

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
Email: mpopovic@vef.hr
Register no.: 61-02-295/24

COURSE SYLLABUS

Course name: **Botany in Veterinary Medicine**
Academic year 2024-25

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

Ira Topličanec, DVM, PhD

First day of classes: 3/10/2024

Last day of classes: 22/10/2024



190523	REPUBLIKA HRVATSKA		
Veterinarski fakultet u Zagrebu			
Primljeno:	04.09.2024		
Klasifikacijska oznaka	Org. jed.		
602-04/24-22/38	251-61-41;251-61-32;251-61-02;		
Urudžbeni broj	Prilozi	Vrijednos	
251-61-02-24-23	0	-	

Activities - Botany in Veterinary Medicine (1/2)

Start Date	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
03/10/2024	13:30	15:00	p01 Basic principles in life organisation of plants	1E-1, 1E-2, 1E-3		1:30	Špoljarić D.	P_fizika
04/10/2024	12:00	13:30	p02 Systematics and evolution of plants	1E-1, 1E-2, 1E-3		1:30	Popović M.	P_fizika
07/10/2024	12:00	13:30	v01 Basic organisational cell types	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_fizika
08/10/2024	10:00	11:30	v01 Basic organisational cell types	1E-3		1:30	Nastavnici na predmetu	V_fizika
08/10/2024	15:15	16:45	p03 Review of the plant kingdom	1E-1, 1E-2, 1E-3		1:30	Špoljarić D.	P_fizika
09/10/2024	8:00	9:30	v02 Plant cell	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_fizika
09/10/2024	15:15	16:45	v02 Plant cell	1E-3		1:30	Nastavnici na predmetu	V_fizika
15/10/2024	8:15	9:45	p04 Poisonous plants -Medicinal plants	1E-1, 1E-2, 1E-3		1:30	Popović M.	V_fizika
16/10/2024	8:15	9:45	p05 Fodder plants	1E-1, 1E-2, 1E-3		1:30	Valpotić H.	V_fizika
17/10/2024	8:30	10:00	v03 Mitosis	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_fizika
17/10/2024	13:50	15:20	v03 Mitosis	1E-3		1:30	Nastavnici na predmetu	V_fizika
18/10/2024	8:45	10:15	v04 Photosynthesis	1E-3		1:30	Nastavnici na predmetu	V_fizika
18/10/2024	15:45	17:15	v04 Photosynthesis	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_fizika

Activities - Botany in Veterinary Medicine (2/2)

Start Date	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
21/10/2024	15:15	16:45	v05 Important honey plants-Grass family	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_fizika
22/10/2024	8:15	9:45	v05 Important honey plants-Grass family	1E-3		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)	21/11/2024 18/12/2024 5/2/2025 19/2/2025
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 prokaryotic and eukaryotic cells according to their structure and microscopically recognize individual groups of prokaryotes and explain their significance for animal health as well as their role in the 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. Describe the life cycle of a cell and cell division (mitosis) and explain their role in the life cycle of multicellular organisms. 5. Match 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. 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. Use various tools and techniques of the content search system to find relevant information related to a particular topic or problem relevant to botany.

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:

- | |
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| 1. Moore, R., W. D. Clark, K. R. Stern, D. Vodopich (1995): Botany. Wm. C. Brouwn Publischers. |
| 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

M. Popović

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