Curriculum Details

Proposed By
Proposed by: johnkaya

Course Record ID
766

Entry Type
New (draft)

Date Created
October 29, 2012

Notes and Special Changes

Stakeholders Consulted

1. Justification
This course is needed for the A.S. in veterinary technology. In order to receive AVMA accreditidation, our program needs to teach an anesthesiology and dentistry class.

2. Course Alpha
ANSC

3. Course Number
261L

4. Course Title (long)
Anesthesiology and Veterinary Dentistry for Veterinary Technicians Lab.
5. **Course Title Short**

Anesth & Dentistry Vet Tec Lab

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6. **Course Credits**

2

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7. **Course Credit Upper Range**

0

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**Repeatable**

Will default to 98 (this is how often someone can sign up for the course (not how many times they can apply it to a degree)

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8. **Course Description**

This course will focus on the clinical skills necessary for safe and effective anesthesia and dental prophylaxis of companion animal patients (dogs and cats). Skills such as intravenous catheter placement, endotracheal intubation, patient preparation and monitoring, and dental prophylaxis under general anesthesia will be stressed. The use and side effects of commonly used sedatives, analgesics and anesthetics will be covered. Postoperative procedures include patient monitoring and charting as well as client education for postoperative care. (6 hours lab).

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9. **Course Pre-Requisites**

Admission in the Veterinary Technology program.

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10. **Course Co-Requisites**

Co-registration in ANSC 261.

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11. **Course Recommended Preparation**

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12. **Contact Hours (lecture, lab, lecture/lab)**

6 hours laboratory

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13. **Department**

Natural Sciences
14. Cross-Listing

15. Course Content


16. Course Competencies

SLO #1: Safely and effectively manage patients during all phases of anesthetic procedures. Tasks: 1) Calculate dosages of appropriate anesthetic-related drugs 2) Administer anesthetic-related drugs by injection, mask, induction chamber or endotracheal tube 3) Place endotracheal tubes in patients when appropriate 4) Utilize clinical signs and appropriate equipment to monitor patient status in all stages of anesthetic procedures (e.g., esophageal stethoscope, Doppler, pulse oximeter)* 5) Evaluate patient and implement and evaluate pain management protocols
6) Recognize and respond appropriately to patients in compromised states
7) Perform appropriate resuscitation procedures as needed
8) Complete controlled substance log

Decision-making abilities: Given the characteristics of the anesthetic patient and the procedure being performed, the veterinary technician will work with the veterinarian to:
1) Assess the patient's risk status and determine appropriate anesthetic and perianesthetic protocols to provide effective pain management and maximum anesthetic safety and effectiveness.
2) Choose and utilize appropriate techniques and equipment to accurately and effectively monitor the patient's ongoing status before, during, and after anesthesia to provide for adequate anesthesia, analgesia, and a safe recovery.

SLO #2: Safely and effectively select, operate, and maintain anesthetic delivery equipment and monitoring instruments. Task: Maintain and operate anesthetic delivery and monitoring equipment, including the following:
- Pulse oximeter
- Esophageal stethoscope
- Electrocardiograph
- Anesthetic machines
- Endotracheal tubes
- Resuscitation bag
- Scavenging systems
- Oxygen sources
- Respiratory monitors
- Blood pressure monitoring devices
- Laryngoscopes
- Ventilator
- Defibrillator

Decision-making abilities:
1) Given the characteristics of the anesthetic instruments and equipment being used, the veterinary technician will recognize and respond appropriately to equipment malfunctions or inappropriate equipment setup in order to ensure proper function and provide maximum benefit to the patient.
2) Given the requirements of the anesthetic protocol, the veterinary technician will select, evaluate, and adjust equipment to ensure proper function and provide maximum benefit to the patient.

SLO #3: Understand and integrate all aspects of patient management for common surgical procedures in companion animal species. Tasks:
1) Demonstrate understanding of routine surgical procedures and related equipment, including surgeries in these categories: ovariohysterectomy, cesarean section, orthopedic procedures, orchietomy, tail docking, onychectomy, laparotomies, dystocias, and prolapsed organs.
2) Properly identify patients and surgical procedures
3) Conduct a thorough patient assessment
4) Organize medical records/consent forms
5) Review pre-operative evaluations
6) Evaluate current patient status
7) Prepare the surgical site using aseptic technique
8) Position patient for common procedures
9) Provide surgical assistance
10) Maintain proper operating room conduct and asepsis
11) Assist with care of exposed tissues and organs
12) Properly pass instruments and supplies
13) Operate and maintain suction and cautery machines
14) Understand the principles of operation and maintenance of fiber optic equipment
15) Keep operative records
16) Perform basic suturing techniques
17) Coordinate anesthesia and pain management with members of the surgical team
18) Provide post-operative care including: pain management, fluid therapy, adequate nutrition, wound management, bandaging, patient discharge instructions, and suture removal.

Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will:
1) Use medical records and patient identification methods to assure that the patient and scheduled procedures are correct.
2) Obtain the patient's vital signs, note any specific physical abnormalities, ensure pre-surgical tests have been completed and report the patient assessment to the veterinarian.
3) Identify the appropriate area of hair to be removed and select appropriate methods to reduce microbial flora on the skin in the area of surgical site in order to decrease the chance of surgical wound contamination.
4) Position the patient appropriately to provide maximum convenience for the surgeon and
maximum safety and benefit for the patient 5) Understand and utilize appropriate aseptic techniques to assist operative personnel in order to provide maximum safety and benefit to the patient. 6) Assure that anesthetic and post-operative pain management protocols are appropriate to provide maximum safety and benefit to the patient. 7) Understand and administer the appropriate methods of post-operative care to assure maximum safety and benefit to the patient. SLO#4: Identify and provide appropriate instruments, supplies and environment to maintain asepsis during surgical procedures. Tasks: 1) Prepare surgical instruments and supplies 2) Prepare gowns, masks, gloves, and drapes 3) Operate and maintain autoclaves 4) Sterilize instruments and supplies using appropriate methods 5) Identify and know proper use for instruments* 6) Identify common suture materials, types, and sizes 7) Provide operating room sanitation and care* 8) Maintain proper operating room conduct and asepsis* 9) Perform post-surgical clean-up (e.g., equipment, instruments, room, proper disposal of hazardous medical waste)* Decision-making abilities: Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will properly select, wrap and sterilize appropriate instruments and supplies and prepare and maintain the surgical environment to ensure maximum safety and benefit to the patient.

17. Assessments, Tasks, and Grading

QUIZZES (100 points total-10 points for each quiz). The student will take ten quizzes to demonstrate knowledge and understanding of information presented in the lectures, clinical lab activities, and text readings. COURSE TASK CHECKLIST (400 points): Students will be required to demonstrate proficiency in all essential skills, tasks, and decision-making abilities. These will be assessed in clinical skills labs, exam and surgical portions of this course using a Course Task Checklist (CTC). This booklet will be given to students during the first week of the course. It is the students responsibility to always have their CTC with them at all times. Students who lose their CTC or behave in an unsafe manner will receive an F grade and be barred from attending future classes. METHOD OF GRADING: Quizzes 100 points Course Task Checklist 400 points TOTAL 500 points GRADING SCALE: Total Points Percentage Points Grade 500 445-500 90-100 A 395-444 80-89 B 345-394 70-79 C 295-344 60-69 D <295 0- 59 F

Grading Options

Will be set to Banner default

18. Auxiliary Materials and Content

Students will need access to the following equipment and supplies: 1) Anesthesia Machine 2) Dental Instruments 3) Dental Machine 4) Monitoring Equipment 5) Dental Wet Table 6) Eye protection goggles, gloves, & masks 7) Anesthetics, drugs, & IV fluids This equipment is already in inventory at WCC. Students will also need access to companion animals (cats and dogs) which will be provided by an animal shelter.
19. Additional Activities outside of class and class time

20. Special Costs connected to the course

Approximate costs for participation in this class is $150 per student (to cover costs of drugs, suture material, and other consumables). This will be recovered by requiring students to purchase a supplies card through the bookstore.

21. What are the Student Learning Outcomes?

Upon successful completion of ANSC 261L, the student should be able to demonstrate proficiency with the following: 1) Safely and effectively manage patients during all phases of anesthetic procedures. 2) Safely and effectively select, operate and maintain anesthetic delivery equipment and monitoring instruments. 3) Safely and effectively operate and maintain dental equipment. 4) Understand and integrate all aspects of patient management for common dental procedures in companion animal species. 4) Identify and provide appropriate instruments, supplies and environment to maintain asepsis during dental procedures.

22. Connection between the Course SLOs and the College's General Education Outcomes

23. How does the proposal connect to the college's strategic plan?

The program objectives align to the following elements of the college's strategic plan:

- **Outcome 4.1**: Contribute to the development of a high-skilled workforce through the establishment of at least one new specific, career-focused degree, certificate or career pathway per year that leads to employment in emerging fields.
- **Outcome 4.2**: Establish partnerships with employers to create internships and job placements.
- **Outcome 4.3**: Expand the curriculum that prepares students for critical workforce shortage areas.
- **Outcome 4.4**: Create internships and service learning opportunities in the community.
- **Outcome 4.5**: Promote the knowledge, skills, and opportunities that support current and emerging STEM fields and careers.
- **Outcome 4.6**: Increase the number of degrees and certificates awarded in STEM fields.

24. Describe the staff that will be needed

This course will require a Veterinarian Instructor licensed in the state of Hawaii. It may also require a credentialed veterinary technician to assist with certain procedures.

25. Describe the facilities that will be needed, including special rooms

This course will require access to a veterinary treatment room for patient preparation and dental procedures. We currently have a room in imiloa that should suffice for this
(imiloa 103 or 104).

26. Describe any other resources that will be needed

27. How will the staff, facilities, and other resources for the course be secured?

A full-time veterinarian and registered veterinary technician has been hired to coordinate and teach the bulk of this course. Existing adjunct veterinary faculty will also serve as instructors. The surgery space will be funded by facilities renovation funds, which are currently available.

28. Certificates

29. Connection to the AA degree

AA DB

30. Maximum Credits Towards an AA Degree

2

31. List any similar classes taught at outside of the UH system

San Juan College: VETT-214: Vet Anesth & Surg Asst III

32. List any similar classes taught at campuses in the UH System.

33. How, if at all, is the course intended to count in lieu of a course taught at a four-year campus.

It is not intended to count for a course on a 4-year campus.

34. How, if at all, is the course similar to upper-division courses in the UH System.

It is not similar.

35. How does the course articulate with four-year programs (Gen Ed)?
36. List any articulations between this course and any four-year program.

End of Proposal