

Jordan University of Science and Technology
Faculty of Agriculture
Department of Animal Production
Semester

Course Information	
Course Title	REPRODUCTIVE PHYSIOLOGY
Course Number	AP 423
Prerequisites	AP 321
Course Website	
Instructor	Dr. Mustafa Beni-Domi
Office Location	M1 L3
Office Phone	7201000 Ext. 22221
Office Hours	8-9 am
E-mail	huseinmq@just.edu.jo
Teaching Assistant	
Course Description	

Text Book	
Title	Applied Animal Reproduction
Author(s)	H. Joe Bearden and J. W. Fuquay
Publisher	
Year	1997
Edition	4th edition
Book Website	
References	1. Reproduction in farm animals (Hafez, 1993). 2. Veterinary Endocrinology and Reproduction (McDonald, 1989). 3. Supplemental material will be handed out as needed.

Assessment Policy		
Assessment Type	Expected Due Date	Weight
First Exam		30
Second Exam		30
Final Exam		40

Course Objectives	Weights
The course will give an overview of reproductive physiology and endocrinology, male and female reproduction, reproductive patterns and methods employed to optimize reproductive management of domestic species.	

Teaching & Learning Methods

Learning Outcomes: Upon successful completion of this course, students will be able to

Learn and acquire a complete overview of the reproductive processes. A major effort will be made to maintain clarity of terminology and concepts associated with reproductive physiology in farm animal species.

Learn and understand up-to-date physiological processes and mechanisms controlling reproduction involving gamete production, endocrine regulation, estrous cycle regulation, conception, gestation, parturition, lactation and reproductive management.

Useful Resources

Course Content

Week	Topics	Chapter in Text (handouts)
	History and introduction to reproductive physiology	
	Anatomy of the female reproductive tract	
	Anatomy of the male reproductive tract	
	Neuroendocrine Regulators of Reproduction <ul style="list-style-type: none"> - The pituitary gland and its reproductive hormones - Neuroendocrine control of the pituitary gland - Hormones of the gonads - Primary reproductive hormones of the adrenal cortex - Endocrine function of the uterine/placental unit - Reproductive role of prostaglandins - Regulation of hormonal receptor sites - Mechanisms of hormone actions 	
	Reproductive Processes <ul style="list-style-type: none"> - Sex differentiation and the male development - Puberty in the male - Spermatogenesis - Hormonal control of the testes and access. sex glands. - Capacitation of spermatozoa and acrosome reaction - Oogenesis - Puberty in the female - The estrous cycle - Stages of the estrous cycle - Hormonal regulation of the estrous cycle 	

	Ovulation	
	Gamete transport and Fertilization	
	Gestation	
	Parturition	
	Mammary system and lactation	
	Mating behavior	
	Seasonal breeders	
	Reproductive management	
	Introduction to AI and embryo transfer techniques	

Additional Notes	
Assignments	Quizzes may be given any time during this course which may cover lecture material between lectures.
Exams	No make-up exams unless absence was excused.
Cheating	Acts in violation including cheating are very serious and will not be tolerated. If you are caught cheating in an examination or quiz you will receive the grade of zero (0) for that examination or quiz. If more than one such incident occurs you receive the grade of zero for the course.
Attendance	Attendance in class is required. Students are expected to attend class regularly.
Workload	Quizzes may be given at the start of the class period or whenever needed. Quizzes will cover lecture material between quizzes.
Graded Exams	
Participation	Participation in class discussions is strongly encouraged
Laboratory	
Projects	