

28433 - Integration: Equidae

Información del Plan Docente

Academic Year	2017/18
Faculty / School	105 - Facultad de Veterinaria
Degree	451 - Degree in Veterinary Science
ECTS	7.0
Year	4
Semester	Annual
Subject Type	Compulsory
Module	---

1.General information

1.1.Introduction

1.2.Recommendations to take this course

1.3.Context and importance of this course in the degree

1.4.Activities and key dates

2.Learning goals

2.1.Learning goals

2.2.Importance of learning goals

3.Aims of the course and competences

3.1.Aims of the course

3.2.Competences

4.Assessment (1st and 2nd call)

4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

5.Methodology, learning tasks, syllabus and resources

5.1.Methodological overview

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 tasks

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The activities are detailed in the following table:

Learning Task	Face-to-face hours	FACE FACTOR	Off-site hours	TOTAL
Theory lectures	60	0.83	50	110
Practices and wet-lab sessions	27.5	0.54	15	42.5
Multimedia			11	11
Tutorials			6.5	6.5
Exams	No		5	5
Total	87.5	1	87.5	175

5.3.Syllabus

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: Parasitic diseases with particular impact in the digestive tract (including dictocaulosis) (2)

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- Topic 7: Diseases of the gastrointestinal tract without acute colic symptomatology: EGUS, esophageal choke, inflammatory bowel disease and malabsorption, chronic diarrhea (1)
- 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 stomach, small intestine and cecum
- Topic 12: Diseases that cause colic in large colon (including acute colitis) (1)
- Topic 13: Diseases that cause colic in small colon. Other clinical processes: rectal lacerations and prolapse, peritonitis and abdominal herniation (1)
- Topic 14: Acute and chronic diarrhea. Inflammatory bowel disease and malabsorption (including pathology) (1)

MODULE 3: OTHER ORGANIC SYSTEMS AND APPARATUS (13 h)

- Topic 15: Main cardiac arrhythmias and heart murmurs (1)
- Topic 16: Main urinary diseases: bladder stones, acute and chronic renal insufficiency (1)
- Topic 17: Endocrine, metabolic and liver diseases (1)
- Topic 18: Main diseases in equine ophthalmology (1)
- Topic 19: Main non-infectious or parasitic neurological diseases (1)
- Topic 20: Neurological infectious diseases (2)
- Topic 21: Neurological parasitic diseases. Systemic and notifiable parasitic diseases (1)
- Topic 22: Systemic and notifiable infectious diseases (2)
- Topic 23: Dermatology: skin neoplasms, processes of allergic origin (1)
- Topic 24: Dermatology: processes of parasitic and infectious etiology (1)
- Topic 25: Gross pathology of module 5 (1)

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MODULE 4: RESPIRATORY TRACT (7 h)

- Topic 26: Upper respiratory tract: nasal cavity, sinus, pharynx, larynx, guttural pouches and trachea (2)
- Topic 27: Lower respiratory tract: not-infectontagious diseases. Pneumonia. Conditions of the pleural cavity and chest wall, pleuropneumonia (2)
- Topic 28: Bacterial respiratory diseases (1)
- Topic 29: Viric respiratory diseases (1)
- Topic 30: Gross pathology of respiratory tract (1)

MODULE 5: LAMENESSES (10 h)

- Topic 31: Semiology and diagnosis. Diagnostic regional and intrasinovial blocks (1)
- Topic 32: Hoof care. Principles of normal and therapeutic shoeing (0'5)
- Topic 33: Laminitis (1'5)
- Topic 34: Injuries of the hoof (1)
- Topic 35: Bone diseases (1)
- Topic 36: Wound management, orthopedics emergencies and bandages (1)
- Topic 37: Osteoarthritis (Degenerative Joint Disease) (1)
- Topic 38: Podothroclear syndrome and caudal hoof pain (1)
- Topic 39: Tendon and ligament injuries (1)
- Topic 40: Muscular diseases and myopathies. Causes of back pain (1)

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

- Topic 41: Exploration of the Mare (including uterine biopsies and cytology) and estrous cycle control (1)
- Topic 42: Stallion exploration. Semen extraction, evaluation and conservation (1)

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- Topic 43: Mare and stallion infertility (1)
- Topic 44: Natural breeding, artificial insemination and embryo transfer (1)
- Topic 45: Infectious and parasitic diseases of reproductive tract and sexual transmission, including infectious abortions (1)
- Topic 46: Management of gestation. Problems during pregnancy and non-infectious abortions (1)
- Topic 47: Partum induction, dystocia, caesarean-section and puerperal problems (1)
- Topic 48: Stallion and mare urogenital surgery (sudden procedures) (1)

MODULE 7: NEONATOLOGY AND COLTS (5 h)

- Topic 49: Birth: fetal viability, neonatal resuscitation, adaptation of extra-uterine life. The sound foals. Sick newborn warning signs. Hypoxic-ischemic neonatal encephalopathy (1)
- Topic 50: Failure transfer of passive immunity. Neonatal sepsis. Neonatal isoerythrolysis. (1)
- Topic 51: Other common diseases of the newborn and the colts: umbilical and scrotal hernias, umbilical stump and bladder disorders, septic arthritis/polyarthritis (1)
- Topic 52: Developmental Orthopedic Diseases, (1)
- Topic 53: Gross pathology of modules 6 and 7(1)

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

- 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.

