

28406 - Embryology and Anatomy II

Información del Plan Docente

Academic Year	2017/18
Faculty / School	105 - Facultad de Veterinaria
Degree	451 - Degree in Veterinary Science
ECTS	7.0
Year	1
Semester	Second semester
Subject Type	Basic Education
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

5.2.Learning tasks

Learning activities planned (program included)

28406 - Embryology and Anatomy II

The program that the student is offered to help achieve the expected results includes the following activities ...

1: Theoretical teaching 50%: 35 contact hours participatory lecture, distributed in 35 sessions 1 hour

Type of activity	Place	Schedule	Schedule	Profesors	Students
Lectures groups 1-6 (35 contact hours)	Aulario	3 sessions/week (35 sessions)	1 hour/session	M. Climent	80
				J. Gil	
				J. Laborda	
Lectures groups 7-12 (35 contact hours)	Aulario	3 sessions/week (35 sessions)	1 hour/session	M. Climent	80
				J. Gil	
				J. Laborda	

2: Practical teaching 45%: 31.5 contact hours dissecting, distributed in 21 sessions of 1.5 hours

Tutored preparation work practices 5%: 3.5 hours, including the specific instruction of the subject of dissection awarded, performance / exhibition with fellow dissecting table.

Type of activity	Place	Schedule	Schedule	Profesors	Students
				M. Climent	

28406 - Embryology and Anatomy II

Supervised
work

Instruction dissection (3,5 contact hours in rotational mode)	Dissection Room	2 sessions/week	2 hour/session	J. Gil J. Laborda	12
--	--------------------	--------------------	-------------------	--------------------------	----

M. Climent

Groups 7 Practical 12 (31,5 contact hours)	Dissection Room	2 sessions/week	1,5 hour/session	J. Gil J. Laborda	80
---	--------------------	--------------------	---------------------	--------------------------	----

M. Climent

Groups 1 Practical 6 (31,5 contact hours)	Dissection Room	2 sessions/week	1,5 hour/session	J. Gil J. Laborda	80
--	--------------------	--------------------	---------------------	--------------------------	----

3: Development of a work by each group of practices, the result will be demonstrated with the delivery of anatomical preparations and a digital support (usually: CD or DVD) containing a document in .doc format (the extension, format and other characteristics will be detailed in the Moodle2 page of the course) and how many static and / or moving images deemed necessary to properly illustrate the work. He also proceed to the defense classroom work, which will be public and will carry out alagún student group, chosen randomly. The maximum exposure is detailed in the rules published by the subject on its website Moodle2.

Work will focus on specific and complementary aspects of osteology and untreated dissection in formal programming practices. Teachers propose topics of the work and supervise the work of the groups, showing them to follow procedures to analyze and study the assigned material and guiding them in the search for information and assessment.

5.3.Syllabus

Embryonic origin, parts, situation, relationships, functional structure, vascularisation, innervation:

- Respiratory System.
- Digestive system.
- Head.
- Urogenital apparatus.
- Central nervous system and sense organs.

5.4.Course planning and calendar

28406 - Embryology and Anatomy II

Schedule sessions and presentation of works

The dates and key milestones of the subject are described in detail, along with the other subjects in the first course in the Bachelor of Veterinary Medicine, on the website of the Faculty of Veterinary Medicine (link: <http://veterinaria.unizar.es/gradoveterinaria/>). This link will be updated at the beginning of each academic year and will be complemented with detailed information on the subject Moodle2 page.

Theory classes: the first school day from February to May last school day. Practical classes: since its inception in February to May last school day.

Final date for submission of group work practice: May (dates page Moodle2 of the subject).

Review of papers presented: May (dates page Moodle2 of the subject).

Practical exam: May (dates page Moodle2 of the subject).

Theoretical exam: June (1st call) and September (2nd call)

5.5. Bibliography and recommended resources

The reference book for the course is: *Protocolos de disección / Julio Gil ... [et al.]* . - 3ª ed. Zaragoza: Servet, 2012, which can be complemented with contents of the following bibliography that can be consulted by the Library website (search biblioteca.unizar.es recommended bibliography)

[BB: Bibliografía básica / BC: Bibliografía complementaria]

- [BB] [Atlas] - Atlas de artrología del perro / [autores] Jesús Laborda, Julio Gil, Miguel Gimeno, Amaia Unzueta . [1ª ed.], 2ª imp. Zaragoza : Diseño y Comunicación Servet, D.L. 2009
- [BB] [Atlas] - Colour atlas of veterinary anatomy. Vol.3, The dog & cat / Stanley H. Done [et al.] . London : Mosby-Wolfe, cop. 1996
- [BB] [Atlas] - Schebitz, Horst. Atlas de anatomía radiográfica canina y felina / H. Schebitz, H. Wilkens ; [traducción Silvia Serdá Cabre, Maite LLoria LLacer] . [1ª ed., reimpr.] / [revisión de la edición española Fidel San Román Ascaso, Pilar LLorens Pena] Barcelona : Grass, 1994
- [BB] Manual de anatomía y embriología de los animales domésticos : conceptos básicos y datos aplicativos. Cabeza, aparato respiratorio, aparato digestivo, aparato urogenital / Salvador Climent Peris ... [et al.] . Zaragoza : Acribia, 2005
- [BB] Manual de anatomía y embriología de los animales domésticos : conceptos básicos y datos aplicativos. Miembro torácico y miembro pelviano, sistema circulatorio, esqueleto de la cabeza / Salvador Climent Peris [et al.] . Zaragoza : Acribia, 2004
- [BB] Manual de anatomía y embriología de los animales domésticos : conceptos básicos y datos aplicativos. Sistema nervioso central y órganos de los sentidos / Salvador Climent Peris [et al.] . Zaragoza : Acribia, 1998
- [BB] Protocolos de disección : anatomía del perro / Julio Gil ... [et al.] . 3ª ed. Zaragoza: Servet, 2012
- [BC] [Anatomía aplicada] - Berg, Rolf. Anatomía topográfica y aplicada de los animales domésticos / Rolf Berg ; [traducción de M.E. Salamanca] . 2a ed. Madrid : Editorial AC, 1987 []
- [BC] [Atlas] - Atlas de anatomía del perro y el gato. Vol.1, Cabeza y cuello / J. Ruberte [et al.] . S. Cugat del Vallés (Barcelona) : Multimédica, D.L. 1995 []
- [BC] [Atlas] - Atlas de anatomía del perro y el gato. Vol.2, Tórax y miembro torácico / J. Ruberte [et al.] . S. Cugat del Vallés (Barcelona) : Multimédica, D.L. 1996 []
- [BC] [Atlas] - Atlas de anatomía del perro y el gato. Vol.3, Abdomen, pelvis y miembro pelviano / J. Ruberte [et al.] . S. Cugat del Vallés (Barcelona) : Multimédica, D.L. 1998
- [BC] [Atlas] - Boyd, Jack S.. Atlas en color de anatomía clínica del perro y el gato / J.S. Boyd, C. Paterson con la colaboración de A. H. May ; [traducción Sol Montes Relanzón] ; [revisión científica, Fidel San Román Ascaso] . 2ª ed. Barcelona : Elsevier, 2008
- [BC] [Atlas] - Clinical radiology of the horse / Janet A. Butler ... [et al.] . 3th ed. Iowa : Wiley-Blackwell, cop. 2008
- [BC] [Atlas] - Kealy, J. Kevin. Diagnostic radiology of the dog and cat / J. Kevin Kealy . 2nd. ed. Philadelphia [etc.] :

