

DEPARTMENT OF ANIMAL SCIENCE

COURSE OUTLINE – FALL 2022

AH 141 ANATOMY AND PHYSIOLOGY I - 4.5 (5.5-0-0.5) 96 HOURS

16 Weeks

Grande Prairie Regional College respectfully acknowledges that we are located on Treaty 8 territory, the traditional homeland and gathering place for many diverse Indigenous peoples. We are honoured to be on the ancestral lands of the Cree, Dene/Beaver and Métis, whose histories, languages, and cultures continue to influence our vibrant community. We are grateful to have the opportunity to work, learn, and live on this land.

| INSTRUCTOR: | Dr. S. Klassen DVM | PHONE: | (780) 835-6633 or CELL: (780)864-0718 |
|----------------------|--------------------|---------|--|
| OFFICE: | AS 141 | E-MAIL: | sklassen@nwpolytech.ca |
| OFFICE HOURS: | As posted | | |

FALL 2022 DELIVERY: Mixed or High-Flex Delivery: this course will largely be delivered onsite with the possibility of occasional remote lectures via ZOOM. Students must have a computer with a webcam and reliable internet connection. Exams will occur onsite/in-person as well but may require a personal computer to complete. Technological support is available through helpdesk@nwpolytech.ca

CALENDAR DESCRIPTION:

Students will develop proper anatomical and physiological terminology. Instruction of cellular biology and physiology will progress into an understanding of organization of cell into tissues, organs and body systems. A working knowledge of body systems will include basic components and functions, gross anatomical features, common abnormalities, interactions with other systems, surgical and diagnostic imaging considerations and location and/or palpation in live animals or cadavers. The student will learn the names, location and function of important anatomical structures in common domestic animal species with an emphasis on the application of practical anatomical knowledge required for mastery of subsequent courses in medical and surgical nursing, x-ray technology, etc.

PREREQUISITE(S)/COREQUISITE:

• Must be registered in the GPRC Animal Health Technology Program

REQUIRED TEXT/RESOURCE MATERIALS:

- Colville & Bassert, *Clinical Anatomy and Physiology for Veterinary Technicians*, 3rd edition
- Bowden, Introduction to Veterinary Anatomy & Physiology Workbook, Elsevier, 2nd ed.
- Singh, *Saunders Veterinary Anatomy Coloring Book*, Elsevier, 2nd ed.

DELIVERY MODE(S):

Lecture and Lab

TRANSFERABILITY: (if applicable)

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 <u>http://www.transferalberta.ca</u>.

** 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:

GRADING CONVERSION CHART for ANIMAL HEALTH TECHNOLOGY

OVERALL GRADE POINT AVERAGE HAS TO BE 2.0 OR HIGHER TO BE

SUCCESSFUL IN THE AHT PROGRAM.

| Alpha Grade | 4-point Equivalent | Percentage Guidelines | Alpha Grade | 4-point Equivalent | Percentage Guidelines |
|----------------|-----------------------|--------------------------|----------------|-----------------------|--------------------------|
| A+ | 4.0 | 90-100 | C+ | 2.3 | 67-69 |
| А | 4.0 | 85-89 | С | 2.0 | 63-66 |
| A- | 3.7 | 80-84 | C- | 1.7 | 60-62 |
| B+ | 3.3 | 77-79 | FAIL | 1.3 | 55-59 |
| В | 3.0 | 73-76 | FAIL | 1.0 | 50-54 |
| В- | 2.7 | 70-72 | WF | 0.0 | 00-49 |

EXAMINATIONS & ATTENDANCE

Please review NWP's Examination and Grading policies.

Attendance will not be assigned a mark in this class; however, attendance will be taken, and unexplained or unexcused absences will result in mark deductions. 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. Assignments MUST be submitted by the due date: a mark of zero will be awarded for any late assignment.

Situations which may also result in mark deductions (at the instructor's discretion):

- Unexplained or unexcused absence (at the instructor's discretion)
- Coming late to class, especially if this is a regular occurrence
- Use of cell phone in class
- Use of computer or other electronics in class, unless approved beforehand by instructor. If use is approved, students using laptops or tablets must sit at the back of the class, without headphones or earbuds, so as not to distract other students. If students are using these devices for reasons other than what is required for class, deductions may occur
- Spelling errors in assignments and exams will ALWAYS result in deductions
- Any handwritten material submitted to an instructor must be in blue or black pen, no white out, medical corrections only
- Use of any unapproved electronics during quizzes or exams will be considered cheating

A personal laptop computer will be required for some exams and quizzes, but plug-in availability is limited so charge your computer ahead of time.

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.

| | Mark Distribution |
|-------------------------------------|-------------------|
| A. Quizzes & Assignments & Projects | 40% |
| B. Midterm Exam | 20% |
| C. Final Written Exam | 30% |
| D. Final Practical Exam | 10% |
| TOTAL | 100% |

A minimum of 60% must be obtained in order to successfully pass AH141.

COURSE SCHEDULE/TENTATIVE TIMELINE:

<u>NOTE</u>: Not all of these units will be covered in AH141. The course content continues in AH240.

A. Introduction to Anatomy & Physiology

Upon successful completion of this unit, you will be able to define and identify anatomy and physiology, and terms of direction and planes of reference as they refer to animal anatomy

B. Cells & Tissues

Upon successful completion of this unit, you will be able to define and discuss cellular physiology and the organization of cells into tissues.

C. Skeletal System

Upon successful completion of this unit, you will be able to identify the components of the skeletal systems of common domestic animals, and discuss the composition and function of bones.

D. Muscular System

Upon successful completion of this unit, you will be able to identify some of the muscles and muscle groups of common domestic animals, and discuss the composition and function of muscles.

E. Integumentary System

Upon successful completion of this unit, you will be able to define integument and identify its components, and discuss the functions of the integumentary system.

F. Cardiovascular System

Upon successful completion of this unit, you will be able to identify the components of the cardiovascular system and discuss their functions.

G. Respiratory System

Upon successful completion of this unit, you will be able to identify the components of the respiratory system and discuss their functions.

H. Nervous System

Upon successful completion of this unit, you will be able to identify the components of the nervous system and discuss their functions.

I. Special Senses

Upon successful completion of this unit, you will be able to identify the main anatomical features of the ear, eye, and nasal cavity, and discuss the functions of each of the special senses.

J. Digestive System

Upon successful completion of this unit, you will be able to identify the components of the digestive system and discuss their functions.

K. Urinary System

Upon successful completion of this unit, you will be able to identify the components of the urinary system and discuss their functions.

L. Endocrine & Immune Systems

Upon successful completion of this unit, you will be able to identify the components of the immune and endocrine systems, and discuss their functions.

M. Reproductive System

Upon successful completion of this unit, you will be able to identify the components of the reproductive systems of the male and female, and discuss their functions.

STUDENT RESPONSIBILITIES:

Enrolment at GPRC 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.

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at https://www.nwpolytech.ca/programs/calendar/ or the Student Rights and Responsibilities policy which can be found at https://www.nwpolytech.ca/programs/calendar/ or the Student Rights and Responsibilities policy which can be found 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.

YEAR: 2022