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- 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)
- 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)
- 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 7) (1 hour)
- DVD Equine Colic (before Topic 8) (2 hours)
- CD Cardiac sounds (before Topic 15) (1 hour)
- CD Equad: upper respiratory tract (before Topic 26) (1'5 hours)
- CD Reproductive ultrasound in mares (before Topic 41) (0'5 hours)
- CD Foal in Mare (before Topic 47) (1 hour)

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- CD Fetal and maternal dystocia in the mare (before Topic 47) (1 hour)
- Video: Urogenital surgeries in the horse (before Topic 48) (1 hour)

5.4.Course planning and calendar

5.5.Bibliography and recommended resources

[BB: Basic bibliography / BC: Supplementary bibliography]

- [BB] Clement, Maryline. L'auscultation cardiaque chez le cheval [Recurso electrónico] / Maryline Clement ; réalisation M. Carré . [s. l.] : Med'Com, [2005]
- [BB] Demory, Catherine. Les dystocies d'origine foetale chez la jument [Recurso electrónico] / Catherine Demory ; réalisation M. Carré . [s. l.] : Med'Com, [2005]
- [BB] Equad [Recurso electrónico] : interactive educational CD -ROM on upper airway diseases in horses / Michael A. Weishaupt ... [et al.] ; in collaboration with James T. Robertson, John A. Stick . Version 1.2 Zurich, Switzerland : Equine Hospital, Faculty of Veterinary Medicine, 2003
- [BB] Fernández Casasnovas, Antonio. La exploración clínica del caballo / Antonio Fernández Casasnovas, Tomás Conde Ayuda, Javier Fondevila Abenia . Zaragoza : Servet, 2011
- [BB] Govaere, Jan. Foal in Mare [video-DVD] : insights inside the foaling mare / Jan Govaere, Katrien Martens, Aart de Kruif . 4th ed. Ghent : University, 2010
- [BB] Manual de gastroenterología equina / editado por Tim Mair , Tom Divers, Norm Ducharme . Buenos Aires : Intermédica, 2003
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- [BB] Rose, Reuben J.. Manual clínico de equinos /Reuben J. Rose, David R. Hodgson ; traducción, Marcela Alcántara Pohls ; asesoría técnica, María Masri Daba México : McGraw-Hill Interamericana, cop. 1995
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- [BB] The Glass horse [recurso electrónico] : equine colic CD : a comprehensive exploration in 3D / [Artist, Flint Buchaman...[et al.]; content experts, Michell Barton, Jim Moore and Nat White]. Version 1.0 Watkinsville, GA : Glass Horse LLC : Distributed by Platinum Performance, cop. 2007
- [BC] Auer, Jörg A.. Equine surgery / Jörg A. Auer, John A. Stick . 4th ed. St. Louis (Missouri) : Elsevier, cop. 2012
- [BC] Buergelt, Claus D. Color Atlas of Equine Pathology / Claus D. Buergelt, Fabio Del Piero. Iowa : Willey, 2014
- [BC] Color atlas of diseases and disorders of the foal / edited by Siobhan B. McAuliffe, Nathan M. Slovis.-- Edinburgh [etc.] : Saunders Elsevier, 2008
- [BC] Ecografía de la reproducción y sexaje en yeguas. [s.l.]: CVM, [s.a.]
- [BC] Equine stud farm medicine and surgery / Derek C. Knottenbelt... [et al.]. Edinburgh [etc.] : Saunders, 2003
- [BC] Equine veterinary education /British Equine Veterinary Association. Newmarket, Suffolk :R. & W. Publications (Newmarket),1989- [publicación periódica]
- [BC] Equinus : publicación de información y práctica veterinaria equina . Madrid : Luzán 5, 2001- [Publicación periódica]
- [BC] Nutrient requirements of horses / Committee on Nutrient Requirements of Horses, Board on Agriculture and Natural Resources, Division on Earth and Life Studies, National Research Council . 6th rev. ed. Washington : National Academy Press, 2007
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- [BC] The equine hospital manual / edited by Kevin Corley and Jennifer Stephen ; with illustrations by Stephen Cahalan . 1st ed. Oxford : Blackwell, 2008
- [BC] The Veterinary clinics of North America. Equine practice . Philadelphia : Saunders, 1985- [Publicación

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periódica]

URL list:

- International Veterinary Information Service [<http://www.ivis.org>]
- Nutrient requirement of horses (NRC) [<http://nrc88.nas.edu/nrh/>]