

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE
Heinzlova 55
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Division:

Organizational unit: Clinic for surgery, orthopaedics and ophthalmology

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Register No of the organisational unit:

Zagreb, 26/1/2026



214588	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	27.01.2026	
Klasifikacijska oznaka	Org. jed.	
602-04/25-22/34	251-61-41;	
Uredžbeni broj	Prilozi	Vrijednost
251-61-21/260-26-134	0	-

COURSE SYLLABUS

Course name: Surgery II
Academic year 2025/2026

Course leader: Prof. Dražen Vnuk, PhD

Deputy course leader: Valentina Plichta, PhD

Teachers: Prof. Dražen Matičić PhD FCA, PhD; Prof. Boris Pirkić; PhD; Prof. Mario Kreszinger, PhD; Prof. Dražen Vnuk, PhD;
Prof. Ozren Smolec, PhD; Assoc. Prof. Nika Brkljača Bottegaro; PhD; Assoc. Prof. Marko Pećin, PhD; Assis. Prof. Petar Kostešić, PhD; Assis.
prof. Marija Lipar, PhD; Valentina Plichta, DVM, PhD; Marija Mamić, DVM, PhD; Petra Dmitrović, DVM, PhD; Niko Ivkić, DVM, Katarina Miljak,
DVM, Petra Ricijaš, DVM; Karlo Tanhofer, DVM
Mirna Abaffy Kirin, DVM, Branko Petričević, DVM, Ema Sajdl, DVM, Klara Klašterka, DVM, Valentina Margić, DVM, Valentina Kos, DVM

First day of classes: 02/03/2026

Last day of classes: 29/05/2026

Activities - Surgery, Orthopaedics and Ophthalmology II (1/3)								
Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
02/03/2026	9:45	11:15	p03 Hernias	8E-1, 8E-2, 8E-3		1:30	Lipar M.	P_fizika
03/03/2026	13:00	14:30	p02 Surgery of the head	8E-1, 8E-2, 8E-3		1:30	Vnuk D.	P_fizika
06/03/2026	10:30	12:00	p01 Castrations	8E-1, 8E-2, 8E-3		1:30	Pećin M.	P_klinike
10/03/2026	14:30	16:00	p04 Gastrointestinal diseases	8E-1, 8E-2, 8E-3		1:30	Mamić M., Vnuk D.	P_fizika
11/03/2026	10:00	13:45	v01 Practical work	8E-1		3:45	Nastavnici na predmetu	V_kirurgija
11/03/2026	14:00	15:30	p05 Surgery of the head	8E-1, 8E-2, 8E-3		1:30	Brkljača Bottegaro N.	P_klinike
12/03/2026	10:00	13:45	v01 Practical work	8E-2		3:45	Nastavnici na predmetu	V_kirurgija
13/03/2026	10:00	13:45	v01 Practical work	8E-3		3:45	Nastavnici na predmetu	V_kirurgija
13/03/2026	14:00	15:30	p06 Thorax	8E-1, 8E-2, 8E-3		1:30	Vnuk D.	P_klinike
20/03/2026	10:00	11:30	p07 Surgical oncology I	8E-1, 8E-2, 8E-3		1:30	Matičić D.	P_klinike
23/03/2026	8:00	9:30	p08 Surgical oncology II	8E-1, 8E-2, 8E-3		1:30	Matičić D.	P_klinike
24/03/2026	9:45	11:15	p09 Diseases of cornea	8E-1, 8E-2, 8E-3		1:30	Pirkić B.	P_klinike
30/03/2026	10:00	15:15	v02 Practical work	8E-3		5:15	Nastavnici na predmetu	V_kirurgija
31/03/2026	10:00	15:15	v03 Practical work	8E-3		5:15	Nastavnici na predmetu	V_kirurgija
01/04/2026	10:00	15:15	v04 Practical work	8E-3		5:15	Nastavnici na predmetu	V_kirurgija
07/04/2026	10:00	15:15	v05 Practical work	8E-3, V_kirurgija		5:15	Nastavnici na predmetu	V_kirurgija

Activities - Surgery, Orthopaedics and Ophthalmology II (2/3)								
Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
08/04/2026	10:00	15:15	v06 Practical work	8E-3		5:15	Nastavnici na predmetu	V_kirurgija
14/04/2026	10:15	11:45	p10 Diseases of uvea	8E-1, 8E-2, 8E-3		1:30	Pirkić B.	P_klinike
16/04/2026	10:00	15:15	v02 Practical work	8E-1		5:15	Nastavnici na predmetu	V_kirurgija
17/04/2026	10:00	15:15	v03 Practical work	8E-1		5:15	Nastavnici na predmetu	V_kirurgija
20/04/2026	8:15	9:45	p11 Diseases of retina	8E-1, 8E-2, 8E-3		1:30	Pirkić B.	P_klinike
20/04/2026	10:00	15:15	v04 Practical work	8E-1		5:15	Nastavnici na predmetu	V_kirurgija
21/04/2026	10:00	15:15	v05 Practical work	8E-1		5:15	Nastavnici na predmetu	V_kirurgija
22/04/2026	10:00	15:15	v06 Practical work	8E-1		5:15	Nastavnici na predmetu	V_kirurgija
24/04/2026	14:30	16:00	p12 Diseases of eyelids	8E-1, 8E-2, 8E-3		1:30	Pirkić B., Plichta V.	P_klinike
05/05/2026	11:30	13:00	p13 Surgical diseases in ruminants	8E-1, 8E-2, 8E-3		1:30	Smolec O.	P_klinike
06/05/2026	14:30	16:00	p14 Colic surgery in horses	8E-1, 8E-2, 8E-3		1:30	Brkljača Bottegaro N.	P_klinike
08/05/2026	14:30	16:00	p15 Diseases of urogenital system	8E-1, 8E-2, 8E-3		1:30	Vnuk D.	P_klinike
11/05/2026	8:00	13:15	v02 Practical work	8E-2		5:15	Nastavnici na predmetu	V_kirurgija
12/05/2026	8:00	13:15	v03 Practical work	8E-2		5:15	Nastavnici na predmetu	V_kirurgija

Kolegij Surgery, orthopaedics and ophthalmology 2

Activities - Surgery, Orthopaedics and Ophthalmology II (30)								
Start Date	Start T	End Ti	Course	Group	Note	Length	Instructor	Room
13/05/2026	18:00	21:45	v07 Practical work	8E-1		3:45	Nastavnici na predmetu	V_kirurgija
14/05/2026	10:00	15:15	v04 Practical work	8E-2		5:15	Nastavnici na predmetu	V_kirurgija
20/05/2026	8:00	13:15	v05 Practical work	8E-2, V_kirurgija		5:15	Nastavnici na predmetu	V_kirurgija
21/05/2026	8:00	13:15	v06 Practical work	8E-2		5:15	Nastavnici na predmetu	V_kirurgija
21/05/2026	18:00	21:45	v07 Practical work	8E-3		3:45	Nastavnici na predmetu	V_kirurgija
29/05/2026	18:00	21:45	v07 Practical work	8E-2		3:45	Nastavnici na predmetu	V_kirurgija
Total: 36						123:45		

STUDENT OBLIGATIONS

Lecture attendance	During the semester student must be present on 15 hours of lectures (from amount of 30 hours) to obtain minimum 3 points during the semester. Maximum obtained number of points from this element is 6.
Seminars attendance	-
Practicals attendance	<p>During the semester, the student must attend 32 hours of exercises (out of a total of 45 hours) to obtain a minimum of 8.4 points. The maximum number of points that can be obtained from this component is 12.</p> <p>A total of 45 hours of exercises is divided across 7 days as follows:</p> <ol style="list-style-type: none"> 1. 5 hours – Intestinal resection and anastomosis (wet and dry lab) and ophthalmologic examination (practical training) 2. 7 hours – Clinical rotation, practical work with patients 3. 7 hours – Clinical rotation, practical work with patients 4. 7 hours – Clinical rotation, practical work with patients 5. 7 hours – Clinical rotation, practical work with patients 6. 7 hours – Clinical rotation, practical work with patients 7. 5 hours – Practical work with patients during night duty and/or weekend duty
Active participation in seminars and practicals	<p>By actively participating in the practicals, students can earn a maximum of 75 points, which corresponds to 10 final points.</p> <p>Points are awarded for the following components:</p> <p>a) Anaesthesiology Protocol – 25 points</p> <ul style="list-style-type: none"> • First exercise – thematic: participation is not evaluated

- Second exercise – clinical rotation, practical clinical work: **max. 5 points**
- Third exercise – clinical rotation, practical clinical work: **max. 5 points**
- Fourth exercise – clinical rotation, practical clinical work: **max. 5 points**
- Fifth exercise – clinical rotation, practical clinical work: **max. 5 points**
- Sixth exercise – clinical rotation, practical clinical work: **max. 5 points**
- Seventh exercise – clinical rotation, practical clinical work: **not evaluated**, but may be replaced with practical work during extracurricular time (e.g., afternoon, night, or weekend round)

Task: Keeping anaesthesiology protocols in an orderly and accurate manner.
Instructions for completing the Anaesthesiology Protocol are available on **Merlin 2025/26**.

b) Surgical Record Form – 25 points

- First exercise – thematic: participation is not evaluated
- Second exercise – clinical rotation, practical clinical work: **max. 5 points**
- Third exercise – clinical rotation, practical clinical work: **max. 5 points**
- Fourth exercise – clinical rotation, practical clinical work: **max. 5 points**
- Fifth exercise – clinical rotation, practical clinical work: **max. 5 points**
- Sixth exercise – clinical rotation, practical clinical work: **max. 5 points**
- Seventh exercise – clinical rotation, practical clinical work: **not evaluated**, but may be replaced with practical work during extracurricular time (e.g., afternoon, night, or weekend round)

Task: Keeping the surgical record form in an orderly and accurate manner.
Instructions for completing the Patient Protocol are available on **Merlin 2025/26**.

c) Active Participation, in Patient Care – 25 points

	<ul style="list-style-type: none">• First exercise – thematic: participation is not evaluated• Second exercise – clinical rotation, practical clinical work: max. 5 points• Third exercise – clinical rotation, practical clinical work: max. 5 points• Fourth exercise – clinical rotation, practical clinical work: max. 5 points• Fifth exercise – clinical rotation, practical clinical work: max. 5 points• Sixth exercise – clinical rotation, practical clinical work: max. 5 points• Seventh exercise – clinical rotation, practical clinical work: not evaluated, but may be replaced with practical work during extracurricular time (e.g., afternoon, night, or weekend round) <p>This component evaluates the student's active participation in patient care.</p> <p>Minimum Requirement</p> <p>Students must obtain at least 5 final points (= 37.5 points × coefficient 0.1333).</p> <p>Active participation during surgical rotation is evaluated continuously throughout the semester.</p>
Midterm exam	<p>During the semester, there will be three (3) mid-term exams (Surgical Oncology, Thoracic Surgery, and Ophthalmology). These exams will be organized during the exercise sessions. Each exam contains eleven (11) problems or questions. Each correctly solved problem or correctly answered question is worth one (1) point.</p> <p>A student must achieve a total of 21 points across all three mid-term exams (a minimum of 7 points per exam) to earn at least 20 final points (21 points × coefficient 0.9696).</p> <p>The maximum number of points a student can obtain from this evaluation component is 32 final points</p>

