Appendix M

AGRICULTURE, FOOD, AND NATURAL RESOURCES (AFNR) YOUTH APPRENTICESHIP

ANIMAL PATHWAY
SMALL ANIMAL/VET ASSISTANT UNIT
UNIT 5

Competency

1. Manage clinic or research appointments

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when the learner:

- Answers and directs phone calls courteously
- Ascertains time required for vet service(s) or lab animal access
- Refers client to worksite professional for priority scheduling to address emergencies and/or urgent care
- Identifies conflicts in facility schedule and those of the client's schedule
- · Assists in recommending resolution to scheduling conflicts
- Confirms that client and the facility have the identical medical appointment information
- Accurately enters appointment times and other required information according to facility guidelines manually and/or electronically as applicable
- Prepares an appointment card if client is present
- · Greets client upon arrival
- Documents any scheduling changes in the correct manual and/or electronic locations, if applicable
- After appointment time, learner documents status of the appointment: late, no show, rescheduled, cancelled, etc. according to facility guidelines

Learning Objectives

- List the elements about an appointment schedule that are most important to the client
- List the scheduling elements of greatest concern to the facility
- Describe the appointment procedures used in your facility
- Detail the client information required for most scheduling procedures
- Describe the importance of reminder calls for appointments
- List the types of calls that indicate a need for immediate service according to your facility quidelines
- Identify office procedures for handling animal medical emergencies
- Explain how departments/facilities handle "no show" appointments
- Recognize the scope and economic impact of the companion animal industry.
- Analyze the history of domestication of common companion animals
- Determine the benefits of companion animals for humans
- Describe the human / companion animal bond
- Identify and discuss some trends in companion animal production and care
- Review the history and controversies surrounding research using animals to evaluate products for human safety

Competency

2. Set up for animal exams & procedures

Performance Standard Condition

Competence will be demonstrated

• at the worksite

Performance Standard Criteria

Performance will be successful when the learner:

- Stocks lab and examination room supplies
- Verifies procedure to be performed
- Consults procedure and its setup requirements
- Gathers the equipment and supplies that will be used for the procedure
- Ensures the cleanliness of the procedure equipment and area/room
- Checks the equipment for malfunction or damage if applicable and allowed
- Reads labels to confirm that any solutions and supplies are correct and not expired
- Arranges the equipment and supplies in the order in which they will be used
- Materials are ready prior to the start of the procedure
- Reports the status of supplies and equipment to the worksite professional
- Documents procedure set up, if applicable

Learning Objectives

- Identify the therapeutic and diagnostic procedures most commonly administered in your facility
- Identify common medical supplies for basic procedures
- Describe the major purpose for each of the procedures identified
- List the types of equipment and supplies that are required for each of the procedures identified
- Identify the care and use of instruments (multi-dose hypodermic syringe, hypodermic syringe and needle, pill gun) used to administer vaccines and pharmaceuticals
- Define the medical terms and abbreviations related to each of the procedures identified
- Detail the importance of equipment and supply checks before procedures
- Explain the importance of a clean environment and clean equipment in the procedure room or area
- Detail how the room/area will be set up to facilitate easy access to necessary equipment and supplies
- Define surgical asepsis, sterile field and describe how test supplies can be contaminated
- Explain how to set up a sterile field
- Explain how to handle bio-contaminated materials
- Describe the different types of animal research
- Identify animals commonly used in laboratory research
- Explain how the well-being of lab animals is ensured

Competency

3. Clean & sterilize equipment

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when the learner:

- Cleans instruments to remove all residual matter, such as blood or organic tissue
- · After cleaning, rinses and allows instruments to thoroughly dry
- Places cleaned & dried instruments in sterilization pouches or wraps
- Labels and seals instruments properly
- Places instruments in autoclave or other sterilization equipment
- Ensures instruments remain apart during the sterilization cycle
- Places empty canisters upside-down in order to prevent accumulation of water
- Does not overload sterilizer trays
- Allows a distance between trays to permit steam circulation
- Records operator initials, date sterilized, minutes of cycle, heat of sterilizer (max) and results, if known (indicator strip turned color, biological control run) if performed.

