DEPARTMENT OF ANIMAL HEALTH TECHNOLOGY

COURSE OUTLINE – WINTER 2014

AH 443 THERIOGENOLOGY – 3.5/60

INSTRUCTOR: Christy Barlund, DVM **PHONE:** 780-835-6701
OFFICE: FAS 136 **E-MAIL:** cbarlund@gprc.ab.ca

OFFICE HOURS: 9:00-4:00 or as posted

PREREQUISITE(S)/COREQUISITE:
Students must complete and pass AH 241, AH 172, and AH247. O4/1

REQUIRED TEXT/RESOURCE MATERIALS:
Student Handouts will be provided.

CALENDAR DESCRIPTION:
Principles of cell division and inheritance are discussed. A review of anatomical and hormonal components of male and female reproduction systems prepares students to learn about breeding behaviors and common diseases or conditions of the reproductive system in various animals. Techniques used to assess or manipulate reproduction in veterinary medicine will be discussed and/or demonstrated. Instruction on gestation and parturition will be the main focus.

CREDIT/CONTACT HOURS:
Course Title: Theriogenology

Hours: 60

Credits: 3.5

DELIVERY MODE(S):

Lectures, Study Guide Notes

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**

EXAMINATIONS:

A passing grade in this course is a minimum of 60%. If a student misses a quiz without a validated reason, a mark of zero will be given and the student will not be allowed to rewrite that particular quiz.

Mark Distribution

Quizzes	20%
Assignments	15%
Mid Term	30%
Final Exam	35%

GRADING CRITERIA:

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

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

STUDENT RESPONSIBILITIES:

Enrolment at the 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:

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. Unit I **Principles of Cytogenetics**

Upon successful completion of this Learning Outcome Guide, you will be able to describe knowledge of cell division (meiosis, mitosis) and describe asexual reproduction.

B. Unit II **Basic Genetic Principles**

Upon successful completion of this Learning Outcome Guide, you will be able to describe and explain:

Mendellian Genetics

Principles of dominance/recessive

Punnet's square and predict patterns of inheritance

Briefly discuss genetic engineering

Briefly discuss principles of recombinant DNA

Briefly discuss cloning and embryo splitting

C. Unit III **Reproduction in Domestic Animals**

Upon successful completion of this Learning Outcome Guide, you will be able to:

Review the components and functions of the male reproductive system

Review the components of the female reproductive system

Discuss comparative reproductive anatomy of the major domestic species

Describe the influences of hormones on reproduction

Discuss breeding behaviours and estrous cycles

Discuss common diseases/conditions of the reproductive system

D. Unit IV **Common techniques used to assess or manipulate reproduction**

Upon successful completion of this Learning Outcome Guide, you will be able to describe knowledge of:

- Breeding soundness evaluations
- Semen collection
- Artificial insemination
- Methods of estrus control
- Principles of embryo transfer

E. Unit V **Pregnancy and Parturition**

Upon successful completion of this Learning Outcome Guide, you will be able to describe and explain knowledge of:

- Fertilization, implantation and types of placentation
- Normal periods of gestation in domestic animals
- Methods of pregnancy diagnosis and their applications
- Normal signs and stages of parturition
- Common diseases of pregnancy
- Dystocia and its management
- Explain methods of fetal extraction
- Care of obstetrical instruments

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

Created by: Christy Barlund, DVM Date: January 2, 2014

Signature:

Approved by: Karlee Worobetz, RAHT Date:

Signature: