

2023-2024

Anatomy with Organogenesis of Domestic Animals I



170494	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
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FACULTY OF VETERINARY MEDICINE
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Register no.: 61-05-2023/345
Zagreb, 06/09/2023

COURSE SYLLABUS

Course name: Anatomy with Organogenesis of Domestic Animals I

Academic year 2023-24

Course leader: Assist. Prof. Ivan Alić
Deputy course leader: Full Prof. Martina Đuras

Teachers: Full Prof. Martina Đuras, Full Prof. Srebrenka Nejedli, Full Prof. Tajana Trbojević Vukičević, Assist. Prof. Ivan Alić, Assist. Prof. Mirela Pavić Vulinović, teaching assistant Magdalena Kolenc, DVM; teaching assistant Kim Korpes, DVM; teaching assistant Denis Leiner, DVM; teaching assistant Ante Plečaš, DVM

First day of classes: 13/11/2023

Last day of classes: 24/01/2024

Activities - Anatomy with Organogenesis of Domestic Animals I (1/6)							
Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
13/11/2023	8:15	9:45	p01 Introduction to veterinary anatomy	1E-1, 1E-2, 1E-3	Alic I.	P_kemija	1:30
15/11/2023	8:15	9:00	p02 General anatomy of the cardiovascular system	1E-1, 1E-2, 1E-3	Alic I.	P_kemija	0:45
15/11/2023	9:00	9:45	p03 General anatomy of the nervous system	1E-1, 1E-2, 1E-3	Alic I.	P_kemija	0:45
16/11/2023	8:15	9:45	p04 General anatomy of the locomotor apparatus	1E-1, 1E-2, 1E-3	Trbojevic-Vukicevic T.	P_kemija	1:30
17/11/2023	16:00	17:30	v01 Planes of the animal body. Anatomical terminology.	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
20/11/2023	16:15	17:45	v02 Scapula and humerus	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
21/11/2023	8:15	9:45	v03 Skeleton of the forearm	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30

Activities - Anatomy with Organogenesis of Domestic Animals I (2/6)							
Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
22/11/2023	15:45	17:15	p05 Skeleton and joints of the thoracic limb	1E-1, 1E-2, 1E-3	Trbojevic-Vukicevic T.	P_amfiteatar	1:30
23/11/2023	8:15	9:45	v04 Skeleton of the manus	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
24/11/2023	8:15	9:45	v05 Joints of the thoracic limb	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
24/11/2023	10:00	10:45	p06 Muscles of the thoracic limb	1E-1, 1E-2, 1E-3	Nejedli S.	P_kemija	0:45
27/11/2023	8:15	9:45	v06 Muscles of the shoulder girdle	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
28/11/2023	8:15	9:45	v07 Muscles of the shoulder and scapular region	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
29/11/2023	14:30	16:00	p07 Blood vessels, nerves and lymph nodes of the thoracic limb	1E-1, 1E-2, 1E-3	Pavic M.	P_kemija	1:30
30/11/2023	8:15	9:45	v08 Muscles of the arm	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30

Activities - Anatomy with Organogenesis of Domestic Animals I (3/6)

Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
01/12/2023	8:15	9:45	v09 Muscles of the craniolateral forearm	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
04/12/2023	8:15	9:45	v10 Muscles of the caudomedial forearm	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
05/12/2023	8:15	9:45	v11 Blood vessels and lymph nodes	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
06/12/2023	8:15	9:45	v12 Nerves of the thoracic limb	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
07/12/2023	8:15	9:45	v13 Regions of the thoracic limb, scapular region and axilla	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
11/12/2023	8:15	9:45	v14 Dissection of the arm	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
12/12/2023	8:15	9:45	v15 Dissection of the forearm	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
13/12/2023	8:15	9:45	v16 Dissection of the forepaw and joints	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30

Activities - Anatomy with Organogenesis of Domestic Animals I(4/6)							
Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
14/12/2023	8:15	9:45	v17 Skeleton of the pelvic girdle	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
15/12/2023	8:15	9:45	p08 Skeleton and joints of the pelvic limb	1E-1, 1E-2, 1E-3	Nejedli S.	P_amfiteatar	1:30
18/12/2023	8:15	9:45	v18 Skeleton of the thigh and leg	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
19/12/2023	8:15	9:45	v19 Joints of the pelvic limb	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
20/12/2023	8:15	9:45	v20 Skeleton of the pes	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
20/12/2023	10:00	10:45	p09 Muscles of the pelvic limb	1E-1, 1E-2, 1E-3	Đuras M.	P_amfiteatar	0:45
20/12/2023	11:15	12:45	p10 Blood vessels, nerves and lymph nodes of the pelvic limb	1E-1, 1E-2, 1E-3	Pavic M.	P_amfiteatar	1:30
21/12/2023	8:15	9:45	v21 Muscles of the pelvic girdle and croup	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30

Activities - Anatomy with Organogenesis of Domestic Animals I(5/6)							
Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
08/01/2024	8:15	9:45	v22 Muscles of the thigh	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
09/01/2024	8:15	9:45	v23 Muscles of the craniolateral leg	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
10/01/2024	8:15	9:45	v24 Muscles of the caudal leg	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
11/01/2024	8:15	9:45	v25 Blood vessels and lymph nodes	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
15/01/2024	8:15	9:45	v26 Nerves of the pelvic limb	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
16/01/2024	8:15	9:45	v27 Regions of the pelvic limb, pelvic girdle and croup	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
17/01/2024	8:15	9:45	v28 Dissection of the thigh	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
18/01/2024	8:15	9:45	v29 Dissection of the leg	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
22/01/2024	8:15	9:45	v30 Dissection of the hindpaw and joints	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
22/01/2024	10:15	11:45	p11 Digital organ	1E-1, 1E-2, 1E-3	Đuras M.	P_amfiteatar	1:30

Activities - Anatomy with Organogenesis of Domestic Animals I (6/6)

Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
23/01/2024	8:15	9:45	v31 Hoof	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
24/01/2024	8:15	9:45	v32 Dissection of the hoof	1E-1, 1E-2, 1E-3	Nastavnici na predmetu	S_anatomija I kat	1:30
Total: 43							61:30

STUDENT OBLIGATIONS

Lectures attendance	The course has 18 hours of lectures. 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. Practical attendance is graded with 12 points in total. The student has to attend at least 51 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 41: a student can justifiably be absent from up to 50 % of the lectures and 20 % 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 tests 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 15/12/2023, 4-5pm, in the Large Computer Hall (1 st repetition: 20/12/2023, 4-5pm, Large Computer Hall; 2 nd repetition: 12/01/2024, 4-5pm, Large Computer Hall). Written test II will be held on 26/01/2024, 2-3pm, in the Large Computer Hall (1 st repetition: 31/01/2024, 8-9am, Large Computer Hall; 2 nd repetition: 05/02/2024, 8-9am, Large Computer Hall).
Final exams (dates)	07/02/2024 and 14/02/2024. Additional examination terms that will be published in February 2024 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:



Assist. Prof. Ivan Alić

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
PRACTICALS**

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