Learning Objectives

- Explain the clinical significance of sterilization and aseptic technique in animal treatment
- Explain how cleanliness affects disease control
- Compare antiseptics and disinfectants
- Compare sterilization methods
- Identify and describe the function of instruments used in veterinary practice
- Explain the equipment and supplies sterilization requirements for each of the procedures identified

Competency

4. Maintain and Quality Control (QC) the diagnostic equipment

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when the learner:

- Identifies Maintenance/QC (quality control) schedule for equipment and/or supplies that produce test results
- Identifies equipment and/or supplies that require maintenance/QC
- Labels equipment appropriately to show malfunction, if applicable
- Identifies location of repair service information, maintenance manuals, and/or troubleshooting guides
- Verifies procedure to follow with worksite professional
- Performs/calls service for routine maintenance or malfunction according to procedure in accordance with equipment manual/maintenance instructions and service agreements
- Documents the maintenance and/or repair/troubleshooting performed
- Performs routine QC procedures according to procedure in accordance with equipment manual/maintenance instructions using Standard Precautions
- Reviews QC results with worksite professional to verify function of equipment/supplies
- Accurately documents the QC performed
- Cleans and maintains equipment and work areas

Learning Objectives

- Explain why performing routine maintenance of equipment reduces the risk of liability and costs to the facility
- Describe the basic procedure to be followed when a piece of equipment is not functioning properly in your facility
- Discuss how tracking of equipment maintenance and servicing is done in the facility
- Review each piece of equipment's cleaning and maintenance schedule
- List the critical pieces of equipment in your facility which require priority repairs when malfunctioning
- Discuss the need for quality control (QC) samples and/or equipment controls in diagnostic testing
- Define positive and negative control
- Describe how equipment function is monitored through QC processes
- Explain how each machine functions to perform lab tests
- Identify the equipment and/or supplies in your facility that require QC
- List the repair and service contractors that service your facility and what they service

Competency

5. Assist to collect diagnostic samples

Performance Standard Condition

Competence will be demonstrated

- at the worksite
- while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when the learner:

- Verifies sample to be collected/processed
- Reviews the specific requirements required for sampling
- Safely handles animal in order to prepare for sampling
- Obtains and prepares instruments as required
- Assists worksite professional to explain collection procedure to client in words the client understands
- Assists to obtain consent for testing
- Assists with collection of specimen according to facility guidelines noting animal safety and Standard Precautions
 - Collects voided urine samples
 - Assists to draw blood for vet analysis
 - o Assists to use fecal loop to obtain fecal sample
 - Examines feces for texture, amount, and color
- Labels OR confirms that the specimen is labeled accurately and completely
- Completes/cosigns paperwork/requisition for collecting and processing specimen
- Delivers specimen, arrange for pickup, or store specimen
- Cleans & sterilizes equipment and supplies and dispose of bio-contaminated articles according to facility guidelines using Standard Precautions

Learning Objectives

- Identify the external parts and describe the physiology of a dog
- Identify the external parts and describe the physiology of a cat
- Compare and contrast the types of rodents and describe management practices involved in their care
- Discuss the use of Standard Precautions while collecting and handling specimens
- Name the specimens collected most frequently in your facility
- Review the procedures for collecting specimens for your facility's specific tests
- Name the equipment and special supplies used for collecting specimens
- Describe your role in the collection and processing of specimens
- Describe the appropriate labeling and storage requirements for specimens
- Explain the purpose of venipuncture
- List the required equipment and supplies needed to perform a venipuncture
- Locate appropriate anatomical sites for venipuncture on animals served by your facility

- Differentiate between different types of specimens including whole blood, serum, plasma, and mucous
- Compare and contrast needles according to gauge, type, and use

Competency

6. Run basic diagnostic tests

Performance Standard Condition

Competence will be demonstrated

• at the worksite

Performance Standard Criteria

Performance will be successful when the learner:

- Locates and identifies the specimen to be tested
- Prepares samples for mailing or shipping if needed
- Selects the correct equipment and supplies
- Includes QC samples, if applicable
- Tests the specimen according to facility guidelines using Standard Precautions
 - Performs basic urinalysis for color, clarity, odor, specific gravity and chemical strip test
 - o Obtains packed cell volume (PCV) on blood samples
 - Prepares fecal flotations in solutions
- Verifies counts, measurements, and/or color reactions with the worksite professional
- Cosigns the recording of the test results
- Cleans & sterilizes equipment and supplies and disposes of bio-contaminated articles
 according to facility guidelines using Standard Precautions

Learning Objectives

- Define zoonosis
- Explain the health risk of animal disease to humans
- Identify common diseases in companion animals
- Identify common internal and external parasites that affect companion animals
- Describe the diseases that parasites may spread or cause
- Diagram and describe the complete life cycle of common parasites that affect animals
- Recognize the importance of controlling parasites, and describe methods used to control
 parasites in disease management
- Identify the major parts of a microscope.
- Demonstrate the proper use and care of a microscope.
- List the reasons for doing a urinalysis
- Outline the procedures for collecting a routine urine specimen
- Describe the procedure for collecting a stool specimen
- List some of the tests that will be performed on a stool specimen
- List the most common tests used to determine characteristics of urine
- Describe normal values and conditions resulting in abnormal test results
- Explain quality control and assurance issues in urine testing
- Explain storage and disposal procedures

Competency

7. Assist to administer routine treatments, vaccines, and medications

Performance Standard Condition

Competence will be demonstrated

- at the worksite
- while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when the learner:

- · Identifies animal
- Assists the worksite professional to review the purpose and the steps of the procedure with the client in words the client understands
- Verifies that the area, equipment, and supplies are appropriate, in-date, and ready for the procedure
- Assists in positioning animal using proper body mechanics
- Assists with procedural steps performed by the worksite professional noting animal safety and Standard Precautions
- Monitors and reports any response to the procedure to the worksite professional
- Labels and processes any specimens when applicable
- Documents (cosigns) assistance while procedure was performed
- Cleans & sterilizes equipment and supplies and disposes of bio-contaminated articles according to facility guidelines using Standard Precautions as applicable

Learning Objectives

- Identify common vet medical terms
- Identify good animal health management practices
- Explain common maintenance needs to promote animal health
- Identify common diseases found in companion animals, and determine the appropriate treatment methods
- Identify common diseases for dogs and determine appropriate prevention and treatment methods (including vaccination schedules)
- Identify common diseases for cats and determine appropriate prevention and treatment methods (including vaccination schedules)
- Examine the primary and secondary defenses the body uses to resist disease
- Recognize the two categories of immunity and compare the types in each category
- Distinguish between the two classifications of drugs (biologics and pharmaceuticals)
- Examine the use of vaccines in disease control and distinguish between modified live and killed vaccines
- Examine the types (antibiotics, steroids, sulfa compounds, hormones) and forms (liquids, powder, boluses, drenches, and feed additives) of pharmaceuticals
- Describe appropriate storage methods for medications and recognize how improper storage conditions may affect drugs

- Illustrate the methods (topically, orally, and injected) used to administer vaccines and pharmaceuticals
- Describe the types of injections, and determine the appropriate injection sites
- Examine the components of a label found on animal medication, and interpret a veterinarian's prescription
- Demonstrate the ability to appropriately administer first aid and apply bandages (pressure and wound)
- Define dose, dosage, and concentration
- Complete conversions necessary to formulate dosages (kg to lb., mg to cc/mL), and calculate appropriate dosages (tablet and liquid) based on body weight
- Read graduated cylinders and syringes, and fill them with correct amounts of medication
- Discuss options in implanted pet identification and location procedures & materials

Competency

8. Assist to prepare animals for surgery

Performance Standard Condition

Competence will be demonstrated

- at the worksite
- while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when the learner:

- Identifies animal
- Verifies that the area, equipment, and supplies are appropriate, in-date, and ready for the procedure
- Obtains & sets up sterile instruments and supplies
- Prepares gowns, masks, gloves and drapes
- Assists in positioning animal using proper body mechanics
- Observes surgical procedural steps performed by the worksite professional
- Labels and processes any specimens when applicable
- Cleans/disinfects and/or sterilizes equipment and supplies and dispose of biocontaminated articles according to facility guidelines using Standard Precautions as applicable

