

2023/2024

COURSE NAME **Surgery, orthopaedics and ophthalmology III**

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE
Heinzelova 55
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Division:
Department / Clinic: Clinic for surgery, orthopaedics and ophthalmology
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Register no.:
File no.:
Zagreb, 11.9.2023.



170645	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	12.09.2023	
Klasifikacijska oznaka	Org. jed.	
605-03/23-04/28	251-61-32;	
Uredbeni broj	Prilozi	Vrijednost
251-61-21/260-23-27	0	-

COURSE SYLLABUS

Course name: **Surgery, orthopaedics and ophthalmology III**

Academic year 2023./2024.

Course leader: Prof. Dražen Vnuk, PhD; Prof. Dražen Matičić, PhD, FCA

Teachers: Assoc. prof. Tomislav Babić, PhD; Prof. Dražen Matičić PhD FCA, PhD; Prof. Boris Pirkić, PhD; Prof. Mario Kreszinger, PhD; Prof. Dražen Vnuk, PhD; Assoc. Prof. Ozren Smolec, PhD; Assoc. Prof. Nika Brkljača Bottegaro, PhD; Asst. Prof. Marko Pećin, PhD; Asst. Prof. Andrija Musulin, PhD

Associate teachers: Petar Kostešić, PhD; Valentina Plichta, PhD; Marija Mamić, DVM; Mirta Vučković, DVM; Ana Smajlović, DVM; Petra Dmitrović, PhD; Katarina Miljak, DVM; Niko Ivkić, DVM
Associates: Marija Lipar, PhD, Mirna Abaffy Kirin, DVM

First day of classes: 2.10.2023.

Last day of classes: 18.01.2024.

Activities - Surgery, orthopaedics and ophthalmology III (1/4)

Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
02/10/2023	8:15	9:45	p01 Diagnostics of lameness in horses	9E-1, 9E-2	Brkljaca Bottegaro N.	V_kemija	1:30
02/10/2023	14:00	15:30	p02 Hoof diseases	9E-1, 9E-2	Brkljaca Bottegaro N.	V_kirurgija	1:30
03/10/2023	13:30	15:00	p03 Bone diseases in horse	9E-1, 9E-2	Brkljaca Bottegaro N.	V_kirurgija	1:30
11/10/2023	13:15	17:45	v01 Diagnostic of lameness in horse	9E-1	Nastavnici na predmetu	V_kirurgija štala	4:30
12/10/2023	13:15	17:45	v01 Diagnostic of lameness in horse	9E-2	Nastavnici na predmetu	V_kirurgija štala	4:30
16/10/2023	7:30	9:00	p04 Tendon and ligament diseases in horses	9E-1, 9E-2	Brkljaca Bottegaro N.	V_kirurgija	1:30
18/10/2023	14:15	18:00	v02 Hoof corrections and horseshoing Midterm exam I	9E-1	Nastavnici na predmetu	V_kirurgija	3:45
20/10/2023	8:00	9:30	p05 Joint diseases in horses	9E-1, 9E-2	Brkljaca Bottegaro N.	V_kirurgija	1:30
20/10/2023	16:30	20:15	v02 Hoof corrections and horseshoing Midterm exam I	9E-2	Nastavnici na predmetu	V_kirurgija	3:45

Activities - Surgery, orthopaedics and ophthalmology III (2/4)

Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
24/10/2023	16:00	17:30	p06 Introduction to orthopaedics	9E-1, 9E-2	Pecin M.	V_kirurgija	1:30
25/10/2023	16:00	17:30	p07 Fracture biology and biomechanics	9E-1, 9E-2	Maticic D.	V_kirurgija	1:30
27/10/2023	15:45	17:15	p08 Treatment of bone fractures	9E-1, 9E-2	Maticic D.	V_kirurgija	1:30
31/10/2023	15:45	17:15	p09 Joint diseases I	9E-1, 9E-2	Kreszinger M.	V_kirurgija	1:30
13/11/2023	15:45	17:15	p10 Joint diseases II	9E-1, 9E-2	Kreszinger M.	V_kirurgija	1:30
20/11/2023	16:00	17:30	p11 Neurological examination	9E-1, 9E-2	Musulic A.	V_kirurgija	1:30
23/11/2023	15:45	17:15	p12 Intervertebral disc diseases	9E-1, 9E-2	Pirkic B.	V_kirurgija	1:30
28/11/2023	16:00	17:30	p13 Fractures and luxations of vertebrae	9E-1, 9E-2	Pirkic B.	V_kirurgija	1:30
01/12/2023	16:00	22:45	v03 Orthopaedic examination	9E-2	Nastavnici na predmetu	V_kirurgija	6:45
04/12/2023	10:00	11:30	p14 Diagnostics of lameness in ruminants	9E-1, 9E-2	Babic T.	V_kirurgija	1:30

Activities - Surgery, orthopaedics and ophthalmology III (3/4)

Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
05/12/2023	7:30	9:00	p15 Diseases of locomotor system in ruminants	9E-1, 9E-2	Smolec O.	V_kirurgija	1:30
05/12/2023	15:00	21:45	v03 Orthopaedic examination	9E-1	Nastavnici na predmetu	V_kirurgija	6:45
06/12/2023	8:15	15:00	v04 Fracture treatment Midterm exam II	9E-1	Nastavnici na predmetu	V_kirurgija	6:45
07/12/2023	8:15	15:00	v04 Fracture treatment Midterm exam II	9E-2	Nastavnici na predmetu	V_kirurgija	6:45
08/12/2023	8:00	12:30	v05 Cow hoof diseases Midterm exam III	9E-1	Nastavnici na predmetu	V_kirurgija	4:30
08/12/2023	12:45	17:15	v05 Cow hoof diseases Midterm exam III	9E-2	Nastavnici na predmetu	V_kirurgija	4:30
21/12/2023	12:00	15:00	s01 Horse lameness 1	9E-1, 9E-2	Brkljaca Bottegaro N.	P_fizika	3:00
10/01/2024	13:30	15:45	s02 Horse lameness 2	9E-1, 9E-2	Brkljaca Bottegaro N.	P_klinike	2:15

Activities - Surgery, orthopaedics and ophthalmology III (4/4)

Start Dat	Start Tim	End Time	Subject	Group	Instructor	Room	Length
18/01/2024	13:00	15:15	s03 Ruminant lameness	9E-1, 9E-2	Smolec O.	V_kirurgija	2:15
Total: 28							82:30

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Lecture attendance	Student must attend 15 hours of maximum 30 hour of lectures to gain minimal 3 points. Maximal number of point for lecture attendance is 6. Student can be absent in 50% of lectures.
Seminars attendance	During semester a students will have 10 hours of seminars. Student is obligated to attend 7 hours out of 10 hours of seminar and is obligated to present at least two (2) seminar essay topics to complete course. Student can be absent on 30% of hours of seminars. Minimal number od points for attending seminars is 4,2 and maximal is 6.
Practicals attendance	During the semester a student must attend 24,5 exercise hours (out of total 35 hours) in order to gain minimal 4,8 points during the semester. Student can be absent on 30% of hours of excersises. The maximal number of gained points from this evaluation element is 6.
Active participation in seminars and practicals	<p>Participating actively at the exercises and seminars students can gain 35 points max., which brings them 10 points in final (25 points in exercises and 10 points in seminars).</p> <p>Points for performing the following tasks: 25 points = keeping records in the book of a patient in an orderly manner and active participation in the work with patients. Points are granted upon student activity or actively running protocols (for example orthopaedic examination protocol). Points are from 1-5 on each exercises. There are 5 exercises in total (5x5 =25). 10 points = seminars (student is obligated to present at least two (2) seminar essay topics to complete course)</p> <p>The number of points students must gain in order to earn minimal 5 final points is 17,5. Student's participation at the exercises will be checked continuously.</p>

GRADING AND EVALUATING STUDENT WORK

Continuous knowledge-checking (mid-terms)	During the semester there will be three (3) preliminary exams organised at the time of exercises each containing eleven (11) problems or questions. Each correctly solved problem or correctly answered question is worth one (1) point. A student must gain the total of 21 points from 3 preliminary exams (minimal 7 from each preliminary exam) in order to earn minimal 20 points (21 point multiply with 0,9696). The maximal number of points a student can gain from this evaluation element is 32 points (33 point multiply with 0,9696). A student who does not gain minimal 21 points during the semester from preliminary exam (3 x minimal 7 points) has a right to take a makeup preliminary
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	<p>exam covering the units from all programme exercises. The makeup preliminary exam will be organised upon completion of the teaching in the semester. The maximum number of each student to attend makeup exam is two (2). The total number of points at the preliminary exam is 32. A student who passes the makeup preliminary exam with 7 points out of 11 has a right to take the final exam. Also if student failed all 3 preliminary exams on makeup preliminary exam one must gain 21 points out of 33 (from each preliminary exam part at least 7 points, 21 in total). Preliminary exams are:</p> <ol style="list-style-type: none"> 1. Diagnostic of horse lameness 2. Orthopaedic examination of small animals and bone diseases 3. Neurological examination <p>Before the final exam students will have chance to make up for exercises and the makeup preliminary exam in case of their excused absence. Also student must have at least two presentation of seminar (essay). Minimal conditions for passing the first, second, third, fourth and fifth (lecture attendance, exercise attendance, exercise activity, seminars activity/attendance, mid term exams) evaluation element are summed up and they are worth 37,6 points all together. (3+4,8+4,8+5+20). Maximum points to gain from all 5 elements is 60 (6+6+6+10+32).</p>
Final exams (dates)	20.11.2023., 11.12.2023., 8.2.2024., 22.2.2024.
Form of final exam	<p>The final exam starts with a student's short analysis of results gained from the first five types of activities of attending lecture. Minimal number of points before exam is 36,4 points. Questions in the final exam will be put in a way that a student can answer in written and oral form. In the written form there will be 5 questions (20 points), 3 of which must be answered correctly (12 points) in order to take the oral exam. Every question has 4 subquestions and every right answered subquestion values 1 point. Therefore written exam has 20 points in total (5x4). The maximum number of points that can be gained at the final exam is 40 points, where 4 points = 1 correct answer. The student must show at least a sufficient knowledge at the final exam, with no regard to gained number of points from the first five evaluation elements, which could be higher than 37,6. The minimal number of points a student must gain at the final exam is 24 (12 points minimal at written and 12 as well at oral exam). Minimal number of points on written exam together with oral exam must be 24 (40 max.) points. If student does not gain minimum 12 points on written exam one can not take oral exam. If student does not gain minimum 12 points in oral exam, one fails. In case a student does not satisfy at the final part of the exam, the lecturer determines time for re-examination.</p>
Examination requirements	<p>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: a student can justifiably be absent from up to 50 % of the lectures; 30% of the seminars and 30 % of the exercises (practicals)</p>

LITERATURE

Obligatory literature	<p>Written materials / Handout materials</p> <p>Selected chapters from:</p> <ol style="list-style-type: none"> 1. Theresa Welch Fossum: Small Animal Surgery (all editions) 2. Noordsy J. L.; Ames N.K. – Food animal surgery (2006.) 3. Mike Ross, Sue Dyson-Lamenees in the Horse (2011.) 4. ICAR – atlas bolesti papaka (Atlas of hoof diseases)(2015.), 5. Jorg Auer, John Stick-Equine Surgery (2012.) 6. N.Kent Ames-Noordsy Food Animal Surgery (2014.) 7. Brinker, Piermattei, and Flo's Handbook of Small Animal Orthopedics and Fracture Repair (all editions). 8. Douglas H. Slatter: Textbook of Small Animal Surgery (all editions) 9. Spencer A. Johnston, Karen M. Tobias; Veterinary Surgery: Small Animal (1st/2nd edition).
Optional literature	<ol style="list-style-type: none"> 1. Theresa Welch Fossum: Small Animal Surgery, 5E. (2018). 2. Noordsy J. L.; Ames N.K. – Food animal surgery (2006.) 3. Mike Ross, Sue Dyson-Lamenees in the Horse (2011.) 4. ICAR – atlas bolesti papaka (Atlas of hoof diseases)(2015.), 5. N.Kent Ames-Noordsy Food Animal Surgery (2014.)

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	<p>The course goals are to introduce basics of small and large animal orthopaedics and basics of small animal neurosurgery in order to prepare students for diagnostic procedures and treatment.</p> <p>Upon gaining of provided skills and knowledge a student is capable of recognising particular orthopaedics and neurological diseases of small animals and orthopaedics diseases of large animals with enrolment in treatment of toes and hooves diseases.</p>
Learning outcomes	<p>In the 9th semester students broaden their knowledge and skills gained in the 7th and the 8th semester in order to improve their competences. Student can recognise diseases of muscles, tendons and ligaments, and determine the basic treatment. The student is acquainted with the diseases of joints, basics of their treatment and indication for referring patients to a referral clinic. He/she is acquainted with diagnostics and basic ways of treatment the fractures in small animals. The student is trained to give the first aid to a patient, immobilize the fracture and recommend</p>

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other options of treatment. The students are acquainted with the diagnostic and basic treatment of lameness, diseases of muscles, tendons and tendon sheaths in large animals. He/she is able to recognise paralyses and paresis in pets and large animals and estimate indication for referring patients to a referral clinic. The student is acquainted with diagnostics of hoof and toes diseases in large animals and is trained to treat simple cases and indicate possible need to refer the patient to a referral clinic. He/she is acquainted with the basics of hoof corrections, types of horseshoes and with the basic techniques of toes corrections. The student is trained to perform basic neurological examination, diagnostics of a fracture and luxation of vertebrae and estimate the indication for referring the patients to a referral clinic. The student is trained to diagnose diseases of intervertebral disc and degenerative diseases of vertebral column and is able to estimate indication for referring the patients to a referral clinic.

GRADING SCHEME

<i>Points</i>	<i>Grade</i>
Up to 59	1 (F)
60-68	2 (E)
69-76	2 (D)

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77-84	3 (C)
85-92	4 (B)
93-100	5 (A)

Course leader:



Head of Department/Clinic:



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

Kolegii:

**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	4,2	6
Practicals attendance	4,2	6
Active participation in seminars and practicals	5	10
Continuous knowledge checking (mid-terms)	20	32
Final exam	24	40
TOTAL	60	100

V. Vukobratović