

DEPARTMENT of Animal Science

COURSE OUTLINE – Fall 2024

AH 340 ANESTHESIOLOGY – 3 (3.5-0-0) 56 HOURS

16 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

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<b>OFFICE HOURS:</b>	Monday – Friday; noon – 1 or as posted		

#### CALENDAR DESCRIPTION:

Instruction on the commonly used anesthetic agents will include their modes of action, human health implications and WHMIS considerations. Students will learn to perform a pre-anesthetic work up, calculate and administer pre-anesthetics, induce and maintain general anesthesia using different agents, techniques and systems. Monitoring of patients includes recognition of anesthetic stages and proper use of monitoring devices. Appropriate responses to anesthetic complications and emergencies will be covered. Appropriate analgesics and analgesic protocols will be discussed.

#### PREREQUISITE(S)/COREQUISITE:

- Must be registered in the NWP Veterinary Technology Program
- AH 141, AH 174, AH 240, AH 242, AH 246, AH249

## REQUIRED TEXT/RESOURCE MATERIALS:

- Bassert et.al., McCurnin's Clinical Textbook for Veterinary Technicians
- Thomas J.A. and Lerche P., Anesthesia & Analgesia for Veterinary Technicians, Mosby Elsevier, 5<sup>th</sup> ed.

## DELIVERY MODE(S):

Lecture: Students will obtain and be evaluated on practical competencies in Anesthesia in Clinical Procedures I & II labs.

## LEARNING OUTCOMES:

Units 1&2	<b>Introduction and Pre-anesthetic period</b> On completion of this unit, students will be able to discuss and describe the types of anesthesia, and apply the components of the preanesthetic period.
Unit 3	<b>Pre-anesthetic Drugs</b> On completion of this unit, students will be able to identify various drugs used before anesthesia and their properties and side effects, and apply this information in labs.
Unit 4	<b>General Anesthesia</b> On completion of this unit, students will be able to discuss and describe stages and planes of general anesthesia, and how to accomplish these in practical situations.
Unit 5	<b>Injectable Anesthesia</b> On completion of the unit, students will be able to describe and perform various types of injectable anesthesia on a patient, and be familiar with the drugs used.
Unit 6	<b>Inhalational Anesthesia</b> On completion of this unit, students will be able to discuss and describe inhalation anesthesia and its components, and be able to apply this information to live patients in lab.
Unit 7	<b>Inhalation Agents</b> On completion of this unit, students will be able to identify and describe agents used in inhalation anesthesia and their advantages and disadvantages.
Unit 8	<b>Pain Management and Analgesia</b> On completion of this unit, students will be able to identify and describe the methods of pain management and drugs used for this purpose, and the necessity for analgesia.
Unit 9	<b>Large Animal Anesthesia</b> On completion of this unit, students will be able to describe and discuss specific methods of anesthesia used in large animals and the requirement for these methods.
Unit 10	<b>Anesthetic Emergencies</b> On completion of this unit, students will be able to discuss possible anesthetic emergencies, their causes and their treatments, and be able to apply this information to live patients.

## TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferalberta.alberta.ca>.

\*\* Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.

## EVALUATIONS:

EXAMINATIONS	Mark Distribution
A. Quizzes & Assignments	45%
B. Midterm Exam	25%
C. Final Exam	30%
	100%

## GRADING CRITERIA

Please note that most universities will not accept your course for transfer credit IF your grade is less than C-.

**OVERALL GRADE POINT AVERAGE HAS TO BE 2.0 OR HIGHER TO BE SUCCESSFUL IN THE VT PROGRAM.**

Grading Chart for courses with Alpha Grading:

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	95-100	C+	2.3	67-69
A	4.0	85-94	C	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
B	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

\* A minimum of 60% must be obtained in order to successfully pass AH340. If a student misses a quiz without prior notification and without a valid reason, a mark of zero will be assigned for that quiz. Late assignments not accepted. Any handwritten material submitted to an instructor must be legible in blue or black pen, no white out or erasable ink used, medical corrections only.

## COURSE SCHEDULE/TENTATIVE TIMELINE:

September	Units 1&2	Introduction and Pre-anesthetic period
	Unit 3	Pre-anesthetic Drugs
	Quiz in class on Preanesthetic Period and related drugs	
	Unit 4	General Anesthesia
October	Unit 5	Injectable Anesthesia
	Midterm Exam	
	Unit 6	Inhalational Anesthesia
November	Unit 7	Inhalation Agents
	Quiz Injectable & Inhalant Anesthetics	
	Unit 8	Pain Management and Analgesia
	Quiz Analgesics/Pain Management	
December	Unit 9	Large Animal Anesthesia
	Unit 10	Anesthetic Emergencies
	Final Exam	

## STUDENT RESPONSIBILITIES:

Please review NWP's Examination and Grading policies.

**Attendance will not be assigned a mark in this class; however, attendance will be noted, and mark deductions may occur for any unexcused absence. As well, short quizzes may occur in any or all lectures and will count for marks.** A student who is not present for a lecture period in which a quiz or exam occurs, scheduled or not, will not be given a chance to make up that quiz and will be awarded a mark of zero for that quiz/exam.

Cell phone use is NOT allowed in class (marks WILL be deducted for this), and use of personal computers, except for exam purposes, is discouraged and must be cleared with the instructor before use. If a computer is used, the student must sit at the back of the class so as not to distract other students.

A supplemental exam *will not* be available for this course.

A final mark of 60% or higher is needed to pass this course. Midterm and final exams will **not** be available to the students for viewing after they are completed, nor will quizzes be available unless the instructor reviews them in class.

Enrolment at NWP assumes that the student will become a responsible citizen of the Polytechnic. As such, each student will display a positive work ethic, take pride in and assist in the maintenance and preservation of Institute property, and assume responsibility for his/her education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting instructor expectations concerning attendance, assignments, deadlines, and appointments.

## STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

\*\*Note: all Academic and Administrative policies are available on the same page.

## Additional Information:

Students may be required to print off their own notes packages, available on the Student Drive under Animal Health or in D2L BrightSpace under the appropriate course heading.