



**DEPARTMENT OF ANIMAL HEALTH TECHNOLOGY  
COURSE OUTLINE – AH 342 LABORATORY PROCEDURES II**

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

**OFFICE  
HOURS:** 9:00 AM-4:00 PM or as posted

**PREREQUISITE(S)/COREQUISITE:**

Students must complete and pass AH141, AH241, AH142, AH220 and AH221  
04/11

**REQUIRED TEXT/RESOURCE MATERIALS:**

- Hendrix, *Laboratory Procedures for Veterinary Technicians*, Mosby
- Sink & Feldman, *Laboratory Urinalysis and Hematology*, Teton NewMedia,

**CALENDAR DESCRIPTION:**

Students will develop knowledge and skills covered in previous lab courses, as well as learning to collect and prepare and evaluate samples for clinical chemistry and cytology.

## **Major Topics**

- A.** Hematology Review
- B.** Sample Collection
- C.** Urinary Tract & Urinalysis
- D.** Enzymology & Enzyme Assays
- E.** Liver & Kidney Function Tests
- F.** Blood Glucose & Pancreas Function
- G.** Skeletal Muscle & Brain Function
- H.** Adrenal, Thyroid, & Parathyroid Gland Function
- I.** Vaginal Cytology
- J.** Semen Evaluation
- K.** Basic Cytology

### **CREDIT/CONTACT HOURS:**

Credits = 6   Hours = 96

### **DELIVERY MODE(S):**

Lectures and labs

**GRADING CRITERIA:**

<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.

## **EVALUATION:**

Please review GPRC's Examination and Grading policies.

Attendance will not be assigned a mark in this class, but if a student misses a class or a lab (including quizzes and exams) or anything else that happens in class (eg. assignments and/or quizzes and/or exams and/or handouts, whether scheduled or not), these will not necessarily 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 and the GPRC Policies and Procedures.

Absence from a laboratory will result in a mark of zero for any assignments or reports assigned in that lab, and also in a deduction of 5% off the final mark for the course for each lab missed unless the student contacts the instructor PRIOR to the lab and the instructor deems the absence as valid (see the attendance policy). Labs will not be made up later. Students must attend the labs AS SCHEDULED unless PRIOR arrangements have been made with the instructor. Students changing labs without approval by the instructor will be marked as absent.

Marks will be deducted for inadequate clean-up and inappropriate dress (including no lab coat) in labs.

Supplemental exams are NOT available for the lab exams (lecture final exam ONLY).

## Mark Distribution

A. Quizzes	15%
B. Midterm Exam	20%
C. Final Lecture Exam	35%
D. Lab Assignments & Reports	10%
E. Final Lab Exam	15%
	<b>100%</b>

### **STUDENT RESPONSIBILITIES:**

Students **MUST** wear a clean lab coat to all labs; scrubs alone are not adequate. Open-toed shoes and dangling jewelry are considered safety hazards and are not allowed in labs.

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

### **STATEMENT ON PLAGIARISM AND CHEATING:**

Please refer to pages 49-50 of the College calendar regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

## **COURSE SCHEDULE/TENTATIVE TIMELINE:**

### **A. Hematology Review**

Upon successful completion of this unit, you will be able to review and apply clinical hematology principles and tests.

### **B. Sample Collection**

Upon successful completion of this unit, you will be able to discuss and demonstrate safe and effective biological sample collection and storage methods.

### **C. Urinary Tract & Urinalysis**

Upon successful completion of this unit, you will be able to discuss the function of the urinary tract and evaluate the function using urinalysis.

### **D. Enzymology & Enzyme Assays**

Upon successful completion of this unit, you will be able to define and apply enzymology and enzyme assays.

### **E. Liver & Kidney Function Tests**

Upon successful completion of this unit, you will be able to discuss the functions of the liver and kidneys, and describe and apply the tests used to evaluate these functions.

### **F. Blood Glucose & Pancreas Function**

Upon successful completion of this unit, you will be able to evaluate and discuss the functions of the pancreas and blood glucose.

### **G. Skeletal Muscle & Brain Function**

Upon successful completion of this unit, you will be able to evaluate and discuss damage to the skeletal muscle and brain.

## **H. Adrenal, Thyroid, & Parathyroid Gland Function**

Upon successful completion of this unit, you will be able to evaluate and discuss the functions of the adrenal, thyroid, and parathyroid glands.

## **I. Vaginal Cytology**

Upon successful completion of this unit, you will be able to evaluate and discuss vaginal cytology in the dog.

## **J. Semen Evaluation**

Upon successful completion of this unit, you will be able to evaluate and discuss the quality of animal semen.

## **K. Basic Cytology**

Upon successful completion of this unit, you will be able to identify the basic characteristics of normal and abnormal cytology of various samples.

**Created by:** Dr. Susan Klassen

Date:

Signature:

**Approved by:** Karlee Worobetz

Date:

Signature: