

2023-2024

INTERNAL MEDICINE

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE
Heinzelova 55
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Division: Clinic Division
Department/Clinic: Clinic for Internal Diseases
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Register no.:
File no.:
Zagreb, 11/09/2023



170709	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	14.09.2023	
Klasifikacijska oznaka	Org. jed.	
605-03/23-04/28	251-61-32;	
Urudžbeni broj	Prilozi	Vrijednost
251-61-20/388-23-33	0	-

COURSE SYLLABUS

Course name: Internal Medicine

Academic year 2023-24

Course leader: Assoc. Prof. Marin Torti, PhD, DVM

Deputy Course leader: Assist. Prof. Jelena Gotić, PhD, DVM

Teachers: Prof. Damjan Gračner, PhD, DVM, Prof. Nada Kučer, PhD, DVM, Prof. Nikša Lemo, PhD, DVM, DECVD, Prof. Vesna Matijatko, PhD, DVM, Assoc. Prof. Mirna Brkljačić, PhD, DVM, Assoc. Prof. Martina Crnogaj, PhD, DVM, Assoc. Prof. Ivana Kiš, PhD, DVM, Assoc. Prof. Marin Torti, PhD, DVM, Assist. Prof. Darko Grden, PhD, DVM, Assist. Prof. Jelena Gotić, PhD, DVM, Assist. Prof. Iva Šmit, PhD, DVM.

Associate teachers: Ines Jović, PhD, DVM, Gabrijela Jukrić Krsteska, PhD, DVM, Tea Dodig, DVM, Maša Efendić, DVM, Filip Kajin, DVM.

First day of classes: 02/10/2023

Last day of classes: 14/12/2023

Activities - Internal Medicine I (1/5)

Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
02/10/2023	12:15	13:45	p01 Introduction. Hematology I	7E-1, 7E-2	Torti M., Šmit I.	P_farmakologija	1:30
02/10/2023	14:15	15:45	p02 Hematology II	7E-1, 7E-2	Šmit I.	P_fiziologija	1:30
03/10/2023	8:15	9:45	p03 Hematology III	7E-1, 7E-2	Brkljacic M., Crnogaj M.	P_kemija	1:30
03/10/2023	10:15	11:45	p04 Biochem. interpretation. Immune-mediated dz	7E-1, 7E-2	Brkljacic M., Šmit I.	P_kemija	1:30
04/10/2023	10:15	11:45	p05 Sepsis. Vet. emerg. med. I	7E-1, 7E-2	Gotic J.	P_fizika	1:30
04/10/2023	12:15	13:45	p06 Vet. emerg. med. II	7E-1, 7E-2	Matijatko V.	P_fiziologija	1:30
05/10/2023	8:15	9:45	p07 GI symptomatology. Upper GI dz.	7E-1, 7E-2	Šmit I.	P_fiziologija	1:30
05/10/2023	10:15	11:45	p08 Lower GI dz.	7E-1, 7E-2		P_kemija	1:30
06/10/2023	12:15	13:45	p09 GDV, gastritis, gastric ulcer	7E-1, 7E-2	Crnogaj M.	P_fiziologija	1:30
06/10/2023	14:15	15:45	p10 Liver and pancreas dz.	7E-1, 7E-2	Crnogaj M., Kiš I.	P_klinike	1:30

Activities - Internal Medicine I (2/5)

Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
09/10/2023	8:15	14:15	v01 Clinical practice 1	7E-1	Nastavnici na predmetu	V_interna	6:00
09/10/2023	16:00	18:00	v08 Clinical practice 1	7E-1	Nastavnici na predmetu	V_interna	2:00
10/10/2023	8:15	14:15	v02 Clinical practice 2	7E-1	Nastavnici na predmetu	V_interna	6:00
11/10/2023	8:15	14:15	v03 Clinical practice 3	7E-1	Nastavnici na predmetu	V_interna	6:00
11/10/2023	18:00	22:00	Night shift 1	7E-1	Nastavnici na predmetu	V_interna	4:00
12/10/2023	8:15	14:15	v04 Clinical practice 4	7E-1	Nastavnici na predmetu	V_interna	6:00
12/10/2023	16:00	18:00	v09 Clinical practice 2	7E-1	Nastavnici na predmetu	V_interna	2:00
13/10/2023	8:15	14:15	v05 Clinical practice 5	7E-1	Nastavnici na predmetu	V_interna	6:00
16/10/2023	8:15	9:45	p11 Upper resp. dz.	7E-1, 7E-2	Crnogaj M.	P_fiziologija	1:30
16/10/2023	10:15	11:45	p12 Pneumothorax, effusions. Pneumonias	7E-1, 7E-2	Matijatko V., Torti M	P_kemija	1:30

Activities - Internal Medicine I (3/5)

Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
17/10/2023	10:15	11:45	p13 Bronchitis, feline asthma. Equine asthma	7E-1, 7E-2	Grden D., Torti M	P_fiziologija	1:30
17/10/2023	12:15	13:45	p14 CV symptoms, pericardial dz., PulHyp	7E-1, 7E-2	Torti M	P_fiziologija	1:30
18/10/2023	8:15	9:45	p15 Cong. heart dz. Valve dz.	7E-1, 7E-2	Torti M.	P_klinike	1:30
18/10/2023	10:15	11:45	p16 Arrhythmias	7E-1, 7E-2	Torti M	P_klinike	1:30
19/10/2023	10:15	11:45	p17 Cardiomyopathies. Equine cardiol.	7E-1, 7E-2	Torti M	P_klinike	1:30
19/10/2023	12:15	13:45	p18 AKI. FLUTD.	7E-1, 7E-2	Kiš I.	P_klinike	1:30
19/10/2023	18:00	22:00	Night shift 1	7E-2	Nastavnici na predmetu	V_interna	4:00
20/10/2023	8:15	9:45	p19 CRF. Lower UT dz.	7E-1, 7E-2	Crnogaj M.	P_klinike	1:30
20/10/2023	10:15	11:45	p20 Oncology I	7E-1, 7E-2	Brkljacic M., Kucer N.	P_klinike	1:30
23/10/2023	8:15	14:15	v06 Clinical practice 6	7E-1	Nastavnici na predmetu	V_interna 2	6:00

Activities - Internal Medicine I (4/5)

Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
24/10/2023	8:15	14:15	v07 Clinical practice 7	7E-1	Nastavnici na predmetu	V_interna 2	6:00
23/11/2023	8:15	14:15	v01 Clinical practice 1	7E-2	Nastavnici na predmetu	V_interna 2	6:00
24/11/2023	8:15	14:15	v02 Clinical practice 2	7E-2	Nastavnici na predmetu	V_interna	6:00
24/11/2023	16:00	18:00	v08 Clinical practice 1	7E-2	Nastavnici na predmetu	V_interna	2:00
27/11/2023	8:15	14:15	v03 Clinical practice 3	7E-2	Nastavnici na predmetu	V_interna	6:00
28/11/2023	8:15	14:15	v04 Clinical practice 4	7E-2	Nastavnici na predmetu	V_interna	6:00
29/11/2023	8:15	14:15	v05 Clinical practice 5	7E-2	Nastavnici na predmetu	V_interna	6:00
29/11/2023	16:00	18:00	v09 Clinical practice 2	7E-2	Nastavnici na predmetu	V_interna	2:00
30/11/2023	8:15	14:15	v06 Clinical practice 6	7E-2	Nastavnici na predmetu	V_interna 2	6:00
01/12/2023	8:15	14:15	v07 Clinical practice 7	7E-2	Nastavnici na predmetu	V_interna 2	6:00
04/12/2023	8:15	9:45	p21 Oncology II	7E-1, 7E-2	Kucer N.	P_fizika	1:30

Activities - Internal Medicine I (5/5)

Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
04/12/2023	10:15	11:45	p22 Oncology III. Equine urinary tract	7E-1, 7E-2	Kucer N.	P_fizika	1:30
05/12/2023	12:15	13:45	p23 Equine gastric dz. Myopathies	7E-1, 7E-2	Grden D., Kucer N.	P_klinike	1:30
05/12/2023	14:15	15:45	p24 Equine colic I	7E-1, 7E-2	Gotic J.	P_klinike	1:30
06/12/2023	8:15	9:45	p25 Equine colic II	7E-1, 7E-2	Gotic J.	P_klinike	1:30
06/12/2023	10:15	11:45	p26 Ruminants I	7E-1, 7E-2	Gracner D.	P_klinike	1:30
06/12/2023	18:00	22:00	Night shift 2	7E-1	Nastavnici na predmetu	V_interna	4:00
07/12/2023	10:15	11:45	p27 Ruminants II	7E-1, 7E-2	Gracner D.	P_klinike	1:30
07/12/2023	12:15	13:45	p28 Ruminants III	7E-1, 7E-2	Gracner D.	P_klinike	1:30
08/12/2023	8:15	9:45	p29 Ruminants IV	7E-1, 7E-2	Gracner D.	P_klinike	1:30
08/12/2023	10:15	11:45	p30 Hypoglycemia, -magnesemia. Trace elements.	7E-1, 7E-2	Gracner D., Grden D.	P_klinike	1:30
14/12/2023	18:00	22:00	Night shift 2	7E-2	Nastavnici na predmetu	V_interna	4:00
Total: 52							153:00

