

ENVIRONMENT, ANIMAL BEHAVIOUR AND WELFARE

UNIVERSITY OF ZAGREB
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COURSE SYLLABUS

Course name: "ENVIRONMENT, ANIMAL BEHAVIOUR AND WELFARE"

Academic year 2024-25

Course leader: Kristina Matković, DVM, PhD, Full Professor

Teachers: Kristina Matković, DVM, PhD, Full Professor; Gordana Gregurić Gračner, PhD, Full Professor; Mario Ostović, DVM, PhD, Assoc. Professor

Assistant: Ivana Sabolek, DVM, junior research assistant

First day of classes: 1st October 2024

Last day of classes: 29th November 2024

ENVIRONMENT, ANIMAL BEHAVIOUR AND WELFARE

Activities - Environment, animal behaviour and welfare (1/3)								
Start Date	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
01/10/2024	10:00	11:30	p01 Soil and surface waters	1E-1, 1E-2, 1E-3		1:30	Gregurić Gračner G.	V_zoohigijena
02/10/2024	13:45	15:15	p02 Drinking water	1E-1, 1E-2, 1E-3		1:30	Ostović M.	V_zoohigijena
04/10/2024	14:00	15:30	v01 Soil	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
07/10/2024	12:00	13:30	v01 Soil	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
07/10/2024	13:45	15:15	p03 Animal behaviour	1E-1, 1E-2, 1E-3		1:30	Matković K.	V_zoohigijena
09/10/2024	8:00	9:30	v02 Water 1	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
09/10/2024	13:30	15:00	v02 Water 1	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
10/10/2024	8:15	9:45	v03 Water 2	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
11/10/2024	13:30	15:00	p04 Animal welfare	1E-1, 1E-2, 1E-3		1:30	Gregurić Gračner G., Matković K.	V_zoohigijena
14/10/2024	13:30	15:00	v03 Water 2	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
15/10/2024	8:15	9:45	v04 Ethogram	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
15/10/2024	15:00	16:30	v04 Ethogram	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
17/10/2024	8:15	9:45	v05 Dogs and cats	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
21/10/2024	8:15	9:45	v05 Dogs and cats	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena

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Activities - Environment, animal behaviour and welfare (2/3)								
Start Date	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
23/10/2024	13:45	15:15	v06 Poultry, colloquium	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
23/10/2024	15:30	17:00	v06 Poultry, colloquium	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
24/10/2024	15:30	17:00	s1 Soil, surface waters and pastures	1E-1, 1E-2, 1E-3		1:30	Matković K.	V_zoohigijena
25/10/2024	15:30	17:00	s2 Sheep and goats	1E-1, 1E-2, 1E-3		1:30	Ostović M.	V_zoohigijena
28/10/2024	15:15	16:45	s3 Laboratory animals	1E-1, 1E-2, 1E-3		1:30	Gregurić Gračner G.	V_zoohigijena
29/10/2024	15:15	16:45	s4 Slaughterhouses and aquatic organisms	1E-1, 1E-2, 1E-3		1:30	Matković K.	V_zoohigijena
04/11/2024	15:15	16:45	v07 Pigs	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
07/11/2024	8:15	9:45	v07 Pigs	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
11/11/2024	15:00	16:30	v08 Cattle	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
12/11/2024	8:00	9:30	v08 Cattle	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
20/11/2024	10:00	11:30	v09 Horses	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
20/11/2024	12:00	13:30	v09 Horses	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
22/11/2024	10:00	11:30	v10 Welfare assessment	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena

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Activities - Environment, animal behaviour and welfare (3/3)								
Start Date	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
22/11/2024	12:00	13:30	v10 Welfare assessment	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
25/11/2024	12:00	13:30	v11 Abnormal behaviours 1	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
26/11/2024	15:15	16:45	v11 Abnormal behaviours 1	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
29/11/2024	9:00	10:30	v12 Abnormal behaviours 2, colloquium	1E-1, 1E-2		1:30	Nastavnici na predmetu	V_zoohigijena
29/11/2024	14:45	16:15	v12 Abnormal behaviours 2, colloquium	1E-3		1:30	Nastavnici na predmetu	V_zoohigijena
Total: 32						48:00		

STUDENT OBLIGATIONS

Lecture attendance	During the semester, the student must be present at 4 hours of lectures to get minimal 3 credits. Achievable maximum points in this element is 6.
Seminars attendance	During the semester, the student must be present at 5 hours of seminars to get minimal 4 credits. Achievable maximum points in this element is 6.
Practicals attendance	During the semester, the student must be present at 16 hours of practicals to get minimal 4 credits. Achievable maximum points in this element is 6.
Active participation in seminars and practicals	Activity in the practicals and seminars shall be graded as follows: for three correct answers during practicals (each answer is worth 1 point) the student will accomplish 3 points. To create a seminar paper achieves additional 2 points. If the seminar held at the Power Point, the student achieves an additional 2 points. If student collect total of 7 points then will achieve a 10 maximal points. To achieve 5 minimal points the student must collect at least 4 points in this element of evaluation.
Final exam	The final exam will be conducted in the form of a written exam, which consists of 8 questions (2 points to "sufficient" response on the question, 3 points for a "good" response on the question, 4 points for "very good" response on the question, 5 points for "excellent" response on the question). With the total of 40 collected points the student will achieve a maximum of 40 points. For a minimum 24 points, a student must collect 24 points out of this element.
Examination requirements	Student requirements are defined in the Regulations on the Integrated Undergraduate and Graduate Study of Veterinary Medicine (2022). 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 first colloquium 23. 10. 2024. The second colloquium 29. 11. 2024.
Final exams (dates)	25/11/2024, 10/2/2025, 20/2/2025
Form of final exam	Written exam

LITERATURE

Obligatory literature	<ol style="list-style-type: none"> 1. The Ethology of Domestic Animals (2009): An Introductory Text / edited by Per Jensen-2nd ed. 2. Appleby, M. C., B. O. Huges (2004): Poultry Behaviour and Welfare. CABI Publishing, London, UK. 3. Fraser, A., D. M. Broom (1996): Farm animal behaviour and welfare (3rd Edition). CABI Publishing, London, UK. 4. Harrison, R. M. (1995): Pollution: Causes Effects and Control (2nd Edition). The Royal Society of Chemistry, Cambridge, UK. 5. Keeling, L., H. Gonyou (2001): Social Behaviour in Farm Animals. CABI Publishing, London, UK. 6. McFarland, D. (1999): Animal behaviour: Psychobiology, Ethology and Evolution (3rd Edition). Pearson Education Limited, Essex, UK. 7. Methling, V., J. Unshelm (Hrsg.) (2002): Umwelt – und tier – gerechte Haltung von Nutz, Heim und Begleitern. Parey Buchverlag, Berlin, Deutschland. 8. Rollin, B. R. (2003): Farm Animal Welfare: Social, Bioethical, and Research Issue, Iowa State Press, USA.
Optional literature	

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OBJECTIVES AND LEARNING OUTCOMES

Course objectives	The course is one of the basic subjects in preventive veterinary medicine, in which students will acquire due knowledge on the concept of animal behaviour and welfare, to ensure such conditions in practice in which the animal will express the behaviour characteristic of its species while feeling well itself. In addition, knowledge about the impact of ground and water on animal health condition, production and reproduction as well as about the influence of animals upon these environmental factors will be acquired in order to preserve proper bio ecologic relationships in the environment. This approach in presentation of particular topics meets the conditions necessary for full understanding and acquisition of knowledge in other courses in preventive veterinary medicine, primarily in the course "Hygiene and Housing of animals", included in further studies in semesters 3 rd and 4 th .
Learning outcomes	<p>Discuss the effect of soil and water on health, production and reproduction of animals, as well as the animal impact on the environment in order to preserve the biological and ecological relationships in it.</p> <p>Value results of soil and water examinations.</p> <p>Organize grazing systems for animals on the basis of climate-specificity, depending of their species, number and health.</p> <p>Differentiate physiological and abnormal behaviour in domestic animals.</p> <p>Independently assess the welfare of (farm) animals in the context of their behaviour.</p>

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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