

## DEPARTMENT of ANIMAL SCIENCE

### COURSE OUTLINE – Fall 2025

#### AH 173 APPLIED MATHEMATICS – 1 (1-0-0) 16 Hours for 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.

<b>INSTRUCTOR:</b>	Chris Mizzi DVM	<b>PHONE:</b>	780-835-6617
<b>OFFICE:</b>	AS 133	<b>E-MAIL:</b>	cmizzi@nwpolytech.ca
<b>OFFICE HOURS:</b>	See posted on door (780-228-3018cell)		

**CALENDAR DESCRIPTION:** Mathematical concepts that are frequently encountered by the Animal Health Technologist will be covered and a working knowledge of common measurement systems and conversions is developed. Accurate calculations using correct notation and units are required.

#### **PREREQUISITE(S)/COREQUISITE:**

- Must be registered in the NWP Veterinary Technology Program

#### **REQUIRED TEXT/RESOURCE MATERIALS:**

- Essential Calculations for Veterinary Nurses and Technicians, Lake & Green, 4th ed. (older editions are acceptable) or Medical Mathematics and Dosage Calculations for Veterinary Technicians, Wiley Blackwell (any edition).
- Students must have internet access as portions of this course may be online.

**DELIVERY MODE(S):** High Flex

Module 1: Measurement Systems. At the end of this module students will be able to define and discuss the common units and conversions used in veterinary medicine.

Module 2: Drug Administration. At the end of this module students will be able to define and discuss veterinary terms related to medications, the ways to safely administer medications and how to interpret drug labels.

Module 3: Dose Calculations. At the end of this module students will be able to define and discuss the parts of a syringe, how to calculate drug dosages for patients, and how to safely dispense medications.

Module 4: Dilutions & Solutions. At the end of this module students will be able to properly dilute medications and chemicals, prepare solutions and work with mixed solutions.

## **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:**

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

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

EXAMINATIONS	Mark Distribution
A. Quizzes & Assignments	40%
B. Final Exam	60%
	<b>100%</b>

\*A minimum of 60% must be obtained in order to successfully pass AH173.

#### COURSE SCHEDULE/TENTATIVE TIMELINE:

As posted

#### STUDENT RESPONSIBILITIES:

Enrolment at NWP assumes that the student will become a responsible citizen of the College. 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.

NWP servers may be monitored. Student accounts are visible via ABTutor and student activity on NWP networks may be monitored during supervised exams and/or anytime students are on NWP networks. The collection of and access to the personal information listed above as permitted by the *Freedom of Information and Protection of Privacy Act*.

**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/polytechnic-leadership/policies-directory>

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

**Additional Information:**

- Disruptive behavior in the class will result in the student being excused from the class – this includes use of cell phones or any hand held equipment that has not been approved by the instructor.
- Any student wishing to see a marked quiz or exam must make an appointment with the instructor to view or go over.