STUDENT OBLIGATIONS

Lecture attendance	By attending lectures in the seventh semester the student gains from 2 to 4 points (60 lecture hours; each lecture hour equals a coefficient of 0,0665) and in the eight semester 1 to 2 points (30 lecture hours; each lecture hour equals a coefficient of 0,0665). Student must attend at least 30 lecture hours (50%) in the seventh semester , for a minimum of 3 points , and at least 15 lecture hours (50%) in the eight semester , for a minimum of 1 point . The maximum number of points from this element is 6 points.
Seminar attendance	During the semester the student must perform at least 8 different standardized practical procedures on animals for a minimum of 5 points . The maximum number of points from this element is 10 points, or 16 different practical procedures.
Practicals attendance	By attending practicals in the seventh semester the student gains from 5 to 7 points (69 exercise hours; each exercise hour equals a coefficient of 0,1) and in the eight semester 3 to 4 (42 exercise hours; each exercise hour equals a coefficient of 0,1). Student must attend at least 48 exercise hours (70%) in the seventh semester , for a minimum of 5 points , and at least 30 exercise hours (70%) in the eight semester , for a minimum of 3 points . The maximum number of points from this element is 10 points.
Active participation in seminars and practicals	During the semester the student must perform 8 different activities (practical procedures or patient analyses) by himself to achieve a minimum of 5 points. The maximum of this element is 10 points (16 different independent activities). Each activity is 0.625 point.
Final exam	The final exam includes written and oral exam. Written exam is composed of 24 questions. The student must answer 14 questions correctly to achieve a minimum of 14 points to fulfil the criteria for oral exam. The maximum of written part of final exam is 24 points (24 correct answers). Each correct answer is 1 point. The oral part of final exam is composed of 8 questions. The minimum points per each question is 1.25 points while maximum is 2 points. The minimum of oral part of the final exam is 10 points and maximum is 16 points. Therefore, the minimum of points required for student to pass the final exam (both written and oral) is 24 points while maximum is 40 points.
Examination requirements	Student requirements are defined in the Regulations on the Integrated Undergraduate and Graduate Study of Veterinary Medicine (2023). 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; 30% of the seminars and 30 % of the exercises.

GRADING AND EVALUATING STUDENT WORK

Continuous knowledge-checking (mid-terms)	The students will have a mid-term (preliminary) written exam consisting of 16 questions. Each question equals 2 points, with a maximum of 32 points. The minimum number of points required to pass is 20 . Taking and passing the test is required for the continuation into the eight semester and registration of final exam. Mid-term (preliminary) written exam dates: 21/12/2023, 11/01/2024, 18/01/2024, 25/01/2024.
Final exams (dates)	04/12/2023, 12/02/2024, 19/02/2024.
Form of final exam	Written exam and oral exam following passed written exam.

LITERATURE

Obligatory literature	Lecture handouts via the LMS. Selected chapters from: <ol style="list-style-type: none"> 1. Textbook of Veterinary Internal Medicine Expert Consult, 8th Edition by Stephen J. Ettinger, DVM, DACVIM, Edward C. Feldman, DVM, DACVIM and Etienne Cote, DVM, DACVIM. 2. Small Animal Internal Medicine, 5th Edition by Richard W. Nelson, DVM and C. Guillermo Couto, DVM. 3. Textbook of the diseases of cattle, horses, sheep, pugs and goats. 10th Edition by Radostits C. M., Gay, O. M. 4. Large Animal Internal Medicine, 6th Edition by Bradford Smith, David Van Metre, Nicola Pusterla.
Optional literature	<ol style="list-style-type: none"> 1. Textbook of Veterinary Internal Medicine Expert Consult, 8th Edition by Stephen J. Ettinger, DVM, DACVIM, Edward C. Feldman, DVM, DACVIM and Etienne Cote, DVM, DACVIM. 2. Small Animal Internal Medicine, 5th Edition by Richard W. Nelson, DVM and C. Guillermo Couto, DVM. 3. A Textbook of the diseases of cattle, horses, sheep, pigs and goats 10th Edition by Radostits CM DVM MSc MRCVS Dipl ACVIM, Otto M. Gay DVM, MVSc, Hon. DVSc, FACVSc, Hon, Diplomate ACVIM. 4. Large Animal Internal Medicine, 6th Edition by Bradford Smith, David Van Metre, Nicola Pusterla.

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	Diagnosis and treatment of the diseases of digestive, cardiovascular, respiratory, and urinary system, as well as diagnosis and treatment of neurologic, endocrinological, hematopoetic, neoplastic, dermatological diseases in different species of domestic animals. Basics of emergency and critical care medicine.
Learning outcomes	During studying internal medicine students acquire and consolidate their medical logics based on medical premises gained in study of preclinical subjects. Such an approach enables forming of experts disposed to new knowledge and independent on stereotypes. Upon acquisition of course content a student can examine the patient, notice disease symptoms, establish a diagnosis, confirm it by proper laboratory tests and finally determine the proper treatment of disease within the internal medicine at the level of generally veterinary medicine. Therefore, a student is well prepared and trained to take part in attending the further clinical courses as well as those belonging to public health.

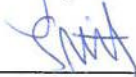
GRADING SCHEME

<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:



Head of Department/Clinic:



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