UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE
Heinzelova 55
Tel. 01/ 2390243
Division: Basic and Pre-clinical Sciences Division
Department / Clinic: Department of Anatomy, Histology and Embryology
Email: martina.duras@vef.hr
Register no.: 61-05-2021/289
Zagreb, 8/09/2021

COURSE SYLLABUS

Course name: Anatomy with Organogenesis of Domestic Animals III

Academic year 2021-22

Course leader: Prof. Martina Đuras (MĐ)

Teachers: Prof. Srebrenka Nejedli (SN), Prof. Tajana Trbojević Vukičević (TTV), Assist. Prof. Mirela Pavić (MP)

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

First day of classes: 4/10/2021

Last day of classes: 7/12/2021

Timetable for LECTURES academic year 2020-2021

LECTURES				
Date	**Methodological unit**	**Teacher**	**Location / time**	**Literature**
4/10/2021	Head skeleton and cervical spine	Assist. Prof. Mirela Pavić	Amphitheatre/ 12-14	KÖNIG, H. E., H.-G. LIEBICH (2007): Veterinary anatomy of domestic mammals, Textbook and color atlas. 3rd Ed. Schattauer, Stuttgart, New York DYCE, K. M., W. O. SACK, C. J. G. WENSING (2010): Textbook of veterinary anatomy. 4th Ed. Saunders Elsevier, Philadelphia. McGEADY, T. A., P. J. QUINN, E. S. FITZPATRICK, M. T. RYAN (2006): Veterinary embryology. Blackwell Publishing, Dublin.
12/10/2021	Head and neck muscles	Assist. Prof. Mirela Pavić	Amphitheatre/ 16-17	
15/10/2021	Blood supply, lymphatic system and endocrine tissues of head and neck	Prof. Martina Đuras	Amphitheatre/ 13-14	
26/10/2021	Mouth, salivary glands, pharynx and esophagus: structure and development	Prof. Tajana Trbojević Vukičević	Amphitheatre/ 14-16	
29/10/2021	Upper respiratory tract, larynx and trachea: structure and development	Prof. Tajana Trbojević Vukičević	Amphitheatre/ 8-10	
4/11/2021	Brain and spinal cord: structure and development	Prof. Srebrenka Nejedli	Amphitheatre/ 12-14	
5/11/2021	Cranial nerves	Prof. Martina Đuras	Amphitheatre/ 13-14	
15/11/2021	Eye: structure and development	Prof. Martina Đuras	Amphitheatre/ 8-9	
15/11/2021	Vestibulocochlear organ: structure and development	Prof. Martina Đuras	Amphitheatre/ 14-15	
3/12/2021	Basic gross anatomy of domestic birds	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**
5/10/2021	Cervical vertebrae	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	KÖNIG, H. E., H.-G. LIEBICH (2007): Veterinary anatomy of domestic mammals, Textbook and color atlas. 3rd Ed. Schattauer, Stuttgart, New York DYCE, K. M., W. O. SACK, C. J. G. WENSING (2010): Textbook of veterinary anatomy. 4th Ed. Saunders Elsevier, Philadelphia. 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. EVANS, H. E., A. de LAHUNTA (2010): Guide to the dissection of the dog.
6/10/2021	Cranial bones	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 10-12	
7/10/2021	Facial bones	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
8/10/2021	Hyoid apparatus	DL, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 10-12	
11/10/2021	Skull as whole I	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
12/10/2021	Skull as whole II	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 10-12	
13/10/2021	Regions and skin muscles of the head and neck. Facial muscles	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
14/10/2021	Mandibular muscles	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
18/10/2021	Superficial structures of facial regions	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
19/10/2021	Superficial muscles of the neck	DL, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 10-12	
20/10/2021	Deep muscles of the neck and the nuchal ligament	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
21/10/2021	Structures of the ventral neck region	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
22/10/2021	Deep structures of facial regions and the temporomandibular joint	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
25/10/2021	External carotid artery and lymph nodes of the head and neck	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
27/10/2021	Mouth and oral cavity	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall,	

