#### Botany in Veterinary Medicine

UNIVERSITY OF ZAGREB FACULTY OF VETERINARY MEDICINE

Heinzelova 55 Tel. 01/2390155

Division: Basic, natural and preclinical science divison Organizational unit: Department of veterinary biology E-mail of the course leader: mpopovic@vef.unizg.hr Register No of the organisational unit: 61-02-187/25

Zagreb, 3/9/2025

#### **COURSE SYLLABUS**

Course name: **Botany in Veterinary Medicine**Academic year 2025/2026

Course leader: Full Professor Maja Popović Nikolić Džolan, DVM, PhD

Deputy course leader: Full Professor Ksenija Vlahović, DVM, PhD

Teachers:

Full Professor Ksenija Vlahović, DVM, PhD Full Professor Maja Popović Nikolić Džolan, DVM, PhD Full Professor Josip Kusak, DVM, PhD Full Professor Tomislav Gomerčić, DVM, PhD

Fodder plants:Full Professor Željko Mikulec, DVM, PhD

Poisonous plants:Full Professor Andrea Prevendar Crnić; DVM, PhD

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

Ira Topličanec, DVM, PhD

First day of classes: 30/9/2025 Last day of classes: 7/11/2025



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	Activities - Botany in Veterinary Medicine (1/2)							
Start Dat	Start	End	Subject	Subject	Group Note	Length	Instructor	Room
30/09/202 5	8:15	9:45	Botany in Veterinary Medicine	p01 Basic principles in life organisation of plants	1E-1, 1E-2	1:30	Špoljarić D.	P_fizika
01/10/202 5	8:15	9:45	Botany in Veterinary Medicine	p02 Systematics and evolution of plants	1E-1, 1E-2	1:30	Popović Nikolić Džolan M.	P_fizika
06/10/202 5	11:45	13:15	Botany in Veterinary Medicine	v01 Basic organisational cell types	1E-1, 1E-2	1:30	Nastavnici na predmetu	V_fizika
07/10/202 5	12:00	13:30	Botany in Veterinary Medicine	p03 Review of the plant kingdom	1E-1, 1E-2	1:30	Špoljarić D.	P_fizika
08/10/202 5	12:00	13:30	Botany in Veterinary Medicine	v02 Plant cell	1E-1, 1E-2	1:30	Nastavnici na predmetu	V_fizika
10/10/202 5	8:15	9:45	Botany in Veterinary Medicine	v03 Mitosis	1E-1, 1E-2	1:30	Nastavnici na predmetu	V_fizika
17/10/202 5	8:15	9:45	Botany in Veterinary Medicine	p04 Poisonous plants -Medicinal plants	1E-1, 1E-2	1:30	Popović Nikolić Džolan M.	V_fizika
20/10/202 5	8:15	9:45	Botany in Veterinary Medicine	v04 Photosynthesis	1E-1, 1E-2	1:30	Nastavnici na predmetu	V_fizika

Activities - Botany in Veterinary Medicine (2/2)									
Start Dat	Start	End	Subject	Subject	Group	Note	Length	Instructor	Room
21/10/202 5	8:15	9:45	Botany in Veterinary Medicine	p05 Fodder plants	1E-1, 1E-2		1:30	Valpotić H.	V_fizika
23/10/202 5	11:45	13:15	Botany in Veterinary Medicine	v05 Important honey plants-Grass family	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_fizika
Total: 10							15:00		

## **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	minimal points. The maximum gained number of points from this evaluation element is 6 points.
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 (2024). 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 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)	21/11/2025 18/12/2025 6/2/2026 19/2/2026
Form of final exam	Written exam.

# **OBJECTIVES AND LEARNING OUTCOMES**

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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		
	nedicine 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	1. Compare prokaryotic and eukaryotic cells according to their structure, identify individual groups of prokaryotes		
	microscopically, and explain their significance for animal health as well as their role in human and animal life.		
	2. Differentiate the basic systematic categories of plants important for veterinary medicine		
	3. Differentiate morphological characteristics of plant groups important in animal nutrition and recognize groups of		
	medicinal and honey plants and groups of plants poisonous for animals		
	4. Describe the cell life cycle and cell division (mitosis) and explain their role in the life cycle of multicellular		
	organisms		
	5. Combine the structure of the eukaryotic plant cell with its functional organization and connect the structure and		
	role of the DNA molecule with the structure of chromosomes		
	6. Explain the process by which organic substances are formed from inorganic substances and light energy is		
	converted into chemical energy (fission reactions, photolysis of water and the respiratory chain).		
	7. Demonstrate your knowledge in the process of extracting DNA molecules from plant cells.		
	8. Use various tools and techniques of content search systems to find relevant information related to a specific topic		
	or problems important for botany		
	or providing important for socially		

## **GRADING SCHEME**

Points	Grade	
Up to 59	1 (F)	
60-76	2 (D,E)	
77-84	3 (C)	
85-92	4 (B)	
93-100	5 (A)	

Popene N. Dždan

Full Professor Maja Popović Nikolić Džolan, DVM, PhD

Head of organizational unit:

Associate Professor Daniel Špoljarić; DVM, PhD

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