

2021-2022

Anatomy with Organogenesis of Domestic Animals I

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE
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Veterinarski fakultet u Zagrebu		
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Uredžbeni broj	Prilozi	Vrijednost
251-61-05-21-27	0	-

COURSE SYLLABUS

Course name: Anatomy with Organogenesis of Domestic Animals I

Academic year 2021-22

Course leader: Prof. Martina Đuras (MĐ)

Teachers: Prof. Srebrenka Nejedli (SN), Prof. Tajana Trbojević Vukičević (TTV)

Associate teachers: Denis Leiner, DVM (DL), Kim Korpes, DVM (KK), Magdalena Kolenc; DVM (MK)

First day of classes: 28/10/2011

Last day of classes: 21/1/2022

Timetable for LECTURES academic year 2021-2022

LECTURES				
Date	Methodological unit	Teacher	Location / time	Literature
28/10/2021	Introduction to veterinary anatomy	Prof. Martina Đuras	Amphitheatre / 12-14	<p>KÖNIG, H. E., H.-G. LIEBICH (2007): Veterinary anatomy of domestic mammals, Textbook and color atlas. 3rd Ed. Schattauer, Stuttgart, New York</p> <p>DYCE, K. M., W. O. SACK, C. J. G. WENSING (2010): Textbook of veterinary anatomy. 4th Ed. Saunders Elsevier, Philadelphia.</p> <p>McGEADY, T. A., P. J. QUINN, E. S. FITZPATRICK, M. T. RYAN (2006): Veterinary embryology. Blackwell Publishing, Dublin.</p>
4/11/2021	General anatomy of the cardiovascular system	Prof. Martina Đuras	Amphitheatre / 14-15	
8/11/2021	General anatomy of the nervous system	Prof. Martina Đuras	Amphitheatre / 10-11	
10/11/2021	General anatomy of the locomotor apparatus	Prof. Tajana Trbojević Vukičević	Amphitheatre / 12-14	
11/11/2021	Skeleton and joints of the thoracic limb	Prof. Tajana Trbojević Vukičević	Amphitheatre / 14-16	
24/11/2021	Muscles of the thoracic limb	Prof. Tajana Trbojević Vukičević	Amphitheatre/ 14-15	
3/12/2021	Blood vessels, nerves and lymph nodes of the thoracic limb	Prof. Tajana Trbojević Vukičević	Amphitheatre / 10-12	
14/12/2021	Skeleton and joints of the pelvic limb	Prof. Srebrenka Nejedli	Amphitheatre / 12-14	
21/12/2021	Muscles of the pelvic limb	Prof. Srebrenka Nejedli	Amphitheatre / 16-17	
12/1/2022	Blood vessels, nerves and lymph nodes of the pelvic limb	Prof. Srebrenka Nejedli	Amphitheatre / 12-14	
19/1/2022	Digital organ	Prof. Srebrenka Nejedli	Amphitheatre / 12-14	

Timetable for PRACTICALS academic year 2021-2022

Department of Anatomy, Histology and Embryology=DAHE

PRACTICALS						
Date	Methodological unit	Teacher	Type of practicals	Group	Location / time	Literature
16/11/2021	Planes of the animal body. Anatomical terminology.	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 12-14	<p>KÖNIG, H. E., H.-G. LIEBICH (2007): Veterinary anatomy of domestic mammals, Textbook and color atlas. 3rd Ed. Schattauer, Stuttgart, New York</p> <p>DYCE, K. M., W. O. SACK, C. J. G. WENSING (2010): Textbook of veterinary anatomy. 4th Ed. Saunders Elsevier, Philadelphia.</p> <p>DONE, S. H., P. C. GOODY, S. A. EVANS, N. C. STICKLAND (2009): Color atlas of veterinary anatomy. Volume 3. The dog and cat. 2nd Ed. Mosby Elsevier, Edinburgh, London, New York.</p>
19/11/2021	Scapula and humerus	SN, DL, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 10-12	
23/11/2021	Skeleton of the forearm	TTV, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
24/11/2021	Skeleton of the manus	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18	
25/11/2021	Joints of the thoracic limb	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 12-14	
26/11/2021	Muscles of the shoulder girdle	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
30/11/2021	Muscles of the shoulder and scapular region	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
1/12/2021	Muscles of the arm	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
2/12/2021	Muscles of the craniolateral forearm	DL, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18	
6/12/2021	Muscles of the caudomedial forearm	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 12-14	
7/12/2021	Blood vessels and lymph nodes of the thoracic limb	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 12-14	
8/12/2021	Nerves of the thoracic limb	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
9/12/2021	Regions of the thoracic limb. Dissection of the scapular region and axilla	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
10/12/2021	Dissection of the arm	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
13/12/2021	Dissection of the forearm	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	

15/12/2021	Dissection of the forepaw and joints	DL, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	EVANS, H. E., A. de LAHUNTA (2010): Guide to the dissection of the dog, 7 th Ed. Saunders Elsevier. Philadelphia.
16/12/2021	Skeleton of the pelvic girdle	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18	
17/12/2021	Skeleton of the thigh and leg	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
20/12/2021	Skeleton of the pes	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 12-14	
21/12/2021	Joints of the pelvic limb	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 17-19	
22/12/2021	Muscles of the pelvic girdle and croup	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
23/12/2021	Muscles of the thigh	DL, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
10/1/2022	Muscles of the craniolateral leg	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
11/1/2022	Muscles of the caudal leg	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
12/1/2022	Blood vessels and lymph nodes of the pelvic limb	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
13/1/2022	Nerves of the pelvic limb	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
14/1/2022	Regions of the pelvic limb. Dissection of the pelvic girdle and croup	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
17/1/2022	Dissection of the thigh	DL, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
18/1/2022	Dissection of the leg	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
19/1/2022	Dissection of the hindpaw and joints	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
20/1/2022	Hoof	KK, MK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 10-12	
21/1/2022	Dissection of the hoof	MK, DL, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	

STUDENT OBLIGATIONS

Lectures attendance	The course has 18 hours of lectures. One hour of lecture (45 minutes) is equal to 0.33 points. Lecture attendance is graded with 6 points in total. The student has to attend at least 9 hours of lectures and achieve at least 3 points.
Practicals attendance	The course has 64 hours of practicals. One hour of practicals (45 minutes) is equal to 0.19 points. Practicals attendance is graded with 12 points in total. The student has to attend at least 42 hours of practicals and achieve at least 8 points.
Active participation in practicals	Active participation in the practicals is evaluated through short oral testing during practicals and is graded with 10 points in total. The student has to achieve at least 5 points.
Final exam	Oral exam is graded with 40 points in total. The student has to achieve at least 24 points at the oral exam.
Examination requirements	Student requirements are defined in the Regulations on the Integrated Undergraduate and Graduate Study of Veterinary Medicine. Given the above, the student must acquire a minimum number of points from all assessment elements in order to take the final exam. Article 45: a student can justifiably be absent from up to 50 % of the lectures; 30% of the seminars and 30 % of the exercises.

GRADING AND EVALUATING STUDENT WORK

Continuous knowledge-checking (mid-terms)	There are two written tests. A maximum of 16 points per test can be achieved. The student has to achieve at least 10 points per test in order to pass. The points of both passed tests are summarized. Both tests are graded together with a maximum of 32 points. Passing these two test is a pre-condition for taking the oral exam. The written tests will be held in the Computer Halls of the Department for Animal Breeding and Livestock Production. Written test I will be held on 16/12/2021, 8-9, in the Large and Small Computer Hall (1 st repetition: 22/12/2021, 12-13, Large Computer Hall; 2 nd repetition: 17/1/2022, 8-9, Small Computer Hall). Written test II will be held on 24/1/2022, 8-9, in the Large and Small Computer Hall (1 st repetition: 1/2/2022, 8-9, Large Computer Hall; 2 nd repetition: 7/2/2022, 8-9, Small Computer Hall).
Final exams (dates)	2/2/2022, 17/2/2022 and supplemental examination terms that will be published in February 2021 for the summer semester
Form of final exam	Oral exam is graded with 40 points in total. The student has to achieve at least 24 points at the oral exam.

LITERATURE

Obligatory literature	<p>KÖNIG, H. E., H.-G. LIEBICH (2007): Veterinary anatomy of domestic mammals, Textbook and color atlas. 3rd Ed. Schattauer, Stuttgart, New York</p> <p>DYCE, K. M., W. O. SACK, C. J. G. WENSING (2010): Textbook of veterinary anatomy. 4th Ed. Saunders Elsevier, Philadelphia.</p> <p>DONE, S. H., P. C. GOODY, S. A. EVANS, N. C. STICKLAND (2009): Color atlas of veterinary anatomy. Volume 3. The dog and cat. 2nd Ed. Mosby Elsevier, Edinburgh, London, New York.</p> <p>EVANS, H. E., A. de LAHUNTA (2010): Guide to the dissection of the dog. 7th Ed. Saunders Elsevier. Philadelphia.</p> <p>McGEADY, T. A., P. J. QUINN, E. S. FITZPATRICK, M. T. RYAN (2006): Veterinary embryology. Blackwell Publishing, Dublin.</p>
Optional literature	<p>NICKEL, R., A. SCHUMMER, E. SEIFERLE (1986): The locomotor system of the domestic mammals. Volume I. Verlag Paul Parey, Berlin, Hamburg.</p> <p>NICKEL, R., A. SCHUMMER, E. SEIFERLE (1981): The circulatory system, the skin, and the cutaneous organs of the domestic mammals. Volume III. Verlag Paul Parey, Berlin, Hamburg.</p> <p>EVANS H. E., A. De LAHUNTA (2012): Miller's anatomy of the dog. 4th Ed. WB Saunders Company, Philadelphia, London.</p> <p>SCHALLER, O. (2007): Illustrated veterinary anatomical nomenclature. 2nd Ed. Ferdinand Enke Verlag, Stuttgart.</p> <p>HYTTEL, P., F. SINOWATZ, M. VEJLSTED (2010): Essentials of domestic animal embryology. Saunders Elsevier, Philadelphia.</p> <p>SADLER, T. W. (2006): Langman's medical embryology, Lippincott Williams & Wilkins a Wolters Kluwer business. 10th Ed. Philadelphia, Baltimore, New York.</p>

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	Following successful completion of the course, students will be able to apply acquired knowledge on gross anatomy and development of the thoracic and pelvic limbs of domestic mammals during preclinical and clinical courses.
Learning outcomes	Following successful completion of the course, students will be able to: <ol style="list-style-type: none"> 1. list and describe major anatomical structures of the thoracic and pelvic limbs of domestic mammals 2. explain the development of the thoracic and pelvic limb structures 3. apply anatomical nomenclature 4. skilled communicate anatomical information 5. utilize dissection skills

GRADING SCHEME

<i>Points</i>	<i>Grade</i>
Up to 59	1 (F)
60-68	2 (E)
69-76	2 (D)
77-84	3 (C)
85-92	4 (B)
93-100	5 (A)

Course leader:



Prof. Martina Đuras

Head of Department/Clinic:



Prof. Martina Đuras

Note: The course leader is required to submit a Course Syllabus to all teachers and associates pertaining to the Course.

**GRADING AND EVALUATION OF STUDENT WORK ON COURSES WITH LECTURES,
SEMINARS and PRACTICALS**

Type of activity	Minimum number of points	Maximum number of points
Lectures attendance	3	6
Seminar attendance	4	6
Practicals attendance	4	6
Active participation in seminars and practicals	5	10
Continuous knowledge checking (mid-terms)	20	32
Final exam	24	40
TOTAL	60	100

**GRADING AND EVALUATION OF STUDENT WORK ON COURSES WITH LECTURES and
SEMINARS**

Type of activity	Minimum number of points	Maximum number of points
Lecture attendance	3	6
Practicals attendance	8	12
Active participation in practicals	5	10
Continuous knowledge checking (mid-terms)	20	32
Final exam	24	40
TOTAL	60	100

**GRADING AND EVALUATION OF STUDENT WORK ON COURSES WITH SEMINARS and
EXERCISES**

Type of activity	Minimum number of points	Maximum number of points
Seminar / practicals attendance	11	18
Active participation in seminars and practicals	5	10
Continuous knowledge checking (mid-terms)	20	32
Final exam	24	40
TOTAL	60	100