

## DEPARTMENT OF ANIMAL SCIENCE

### COURSE OUTLINE – Fall 2025

#### AH345 CLINICAL PROCEDURES I – 2 (0-0-5.5) 88 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.

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<b>OFFICE HOURS:</b>	See posted schedules		

#### CALENDAR DESCRIPTION:

Review of skills learned throughout the program by performing the tasks and responsibilities of a Veterinary Technologist in a clinic and pharmacy setting. The student will perform reception duties, book, admit and discharge patients, perform laboratory tests, administer medications, monitor patients and discuss cases on rounds, maintain records, files and inventories and many other duties required of a Veterinary Technologist in a private practice. The student is expected to demonstrate teamwork and co-operation at all times.

## PREREQUISITE(S)/COREQUISITE:

- Must be registered in the NWP Veterinary Technology Program
- PREREQUISITE AH141, AH173, AH240, AH246,
- COREQUISITE AH340, AH342, AND AH348
- Must be an Active ABVMA Student Member in good standing

## REQUIRED TEXT/RESOURCE MATERIALS:

- Joanna M. Bassert, McCurnin's *Clinical Textbook for Veterinary Technicians*, Elsevier, 10<sup>th</sup> or 11<sup>th</sup> Edition.
- Kristin J. Holtgrew-Bohling, *Mosby's Veterinary PDQ*, Elsevier, 4<sup>th</sup> Edition.

## DELIVERY MODE(S):

Onsite Delivery. This course is delivered onsite at the NWP Fairview campus.

## LEARNING OUTCOMES:

See posted lab and clinic schedule. Lab designation may be subject to change.

- Sterile Tech #1
  - Upon successful completion of this Module, you will be able to describe and demonstrate the appropriate use of surgical instruments and supplies; prepare facilities equipment for aseptic procedures.
- Sterile Tech #2
  - Upon successful completion of this Module, you will be able to prepare and perform aseptic surgical scrub, describe and demonstrate appropriate operating room conduct and maintain operating room asepsis
- Sterile Tech #3
  - Upon successful completion of this Module, you will be able to describe and demonstrate the preparation of and equipment for the patient for general surgery, describe and demonstrate draping of a patient, describe and demonstrate how to properly pass instruments and supplies during general surgery.
  
- Suture Lab
  - Upon successful completion of this Module, you will be able to identify common suture material, suture patterns and knots used in veterinary practice.



- Large Animal Applied Anatomy Review
  - Students are expected to complete a large animal practical review of anatomy on a live bovine or equine. Refer to Applied Anatomy study guide.
- Canine Venipuncture
  - Upon successful completion of this Module, you will be able to discuss and perform venipuncture, intravenous catheterization and initiate.
- Feline Venipuncture
  - Upon successful completion of this Module, you will be able to discuss and perform venipuncture, intravenous catheterization in the cat and review maintenance of manual IV fluid therapy in the feline.
- Intro to Anesthesia
  - Upon successful completion of this Module, you will be able to describe and demonstrate the assembly of an anesthetic machine with basic knowledge of the function of the various parts and the ability to identify and properly assemble the anesthetic system ;Routine maintenance of the anesthetic machine; anesthetic precheck for leaks and filling of isoflurane vaporizers
- Monitoring of Anesthesia
  - Upon successful completion of this Module, you will be able to describe and demonstrate the basic principles of anesthetic monitoring using patient's Vital signs, Reflexes and machine generated parameters to determine anesthetic depth of patient and when to notify the veterinarian in charge.
- Introduction to Canine Anesthesia
  - Upon successful completion of this Module, you will be able to describe and demonstrate set-up of gas anesthetic machine; Recognize and interpret the physiological parameters found on the patient in the pre-anesthetic exam; Demonstrate the use of different pre-medications; Demonstrate different induction methods used; Demonstrate proper intubation technique; Demonstrate maintaining proper anesthetic depth through interpretation of the symptoms of the different stages of anesthetic and appropriate use of flow meter, vaporizer and pop-off valve; Demonstrate proper monitoring of the patient physiological parameters and recording them on an anesthetic log; Demonstrate proper disconnection and extubation procedure
- Introduction to Feline Anesthesia
  - Upon successful completion of this Module, you will be able to describe and demonstrate set-up of gas anesthetic machine for feline patients; Recognize and interpret the physiological parameters found on the patient in the pre-anesthetic exam; Demonstrate the use of different pre-medications; Demonstrate different induction methods used in cats; Demonstrate proper intubation technique in cats; Demonstrate maintaining proper anesthetic depth through interpretation of the symptoms of the different stages of anesthetic and appropriate use of flow meter, vaporizer and pop-off valve; Demonstrate proper monitoring of the patient physiological parameters and recording them on an anesthetic log;



Demonstrate proper disconnection and extubation procedure; Recognize and describe the danger posed by laryngeal spasms in the cat.

