DEPARTMENT OF ANIMAL SCIENCE

COURSE OUTLINE – WINTER 2021

AH 249 HEMATOLOGY – 3.5 (3-0-3) 96 HOURS

16 Weeks

INSTRUCTOR:	Karlee Worobetz	**PHONE:**	(780) 835 6686
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OFFICE HOURS:	Online Office Hours: Monday to Friday 9am-4pm		

WINTER 2021 DELIVERY:

Mixed Delivery – Remote and Onsite. This course is delivered remotely with some face-to-face/onsite components at the GPRC [*Fairview*] campus.

- For the remote delivery components: students must have a computer with a webcam and reliable internet connection. Technological support is available through helpdesk@gprc.ab.ca.
- For the onsite components: students must supply their own mask [and/or face shield] and follow GPRC Campus Access Guidelines and Expectations.

Note: GPRC reserves the right to change the course delivery.

CALENDAR DESCRIPTION:

Students are introduced to hematological procedures and will learn to identify normal blood parameters and cells. A review of the CBC in the lab and lecture will improve the student's ability to perform hematological tests. The student will learn to evaluate the erythron, leukon, and hemostasis by recognizing and interpreting abnormal results and identifying possible causes of those results. Hemopoietic neoplasia is discussed. Case studies will be used extensively in presentation of course material.

PREREQUISITE(S)/COREQUISITE:

- Must be registered in the GPRC Animal Health Technology Program
- AH141 and AH174

REQUIRED TEXT/RESOURCE MATERIALS:

- ***McCurnin's Clinical Textbook for Veterinary Technicians,*** Eight Edition

- ***Laboratory Urinalysis and Hematology***, Teton New Media
- **Computer/Tablet or device with working internet and video**

DELIVERY MODE(S):
MIXED USING D2L global software for Lecture purposes. The Brightspace learning management system, which is a cloud-based software used by GPRC, for online and blended classroom learning. Zoom will be used to deliver classroom instruction and lab components will be online and in person.

COURSE OBJECTIVES/LEARNING OUTCOMES:
Listed below in Timeline.

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.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:

GRADING CRITERIA:
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
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		FAIL	1.3	55-59
B	3.0	73-76		FAIL	1.0	50-54
B-	2.7	70-72		WF	0.0	00-49

To pass this course, student must achieve a minimum overall grade of 60% in the entire course. Attendance is essential for success in this class. The student will be assigned a mark of zero for those assignments/exams/ etc. missed without a valid absence. If the student contacts the instructor prior to

missing a class/lab/exam/etc., and if the student has an acceptable excuse (the validity of the excuse is at the discretion of the instructor and will require documentation such as a note from a doctor), the student may be excused without penalty and be given access to the missed material. Overall excessive absence, coming to class late, or leaving during class, may result in mark deductions at the instructor's discretion. Video during online lecture must be active in order to be considered in attendance. Unexcused absences of more than 3 hours of class will be investigated and mark deductions WILL result (1% from the final course mark for each hour of unexcused absence).

For examination policies, please see the GPRC Examination Policy document.
Supplemental final exam is not given for the Final Lab Exam.

Absence from a scheduled lab class will result in a mark of zero for any assignments or reports for that lab, and also in a deduction of 5% from the final mark for each lab missed unless the student contacts the instructor prior to the lab and the instructor deems the absence valid. Labs will not be made up later. Students must attend labs as scheduled unless prior arrangements with the instructor have been made. Without proper arrangements, students changing labs will be marked as absent. Marks will be deducted for inadequate clean-up in labs and/or inadequate preparation or dress.

	Mark Distribution
A. Quizzes & Assignments(includes lab assignments)	30%
B. Midterm Exam	20%
C. Final Exam (written)	30%
D. Final Exam (lab/practical)	20%
	100%

*A minimum of 60% must be obtained in order to successfully pass AH 249.

COURSE SCHEDULE/TENTATIVE TIMELINE:

Introduction

Upon successful completion of this unit, you will be able to explain and discuss the composition and functions of blood.

The Erythrocyte (Red Blood Cell)

Upon successful completion of this unit, you will be able to describe and discuss the erythrocyte (Red Blood Cell)

The Leukocyte (White Blood Cell)

Upon successful completion of this unit, you will be able to define and discuss the leukocyte (White Blood Cell)

The Thrombocyte (Platelet)

Upon successful completion of this unit, you will be able to explain and discuss the knowledge obtained regarding the platelet (thrombocyte).

Hematological Samples

Upon successful completion of this unit, you will be able to discuss and apply the knowledge acquired regarding obtaining, processing and storing hematological samples.

Erythrocyte Abnormalities

Upon successful completion of this unit, you will be able to describe and discuss normal and abnormal erythrocyte morphology and diseases and conditions involving red blood cells.

Leukocyte Abnormalities

Upon successful completion of this unit, you will be able to describe and discuss normal and abnormal leukocytes and evaluate leukograms to identify common disorders and diseases involving white blood cells.

Hemostasis

Upon successful completion of this unit, you will be able to describe and discuss the mechanisms and defects of hemostasis (coagulation).

Hematology Laboratory

Upon successful completion of this laboratory, you will be able to demonstrate and explain the procedure for and the outcome of a complete blood count and other laboratory tests used on blood from normal and abnormal animals and identify and explain the abnormal results of these tests.

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 College Admission Guide at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at http://www.gprc.ab.ca/about/administration/policies/

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