



**DEPARTMENT OF ANIMAL SCIENCE**

**COURSE OUTLINE – WINTER 2020**

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

**16 Weeks**

<b>INSTRUCTOR:</b>	Karlee Worobetz	<b>PHONE:</b>	(780) 835 6686
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<b>OFFICE HOURS:</b>	See posted schedule		

**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

**DELIVERY MODE(S):**

**Lab**

**Lecture**

**COURSE OBJECTIVES/LEARNING OUTCOMES:**

**TRANSFERABILITY:** (if applicable)

A list of institutions to which this course transfers (For example: UA, UC, UL, AU, GMU, CU, CUC, KUC. Please note that this is a sample and it must be replaced by your specific course transfer)

\*Warning: Although we strive to make the transferability information in this document up-to-date and accurate, the student has the final responsibility for ensuring the transferability of this course to Alberta Colleges and Universities. Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at Alberta Transfer Guide main page <http://www.transferalberta.ca> or, if you do not want to navigate through few links, at <http://alis.alberta.ca/ps/tsp/ta/tbi/onlineSearch.html?SearchMode=S&step=2>

\*\* 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

**(The following criteria may be changed to suite the particular course/instructor)**

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

<b>GRADING CRITERIA:</b>
<b>GRADING CONVERSION CHART for ANIMAL HEALTH TECHNOLOGY</b>
<b>OVERALL GRADE POINT AVERAGE HAS TO BE 2.0 OR HIGHER TO BE SUCCESSFUL IN THE AHT PROGRAM.</b>

<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>		<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>
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

## EVALUATIONS:

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. 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.

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

\*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).

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### **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.

YEAR:

