

## Anatomy with Organogenesis of Domestic Animals II

UNIVERSITY OF ZAGREB  
FACULTY OF VETERINARY MEDICINE  
Heinzelova 55  
Tel. 01/239 249  
Division: Basic and Pre-clinical Sciences Division  
Organizational unit: Anatomy, Histology and Embryology  
E-mail of the course leader: [ialic@vef.hr](mailto:ialic@vef.hr)  
Register No of the organisational unit: 61-05-2026/15  
Zagreb, 32/01/2026



214106	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	22.01.2026	
Klasifikacijska oznaka	Org. jed.	
605-03/26-04/12	251-61-32;	
Uredbeni broj	Prilozi	Vrijednost
251-61-05/455-26-02	0	-

### COURSE SYLLABUS

Course name: Anatomy with Organogenesis of Domestic Animals II

Academic year 2025/2026

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

Teachers: Full Prof. Martina Đuras; Full Prof. Srebrenka Nejedli; Full Prof. Tajana Trbojević Vukičević; Associate Prof. Mirela Pavić Vulinović; Assistant Prof. Ivan Alić; teaching assistant Magdalena Kolenc, DVM, PhD; teaching assistant Kim Korpes, DVM, PhD; teaching assistant Ante Plečaš, DVM, PhD; teaching assistant Mirna Mandić, DVM

First day of classes: 25/02/2026  
Last day of classes: 03/06/2026

### Activities - Anatomy with organogenesis of domestic animals II (1/6)

Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
25/02/2026	10:45	11:30	p01 Structure and development of the Trunk skeleton	2E-1, 2E-2, P_amfiteatar		0:45	Alić I.	P_amfiteatar
25/02/2026	13:30	15:00	v01 Thoracic vertebrae	2E-1, 2E-2, S_anatomija I kat		1:30	Nastavnici na predmetu	S_anatomija I kat
26/02/2026	10:45	12:15	p02 Body wall, body cavities and their serous lining	2E-1, 2E-2		1:30	Pavić Vulinović M.	P_amfiteatar
27/02/2026	13:30	14:15	p03 Structure and development of the trachea and lungs	2E-1, 2E-2		0:45	Đuras M.	P_amfiteatar
27/02/2026	14:45	16:15	v02 Lumbar and sacral vertebrae	2E-1, 2E-2, S_anatomija I kat		1:30	Nastavnici na predmetu	S_anatomija I kat
02/03/2026	13:45	15:15	v03 Ribs and sternum	2E-1, 2E-2, S_anatomija I kat		1:30	Nastavnici na predmetu	S_anatomija I kat
05/03/2026	10:45	12:30	p04 Structure and development of the heart	2E-1, 2E-2		1:45	Korpes K.	P_amfiteatar
05/03/2026	13:00	14:30	v04 Thorax, body cavities	2E-1, 2E-2, S_anatomija I kat		1:30	Nastavnici na predmetu	S_anatomija I kat
06/03/2026	13:45	15:15	v05 Trachea and lungs	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
09/03/2026	14:15	15:45	v06 Pulmonary root and hilus	2E-1, 2E-2, S_anatomija I kat		1:30	Nastavnici na predmetu	S_anatomija I kat
10/03/2026	12:15	13:45	v07 Bronchal tree	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat

### Activities - Anatomy with organogenesis of domestic animals II (2/6)

Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
12/03/2026	13:15	14:45	v08 Pericardium and external heart	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
13/03/2026	9:00	10:30	v09 Atria and ventricles	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
16/03/2026	7:30	9:00	v10 Functional and nutritive circulation	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
16/03/2026	10:00	11:30	p05 Digestive system - Part I	2E-1, 2E-2		1:30	Nejedli S.	P_amfiteatar
17/03/2026	8:15	9:45	v11 Foetal circulation	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
19/03/2026	10:15	11:45	v12 1st oral activity for max 2 points	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
19/03/2026	12:00	13:30	p06 Digestive system - Part II	2E-1, 2E-2		1:30	Nejedli S.	P_amfiteatar
23/03/2026	11:45	13:15	v13 Esophagus and simple stomach	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
24/03/2026	8:15	9:45	v14 Composed stomach	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
25/03/2026	11:45	13:15	v15 Intestine of the Carnivores	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
26/03/2026	8:15	9:45	v16 Intestine of the Pigs	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
27/03/2026	8:00	9:30	v17 Intestine of the Ruminants	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
30/03/2026	8:15	9:45	v18 Intestine of the Horses	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat

### Activities - Anatomy with organogenesis of domestic animals II (3/6)

Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
31/03/2026	11:45	13:15	v19 Liver	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
01/04/2026	8:15	9:45	v20 Functional and nutritive circulation of the Liver	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
07/04/2026	10:00	11:30	p07 Urinary system	2E-1, 2E-2		1:30	Đuras M.	P_amfiteatar
07/04/2026	11:45	13:15	v21 Pancreas and spleen	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
09/04/2026	9:45	11:15	v22 2nd oral activity (Digestive system) for max 2 points	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
10/04/2026	12:00	13:30	v23 Kidney and ureter	2E-1, 2E-2, 2E-3		1:30	Nastavnici na predmetu	S_anatomija I kat
13/04/2026	14:30	16:00	p08 Female genital organs	2E-1, 2E-2		1:30	Kolenc M.	P_fiziologija
13/04/2026	16:00	17:30	v24 Urinary bladder and urethra	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
15/04/2026	8:15	9:45	v25 Ovarium and Tuba uterina	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
16/04/2026	13:15	14:45	v26 Uterus, vagina, vestibulum vaginae, vulva, clitoris and urethra feminina	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
17/04/2026	14:00	15:30	Anatomy with organogenesis of domestic animals II	2E-1, 2E-2	Kolokvij	1:30	Alić I.	R_stočarstvo mala, R_stočarstvo velika
20/04/2026	11:00	12:30	v27 Scrotum, testis and epididymis	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
21/04/2026	11:30	13:00	p09 Male genital organs	2E-1, 2E-2		1:30	Pavić Vulinović M.	P_amfiteatar

### Activities - Anatomy with organogenesis of domestic animals II (4/6)

Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
21/04/2026	13:30	15:00	v28 Deferens duct, male accessory glands and penis	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
23/04/2026	8:15	9:45	v29 3rd oral activity (urogenital system) for max 2 points	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
24/04/2026	11:15	12:00	p10 Mammary gland	2E-1, 2E-2		0:45	Alić I.	P_amfiteatar
24/04/2026	14:45	16:15	v30 Mammary gland	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
28/04/2026	7:45	9:15	v31 Regions of the trunk. External fascia of the trunk. Cutaneous muscles.	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
04/05/2026	15:00	16:30	v32 Muscles of the pectoral wall I	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
05/05/2026	13:45	15:15	v33 Muscles of the pectoral wall II	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
06/05/2026	15:15	16:45	v34 Muscles of the abdominal wall and inguinal canal	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
07/05/2026	8:15	9:45	v35 4th oral activity (regions, fascia and muscles of the trunk) for max 2 points	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
07/05/2026	10:00	11:30	p11 Nervous, lymphatic and endocrine system	2E-1, 2E-2		1:30	Trbojević-Vukičević T.	P_amfiteatar
08/05/2026	8:15	9:45	v36 Internal fascia, pleura, pleural cavities	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat

### Activities - Anatomy with organogenesis of domestic animals II (5/6)

Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
11/05/2026	8:15	9:45	v37 Mediastinum	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
12/05/2026	11:00	11:45	p12 Blood vessels of the trunk	2E-1, 2E-2		0:45	Trbojević-Vukičević T.	P_amfiteatar
14/05/2026	14:45	16:15	v38 Diaphargm	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
15/05/2026	14:00	15:30	v39 Autonomic nerves	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
18/05/2026	14:00	15:30	v40 Aorta	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat
19/05/2026	14:30	16:00	v41 A. subclavia	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija prizemlje
21/05/2026	11:30	13:00	v42 5th oral activity for max 1 point	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje
22/05/2026	9:30	11:00	v43 Cavum abdominis, peritoneum and omentum	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje
25/05/2026	14:00	15:30	v44 Aorta abdominals - visceral arteries	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje
26/05/2026	14:15	15:45	v45 Aorta abdominals - parietal arteries	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje
27/05/2026	14:00	15:30	v46 Vena cava caudalis	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje
28/05/2026	14:00	15:30	v47 Pelvic blood vessels and nerves	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje
01/06/2026	14:00	15:30	v48 Muscles of the back	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje

### Activities - Anatomy with organogenesis of domestic animals II (6/6)

Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
02/06/2026	12:30	14:00	v49 Spine and spinal cord	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje
03/06/2026	13:00	14:30	v50 6th oral activity for max 1 point	2E-1, 2E-2		1:30	Nastavnici na predmetu	S_anatomija I kat, S_anatomija prizemlje
03/06/2026	14:45	16:15	Anatomy with organogenesis of domestic animals II	2E-1, 2E-2	Kolokvij 2.	1:30	Alić I.	R_stočarstvo mala, R_stočarstvo velika
08/06/2026	9:00	10:30	Anatomy with organogenesis of domestic animals II	2E-1, 2E-2	Kolokvij-prvo ponavljanje	1:30	Alić I.	R_stočarstvo mala, R_stočarstvo velika
11/06/2026	13:00	14:30	Anatomy with organogenesis of domestic animals II	2E-1, 2E-2	Kolokvij-drugo ponavljanje	1:30	Alić I.	R_stočarstvo mala, R_stočarstvo velika
<b>Total: 66</b>						<b>96:15</b>		

## Anatomy with Organogenesis of Domestic Animals II

### STUDENT OBLIGATIONS

Lecture attendance	The course has 20 hours of lectures. One hour of lecture (45 minutes) is equal to 0.3 points. Lecture attendance is graded with 6 points in total. The student has to attend at least 10 hours of lectures (3 points).
Practicals attendance	The course has 100 hours of practicals. One hour of practicals (45 minutes) is equal to 0.12 points. Practical session attendance is graded with 12 points in total. The student has to attend at least 70 hours of practicals (8 points).
Active participation in seminars and practicals	Active participation in the practical session 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 (2022). Given the above, the student must acquire a minimum number of points from all assessment elements in order to take the final exam. <b>Article 41:</b> a student can justifiably be absent from up to 50% of the lectures and 30% of the practicals.

### GRADING AND EVALUATING STUDENT WORK

Continuous knowledge-checking (mid-terms)	<p>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.</p> <p>Written test I will be held on 17/4/2026, 2:00-3:00 pm, in the Large and Small Computer Hall (1<sup>st</sup> repetition: 8/6/2026, 9:00-10:30 am, Large Computer Hall; 2<sup>nd</sup> repetition: 11/6/2026, 1:00-2:30 pm, Large Computer Hall).</p> <p>Written test II will be held on 03/6/2026, 2:45-4:15pm, in the Large and Small Computer Hall (1<sup>st</sup> repetition: 8/6/2026, 9:00-10:30 am, Large Computer Hall; 2<sup>nd</sup> repetition: 11/6/2026, 1:00-2:30 pm, Large Computer Hall).</p>
Final exams (dates)	25/6/2026, 08/7/2026, 9/9/2026, 18/9/2026
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

## Anatomy with Organogenesis of Domestic Animals II

Obligatory literature	<p>KÖNIG, H. E., H.-G. LIEBICH (2007): Veterinary anatomy of domestic mammals, Textbook and color atlas. 3<sup>rd</sup> Ed. Schattauer, Stuttgart, New York</p> <p>DYCE, K. M., W. O. SACK, C. J. G. WENSING (2010): Textbook of veterinary anatomy. 4<sup>th</sup> 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. 7<sup>th</sup> 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. 4<sup>th</sup> 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 &amp; Wilkins a Wolters Kluwer business. 10<sup>th</sup> Ed. Philadelphia, Baltimore, New York.</p>

### **OBJECTIVES AND LEARNING OUTCOMES**

Course objectives	The course presents the gross anatomy of domestic animals with the embryonic development of organs and organic systems to veterinary medicine students in order to ensure basic knowledge for other disciplines such as physiology, pathology and clinical courses.
Learning outcomes	Following successful completion of the course, students will be able to:

## Anatomy with Organogenesis of Domestic Animals II

1. list and describe major anatomical structures of the trunk including the viscera of domestic mammals
2. explain the development of the viscera
3. apply anatomical nomenclature
4. skilled communicate anatomical information  
utilize dissection skills

### GRADING SCHEME

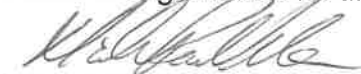
<i>Points</i>	<i>Grade</i>
Up to 59	1 (F)
60-76	2 (D, E)
77-84	3 (C)
85-92	4 (B)
93-100	5 (A)

Course leader



Assistant Prof Ivan Alić

Head of organizational unit:



Associate Prof Mirela Pavić Vulinović

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