

APAV 55: ANIMAL MANAGEMENT & CLINICAL SKILLS I

Foothill College Course Outline of Record

Heading	Value
Units:	4
Hours:	36 lecture, 36 laboratory per quarter (72 total per quarter)
Prerequisite:	Per California Code of Regulations, this course is limited to students admitted to the Advanced Veterinary Assisting Apprenticeship Program.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Description

Intended for the pre-clinical nursing training of advanced veterinary assisting apprenticeship students. The following topics are covered: occupational health and safety, dog and cat handling and restraint, administration of medication, assessing dehydration and basic fluid administration, principles of aseptic technique, sanitation, disinfection and sterilization, introduction to principles of surgical nursing and instrumentation.

Course Objectives

The student will be able to:

- Discuss the state and federal laws that govern safety in the veterinary workplace and describe the requirements for Cal-OSHA compliance.
- Compare and contrast eukaryotic, bacterial and viral organisms in structure and function.
- Explain the roles of immunity and microorganisms in the disease process.
- Identify health and safety hazards in a veterinary clinic or biomedical institution and describe safe practices.
- Describe the classes of sterilants, disinfectants and antiseptics and explain their clinical application.
- List and employ the principles of aseptic technique and the universal precautions.
- Demonstrate safe, humane and proper methods of animal handling and restraint.
- Demonstrate competence in preparing and administering medication.
- Describe and assess dehydration in the veterinary patient.
- Identify, properly handle, and maintain common surgical instruments.
- Demonstrate or explain proper techniques for the preparation of surgical packs, operation of an autoclave and gas sterilizer.

Course Content

- Laws governing health and safety in the workplace
 - Federal laws
 - State laws, Cal-OSHA

- Local laws
- Proper disposal of sharps and medical waste
- Documentation
 - Four written components required of most veterinary practices
 - How to implement a sanitation plan
 - Documentation and safety in the workplace
- Basic bacterial cell and viral structure and function
 - Eukaryotic cells
 - Prokaryotic cells
 - Enzyme structure and function
 - Anaerobic and aerobic respiration, fermentation
 - Viral structure and replication
 - Bacteriophage vs. mammalian viruses
 - Retroviruses, medical significance
- Microorganisms and disease
 - Types of microorganism
 - Immune responses
 - Humoral and cellular immune responses
 - Active and passive immunity
 - Role of vaccination in preventing disease
 - Portals of entry
 - Pathogenicity and virulence
- Health and safety hazards in the veterinary workplace
 - Chemicals
 - Biohazardous materials
 - Radiation safety
 - Waste anesthetic gas and hazards of compressed gases
 - Electrical equipment
 - Animal bites
 - Zoonotic diseases
 - Ergonomics
 - Health hazards and pregnancy
 - Other safety hazards
- Sterilants, disinfectants and antiseptics
 - Surface application
 - Surgical instruments
 - How and where to use different chemicals
 - Safety Data Sheets
- Principles of aseptic technique and universal precautions
 - Surgical preparation of personnel
 - Surgical hand scrub
 - Drying hands
 - Donning sterile gown
 - Gloving techniques
 - Surgical preparation of the patient
 - Aseptic preparation of surgical sites
 - Draping techniques
 - Patient transport
 - Final prep in surgical suite
 - Preparation of sterile surgical packs
 - Instrument
 - Gown
 - Towel
 - Special purpose
 - Comportment in surgical suite
 - Record keeping
 - Universal precautions
 - PPE
 - Proper hand washing
- Animal handling and restraint
 - Proper lifting technique
 - Canine restraint

- a. Canine body language
- b. Restraint for medical procedures
- 3. Feline restraint
 - a. Feline body language
 - b. Restraint for medical procedures
- H. Preparation and administration of medications
 - 1. Documentation
 - 2. Five rights
 - 3. Capsules, tablets and liquids
 - 4. Syringes and needles
 - 5. Enteral routes of administration
 - a. Per os
 - b. Per rectum
 - 6. Parenteral routes of administration
 - a. Subcutaneous
 - b. Intramuscular
 - c. Intravenous
 - 1) Identify parts of an intravenous administration set
 - d. Intradermal
 - e. Topical
 - I. Clinical and laboratory assessment of dehydration in the veterinary patient
 - 1. Physical findings
 - 2. Historical information
 - 3. Laboratory assessment
 - 4. Nursing assessments
 - J. Surgical instruments
 - 1. Identification of common surgical instruments
 - 2. Handling and use
 - 3. Care and maintenance
 - K. Surgical packs
 - 1. Selecting instruments
 - 2. Preparing packs
 - 3. Operation and maintenance of the autoclave
 - 4. Principles and method of gas sterilization

Lab Content

- A. General restraint (dogs and cats)
 - 1. Sternal recumbency restraint (dogs and cats)
 - 2. Lateral recumbency restraint (dogs and cats)
 - 3. Cephalic venipuncture restraint (dogs and cats)
 - 4. Saphenous venipuncture restraint (dogs and cats)
 - 5. Jugular venipuncture restraint (dogs and cats)
 - 6. Feline neck scruff
 - 7. Feline towel restraint
 - 8. Eye/ear medication restraint (dogs and cats)
 - 9. Canine nylon/leather muzzle application
 - 10. Apply Elizabethan collar
 - 11. "Rabies Pole" use (GROUP)
- B. Surgical instrument care, wrapping, and sterilization
 - 1. Clean surgical instruments
 - 2. Prepare a surgical pack for sterilization
 - 3. Sterilize an instrument pack in an Autoclave
- C. Small animal nursing skills
 - 1. Administer oral tablet or capsule to a dog or cat
 - 2. Administer oral liquid to a dog or cat
 - 3. Administer subcutaneous injection to a dog or cat
 - 4. Administer intramuscular injection to a dog or cat
 - 5. Administer subcutaneous fluids to a dog or cat

Special Facilities and/or Equipment

Classroom and laboratory with multimedia presentation and projection capabilities. Laboratory with suitable small animal holding kennels, work tables, supply cabinets and scrub sink. Demonstration equipment and supplies, including fluid administration equipment, medications and administration supplies, autoclave, surgical soft goods and instruments, gowns and gloves.

Method(s) of Evaluation

The student will demonstrate proficiency by some or all of the following:

- A. Written quizzes and examinations.
- B. Written homework assignments may be assigned.
- C. Term project.
- D. Two practical laboratory examinations. Proficiency will be individually assessed in skills appropriate to this course, as required by the AVM
 - A. Students practice the required skills during lab classes, and know the criteria for demonstration of competency.

Method(s) of Instruction

- A. Lecture
- B. Discussion
- C. Cooperative learning exercises
- D. Laboratory: demonstration and practice of skills

Representative Text(s) and Other Materials

Bassett, Joanna M., and Dennis M. McCurnin. Clinical Textbook For Veterinary Technicians, 9th ed. W. B. Saunders Co., 2014.

Taylor, Susan. Small Animal Clinical Techniques. 2nd ed. Elsevier, 2016.

Tear, Marianne. Small Animal Surgical Nursing: Skills and Concepts. 2nd ed. Mosby, 2012.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

Students may be required to complete some or all of the following assignments:

- A. Reading assignments
 - 1. Weekly reading assignments from text, class handouts and online resources ranging from 50 to 100 pages per week
- B. Writing assignments
 - 1. Short answer essay questions
 - 2. Term project
- C. "Nerd Book" project

Discipline(s)

Registered Veterinary Technician