



**DEPARTMENT OF ANIMAL HEALTH TECHNOLOGY**

**COURSE OUTLINE – AH249 3.5 (3-0-3)**

**Hematology**

**Winter 2015**

**INSTRUCTOR:** Dr. S. Klassen                      **PHONE:** 780-835-6633  
**OFFICE:** FAS 141                                      **E-MAIL:** sklassen@gprc.ab.ca

**OFFICE HOURS:** As posted

**PREREQUISITE(S)/COREQUISITE:**

Students must complete and pass AH172, AH173, & AH174 <sup>04/11</sup>.

**REQUIRED TEXT/RESOURCE MATERIALS:**

Hendrix, *Laboratory Procedures for Veterinary Technicians*, Mosby, 2007 , 5th Edition  
*Laboratory Urinalysis and Hematology*, Teton New Media

**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.

**CREDITS: 3.5**

**CONTACT HOURS: 96**

**DELIVERY MODE(S): Lecture and Labs**

## STUDENT EVALUATION:

Attendance will not be assigned a mark in this class, but if a student misses a class or a lab (including quizzes and exams), any assignments and/or quizzes and/or exams and/or handouts, whether scheduled or not, that occur or are distributed in the class or lab that was missed, will not be provided to the student or made up in any way. The student will be assigned a mark of zero for those assignments/exams/ etc. missed. 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 may 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. For further clarification on the attendance policy, see the AHT Program guidelines in the orientation booklet.

Supplemental final exam is not generally available for this course

Absence from a laboratory 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.

## GRADING CRITERIA:

	Mark Distribution
A. Quizzes	15%
B. Midterm Exam (written)	20%
C. Lab Reports & Assignments	10%
D. Final Exam (Lab)	16%
E. Final Exam (Written)	39%
	<b>100%</b>

<b>GRANDE PRAIRIE REGIONAL COLLEGE</b>			
<b>GRADING CONVERSION CHART</b>			
<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>	<b>Designation</b>
<b>A<sup>+</sup></b>	<b>4.0</b>	<b>90 – 100</b>	<b>EXCELLENT</b>
<b>A</b>	<b>4.0</b>	<b>85 – 89</b>	
<b>A<sup>-</sup></b>	<b>3.7</b>	<b>80 – 84</b>	<b>FIRST CLASS STANDING</b>
<b>B<sup>+</sup></b>	<b>3.3</b>	<b>77 – 79</b>	
<b>B</b>	<b>3.0</b>	<b>73 – 76</b>	<b>GOOD</b>
<b>B<sup>-</sup></b>	<b>2.7</b>	<b>70 – 72</b>	
<b>C<sup>+</sup></b>	<b>2.3</b>	<b>67 – 69</b>	<b>SATISFACTORY</b>
<b>C</b>	<b>2.0</b>	<b>63 – 66</b>	
<b>C<sup>-</sup></b>	<b>1.7</b>	<b>60 – 62</b>	<b>MINIMAL PASS*</b>
<b>F</b>	<b>1.3</b>	<b>55 – 59</b>	<b>FAIL</b>
	<b>1.0</b>	<b>50 – 54</b>	
	<b>0.0</b>	<b>0 – 49</b>	
<b>WF</b>	<b>0.0</b>	<b>0</b>	<b>FAIL, withdrawal after the deadline</b>

\*overall grade average has to be 2.0 or higher to be successful in the program.

**TRANSFERABILITY:**

\*\* 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

**STATEMENT ON PLAGIARISM AND CHEATING:**

Please refer to the College calendar regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

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## **EXAMINATIONS:**

Any communication or electronic devices are not allowed in the classroom during the exam.

All quizzes and exams are to be written in black or blue pen. All corrections are to be done with medical corrections. Any unreadable writing will be marked incorrect. Spelling does count.

For the full exam policy, please see GPRC's Examination Policy document.

**STUDENT RESPONSIBILITIES:** Enrollment at the Grand Prairie Regional College-Fairview 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 College 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.

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## **OBJECTIVES**

### **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 unit, 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.