

Información del Plan Docente

Academic Year 2016/17

Academic center 105 - Facultad de Veterinaria

Degree 451 - Degree in Veterinary Science

ECTS 7.0 **Course** 4

Period Annual

Subject Type Compulsory

Module ---

- 1.Basic info
- 1.1.Recommendations to take this course
- 1.2. Activities and key dates for the course
- 2.Initiation
- 2.1.Learning outcomes that define the subject
- 2.2.Introduction
- 3.Context and competences
- 3.1.Goals
- 3.2.Context and meaning of the subject in the degree
- 3.3.Competences
- 3.4.Importance of learning outcomes
- 4.Evaluation
- 5. Activities and resources

5.1.General methodological presentation

The learning process designed for this topic is based on lectures, demonstrations and laboratory sessions, problem and case-based learning sessions, on-line multimedia material and autonomous work.

5.2.Learning activities

The activities are detailed in the following section (5.3)



5.3.Program

LECTURES: 60 hours

MODULE 1 (5 h)

- Topic 1: General overview of management, uses, facilities and official documentation of horses (1)
- Topic 2: Equine nutrition (2)
- Topic 3: Breeding in sport and athletic horses (1)
- Topic 4: Sedation and anesthesia in horses (1)

MODULE 2: GASTROINTESTINAL TRACT (12 h)

- Topic 5: Oral cavity (1)
- Topic 6: Esophagus and stomach (including pathology) (1)
- Topic 7: Parasitic diseases with particular impact in the digestive tract (including pathology) (2)
- Topic 8: Colic syndrome: classification and clinical exploration. Importance of endotoxemia in equine clinic (2)
- Topic 9: Fluid therapy and medical treatments of colic (1)
- Topic 10: Decision making, principles of colic surgery and postoperative complications (1)
- Topic 11: Diseases that cause colic in small intestine, cecum, large and small colon (including pathology) (2)
- Topic 12: Other clinical processes: rectal lacerations and prolapse, peritonitis and abdominal herniation (1)
- Topic 13: Acute and chronic diarrhea. Inflammatory bowel disease and malabsorption (including pathology) (1)

MODULE 3: LAMENESSES (10 h)

- Topic 14: Hoof care. Principles of normal and therapeutic shoeing (0'5)
- Topic 15: Semiology and diagnosis. Diagnostic regional and intrasinovial blocks (1)
- Topic 16: Laminitis (1'5)



- Topic 17: Injuries of the hoof (1)
- Topic 18: Bone diseases (1)
- Topic 19: Wound management, orthopedics emergencies and bandages (1)
- Topic 20: Joint diseases. Podothroclear syndrome and caudal hoof pain (2)
- Topic 21: Tendon and ligament injuries (1)
- Topic 22: Muscular diseases and myopathies. Causes of back pain (1)

MODULE 4: RESPIRATORY TRACT (7 h)

- Topic 23: Upper respiratory tract: nasal cavity, sinus, pharynx, larynx, guttural pouches and trachea (2)
- Topic 24: Lower respiratory tract: not-infectcontagious diseases. Pneumonia. Conditions of the pleural cavity and chest wall, pleuropneumonia (including pathology) (2)
- Topic 25: Respiratory infectious and parasitic diseases: strangles, influenza, respiratory herpesvirus, rhodococcus, dictiocaulosis... (including pathology) (3)

MODULE 5: OTHER ORGANIC SYSTEMS AND APPARATUS (13 h)

- Topic 26: Main cardiac arrhythmias and heart murmurs (1)
- Topic 27: Main urinary diseases: bladder stones, acute and chronic renal insufficiency (1)
- Topic 28: Endocrine, metabolic and liver diseases (1)
- Topic 29: Main diseases in equine ophthalmology (1)
- Topic 30: Main non-infectious or parasitic neurological diseases (1)
- Topic 31: Neurological infectious and parasitic diseases (2)
- Topic 32: Systemic infectious and parasitic diseases. Notifiable diseases (3)
- Topic 33: Dermatology: skin neoplasms, processes of allergic origin, processes of parasitic and infectious etiology (2)
- Topic 34: Gross pathology of module 5 (1)



MODULE 6: REPRODUCTION. STUD FARM DISEASES (8 h)

- Topic 35: Exploration of the Mare (including uterine biopsies and cytology) and estrous cycle control (1)
- Topic 36: Stallion exploration. Semen extraction, evaluation and conservation (1)
- Topic 37: Mare and stallion infertility (1)
- Topic 38: Natural breeding, artificial insemination and embryo transfer (1)
- Topic 39: Infectious and parasitic diseases of reproductive tract and sexual transmission, including infectious abortions (1)
- Topic 40: Management of gestation. Problems during pregnancy and non-infectious abortions (1)
- Topic 41: Partum induction, dystocia, caesarean-section and puerperal problems (1)
- Topic 42: Stallion and mare urogenital surgery (sudden procedures) (1)

MODULE 7: NEONATOLOGY AND COLTS (5 h)

- Topic 43: Birth: fetal viability, neonatal resuscitation, adaptation of extra-uterine life. The sound foals. Sick newborn warning signs. Hypoxic-ischemic neonatal encephalopathy (1)
- Topic 44: Failure transfer of passive immunity. Neonatal sepsis. Neonatal isoeritrolisis. (1)
- Topic 45: Other common diseases of the newborn and the colts: umbilical and scrotal hernias, umbilical stump and bladder disorders, septic arthritis/polyarthritis (1)
- Topic 46: Developmental Orthopedic Diseases, (1)
- Topic 47: Gross pathology of modules 6 and 7(1)

PRACTICAL SESSIONS: 27,5 face-to-face workshop hours

DURING FIRST FOUR-MONTH PERIOD

- Session 1: Preparation of rations (2 hours) (12 groups) Computer room



- Session 2: Qualitative and quantitative coprology of parasitic processes. Stool culture. Parasitological post-mortem diagnostic (2 hours) (12 groups) Laboratory of Parasitology.
- Session 3: Lameness examination: inspection and static exam with lame horses (1.5 hours) (24 groups) HVUZ.
- Session 4: Lameness examination: dynamic exam with lame horses and/or and/or Computerized Lameness Simulator (1.5 hours). (24 groups) HVUZ and/or Computer room.
- Session 5 Peri-neural anesthesia and arthrocentesis of the distal limb of the horse, dissection of the distal limb (3 hours) (24 groups) Wet lab with postmortem specimens in Surgical lab.
- Session 6: Case-based learning session: "¡ SOS: my horse is in colic!" (2 hours) (12 groups)
- Session 7: Case-based learning session: "¡My horse show respiratory noises...!" ¡ My horse coughing with/without nasal discharge...!" (2 hours) (12 groups)

DURING SECOND FOUR-MONTH PERIOD

- Sessions 8 and 9: Genital exploration of the mare. Evaluation and preparation of seminal doses (3.5 hours) (24 groups). Teaching farm-ship with mares and Biotechnology lab
- Session 10: Case-based learning session: "¡Infertile mare...!. Danger: abortions!..." (2 hours) (12 groups)
- Session 11: Case-based learning session: "¡My newborn foal is ill...!" (2 hours) (12 groups)
- Session 12: Problem-based learning session: "I just bought a horse..." (2 hours) (12 groups)

DURING THE TWO FOUR-MONTH PERIOD:

- Session 13: Necropsy technique in horses: visualization of the equine digestive tract and other internal organs (2 hours) (6 groups) Necropsy room.
- Session 14: Advanced clinical examination Pre-purchase examination (2 hours). (24 groups) Teaching farm-ship with horses

MULTIMEDIA FILES SELF-STUDY: 11 hours of autonomous work

Students must watch (individually or in a group) the following multimedia files. These activities must be carried out before the respective theoretical lectures.



- Video: The horse digestive system, Horse digestion guide Equine Nutrition Feedstuffs y The horse body condition (1 hour) (before Topic 2)
- CD Equine Dental (before Topic 5) (1 hour)
- CD Passing nasogastric tube in the horse (before Topic 6) (1 hour)
- DVD Equine Colic (before Topic 8) (2 hours)
- CD Equad: upper respiratory tract (before Topic 23) (1'5 hours)
- CD Cardiac sounds (before Topic 26) (1 hour)
- CD Reproductive ultrasound in mares (before Topic 35) (0'5 hours)
- CD Foal in Mare (before Topic 41) (1 hour)
- CD Fetal and maternal dystocia in the mare (before Topic 41) (1 hour)
- Video: Urogenital surgeries in the horse (before Topic 42) (1 hour)

5.4. Planning and scheduling

5.5.Bibliography and recomended resources

http://psfunizar7.unizar.es/br13/eBuscar.php?tipo=a