeding practices.*
 - a. *Natural*
 - b. *Embryo Transfer (E.T.)*
 - c. *Artificial Insemination (A.I.)*
 5. *Identify and describe physical characteristics for breeding animals.*
 6. *Summarize the function of the major parts of the reproductive tract.*
 7. *Describe states of the estrous cycle.*
 8. *Describe the signs of approaching parturition.*
 9. *Evaluate the environment from parturition to weaning.*
 10. *Discuss special consideration for hospitalized patients.*

Unit Six

Diseases

1. Describe the relationship between management, prevention, and control of parasites.
 - a. External
 - b. Internal
2. Explain the difference between disease prevention, disease controls, and disease treatments.
3. Explain a disease prevention program.
 - a. Natural immunity
 - b. Sanitation
 - c. Vaccination
 - d. Control of vectors
4. Discuss common diseases and zoonosis.

Unit Seven

Genetics

1. Contrast the effects of heredity and environment on growth and development.
2. Discuss the implication of genetics.
 - a. Chromosomes/genes
 - b. Dominant/Recessive/Incomplete dominance
 - c. Lethals
 - d. Hybrids

Unit Eight

Handling and Restraints

1. Describe the proper use of mechanical restraints.
 - a. Headstalls
 - b. Twitches
 - c. Stocks/squeeze shoots
 - d. Muzzles
2. Demonstrate appropriate physical restraint techniques.
3. Discuss proper techniques of performing a physical examination.
 - a. Vital Signs
 - b. Fecal Exam for parasites
 - c. Health tests/inspections for livestock shows/exhibitions

Unit Nine

Pharmacy and Pharmacology

1. Demonstrate knowledge of pharmacology basics.
2. Discuss legal requirements and issues as they relate to pharmacology.
3. Discuss vaccinations and booster shots.
4. Describe the basic drug groups.
5. Discuss routes/methods for the administration of various medications.
6. Demonstrate proper use and disposal of syringes and needles.
7. Perform basic dosage calculations.
8. Demonstrate proper documentation techniques as related to pharmacology.

Unit Ten

Human Animal Bond

1. *Demonstrate proper techniques for interactions with clients on a daily basis.*
2. *Demonstrate proper support techniques for dealing with a client's grief over loss of a companion animal.*
3. *Demonstrate proper support techniques for dealing with a client's grief with caring for a companion animal with a terminal illness.*
4. *Discuss professional responsibility.*
5. *Explain interdisciplinary approaches used to enhance the lives of humans using the human animal bond.*
6. *Discuss the practice of euthanasia and the veterinary assistant's role in the procedure.*
7. *Discuss the benefits and risks of human animal interactions.*

Unit 11

Professionalism and Job Seeking Skills

1. Demonstrate professional development and job seeking skills.
 - a. Cover letter
 - b. Resume'

c. Professional dress/appearance

Resources

Internet Sites