



DEPARTMENT OF ANIMAL SCIENCE

COURSE OUTLINE – Fall 2026

AH344: APPLIED IMMUNOLOGY – 1.5 (2-0-0) 32 Hours for 12 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.

INSTRUCTOR: Chris Mizzi DVM

PHONE: 780-835-6617

OFFICE: Remote

E-MAIL:

cmizzi@nwpolytech.ca

OFFICE HOURS: by appointment
(Cell 780-228-3018)

CALENDAR DESCRIPTION: A review of the purpose, functions and normal variations of the immune system is covered. Disorders of the immune system will be classified into broad categories and includes discussion of clinical signs, diagnostic procedures and treatment principles of some common immunological conditions. Students will learn the concepts and application of basic immunological tests and vaccination procedures. Principles of blood grouping and transfusions are covered.

PREREQUISITE(S)/COREQUISITE(S):

- Must be registered in the NWP Veterinary Technology Program
- AH141, AH240, AH242, AH249

REQUIRED MATERIALS:

No specific text required, but Anatomy and Lab Procedures textbooks have some pertinent information and readings may be assigned. Students must have access to a computer with a camera and reliable internet connection.

DELIVERY MODE(S):

Lecture will be delivered remotely via zoom. Technological support is available through helpdesk@nwpolytech.ab.ca.

LEARNING OUTCOMES:

The Immune System: Structure & Function:

Upon successful completion of this unit, you will be able to define and discuss structures and functions of the immune system.

Disorders of the Immune System:

Upon successful completion of this unit, you will be able to describe and discuss disorders of the immune system.

Use of Immunological Concepts in Veterinary Medicine:

Upon successful completion of this unit, you will be able to define and discuss common testing methods using immunological concepts as well as other means of using the immune system to combat or prevent disease.

Blood Typing and Transfusions:

Upon successful completion of this unit, you will be able to describe and discuss blood typing and its importance for blood transfusions.

Vaccinations and Vaccines:

Upon successful completion of this unit, you will be able to discuss vaccination and its importance and describe the various types of vaccines.

Vaccines and Disease Prevention:

Upon successful completion of this unit, you will be able to describe the diseases for which vaccines are available and apply the use of vaccines to prevent the diseases

TRANSFERABILITY:

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

**** For courses with alpha (letter) grading, a 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.**

		Mark Distribution
	A. Quizzes & Assignments	30%
	B. Midterm Exam	30%
	C. Final Exam	40%
		100%

*A minimum of 60% must be obtained to successfully pass AH443.

GRADING CRITERIA

Please note that most institutions 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

COURSE SCHEDULE/TENTATIVE TIMELINE:

See course objectives on myClass for tentative timeline

STUDENT RESPONSIBILITIES:

Enrolment at NWP assumes that the student will become a responsible citizen of the Institute. 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 their education by researching academic requirements and policies;



demonstrating courtesy and respect toward others; and respecting instructor expectations concerning attendance, assignments, deadlines, and appointments.

Veterinary Technology Program Attendance & Conduct Summary

- **Zero Tolerance for Impairment:** Attending labs, exams/quizzes, lectures, or guest speaker events under the influence of alcohol or impairing substances (including certain medications) is strictly prohibited. Violations result in unexcused absences and a mark of zero.
- **Mandatory Attendance:** Attendance is required for all exams, guest speakers and labs. Arriving late to labs, lectures, quizzes/exams will be considered an unexcused absence. Unexcused absences (at the instructor's discretion) result in:
 - **5% deduction** from the final course grade (labs/guest speakers)
- **Absence Approval:** Absences must be approved in advance or as soon as possible afterward with valid written documentation (e.g., doctor's note). Employment conflicts are not considered valid excuses.
- Excused absences do not exempt students from required work or deadlines.

INFORMATION TECHNOLOGY

- 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 <https://www.nwpolytech.ca/about/polytechnic-leadership/policies-directory>.

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

