VT-2200: DENTISTRY FOR VETERINARY TECHNICIANS

Cuyahoga Community College

Viewing: VT-2200: Dentistry for Veterinary Technicians

Board of Trustees:

1/30/2025

Academic Term:

Fall 2025

Subject Code

VT - Veterinary Technology

Course Number:

2200

Title:

Dentistry for Veterinary Technicians

Catalog Description:

Fundamentals of veterinary dentistry. Students learn how to perform oral cavity assessments, routine dental cleaning, dental charting, and client education, and assist with advanced dental procedures.

Credit Hour(s):

1

Lecture Hour(s):

1

Requisites

Prerequisite and Corequisite

VT-1600 Veterinary Surgical Nursing and Assisting, and BIO-1420 Anatomy and Physiology of Domestic Animals II.

Outcomes

Course Outcome(s):

Evaluate and document oral and dental health and disease using dental charts and diagrams.

Objective(s):

- 1. Identify normal dental anatomy, dentition, and occlusion in common domestic species.
- 2. Assess the oral cavity and differentiate normal from abnormal findings.
- 3. Assess sulcus depth, and calculus, plaque, gingivitis, periodontal disease, and tooth mobility using dental indices.
- 4. Identify individual teeth using the Triadan system.
- 5. Complete dental records and charts according to standards of contemporary practice.

Course Outcome(s):

Perform routine dental cleaning using hand and power instrumentation and assist with non-routine dental procedures.

Objective(s):

- 1. Polish the teeth using power equipment.
- 2. Perform post-operative care required to prepare the patient for release from the hospital.
- 3. Assist with advanced periodontal treatment including gingivectomies and gingival flaps.
- 4. Assist with advanced dental procedures including surgical extractions and endodontic procedures.
- 5. Identify and explain safety and anesthetic considerations for dental procedures.
- Select, set-up, operate, and maintain hand and power dental equipment.

- 7. Coordinate pain management protocols for dental procedures.
- 8. Remove dental plaque and calculus using hand instruments and power ultrasonic and piezoelectric scalers.

Course Outcome(s):

Provide client education regarding home dental care and prevention.

Objective(s):

- 1. Educate clients regarding the benefits of dental services.
- 2. Explain how to prevent dental disease using nutritional, mechanical, and pharmacologic methods.
- 3. Educate clients regarding dental services provided, home care following a dental procedure, and disease prevention.

Course Outcome(s):

Recognize and describe common dental diseases in domestic animals.

Objective(s):

- 1. Explain signs of, pathogenesis of, and treatment of periodontal disease.
- 2. Describe the common hereditary malocclusions and dental conditions of dogs and cats.
- 3. Identify gingivitis, dental trauma, and occlusal problems in the dog and cat.
- 4. Describe the indications for tooth extraction and perform a closed extraction in a dog or cat under veterinary supervision.
- 5. Explain the role of advanced endodontics and orthodontics and the value of patient referral.

Methods of Evaluation:

- 1. Quizzes
- 2. Unit and final lecture examinations
- 3. Homework assignments
- 4. Presentations
- 5. Participation

Course Content Outline:

Veterinary dentistry (small animals only)

- 1. Dental anatomy
 - a. Tooth
 - b. Periodontium
 - c. Gingival tissues
 - d. Oral mucosa
 - e. Normal dentition and occlusion
- 2. Positional terminology
 - a. Upper arcade
 - b. Lower arcade
- 3. Tooth identification
 - a. Triadan system
 - b. Anatomical system
- 4. Oral Examination and charting
 - a. Plaque and calculus
 - b. Clinical signs of disease
 - c. Measuring sulci and pockets
 - d. Assessment of gingival recession and attachment loss
 - e. Assessment of the tooth surface
- 5. Dental charting
 - a. Plaque index
 - b. Calculus index
 - c. Gingivitis index
 - d. Mobility index

- e. Furcation exposure index
- f. Commonly used symbols
- 6. Periodontal disease
 - a. Definition
 - b. Pathophysiology
 - c. Classification system
 - d. Treatment
- 7. Dental cleaning
 - a. Safety issues
 - b. Instrumentation
 - i. Ultrasonic scalers
 - ii. Hand instruments
 - iii. Equipment for polishing and drilling
 - c. Removing supragingival calculus
 - i. Ultrasonic scaling
 - ii. Hand scaling
 - d. Removing subgingival calculus
 - i. Subgingival planing and curettage
 - e. Checking for missed plaque and calculus
 - f. Polishing
 - g. Sulcus irrigation
 - h. Fluoride treatment
 - i. Prevention of dental disease
 - i. Home care and client education
 - ii. Home care products
 - iii. Mechanical prevention
 - iv. Dietary prevention
 - v. Toys and chews
- 8. Exodontics
 - a. The technician's role in exodontics
 - b. Instrumentation
 - c. Closed vs. open extractions
 - d. Extraction techniques
- 9. Advanced treatment modalities
 - a. Periodontal surgery
 - b. Endodontics
- 10. Dental diseases
 - a. Developmental diseases
 - i. Retained deciduous teeth
 - ii. Malocclusions
 - iii. Diseases of the enamel
 - b. Dental trauma
 - c. Oral tumors
 - d. Congenital abnormalities
 - e. Gingivitis/stomatitis
 - f. Feline dental resorptive lesions
 - g. Abscessed teeth
 - h. Gingival hyperplasia

Resources

Bassert, Joanna M., editor, et al. McCurnin's Clinical Textbook for Veterinary Technicians. 10th ed. Elsevier, 2022.

DuPont, Gregg A., and Linda J. DeBowes. Atlas of Dental Radiography in Dogs and Cats. 1st ed. Elsevier, 2009.

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Perrone, Jeanne R. editor. Small Animal Dental Procedures for Veterinary Technicians and Nurses. 2nd ed. John Wiley & Sons, Inc., 2021.

Bellows, Jan, et al. "2019 AAHA Dental Care Guidelines for Dogs and Cats" *Journal of the American Animal Hospital Association*. vol. 55 no. 2, Mar. Mar/Apr 2019, pp. 46-49.

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

Resources Other

Clinician"s Brief. http://www.cliniciansbrief.com//

Veterinary Learning Systems. https://www.vetlearn.com/

DVM360. http://www.dvm360.com/

On the floor at Dove. https://go.atdove.org/ (https://go.atdove.org/)

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