- Advanced Animal Nursing Techniques
  - Upon successful completion of this Module, you will be able to discuss and perform various regional/local anesthetic blocks and demonstrate basic CRI calculations.
- Sanitation/Clinic rotations
  - Learners will be given the opportunity to independently review techniques already learned in prerequisite courses to demonstrate proper modalities of animal husbandry, not solely limited to cleaning and disinfecting animal housing, to prevent disease transmission and facilitate a modern veterinary clinic environment.
- Sheep Lab
  - Upon successful completion of this Module, you will be able to describe and demonstrate restraint of sheep for veterinary procedures such as SQ, IM or IV medications; and collect blood from the jugular vein using the vacutainer system.
- Equine Oral & Parenterals
  - Upon successful completion of this Module, you will be able to describe and demonstrate identification of horses for legal purposes; normal values of vital signs for the horse; IM injection, IV Venipuncture and oral deworming and the student will be able to describe restraint of a horse using a twitch and administration of intranasal vaccines.
- Cattle Handling
  - Upon successful completion of this Module, the student will be able to discuss and define vaccination procedures for cattle, how to process cattle in a chute system and the methods used for pregnancy diagnosis.
- Goat Lab
  - Upon successful completion of this Module, students will be able to: Handle goats properly and do a physical exam; Halter a goat; perform Subcutaneous injections and Hoof trim.
- Bovine Orals & Parenterals
  - Upon successful completion of this Module, students will be able to: Administer large volumes of fluids via stomach tube and Frick speculum; Administer small volumes of fluids via drenching; Administer boluses via balling gun; Insert a Drinkwater speculum.
- Equine Dental
  - Upon successful completion of this Module, you will be able to describe and define the reasons why an equine dental is performed, how it is performed and the benefits to the horse. The student will also be able to discuss common dental

problems in horses and how to use and maintain the equipment for performing equine dentals.

- Bovine Epidurals/IV
  - Upon successful completion of this Module, you will be able to describe and demonstrate restraint of cattle; gain intravenous access in a variety of anatomic locations; procedures for epidural placement in the cow.
- Special Bovine Anesthesia Techniques
  - Upon successful completion of this Module, you will be able to describe and demonstrate cornual nerve, line or an inverted L local anesthetic block; recognize and know the names of surgical instruments used for bovine castration and dehorning; describe the process of infusing medications into the mammary gland; and demonstrate a skin scraping.
- Equine Sheath Cleaning
  - Upon successful completion of this Module, you will be able to describe and define the reasons why sheath cleaning is performed, how it is performed and the benefits to the horse. The student will demonstrate sheath cleaning on sedated horses for clinical use.

**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:**

Students are evaluated on timeliness, presentation, sanitation duties, clinic duties, medical records, conflict resolution, teamwork and attitude.

See NWP VT SOP binder and/or Comp Tracker for pass requirements and deductions.

<b>EXAMINATIONS</b>	<b>Mark Distribution</b>
<b>A. Lab and Clinic</b>	<b>100%</b>
	<b>100%</b>

\*A minimum of 80% must be obtained in order to successfully pass AH345. 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 material handed in to an instructor must be in blue or black pen, no white out, medical corrections only.

## GRADING CRITERIA:

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

### Grading Chart for course with Credit/No Credit Grading:

Alpha Grade	4-Point Equivalence	Percentage Conversion (unless otherwise specified in the Course Outline)	Descriptor
CR	N/A	80-100	Credit
NC	N/A	0-79	No Credit

## COURSE SCHEDULE/TENTATIVE TIMELINE:

As posted see separate schedule for details.

## STUDENT RESPONSIBILITIES:

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

### Veterinary Technology Program Attendance & Conduct Summary

- **Zero Tolerance for Impairment:** Attending labs, exams/quizzes, lectures, animal care duties, 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.

- **Lab Preparation:** Students must arrive at labs properly dressed, equipped, and prepared (including assigned readings). Unprepared students may be dismissed and a 5% deduction will occur off the final grade.
- **Mandatory Attendance:** Attendance is required for all labs, exams, guest speakers, and animal care duties. Arriving late to labs, lectures, quizzes/exams will be considered an unexcused absence. Unexcused absences (at the instructors discretion) result in:
  - **5% deduction** from the final course grade (labs/guest speakers, animal care duties)
  - **3 or more unexcused absences** in animal care will lead to automatic failure of the course.
- **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.
- **Make-Up Policy:** Labs, lectures, guest speakers, and animal care duties cannot be made up. Missed assessments due to unexcused absences receive a grade of zero. Excused absences do not exempt students from required work or deadlines.
- **Exam Conduct:** No electronic devices (phones, smartwatches, headphones, tablets) are permitted during exams or evaluations. Having one present will result in immediate dismissal and a grade of 0%.
- **Animal Care Duties:** Animal care related duties refer to the provision of essential care for program housed animals including but not limited to: cats, dogs, horses, cattle, rabbits, mice (walking, behaviour modification / observation and documentation). Students are required to participate based on a rotation schedule which will include weekends and holidays. Not doing so according to set guidelines will result in deductions. Schedule changes are limited and must be approved by the instructor prior to the scheduled time. See Clinic/Sanitation Contract and information sheet for specific guidelines and deductions.
- **Further Guidelines:**
  - Spelling errors in exams/quizzes, assignments and medical records will result in a 0.5% deduction for each occurrence.
  - All handwritten materials that are submitted to the instructor must be using blue or black pen, no white out and using appropriate medical corrections.
- Refer to the **NWP Veterinary Technology Student Competency Checklist** and **Clinic/Sanitation Contract** for detailed expectations and grading criteria.

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

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