



Course Descriptor VTMD512 Veterinary Anesthesiology

Proposed Academic Year	2021 - 22	Last Reviewed Academic Year	
Course Code	VTMD512	Course Title	Veterinary Anesthesiology
Credit hours	2	Level of study	Undergraduate
College / Centre	CAHS	Department	VTMD
Co-requisites		Pre-requisites	VTMD412

1. COURSE OUTLINE

The course provides students to the introduction of patient evaluation and preparation, local anesthetic drugs, anesthetic equipment, patient monitoring, pain management, breathing systems and ventilation, shock therapy, respiratory and cardiac emergencies, and euthanasia.

2. AIMS

The course aims to provide clinical experience in the use of anesthetics in different animal species with more emphasis on small companion animals, horses, and some farm animals. The goal is for students to learn the skills and thought processes necessary to perform safe anesthesia in a modern veterinary practice.

3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS

Learning Outcomes (Definitive)	Teaching and Learning methods (Indicative)	Assessment (Indicative)
Upon successful completion of this course, students will be able to:		
1. Compare and contrast appropriate anesthetic, sedation and analgesic regimes and contraindications based on patient assessment.	Power point presentations, lab work, discussion	Work sheets and written examinations
2. Evaluate and prepare a patient for anesthesia and state the necessary steps to safely induce anesthesia.	Power point presentations, lab work, discussion	Work sheets and written examinations
3. Select and calculate dosages of sedatives, pre-anesthetics and anesthetic agents based on patient data.	Power point presentations, lab work, discussion	Work sheets and written examinations
4. Select, operate and maintain anesthetic machinery and monitoring	Power point presentations, lab work, discussion	Work sheets and written examinations



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devices within appropriate parameters of use.		
Identify and practice safe use and handling of anesthetic agents and pharmaceuticals within acceptable Health and Safety guidelines to maximize patient and handler safety.	Power point presentations, lab work, discussion	Work sheets and written examinations

4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Assignment	20%
Quizzes	20%
Mid-term Examination	25%
Final Examination	40%
TOTAL	100%

5. ACHIEVING A PASS

Students will achieve **2** credit hours for this course by passing **ALL** of the course assessments [*Quizzes, Mid-term, Final examinations**] and achieving a **minimum overall score of 50%**.

NB *Ensure that ALL learning outcomes are taken into account

6. COURSE CONTENT (Indicative)

1. An introduction to anaesthesia and general considerations
2. Patient monitoring and clinical measurement
3. An introduction to pharmacokinetics
4. Principles of sedation, anticholinergic agents, and principles of premedication
5. Analgesia
6. Injectable anaesthetic agents
7. General pharmacology of the inhalation anaesthetics
8. Relaxation of the skeletal muscles
9. Pulmonary gas exchange: artificial ventilation of the lungs
10. Apparatus for administration of anaesthetics
11. Anaesthesia of horse
12. Anaesthesia of cattle
13. Anaesthesia of sheep, goats
14. Anaesthesia of the camel
15. Anaesthesia of the dog
16. Anaesthesia of the cat
17. Anaesthesia of small mammals, exotic pets, aquatic and small wildlife

TOTAL HOURS	30
Plus RECOMMENDED INDEPENDENT STUDY HOURS	15
TOTAL COURSE HOURS	45



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7. RECOMMENDED REFERENCES

Core text/s:

-William J. Tranquilli, John C. Thurmon, Kurt A. Grimm (Editors): Lumb and Jones' Veterinary Anesthesia and Analgesia, 4th Edition, The Amazon Book Review.

Library + online resources:

Open Educational Resources: