I. TITLE:
Equine Reproduction

II. COURSE DESCRIPTION:
A comprehensive study of the reproductive anatomy and physiology of the stallion and brood mare, as well as the care of the foal from birth to weaning. Special attention is given to current management concepts prevalent in the equine industry today.

Prerequisite: AGR 302

III. PURPOSE:
To enable students to become competent in the management concepts of breeding and techniques of mating stallion and mare.

IV. COURSE OBJECTIVES:
After completion of this course the student should be able to:
A. Identify anatomy of male and female reproductive tract
B. Discuss conditions and causes of infertility
C. Describe influence of hormone secretions and seasonal variations in reproductive activity
D. Evaluate semen
E. Identify signs of estrus and record cyclic behavior for study
F. Explain methods of breeding
G. Explain gametogenesis
H. Describe foaling procedure
I. Describe care of foal until weaning time
J. Know when to seek veterinary assistance
K. Know and practice sage handling procedures of mares, stallions, and foals

V. CONTENT OUTLINE:
A. Infertility problems – normal ranges of reproductive efficiency
B. Spermatogenesis and oogenesis
C. Anatomy of reproduction
D. Periods of estrus
E. Signs of estrus  
F. Seasonal variations in reproduction  
G. Nutritional influences on reproduction  
H. Breeding Season Hygiene  
I. Trouble and solutions at foaling  
J. Factors affecting mare and stallion management  
K. Care of foal until weaning  
L. Care of geriatric mares and stallions

VI. INSTRUCTIONAL ACTIVITIES:

A. Reading assignments in text  
B. Outside reading assignments  
C. Planning of farm activities  
D. Collecting and checking semen  
E. Breeding of mares in class

VII. FIELD, CLINICAL, AND/OR LABORATORY EXPERIENCES:

None

VIII. RESOURCES:

A. *Equine Breeding Management and Foal Development*  
B. Artificial Insemination Equipment

IX. GRADING PROCEDURES:

A. Tested over materials covered in class, outside assignments, and lab participation  
B. Exam procedures: All exams will be taken at scheduled time, unless prior approval of instructor is given. Exception will require students to take an exam early or make-up exams will be given during finals week.  
C. Grading Scale  
   90-100 = A  
   80-89 = B  
   70-79 = C  
   60-69 = D  
   Below 60 = E

X. ATTENDANCE POLICY:

Please refer to the most current copy of the *Murray State University’s Undergraduate Bulletin*. 
XI. ACADEMIC HONESTY POLICY:

Please refer to the most current copy of the Murray State University’s Undergraduate Bulletin.

NOTE: The School of Agriculture Faculty have adopted and implemented an Academic Honesty Policy in addition to the University Honesty Policy, which can be found in the current Undergraduate Bulletin. The policy sets guidelines regarding acts of dishonesty and the procedure to follow should an event occur. It is each Agriculture student’s responsibility to obtain and read a copy of this document. The School’s Academic Honesty Policy can be obtained by asking for a copy from any Agriculture Faculty member or the Secretary.

XII. TEXT AND REFERENCES:


XIII. PREREQUISITES:

AGR 302

XIV. STATEMENT OF AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY:

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. For more information, contact Sabrina Y. Dial, Director of Equal Opportunity, Murray State University, 103 Wells Hall, Murray, KY 42071-3318. Telephone: 270-809-3155 (voice), 270-809-3361 (TDD).

XV. MSU SCHOOL OF AGRICULTURE CELL PHONE POLICY:

The School of Agriculture recognizes that in today’s world cell phones are a familiar and often necessary form of communication for students.

It shall be the policy of the School that no cell phone usage shall be allowed in class and/or labs without the prior consent of the course instructor. This shall include verbal calling, incoming calls, email, text messaging, and use of cell phone calculators on tests and quizzes.
Cell phones must be kept off and out of sight (i.e. secured to a person’s belt or kept in a bag or purse away from desks and lab counters). Should a student’s cell phone be visible, ring, or other form of unauthorized usage that is interruptive to the class or lab, the student may be asked to leave class and not return for that class/lab period. Upon prior consent of the instructor, a student may obtain permission to have their phone on in case of an emergency or in critical family situations.

This policy also includes pagers and other electronic equipment such as blackberries and/or computers/laptops.