Appendix M

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

ANIMAL PATHWAY
SMALL ANIMAL/VET ASSISTANT UNIT
UNIT 5
Unit 5: Animal Pathway
Small Animal/Vet Assistant

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 guidelines
- 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

Comments:
Unit 5: Animal Pathway
Small Animal/Vet Assistant

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
• Consulti 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

Comments:
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

Comments:
Unit 5: Animal Pathway
Small Animal/Vet Assistant

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

Comments:
Unit 5: Animal Pathway
Small Animal/Vet Assistant

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
  - 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

Comments:
Unit 5: Animal Pathway
Small Animal/Vet Assistant

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
  o Performs basic urinalysis for color, clarity, odor, specific gravity and chemical strip test
  o Obtains packed cell volume (PCV) on blood samples
  o 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

Comments:
Unit 5: Animal Pathway  
Small Animal/Vet Assistant

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

Comments:
Unit 5: Animal Pathway
Small Animal/Vet Assistant

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 bio-contaminated 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

Comments:
Unit 5: Animal Pathway
Small Animal/Vet Assistant

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

Comments:
Unit 5: Animal Pathway
Small Animal/Vet Assistant

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
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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

Comments: