

2024-2025

FORENSIC VETERINARY MEDICINE

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE
Heinzelova 55
Tel. 01/2390-125
Division:
Department / Clinic
Department of Forensic and State Veterinary Medicine
Email: sudska@vef.hr
Register no.:
File no: 61-24-24-144
Zagreb, 2. September 2024.

		
190380	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	02.09.2024	
Klasifikacijska oznaka	Org. jed.	
602-04/24-22/38	251-61-41;	
Uredžbeni broj	Prilozi	Vrijednost
251-61-24-24-04	0	-

COURSE SYLLABUS

Course name: Forensic Veterinary Medicine

Academic year 2024-2025

Course leader:

Teachers: Prof Krešimir Severin

Associate teachers: assistant Magdalena Palić, univ. spec. med. vet.

First day of classes: 14.10.2024.

Last day of classes: 19.12.2024.

Activities - Forensic Veterinary Medicine (1/3)								
Start Date	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
14/10/2024	7:30	9:00	p01 General overview - introduction, legal aspect	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
15/10/2024	7:30	9:00	p02 Neglect and animal abuse Accidental, non-accidental injuries	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
17/10/2024	8:15	9:45	p03 Forensic physical examination Forensic necropsy	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
17/10/2024	13:45	15:15	v01 Forensic aspects of postmortem changes	11E-1, 11E-2, 11E-3		1:30	Palić M.	P_sudska
21/10/2024	8:15	9:45	v02 Estimation of postmortem interval	11E-1, 11E-2, 11E-3		1:30	Palić M.	P_sudska
22/10/2024	12:15	13:45	v03 Forensic aspects of inflamm and adaptive cellular responses	11E-1, 11E-2, 11E-3		1:30	Palić M.	P_sudska
23/10/2024	8:15	9:45	p04 Crime scene invest Evidence collection and analysis	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
24/10/2024	8:15	9:45	v04 Blunt force injuries (BFI) - abrasions, contusions and lacerations	11E-1, 11E-2, 11E-3		1:30	Palić M.	P_sudska
28/10/2024	13:30	15:00	v05 Blunt force injuries (BFI) - Fracture/wounds healing process	11E-1, 11E-2, 11E-3		1:30	Palić M.	P_sudska

Activities - Forensic Veterinary Medicine (2/3)

Start Date	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
29/10/2024	14:00	15:30	v06 Sharp force injuries - incised wounds	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
06/11/2024	10:30	12:00	p05 Expert witness testimony and report writing	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
06/11/2024	12:30	14:00	v07 Bite injuries Predator attack Animal fighting	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
12/11/2024	14:30	16:00	v08 Firearms injuries	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
20/11/2024	13:45	15:15	v09 Asphyxia injuries - strangulation, choking and smoth.	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
21/11/2024	13:45	15:15	v10 Physical injuries - thermal, electric, hypo/hyperthe.	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
25/11/2024	12:15	13:45	v11 Veterinary Forensic Toxicology	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
27/11/2024	12:00	13:30	v12 Forensic analysis of disease in farm animals	11E-1, 11E-2, 11E-3		1:30	Severin K.	P_sudska
28/11/2024	13:00	14:30	v13 Forensic analysis of diseases in pet and exotic anim.	11E-1, 11E-2, 11E-3		1:30	Palić M.	P_sudska
02/12/2024	12:15	13:45	v14 Case study - student seminars	11E-2		1:30	Palić M.	P_sudska
03/12/2024	12:00	13:30	v14 Case study - student seminars	11E-3		1:30	Palić M.	P_sudska

Activities - Forensic Veterinary Medicine (3/3)

Start Date	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
03/12/2024	14:00	15:30	v14 Case study - student seminars	11E-1		1:30	Palić M.	P_sudska
09/12/2024	14:15	17:15	v15 Material evidence, Biological traces DNA isolation	11E-3		3:00	Severin K.	P_sudska
10/12/2024	7:30	10:30	v15 Material evidence, Biological traces DNA isolation	11E-1		3:00	Severin K.	P_sudska
10/12/2024	10:30	13:30	v15 Material evidence, Biological traces DNA isolation	11E-2		3:00	Severin K.	P_sudska
17/12/2024	11:15	13:30	v16 DNA fingerprinting, STR-PCR	11E-3		2:15	Severin K.	P_sudska
18/12/2024	8:30	10:45	v16 DNA fingerprinting, STR-PCR	11E-2		2:15	Severin K.	P_sudska
19/12/2024	8:30	10:45	v16 DNA fingerprinting, STR-PCR	11E-1		2:15	Severin K.	P_sudska
Total: 27						47:15		

f

STUDENT OBLIGATIONS

Lecture attendance	Attending lectures	3	6
	6% of grade	10 lectures hours: one lecture hour is multiplied with 0.6, and a student must attend minimal 5 lecture hours	
Seminars attendance			
Practicals attendance	Attending practicals	9	12
	12% of grade	35 practicals hours – one practical hour is multiplied with 0.343, and a student must attend minimal 25 practical hours	
Active participation in seminars and practicals	Participation at practicals	5	10
	10% of grade	Each student is obliged to prepare and present seminar work (the court case from the Department's archive) which will be assessed	
	Continuous knowledge checking	20	32
	32% of grade	- first preliminary exam 10-16 points (16 question, each question is worth 1 point) - second preliminary exam 10-16 points (16 questions each question is worth 1 point)	
Final exam	Final exam	24	40
	40% of grade	In order to take the final exam a student must gain minimal 36 points from attending and participation at lectures and seminars and from continuous knowledge checking. Written exam form 24 to 40 points A student gets 8 questions – each correct answer is worth 5 points.	
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)	2.12.2024., 17.12.2024., 20.01.2025., 3.2.2025.
Final exams (dates)	28.11.2024., 11.2.2025., 21.02.2025.,
Form of final exam	Written exam

LITERATURE

Obligatory literature	Cooper J.E., M.E. Cooper (2007): Introduction to Veterinary and Comparative Forensic Medicine, Blackwell Publishing, Oxford. Merck M.D. (2012): Veterinary Forensics: Animal Cruelty Investigations, 2nd Edition, Wiley-Blackwell Civil Obligations Act , OFFICIAL GAZETTE NO. 035/2005, 041/2008, 029/2018, 126/2021, 114/2022, 156/2022 Civil Procedure Act , OFFICIAL GAZETTE NO. 148/11 Criminal Code , OFFICIAL GAZETTE NO. 125/2011, 118/2018, 126/2019, 084/2021, 114/2022 Misdemeanour Act , OFFICIAL GAZETTE NO. 107/07
Optional literature	Munro R., H. Munro (2008): Animal Abuse and Unlawful Killing, Saunders, London.

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	Forensic veterinary medicine course is conceived in a way to introduce the student in this special field of veterinary medicine. Teaching presents students that all veterinarians deal with this part of legal medicine, not only experts in this veterinarian discipline. The goal of the course is to train students for legal medical judging of disputable cases related to animals and animal products, indicate the important procedures at a crime scene (Site visits and fieldwork) and what are the preconditions for ensuring credible material evidence. Student acquires the knowledge how to create forensic veterinary expertise and how to present their expert explanations by providing findings and opinions through the veterinary expertise and/or statements to the court or other body which seeks these services. Also students will be trained to determine pain, suffering, fear and injuries that have occurred during animal neglect, abuse or cruelty. Finally, students will be given the knowledge about responsibilities of veterinary staff during the performance of veterinary activities and most common type of professional misconduct.
Learning outcomes	• contrast the acquired knowledge of veterinary medicine clinics, veterinary public health, animal production and biotechnology with newly acquired ones in the field of forensic veterinary medicine • explain the responsibility of future veterinary staff in dealing on requests by judicial authorities, inspection control, legal and natural persons • analyse the formal and material legislation of Civil, Misdemeanour and Criminal Act • compare the professional witness and expert witness duties in report writing and giving evidence in court • investigate and collect evidence from or prepare reports about matters concerning crime scene investigation • explain the procedure of identification of vertebrates from the preparation of various biological samples to the performance of selected molecular methods • present the basic elements of the forensic necropsy, in order to ascertain the cause of death, the mechanism of death and the manner of death • present the basic elements of the forensic clinical examination of an animal prior to purchase or that might be the subject of a legal case • evaluate the main elements for determining the • the value of animals relevant to legal and insurance cases • recognize and evaluate of medical-legal and forensic aspects of most important animal diseases and disorders

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.