

# **EFFECTIVE SEPTEMBER 2008 CURRICULUM GUIDELINES**

Α.	Division:	Education	Ef	fective Date:	September 2008	
В.	Department / Program Area:	Science and Technolog Animal Health Techno	·	vision	New Course	X
	C		If I	Revision, Section(s)		
				vised: te of Previous Revision		
				te of Current Revision:	•	
C:	AHTT 2108	D: Ve	terinary Anaest	hesia	E: 3	
	Subject & Cou	arse No.	Descri	ptive Title	Semester Credits	
F:	Calendar Description: This course combines both theory and practical aspects of veterinary anaesthesia for both small and large animals. Topics include the calculation of drug doses, pre-anaesthetic patient preparation, administration of local anaesthetics, sedatives, induction drugs and inhalant anaesthetics, monitoring patients under general anaesthesia, detection and management of anaesthetic complications, as well as post-operative patient care and pain prevention. Knowledge and understanding of inhalant anaesthetic machines and monitoring equipment will also be covered.  Enrolment is limited to students in the Animal Health Technology Program.				d	
G:		ontact Hours to Type of Ins	struction <b>H</b> :	Course Prerequisites:		
	/ Learning Setti	ngs		AHTT 1203 Veterina	arv Care 2	
	Primary Method	ds of Instructional Delivery	and/or	11111111200 (00011110	ily care 2	
	Learning Setting	gs:	T	G G :::		
	Lecture/Labor	atorv	I:	Course Corequisites:		
		•		None		
	Number of Con for each descrip	tact Hours: (per week / sen	nester			
	5 h / l		J:	Course for which this	Course is a Prerequisite:	
	5 hours/week: 3 lecture/ 2 hou	ırs laboratory		AHTT 2304		
		eks per Semester:				
		ons per bemester.				
	15 weeks		<b>K</b> :	Maximum Class Size:		
				30		
L:	PLEASE INDICATE:					
	Non-Credit					
	X College Credit Non-Transfer					
	College Credit Transfer:					
	SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bctransferguide.ca)				e.ca)	
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# M: Course Objectives / Learning Outcomes

Upon completion of this course students will be able to:

- 1. Understand the function of both large and small animal inhalant anaesthetic machines
- Operate an inhalant anaesthetic machine for the delivery of general anaesthesia to companion and food animals.
- 3. Understand the basic pharmacology of drugs used in implementation of local anaesthesia, sedation and inhalant anaesthesia.
- 4. Calculate sedative and anaesthetic drug dosages for an individual animal.
- 5. Have a working knowledge of the routes of anaesthesia drug administration used in veterinary medicine.
- 6. Monitor the depth of anaesthesia.
- 7. Use the following anaesthetic monitoring devices to detect anaesthesia related problems:
  - Esophageal stethoscope
  - Doppler blood pressure monitor
  - Oscillometric blood pressure monitor
- 8. Intubate companion and food animal species
- Understand the function of compressed gas delivery systems associated with the inhalant anaesthesia machine
- 10. Understand the occupational hazards associated with workplace exposure to anaesthetic drugs.
- 11. Intervene during anaesthesia emergency situations
- 12. Exhibit a working knowledge of anaesthesia emergency drugs

#### **N:** Course Content:

The major topics in the course include:

# 1. The anaesthesia machine and its component parts:

- Compressed gas systems
- Scavenging/waste gas evacuation
- Breathing circuits
- Circle breathing system
- Reservoir bags
- Carbon dioxide absorbent granules
- Endotracheal tubes

# 2. Patient assessment in preparation for anaesthesia:

- Physical and temperament evaluation
- Pre-anaesthesia tests

# 3. Anaesthesia premedication:

- Sedatives
- Tranquilizers
- Analgesic drugs
- Sedative reversal agents
- Anticholinergic agents

#### 4. Anaesthesia induction:

- Induction techniques- mask induction
- Induction techniques-tank induction
- Induction techniques- injectable
- Injectable anaesthetic induction drugs
- Endotracheal intubation

#### 5. Anaesthesia Maintenance:

- Inhalant anaesthesia maintenance
- Injectable anaesthesia maintenance

# 6. Anaesthesia Support:

- The concept of controlled poisoning
- Fluid therapy
- Heat supplementation
- Ocular protection
- Assisted breathing

#### 7. Anaesthesia Monitoring Techniques:

- Cardiovascular monitoring
- Respiratory monitoring
- Species specific monitoring priorities

### **O:** Methods of Instruction

This course includes 3 hours of classroom instruction as well as 2 hours of laboratory activity per week.

# **P:** Textbooks and Materials to be Purchased by Students

- 1. Lake, T. *Dosage Calculation for Veterinary Nurses and Technicians*. 2005. Butterworth-Heinemann Publishing. (required).
- 2. McCurnin, D.M. & Bassert, J.M., 2006. *Clinical Textbook for Veterinary Technicians*. 6<sup>th</sup> ed., Elsevier (required).
- 3. Wanamaker, BP & Massey, K.L., 2004. *Applied Pharmacology for the Veterinary Technician 3*. 3<sup>rd</sup> ed., Saunders-Elsevier (required).
- 4. Romich, J.A., 2005. Fundamentals of Pharmacology for Veterinary Technicians. Thomson Delmar Learning. (recommended)
- 5. McKelvey D., Hollingshead, W.K. *Veterinary Anaesthesia and Analgesia*. Elsevier Press. Current edition

# Q: Means of Assessment

 Quizzes
 20-30%

 Assignments
 15-35

 Attendance & Participation
 10

 Final Exam
 20-35

 100%

Grades: A+ 95-100, A 90-94, A- 85-89, B+ 80-84, B 75-79, B- 70-74,

C+65-69, C 60-64, C-55-59, P 50-54, F 0-49.

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R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR					
No					
Rhonda Benke, RVT					
Diane Boyle, DVM					
Advisor: Nancy Brock, DVM, DACVA					
Course Designer(s)	Education Council / Curriculum Committee Representative				
Dr. Sandy Vanderburgh					
Dean / Director	Registrar				

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