Learning Objectives

- · List common surgical procedures performed at your facility
- Identify and describe common surgical instruments
- Indentify common suture materials, types and sizes
- Describe the preparation of surgical sites using aseptic techniques
- Identify the position(s) necessary for the animal during each common therapeutic and diagnostic procedures performed in your facility

Competency

9. Monitor animal responses to non-surgical procedures

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when the learner:

- Monitors respirations, heart, body temperature, and mucous membranes
- Positions self during procedure so as to make the necessary observations of animal reactions
- Observes for signs of distress
- · Reports distress symptoms to worksite professional as noted
- Accurately reads vital signs, if applicable to monitoring in the procedure
- Documents observations of response to treatment following facility guidelines

Learning Objectives

- Explain how to take temperatures for the animal(s) that you work with
- Explain how to determine pulse, respiration, weight and height for the animal (s) that you
 work with
- Recognize normal ranges for temperature, respiration, pulse, and physical characteristics for a healthy animal versus an unhealthy animal
- List and describe emergency medical situations and possible solutions
- Outline the importance of monitoring during a procedure
- List the signs to be observed during a procedure
- Describe the signs/symptoms that indicate distress
- Explain the value of measuring vital signs, especially heart rate and blood pressure, during some procedures
- Identify how your facility handles emergency situations
- Discuss the importance of documenting any reactions/responses to a procedure including follow up care
- Outline potential adverse reactions to common procedures
- Describe the positive results expected from common procedures

Competency

10. Service customers and/or collect fees

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when the learner:

- Interacts with customers and colleagues in a professional manner (e.g., prompt, friendly, courteous, respectful, helpful, knowledgeable, understandable)
- Answers customer questions within the realm of current training & learning OR refer to worksite professional
- Provides, and orders if applicable to worksite, pet identification supplies
- Provides appropriate literature as directed or requested
- Accepts payment for services, sales items, and/or prescribed medications
- Documents disbursements or deposits to the cash drawer in the appropriate record, if applicable
- Processes client cash or credit payment according to facility guidelines
- Operates cash register, if applicable
- Makes accurate change
- Cash Drawer balances with the day's receipts and disbursements

Learning Objectives

- List the requirements for client identification when presenting a check or credit card
- Indicate the importance of client verification procedures when accepting check or credit card payments
- Describe components of an acceptable check
- Explain your facility's guidelines for checks
- Explain how to operate your facility's cash register, if applicable
- · Compare and contrast groups and breeds of dogs
- Analyze the factors to consider when selecting a dog
- Describe the nutritional requirements for dogs, analyze the components of dog food, and recognize appropriate feeding practices for dogs
- Examine dog behaviors and describe management, training, and grooming techniques
- Compare and contrast the short-haired and long-haired classes and identify some major breeds of cats
- Analyze the factors to consider when selecting a cat
- Describe the nutritional requirements for cats, analyze the components of cat food, and recognize appropriate feeding practices for cats
- Identify animals commonly used as safety and/or service animals and describe how they are used
- Describe grooming techniques and requirements for cats and dogs

Competency

11. Assist with animal euthanasia

Performance Standard Condition

Competence will be demonstrated

- at the worksite OR in the classroom in a simulated setting
- while assisting a worksite professional
- NOTE: A simulated setting should ONLY be used IF there is no possibility of skill performance at the worksite

Performance Standard Criteria

Performance will be successful when the learner:

- Reviews appropriate forms for euthanasia consent and disposal with owner
- Assists worksite professional to explain process to owner in layman's terms and what is to be expected during procedure
- Identifies animal
- Verifies that the area, equipment, and supplies are appropriate, in-date, and ready for the procedure
- Assists in positioning animal using proper body mechanics
- Allows the owner a chance to say goodbye
- **Observes** the administration of the injection
- Offers owner grief counseling materials
- Cleans & sterilizes equipment and supplies and dispose of bio-contaminated articles
 according to facility guidelines using Standard Precautions as applicable

Learning Objectives

- Compare methods used to euthanize animals
- Describe the drugs used by veterinarians to euthanize an animal
- Explain the actions of the drugs on the animals systems
- List possible body movements that may result from the injection prior to death
- Discuss the importance of the grieving process for the owner