

Obstetrics 1. – 2018 Fall

Program of Lectures for the English Course 7th Semester:

Introduction to Physiology of Reproduction. Reproductive Physiology, Pregnancy, Genital Malfunctions and Udder Health Care of the Cow. Small ruminant reproduction.

TUESDAYS from 8:15 in the “Hetzel Henrik lecture-hall” (3x45’)

1.	11 Sept.	The introduction of the program and requirements.
		Introduction to physiology of reproduction I. Hypothalamus. Corpus pineale. Hypophysis. Ovarian structures (follicular development, ovulation, formation of corpus luteum). Neurotransmitters, hormones, growth factors in animal reproduction (<i>Solti, L.</i>)
2.	18 Sept.	Introduction to physiology of reproduction III. Development and maturation of the oocyte. Fertilization. Early embryonic development. The concept and species-based characteristics of maternal recognition of pregnancy (<i>Cseh, S.</i>)
3.	25 Sept.	Introduction to physiology of reproduction II. Concept and comparative aspects of cyclic ovarian function in domestic mammals. Spontaneous and induced forms of ovulation. Seasonality of reproduction. Puberty. (<i>Solti, L.</i>)
4.	2 Oct.	Puberty. The cyclic ovarian function of the cow. Estrus. Estrus detection under farm conditions, and advanced techniques used to check and improve its efficacy. Physiology and pathology of pregnancy (embryonic and fetal development; development of fetal membranes; implantation; endocrinology of pregnancy; pregnancy detection; termination of pregnancy; embryonic mortality; abortion) (<i>Solti, L.</i>)
5.	9 Oct.	The ovarian function in postpartum dairy and beef cows (first ovulation / onset of cyclicity; first estrus; re-conception). Energy imbalance, and protein overfeeding, trace elements and other factors influencing the postpartum reproduction. (<i>Solti, L.</i>)
6.	16 Oct.	Physiology and care of calving. Neonatology (the care and non-infectious diseases of newborn calves). Injuries of the birth canal. The prolapsed uterus after calving. Placental retention. (<i>Cseh, S.</i>)
23 Oct - Holiday		
7.	30 Oct.	Characteristics of uterine contractility during the early puerperium. Peri/postpartum metabolic disorders: milk fever, ketosis, and fatty liver disease. Udder oedema. (<i>Cseh, S.</i>)
8.	6 Nov.	Physiology, pathology and clinical aspects of uterine involution and its bacterial complications. Principles of antimicrobial and prostaglandin therapy. (<i>Földi, J.</i>)
9.	13 Nov.	Diseases and malfunctions of genitals (CLP; anovulatory cysts; delayed ovulation; tumors and other disorders; the contagious forms of subacute/chronic (endo)metritis; other inflammatory and non-inflammatory diseases/abnormalities of the oviduct, uterus, cervix and vagina). (<i>Cseh, S.</i>)
10.	20 Nov.	Endocrine treatment procedures [estrus synchronization (gestagens, PGF _{2α}); induction of ovarian cyclicity (gestagen+eCG, GnRH); induction of ovulation (GnRH); induction and synchronization of cyclicity / ovulation (Ov-synch=GPG) in dairy and beef cattle. Management of reproduction and infertility in (1) large-scale and (2) in smaller, family-operated dairy and beef herds (<i>Cseh, S.</i>)
11.	27 Nov.	Anatomy, physiology and clinical investigation of the bovine udder; antimicrobial self-defense mechanisms of the udder; mastitis pathogens; pathogenesis of mastitis; inflammatory markers in the mastitis milk. Clinical pathology of mastitis caused by various pathogens (Staphylococcus aureus, CNS, Streptococci and Gram-negative environmental pathogens; the “summer mastitis”) (<i>Jánosi Sz.</i>)
12.	4 Dec..	Principles in herd-level management of mastitis (<i>Markus, G.</i>)
13.	11 Dec.	Reproduction of small ruminants: Physiology of the oestrus cycle. Seasonality of reproduction. Induction and synchronization of the oestrus cycle. Methods for improving the ovulation rates. Pregnancy and its detection. Pathology of pregnancy, pregnancy toxemia / ketosis. Management of reproduction. (<i>Cseh, S.</i>)

Mid-term exam (written test):

29 November 2018 Thursday 7:00 am 1-4. gr. – TORMAY BÉLA lect. hall;

5-8. gr. – HETZEL HENRIK lect. hall

Topics: - lectures (1-10.); - practicals (1-4.); - plenaries (1-4.)

Re-take of the missed midterm exam*: **5 December 2017 wednesday 7:00 h** HETZEL HENRIK lect. hall

Topics: - lectures (1-12.); - practicals (1-5.); - plenaries (1-5.)

* Students who had missed mid-terms due to justified reasons or reached an insufficient result, are required to write a re-take midterm test. In case of absence without leave from the mid-term test or in case of failing the repeated test, the student is obliged to take a written exam during the exam period (containing all materials taught in the semester, including lectures, plenaries and practicals). This exam will give the note for the student. Justification of absence from the mid-term test must be transmitted personally by the student to the Secretariat of the Department.

Preparation of the Diploma thesis

For those students who prepare their diploma thesis at the Department of Obstetrics and Reproduction we warmly recommend to read carefully the information material provided by the Central Library of the Faculty (http://konyvtar.univet.hu/?page_id=83&lang=en)

The order of duty at the Small Animal Reproduction Clinic:

1. No more than five students have permission to participate in clinical work in examination room and/or operation room of reproduction clinic simultaneously. The order is first one first serve except the students on obligatory duty. Students have to wear a clean white cloth or any type of surgeon's cloth which haven't been used at clinic of infective patients, and at the Pathology Department.
2. In the operation room the use of operation cap, mask, and plastic foot-muff (all arranged by the students oneself) is obligatory.
3. The touch, feed, drink and take for a walk of the hospitalised patients is forbidden except by the agreement of the doctor of duty at the Reproduction Clinic.

Large animal practicals held in Üllő:

Trainers/clinicians of the farm animal clinic Üllő ask you to bring forceps, needle-holder, scalpel and scissors with yourself to the practicals.

Budapest, September, 2018

Prof. Sandor Cseh,
chair of department