28406 - Embryology and Anatomy II

- W.B. Saunders, 1987 []
- [BC] [Atlas] - McLelland, John. Atlas en color de anatomía de las aves / John MacLelland ; prólogo, Julián J. Baumel . Madrid [etc.] : Interamericana:McGraw-Hill, D.L. 1992 []
 - [BC] [Atlas] - Popesko, Peter. Atlas de anatomía topográfica de los animales domésticos. Tomo I, Cabeza y cuello / Peter Popesko ; [revisión científica, Jan Kolda, Karol J. Fried] ; [colaboradores, A. I. Akajevskij, Jurajsutta, Rudolf Skarda] ; [revisión científica de la obra española, Víctor Götzens García] . 2ª ed. Barcelona : Masson, 1998
 - [BC] [Atlas] - Popesko, Peter. Atlas de anatomía topográfica de los animales domésticos. Tomo II, Tronco / Peter Popesko ; [revisión científica, Jan Kolda, Karol J. Fried] ; [colaboradores, A. I. Akajevskij, Jurajsutta, Rudolf Skarda] ; [revisión científica de la obra española, Víctor Götzens García] . 2ª ed. Barcelona : Masson, 1998
 - [BC] [Atlas] - Popesko, Peter. Atlas de anatomía topográfica de los animales domésticos. Tomo III, Pelvis y miembros / Peter Popesko ; [revisión científica, Jan Kolda, Karol J. Fried] ; [colaboradores, A. I. Akajevskij, Jurajsutta, Rudolf Skarda] ; [revisión científica de la obra española, Víctor Götzens García] . 2ª ed. Barcelona : Masson, 1998
 - [BC] Dyce, Keith M.. Anatomía veterinaria / K.M. Dyce, W.O. Sack, C.J.G. Wensing ; traducción Juan Roberto Palacios Martínez ; revisión técnica, Santiago Aja Guardiola . 4ª ed. México : Manual Moderno, 2012
 - [BC] [Embriología] - Gilbert, Scott F.. Biología del desarrollo / Scott F. Gilbert ; con un capítulo sobre el desarrollo de plantas por Susan R. Singer . . 7ª ed. Buenos Aires [etc.] : Editorial Médica Panamericana, 2005 []
 - [BC] [Embriología] - Habel, Robert E.. Anatomía veterinaria aplicada / Robert E. Habel ; traducido de la 2a. ed. norteamericana por Salvador Climent Peris . Zaragoza : Acribia, imp. 1988 []
 - [BC] [Embriología] - Sadler, T. W.. Embriología médica [12ª ed.] / T. W. Sadler ; ilustraciones, Jill Leland ; imágenes, Susan L. Sadler- Redmon ; microfotografías, Kathy Tosney ; ecografías, Nancy Chescheir, Hytham Imseis ; [traducción, Juan Roberto Palacios Martínez ; revisión técnica, María Dolores González Vidal]. 12ª ed. Hospitalet de Llobregat : Wolters Kluwer : Lippincott Williams & Wilkins, D.L. 2012 []
 - [BC] Evans, Howard E.. Disección del perro / Howard E. Evans, Alexander de Lahunta ; traducción, Santiago Aja Guardiola . 5a. ed. México [etc.] : McGraw-Hill Interamericana, cop. 2002
 - [BC] Manual de anatomía y embriología de los animales domésticos : conceptos básicos y datos aplicativos. Aparato locomotor : conceptos generales y región axil / Salvador Climent Peris [et al.] . Zaragoza : Acribia, 2002
 - [BC] Manual de anatomía y embriología de los animales domésticos : conceptos básicos y datos aplicativos. Embriología general / Salvador Climent Peris [et al.] . Zaragoza : Acribia, 1998
 - [BC] Miller, Malcom E.. Miller's anatomy of the dog / Howard E. Evans . 3rd. ed. Philadelphia [etc.] : W.B. Saunders, 1993
 - [BC] Noden, Drew M.. Embriología de los animales domésticos : mecanismos de desarrollo y malformaciones / Drew M. Noden, Alexander de Lahunta ; traducido por Narciso Murillo Ferrol . 1ª reimpr. Zaragoza : Acribia, D. L. 2001
 - [BC] Nomenclatura anatómica veterinaria ilustrada / editor Oskar Schaller ; con la colaboración de Georghe M. Constantinescu [et al.] ; traducción de Salvador Climent Peris [et al.] . Zaragoza : Acribia, D.L. 1996
 - [BC] Sisson, Septimus. Anatomía de los animales domésticos / Sisson, Grossman, Robert Getty ; coordinación editorial, Cynthia Ellenport Rosenbaum, N.G. Ghoshal, Daniel Hillmann ; [traducido por R. Martín Roldán, M. Illera Martín, M. J. Blánquez Layunta]. 5a ed., reimpr. Barcelona [etc.] : Masson, 1998
 - [BC] The anatomy of the domestic animals. Vol.1, The locomotor system of the domestic mammals / by Richard Nickel ... [et al.]; translation by Walter G. Siller and William M. Stokoe . [1st ed.] Berlin : Paul Parey, 1986
 - [BC] The anatomy of the domestic animals. Vol.2, The viscera of the domestic mammals / by August Schummer and Richard Nickel . 2nd rev. ed. / translation and revision by Wolfgang Otto Sack Berlin : Paul Parey, 1979
 - [BC] The anatomy of the domestic animals. Vol.5, Anatomy of the domestic birds / R. Nickel, A. Schummer, E. Seifel ; translation by W. G. Siller and P. A. L. Wight . [1st ed.] Berlin : Paul Parey, 1977

Listado de URL

- Departamento de Anatomía, Embriología y Genética Animal [http://www.unizar.es/departamentos/anatomia_embriologia]
- Gabinete Virtual de Anatomía [<https://www.unizar.es/gabinetedeanatomia/>]
- Materiales interactivos, complementarios al libro: Anatomía del perro: Protocolos de disección / Julio Gil ... [et al.] . 3ª ed. Zaragoza: Servet, 2012 [<http://www.protocolosdediseccion.com>]
- Osteología 3D del conejo mediante autoestereoscopia (Rabbit's 3D osteology by mean selfstereoscopy)[<http://ocw.unizar.es/ocw/course/view.php?id=23>]
- Osteología 3D del perro mediante autoestereoscopia (Dog's 3D osteology by mean selfstereoscopy)[<http://ocw.unizar.es/ocw/course/view.php?id=24>]



28406 - Embryology and Anatomy II

- Osteología 3D en el gato mediante autoestereoscopia (Cat's 3D osteology by mean selfstereoscopy)[<http://ocw.unizar.es/ocw/course/view.php?id=25>]