					DAHE/ 14-16	7th Ed. Saunders Elsevier. Philadelphia.
28/10/2021	Pharynx	DL, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 10-12	
2/11/2021	External nose, nasal cavity and paranasal cavities	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
3/11/2021	Larynx	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
8/11/2021	Meninges	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 10-12	
9/11/2021	Brain	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
10/11/2021	Cranial nerves I-VI	MK, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
11/11/2021	Cranial nerves VII-XII	DL, MĐ, SN	Dissection	1,2,3	Dissection Hall, DAHE/ 14-16	
17/11/2021	Eye	KK, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
19/11/2021	Vestibulocochlear organ	MĐ, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 8-10	
23/11/2021	Dissection of the head and neck I	TTV, MK, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18	
25/11/2021	Dissection of the head and neck II	SN, TTV, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18	
29/11/2021	Dissection of the head and neck III	MĐ, SN, TTV	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18	
1/12/2021	Dissection of the head and neck IV	DL, MĐ, KK	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18	
2/12/2021	Dissection of the head and neck V	SN, DL, MĐ	Dissection	1,2,3	Dissection Hall, DAHE/ 12-14	
6/12/2021	Avian osteology	MK, KK, DL	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18	
7/12/2021	Dissection of the chicken	DL, KK, MK	Dissection	1,2,3	Dissection Hall, DAHE/ 16-18:30	

STUDENT OBLIGATIONS

Lectures attendance	The course has 15 hours of lectures. One hour of lecture (45 minutes) is equal to 0.4 points. Lecture attendance is graded with 6 points in total. The student has to attend at least 8 hours of lectures and achieve at least 3 points.
Practicals attendance	The course has 63 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 43 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 3/11/2021, 12-14, in the Large Computer Hall (1st repetition: 9/11/2021, 13-14, Large Computer Hall; 2nd repetition: 23/11/2021, 12-13, Small Computer Hall). Written test II will be held on 9/12/2021, 10-11, in the Large and Small Computer Hall (1st repetition: 17/12/2022, 16-17, Large Computer Hall, 2nd repetition: 12/1/2022, 15-16 Small Computer Hall).
Final exams (dates)	20/12/2021, 24/1/2022, 10/2/2022 and supplemental examination terms that will be published in February 2022 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	KÖNIG, H. E., H.-G. LIEBICH (2007): Veterinary anatomy of domestic mammals, Textbook and color atlas. 3rd Ed. Schattauer, Stuttgart, New York DYCE, K. M., W. O. SACK, C. J. G. WENSING (2010): Textbook of veterinary anatomy. 4th Ed. Saunders Elsevier, Philadelphia. 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. EVANS, H. E., A. de LAHUNTA (2010): Guide to the dissection of the dog. 7th Ed. Saunders Elsevier. Philadelphia. McGEADY, T. A., P. J. QUINN, E. S. FITZPATRICK, M. T. RYAN (2006): Veterinary embryology. Blackwell Publishing, Dublin.
Optional literature	NICKEL, R., A. SCHUMMER, E. SEIFERLE (1986): The locomotor system of the domestic mammals. Volume I. Verlag Paul Parey, Berlin, Hamburg. 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. EVANS H. E., A. De LAHUNTA (2012): Miller's anatomy of the dog. 4th Ed. WB Saunders Company, Philadelphia, London. SCHALLER, O. (2007): Illustrated veterinary anatomical nomenclature. 2nd Ed. Ferdinand Enke Verlag, Stuttgart. HYTTEL, P., F. SINOWATZ, M. VEJLSTED (2010): Essentials of domestic animal embryology. Saunders Elsevier, Philadelphia. SADLER, T. W. (2006): Langman's medical embryology, Lippincott Williams & Wilkins a Wolters Kluwer business. 10th Ed. Philadelphia, Baltimore, New York.

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 head and neck of domestic mammals and basic gross anatomy of domestic birds during preclinical and clinical courses.
Learning outcomes	Following successful completion of the course, students will be able to: 1. list and describe major anatomical structures of the head and neck of domestic mammals and basic gross anatomy of domestic birds 2. explain the development of the structures of the head and neck 3. apply anatomical nomenclature 4. skilled communicate anatomical information 5. utilize dissection skills

GRADING SCHEME

Points	*Grade*
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 EXCERCISES

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