

COURSE LAYOUT

1. GENERAL

SCHOOL	Animal Biosciences		
DEPARTMENT	Animal Science		
STUDY LEVEL	Bachelor		
COURSE CODE	0166	SEMESTER	5 th
COURSE TITLE	THE PHYSIOLOGICAL BASES OF FARM ANIMAL REPRODUCTION AND LACTATION		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	ECTS
Theory		2	2
Laboratory Practicals		2	2
			4
COURSE TYPE	Field of Science		
PREREQUISITES	-		
LANGUAGE	Greek		
IS THE COURSE OFFERED for ERASMUS STUDENTS?	Yes (in English)		
COURSE WEB PAGE (URL)	-		

2. LEARNING OUTCOMES

Learning Outcomes
<p>The course "THE PHYSIOLOGICAL BASES OF FARM ANIMAL REPRODUCTION AND LACTATION" aims to familiarize students, in theoretical and practical level, with the contemporary physiological aspects applied in mechanisms of productive animal reproduction and lactation.</p> <p>In particular, lectures and practice focus on the understanding of:</p> <ol style="list-style-type: none"> 1. The factors that influence the conception rate, the duration of gestation and parturition but also the factors used for the estimation of the reproductive potential (prolificacy rate, viability rate, profitability rate). 2. The factors that affect the process of milk production, the growth of mammary gland and the development of lactation in ruminants.
General Competenses
<ul style="list-style-type: none"> • Individual and group work • Producing new research ideas • Promotion of free, creative and inductive thinking

3. COURSE CONTENT

Applied animal reproduction: basic elements of female and male reproductive system. Life cycle, spermatogenesis, ovogenesis, insemination, differentiation of genital systems. Differentiation of sexes. Egg and sperm transport, capacitation of spermatozoa, entry into ovum, pronucleus formation. Hormones, control of estrous cycle, control of puberty and seasonality.

Structure of the udder. Morphology and texture of mammary gland. Milk composition. Mammogenesis. Growth and evolution of mammary gland. Hormonal regulation. Milk synthesis and secretion. Initiation and maintenance of lactation. Metabolism on mammary gland function. Mammary involution. Factors affecting lactation.

4. TEACHING and LEARNING METHODS - Evaluation

TEACHING METHOD	In class, face to face.	
USE OF INFORMATICS and COMMUNICATION TECHNOLOGIES	PowerPoint and video presentations. Communication with students via e-mail. Teaching support through access to the e-class platform, to on-line databases etc.	
TEACHING ORGANISATION	Activities	Work load per semester
	Lectures	40
	Laboratory practice	30
	Training tours (visits in animal farms).	10
	Individual study of students	20
	Total work load (25 h work load per ECTS)	100
STUDENTS EVALUATION	<p>The evaluation on the course's theory consists of:</p> <ol style="list-style-type: none"> 1. final written examination on the course's theory (80-100%), consisting of: <ol style="list-style-type: none"> I. Evaluation of elements of the course's theory II. Short-answer questions III. Multiple choice questions 2. Personal written essay and its presentation <p>The evaluation on the course's laboratory practice is determined by the final written examination (100%) consists of:</p> <ol style="list-style-type: none"> I. Evaluation of elements of the course's theory II. Short-answer questions III. Multiple choice questions 	

5. BIBLIOGRAPHY

-Proposed Literature:

Ρογδάκης Εμμ. (2006): Γενική Ζωοτεχνία, Εκδόσεις Σταμούλης, Αθήνα.

Ζυγογιάννης Δ. (2006): Προβατοτροφία, Εκτροφή μηρυκαστικών (τεύχος Α), εκδ. Σύγχρονη Παιδεία, Θεσσαλονίκη.

Κατσαούνης Ν. (1994): Προβατοτροφία, Εκδ. οίκος αδελφών Κυριακίδη, Θεσσαλονίκη.

-Related Scientific Journals:

Επιθεώρηση Ζωοτεχνικής Επιστήμης

*Animal
Small Ruminant Research*