Animal Reproduction

AGAH 1447

Course Syllabus

Chad Henry-Instructor
e-mail: chenry@ntcc.edu

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Course Description:

The study of male and female organ functions, endocrinology, and common management practices related to reproduction in domestic animals. The structure and function of each aspect will be covered in detail plus artificial insemination and palpation.

Textbook:

*Applied Animal Reproduction, 6*th Edition, H. Bearden and John Fuquay, Prentice Hall Publishers.

Course Goals:

Identify reproductive organs and functions; relate endocrinology to the reproductive process; implement managerial practices designed to improve reproductive efficiency and also become proficient in artificial insemination and pregnancy diagnosis by rectal palpation in cows.

General Course Requirements:

Class attendance is required. If you have more than three unexcused absences, you should consult with me about your grade. Anyone who wishes to withdraw from class must take the responsibility to formally drop with the Registrar; otherwise a failing grade will be given.

Office Hours:

MW 7:30-8:00, 1:00-1:30, 3:30-4:30 TR 7:30-8:00, 12:00-1:30, 3:30-4:30

Appointments with me may be scheduled at other times. Call for an appointment at (903) 434-8177, Office AGC 110. E-mail address: chenry@ntcc.edu

Grading:

Grades will be computed as follows:

(3) Exams:	65%
Class Participation:	10%
Lab:	25%

The grading scale below will be used to determine your final grade.

Points	grade
90-100	A
80- 89	B
70- 79	C
60- 69	D
BELOW 59%	F

Class Participation:

Class participation is based on attendance, classroom discussion, and participation.

Lab:

Your lab grade will be based on participation, attendance, and being able to demonstrate proper techniques in artificial insemination, pregnancy diagnosis, and heat detection in cattle. Lab work may require suitable clothing for outdoor farm settings.

ACADEMIC HONESTY POLICY

> "Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. **NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook."**

ADA Statement

It is the policy of Northeast Texas Community College to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to arrange an appointment with a College counselor to obtain a Request for Accommodations form. For more information, please refer to the Northeast Texas Community College Catalog or Student Handbook.

Course Objectives:

The Student should be able to:

-identify the organs and structures of the female reproductive system
-identify the organs and structures of the male reproductive system
-know the sources and functions of the major reproductive hormones
-understand the interaction between the reproductive hormones in regulating most reproductive processes
-describe how the functional anatomy and hormonal regulation are integrated in reproductive process
-understand the regulations of the estrous cycle
-discuss synchronization of estrus, superovulation, cystic ovaries
-describe production, maturation, and transport of gametes and fertilization
-understand the development of embryo to a fetus
-describe how the endocrine system regulates parturition
-know the importance of postpartum recovery and how it affects future reproductive efficiency
-know the importance of colostrums to the survival of the neonate
-understand the functional anatomy and regulation of mammary function
-discuss different ways to detect estrus
-discuss how to evaluate, process, and handle semen
-know the advantages and disadvantages of artificial insemination
-know the methods for artificial insemination
-know how to artificial inseminate cattle
-know how to diagnosis pregnancy in cattle
-discuss the importance of good reproductive management
-know the major causes of infertility and the best way to try and control them
-discuss the role nutrition plays in reproduction

Course Outline:

Week 1	Introduction and history
Week 2	Female reproductive system
Week 3	Male reproductive system
Week 4	Neuroendocrine regulators of reproduction
Week 5	Estrous cycle
Week 6	Spermatogenesis
Week 7	Ovigenesis
Week 8	Gestation
Week 9	Parturition
Week 10	Lactation
Week 11	Semen collection
Week 12	Semen Evaluation
Week 13	Insemination techniques
Week 14	Reproductive management
Week 15	Pregnancy diagnosis
Week 16	Nutritional management