

2023-2024

BOTANY IN VETERINARY MEDICINE

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE
Heinzelova 55
Tel. 01/2390-140
Division: Basic, natural and preclinical science division
Department / Clinic: Department of veterinary biology
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Register no.: 61-02-322/23



170283	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Priljeno:	06.09.2023	
Klasifikacijske oznake	Org. jed.	
605-03/23-04/28	251-61-32;	
Uradbeni broj	Prilozi	Vrijednost
251-61-02/301-23-11	0	

COURSE SYLLABUS

Course name: **Botany in Veterinary Medicine**
Academic year 2023-24

Course leader: Professor Maja Popović, DVM, PhD

The substitute of course coordinator: Professor Ksenija Vlahović, DVM, PhD

Teachers:

Professor Ksenija Vlahović, DVM, PhD

Professor Maja Popović, DVM, PhD

Professor Josip Kusak, DVM, PhD

Professor Tomislav Gomerčić, DVM, PhD

Fodder plants: Professor Željko Mikulec, DVM, PhD

Poisonous plants: Professor Andrea Prevendar Crnić, DVM, PhD

Important honey plants in Croatia: Associate Professor Daniel Špoljarić, DVM, PhD

Medicinal plants: Professor Damir Žubčić, DVM, PhD

First day of classes: 3/10/2023

Last day of classes: 20/10/2023

JP

Activities - Botany in Veterinary Medicine (1/2)								
Start Date ?	Start Ti	End Ti	Subject	Group	Note	Length	Instructor	Room
03/10/2023	8:15	9:45	p01 Basic principles in life organisation of plants	1E-1, 1E-2, 1E-3		1:30	Špoljaric D.	P_fizika
03/10/2023	16:00	17:30	v01 Basic organisational cell types	1E-3		1:30	Nastavnici na predmetu V_fizika	
04/10/2023	14:00	15:30	p02 Systematics and evolution of plants	1E-1, 1E-2, 1E-3		1:30	Popovic M.	P_fizika
04/10/2023	15:45	17:15	v01 Basic organisational cell types	1E-1, 1E-2		1:30	Nastavnici na predmetu V_fizika	
05/10/2023	8:15	9:45	p03 Review of the plant kingdom	1E-1, 1E-2, 1E-3		1:30	Špoljaric D.	P_fizika
06/10/2023	8:15	9:45	p04 Poisonous plants -Medicinal plants	1E-1, 1E-2, 1E-3		1:30	Popovic M.	P_fizika
06/10/2023	10:15	11:45	v02 Plant cell	1E-1, 1E-2		1:30	Nastavnici na predmetu V_fizika	
06/10/2023	15:00	16:30	v02 Plant cell	1E-3		1:30	Nastavnici na predmetu V_fizika	
09/10/2023	8:15	9:45	p05 Fodder plants	1E-1, 1E-2, 1E-3		1:30	Valpotic H.	P_fizika
09/10/2023	13:45	15:15	v03 Mitosis	1E-3		1:30	Nastavnici na predmetu V_fizika	
11/10/2023	9:00	10:30	v03 Mitosis	1E-1, 1E-2		1:30	Nastavnici na predmetu V_fizika	
17/10/2023	12:15	13:45	v04 Photosynthesis	1E-3		1:30	Nastavnici na predmetu V_fizika	
17/10/2023	14:15	15:45	v04 Photosynthesis	1E-1, 1E-2		1:30	Nastavnici na predmetu V_fizika	

JP

Activities - Botany in Veterinary Medicine (2/2)								
Start Date ?	Start Ti	End Ti	Subject	Group	Note	Length	Instructor	Room
20/10/2023	8:15	9:45	v05 Important honey plants-Grass family	1E-3		1:30	Nastavnici na predmetu V_fizika	
20/10/2023	12:15	13:45	v05 Important honey plants-Grass family	1E-1, 1E-2		1:30	Nastavnici na predmetu V_fizika	
Total: 15						22:30		

STUDENT OBLIGATIONS

Lecture attendance	During the session for the „Botany in veterinary medicine“ course the student must attend 5 lecture lessons in order to gain 3 minimal points. The maximum gained number of points from this evaluation element is 6 points.
Seminars attendance	-
Practicals attendance	During the session student must attend 7 exercise lessons in order to gain 8 minimal points during the semester. The maximum gained number of points from this evaluation element is 12 points.
Active participation in seminars and practicals	During the session at the time of exercises student must do provided tasks from 5 programming exercises and for a completed task she/he gets a signature from the lecturer. Each well done and signed programming exercise is worth 1.4 points. For programming exercises in practicum a student can gain total of 7 points for 5 programme exercises. After a field work lesson (there are 2 field work lessons planned) a student gains 1.5 points if she/he wrote and /or collected predetermined materials. For two positive oral answers during the exercises student gains additional 1.5 points. During the session student must gain total of 5 points in order to have the minimal number of 5 points. Maximal number of points gained from this evaluation element is 10.
Final exam	The final exam starts with a student's short analysis of results gained from the first four types of activities of attending lecture. Questions in the final exam will be put in a way that a student can answer in writing. The maximum number of points that can be gained from the final exam is 60 points, where 1 point= 1 correct answer (60 questions = 60 points). Student must show at least a sufficient knowledge at the final exam, with no regard to gained number of points from the first four evaluation elements, which could be higher than 36. The minimal number of points a student must gain at the final exam is 36 in order to gain minimal number of 24 points. In case a student does not satisfy at the final part of the exam, the lecturer determines time for reexamination.
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 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 the session 4 preliminary exams will be organized at the time of exercises each of them consisting 5 tasks or questions. Each correctly done task or well answered question is worth 1 point. In context of this evaluation element it is possible to gain the maximum of 20 points. Student must gain total of 12,5 points from the preliminary exams in order to gain minimum of 20 points. The total gained number of points from this evaluation element is 32 points. Student who does not gain minimum of 12,5 points during the session has right to take a makeup preliminary exam which will comprise material from all programming exercises and will be organized upon completion of the teaching in the session. Total number of points at the preliminary exam is 20. Student who does the makeup exam with better-than 50% results has right to take the final exam.
Final exams (dates)	8/11/2023 14/12/2023 6/2/2024 19/2/2024
Form of final exam	Written exam

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	Students will be able to distinguish basic systematic categories of plants important for veterinary medicine. They will be able to recognise mutual dependence of plants and animals within the whole ecosystem. They will get acquainted with morphologic basis of fodder plants from plough-fields and grasslands. They will be aware of medicine plants groups as well of plants poisonous for animals. They could get required information on plants important in veterinary medicine using botanic literature and data basis.
Learning outcomes	<ol style="list-style-type: none"> 1. Compare the structure of prokaryotic and eukaryotic cells and enumerate groups of prokaryotes and explain their significance for animal health as well as the role and application of bacteria in the biosphere and life of humans and animals 2. Distinguish basic systematic categories of plants important for veterinary medicine 3. Differentiate morphology group of plants important in animal nutrition and identify groups of medicinal and honey plants and groups of plants poisonous to animals 4. Draw and explain the processes associated with cell division in plants and animals, and operate a light microscope and draw observed cells and intracellular structures 5. Written to summarize their knowledge of the structure of plant cells and the function of its organelles with special reference to material, accommodation and the role of DNA molecules 6. Demonstrate their knowledge in the process of separating molecules of DNA from plant cells 7. Explain the processes that arise from inorganic organic matter and light energy is converted to chemical (division reaction, photolysis of water and the respiratory chain) 8. Systems used to search for content relevant to botany in veterinary medicine using literature and databases

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)

Literature:

2023-2024

BOTANY IN VETERINARY MEDICINE

1. Moore, R., W. D. Clark, K. R. Stern, D. Vodopich (1995): Botany. Wm. C. Brown Publishers.

2. Wynn, S.G., Fougere (2007): Veterinary herbal medicine. Mosby Elsevier.

WEB Handbook: Overview of the plant kingdom with an introduction into plant groups important in veterinary medicine. Professor Ksenija Vlahović, DVM, PhD.

Course leader:
Professor Maja Popović, DVM, PhD

Maja Popović

Head of Department of veterinary biology:
Professor Maja Popović DVM, PhD

Maja Popović

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