	<p>(33 points × coefficient 0.9696).</p> <p>A student who does not obtain the minimum of 21 points during the semester has the right to take two makeup mid-term exams, only for the exams they failed. A student who passes a makeup mid-term exam with at least 7 correct answers gains the right to take the final exam.</p> <p>Mid-term exams will be held during the last three practical sessions (out of five practicals during the rotation, not counting the first night shift).</p> <p>Mid-term exam topics: Thorax, Surgical Oncology, Ophthalmological Examination.</p>
Final exam	<p>The minimal requirements for passing the first, second, third, and fourth evaluation elements (lecture attendance, exercise/practical attendance, active participation in exercises, and mid-term exams) are added together and are worth a total of 37.6 points. The maximum number of points that can be earned from all four elements is 60.</p> <p>The final exam contains questions that may be answered in both written and oral form. The written part consists of 20 questions, divided into 5 groups (20 points in total). A student must answer at least 12 questions correctly in order to proceed to the oral exam.</p> <p>The oral exam consists of 5 questions, with a maximum of 20 points available. Each question can be awarded 0–4 points.</p> <p>The minimal number of points a student must earn on the final exam is 24 points (at least 12 on the written part and at least 12 on the oral part).</p> <p>The maximum combined score from the written and oral exam is 40 points.</p> <p>A student who does not earn at least 12 points on the written exam cannot take the oral exam. A student who does not earn at least 12 points on the oral exam fails the course.</p> <p>The final grade for the course is expressed numerically, based on the total number of points, using</p>

	grades from 1 to 5 . A grade of 1 indicates that the student has not successfully mastered the course content (insufficient performance).
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. Regulations On Intergraduate And Graduate Studies, Article 41: 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)	During practicals. Re-take in case of not passing is after the first exam term (29.6.2026. and 2.9.2026.)
Final exam (dates)	24.6.2026., 10.7.2026., 9.9.2026., 17.9.2026.
Form of final exam	Written and oral

LITERATURE

Obligatory literature	MERLIN https://moodle.srce.hr/2025-2026/
Optional literature	1. Welch Fossum, T. (2018): Small Animal Surgery, 5th ed. 2. Auer, J.A., J.A. Stick, J.M. Kummerle, T.Prange (2019): Equine Surgery. 5th ed. 3. Kent Ames, N. (2013): Noordsy's Food Animal Surgery, 5th ed. 4. Maggs, D., P. Miller, R. Ofri (2018): Slatter's fundamentals of veterinary ophtalmology. 6th ed.

OBJECTIVES AND LEARNING OUTCOMES

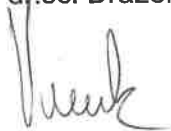
Course objectives	Objective is to introduce the student with the basic knowledge in ophthalmology, abdominal and thoracic surgery, and oncology of domestic animals.
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<p>Learning outcomes</p>	<p>Differentiate head and neck diseases of small and large animals and suggest a basic treatment plan and analyze indications for referral to a referral clinic.</p> <p>Determine the priority of procedures for the diagnosis and treatment of a patient with thoracic cavity disease and analyze the indications for referral to a referral clinic.</p> <p>Differentiate between certain types of hernias to establish the correct diagnosis and their treatment and analyze the indications for referral to a referral clinic.</p> <p>Differentiate between certain types of hernias to establish the correct diagnosis and their treatment and analyze the indications for referral to a referral clinic.</p> <p>Analyze diagnoses of diseases of the digestive and genitourinary systems of dogs and cats, choose the option of stabilizing the patient and analyze the indication for his referral to a referral clinic.</p> <p>To determine the basics of laparotomy and abomasal dislocation in ruminants and the possibilities of treating them.</p> <p>Assess diseases of the equine abdominal cavity that are manifested by colic, approach the team treatment of colic, choose the option for stabilizing the patient and for surgical treatment, and assess the indication for his referral to a referral clinic.</p> <p>Analyze the basic postulates of the surgical approach and treatment techniques for oncology patients and discuss the need for a multidisciplinary treatment modality.</p> <p>Analyze diagnoses, classify ocular diseases of small and large animals, propose basic treatment and treatment in cases of emergencies, and analyze the indication for surgical treatment and for its referral to a referral clinic.</p>

GRADING SCHEME

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

Course leader
Prof. dr.sc. Dražen Vnuk



Head of clinic
Prof. dr. sc. Dražen Vnuk



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