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# V T 72: PRINCIPLES OF VETERINARY DENTISTRY

# **Foothill College Course Outline of Record**

Heading	Value
Effective Term:	Summer 2023
Units:	4
Hours:	3 lecture, 3 laboratory per week (72 total per quarter)
Prerequisite:	V T 70.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

# **Student Learning Outcomes**

- Safely and correctly perform a complete dental prophylaxis on a veterinary companion animal patient at an entry level of competency.
- Prepare and effectively deliver client education regarding home dental care for companion animals.

# **Description**

Basic principles of veterinary dentistry for the veterinary technology student. Includes dental anatomy, physiology, pathophysiology, charting, and instrumentation. Techniques of routine dental prophylaxis and aspects of anesthesia specific to dental patients. Discussion of periodontal disease, modes of therapy, client education, and preventive care. Introduction to common dental disorders and dental radiography. Course includes hands-on laboratory sessions using veterinary dental equipment, models, live animal patients, and cadaver heads. Care and use of common instruments and equipment. Comparative dentistry: dental anatomy and physiology and discussion of dental diseases in a variety of domestic animals. Intended for students in the Veterinary Technology Program; enrollment is limited to students accepted in the program.

## **Course Objectives**

The student will be able to:

- 1. Demonstrate practical knowledge of dental anatomy and terminology
- 2. Relate and employ proper dental charting techniques
- 3. Identify common dental instruments and equipment
- Explain and demonstrate the proper use, care, and maintenance of common dental equipment and tools
- Explain the pathophysiology and therapy of common dental and oral disorders
- 6. Describe and perform a complete dental prophylaxis using hand and power dental tools
- 7. Describe principles of pain management in veterinary dentistry
- 8. Identify the components of a dental radiography unit, select exposure factors, and safely expose and interpret dental radiographs

- Educate clients about common dental problems and proper care and prevention
- 10. Explain how form follows function in comparative dentistry

#### **Course Content**

- 1. Dental anatomy and terminology
  - a. Regional anatomy and physiology
- 2. Charting techniques
  - a. Nomenclature of anatomy
  - b. Dental charting
- 3. Dental equipment
  - a. Dental hand instruments and dental power equipment
    - i. Identification and proper use
    - ii. Ergonomics
    - iii. Care and maintenance
- 4. Pathophysiology of common dental and oral disorders
  - a. Periodontal disease
    - i. Etiology
    - ii. Stages/pathogenesis
    - iii. Treatment of periodontal disease
  - b. Other common disease
    - i. Etiology
    - ii. Pathophysiology
    - iii. Treatments
- 5. The complete COHAT
  - a. Steps and techniques in a COHAT (dental prophylaxis)
  - b. Use of scaler and curette
  - c. Use of ultrasonic scaler
  - d. Use of polisher
- 6. Principles of pain management in veterinary dentistry
  - a. Rational for pain management during COHAT
  - b. Local anesthetic block techniques for pain control
- 7. Dental radiology
  - a. Safety
  - b. Exposure factors
  - c. Positioning
  - d. Interpreting
- 8. Educate clients about common dental problems and proper care and prevention
  - a. Client education
  - b. Home care
  - c. Common dental disorders
- 9. Comparative dentistry

#### **Lab Content**

- Hands-on sessions using veterinary dental equipment, models, and live animal patients
- 2. Care and use of common instruments and equipment
- 3. Study of the relevant anatomy using models and live animals
- Performance of a complete oral examination, dental charting, and the complete dental prophylaxis on cadaver/models
- 5. Case discussions

# **Special Facilities and/or Equipment**

- 1. Classroom equipped with multimedia projection and presentation capabilities.
- 2. Laboratory equipped with hand and power dental instruments.
- 3. Veterinary dental models and audiovisual materials.
- 4. Dogs and cats for physical examination practice.
- 5. Cadavers, skulls, typodonts, and other models.
- 6. Imaging: dental radiograph machines and digital image capture equipment.

### Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Participation and performance in the laboratory Comprehensive written final examination Practical examinations Written client education dialogue Case study Take home assignments

## **Method(s) of Instruction**

Methods of Instruction may include but are not limited to the following:

Lecture
Discussion
Laboratory
Demonstration

# Representative Text(s) and Other Materials

Holmstrom, Steven E.. Veterinary Dentistry: A Team Approach. 2019.

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

- Weekly reading assignments from text, class handouts, and outside sources, ranging from 50-100 pages per week
- Weekly homework assignments, which may include interpretation and charting of dental pathology via case studies, photographs, and videos

# Discipline(s)

Registered Veterinary Technician