

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE
Heinzelova 55
Tel.: 01/2390 294
Division: Animal Production and Biotechnology
Organizational unit: Animal Hygiene, Behaviour and Welfare
E-mail of the course leader: mostovic@vef.unizg.hr
Register No of the organisational unit: 6/24
Zagreb, 25/1/2024



177813	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	25.01.2024	
Klasifikacijska oznaka	Org. jed.	
605-03/23-04/28	251-61-32;251-61-41;	
Uredžbeni broj	Prilozi	Vrijednost
251-61-11/378-24-76	0	-

COURSE SYLLABUS

Course name: Hygiene and Housing of Animals
Academic year 2023/2024 IVth (summer) semester

Course leader: Assoc. Prof. Mario Ostović
Deputy course leader: Full Prof. Kristina Matković

Teachers: Full Prof. Kristina Matković, Full Prof. Gordana Gregurić Gračner, Assoc. Prof. Mario Ostović, Assistant Ivana Sabolek

First day of classes: 26/2/2024
Last day of classes: 17/5/2024

Activities - Hygiene and housing of animals (1/2)

	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
26/02/2024	11:30	13:00	p01 Cattle	4E-1, 4E-2, 4E-3		1:30	Matkovic K.	V_zoohigijena
27/02/2024	11:45	13:15	p02 Swine	4E-1, 4E-2, 4E-3		1:30	Ostovic M.	V_zoohigijena
28/02/2024	11:45	13:15	p03 Poultry	4E-1, 4E-2, 4E-3		1:30	Matkovic K.	V_zoohigijena
29/02/2024	8:15	9:45	p04 Herd health	4E-1, 4E-2, 4E-3		1:30	Matkovic K.	V_zoohigijena
01/03/2024	10:00	11:30	s01 Cattle	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
04/03/2024	11:45	13:15	s02 Sheep and goat	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
05/03/2024	8:00	9:30	p05 Pets, laboratory animals	4E-1, 4E-2, 4E-3		1:30	Greguric Gracner G.	V_zoohigijena
06/03/2024	8:00	9:30	p06 Stock breeding manure	4E-1, 4E-2, 4E-3		1:30	Ostovic M.	V_zoohigijena
08/03/2024	9:15	10:00	p07 Horses	4E-1, 4E-2, 4E-3		0:45	Greguric Gracner G.	V_zoohigijena
11/03/2024	10:15	11:45	s03 Swine	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
14/03/2024	8:15	9:45	s04 Poultry I	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
15/03/2024	8:15	9:45	s05 Poultry II	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
18/03/2024	8:15	9:45	s06 Recapitulation and colloquium I	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
21/03/2024	13:00	14:30	s07 Horse	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
22/03/2024	10:30	16:30	t01	4E-1, 4E-2, 4E-3		6:00	Nastavnici na predmetu	

Activities - Hygiene and housing of animals (2/2)

	Start T	End Ti	Subject	Group	Note	Length	Instructor	Room
25/03/2024	12:15	13:45	s08 Stock breeding manure	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
26/03/2024	10:30	12:00	s09 Laboratory animals	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
27/03/2024	10:00	11:30	s10 Biosafety	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
09/04/2024	9:30	11:00	s11 Recapitulation and colloquium II	4E-1, 4E-2, 4E-3		1:30	Nastavnici na predmetu	V_zoohigijena
10/04/2024	10:00	16:00	t02	4E-1, 4E-2, 4E-3		6:00	Nastavnici na predmetu	
25/04/2024	10:00	16:00	t03	4E-1, 4E-2, 4E-3		6:00	Nastavnici na predmetu	
17/05/2024	10:00	16:00	t04	4E-1, 4E-2, 4E-3		6:00	Nastavnici na predmetu	
Total: 22						50:15		

STUDENT OBLIGATIONS

Lecture attendance	During the two semesters, the student must be present at 15 hours of lectures to get minimal 3 credits. An achievable maximum point in this element is 6.
Seminars attendance	During the semester, the student must be present at 16 hours of seminars to get minimal 4 credits. An achievable maximum point in this element is 6.
Practicals attendance	During the two semesters, the student must be present at 30 hours of practicals to get minimal 4 credits. An achievable maximum point in this element is 6.
Active participation in seminars and practicals	Activity in the practicals and seminars shall be graded as follows: for correct answers during practicals in the III rd semester the student achieves min 1 point, max 2 points; to create a seminar paper in the IV th semester the student achieves 2 points, if the seminar is held at the Power Point, the student achieves an additional 2 points; to create reports from field practicals in the IV th semester the student achieves 4 points. In total, the student can achieve max 10 points.
Final exam	Minimum conditions for the passage of the first, second, third, fourth and fifth evaluation elements will be aggregated and must amount to 36 credits. To access the final exam, students need to realize those 36 points. 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 "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, the 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. 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 the Integrated Undergraduate 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 practicals.

GRADING AND EVALUATING STUDENT WORK

Continuous knowledge-checking (mid-terms)	First colloquium 18/3/2024 Second colloquium 9/4/2024
Final exams (dates)	21/3/2024, 13/6/2024, 11/7/2024, 11/9/2024, 20/9/2024
Form of final exam	Written exam

LITERATURE

<p>Obligatory literature</p>	<ol style="list-style-type: none"> 1. ALAND, A., T. BANHAZI (2013): Livestock Housing. Wageningen Academic Publishers, NL. 2. BUCKLE, A. P., R. H. SMITH (1994): Rodent Pests and Their Control. CABI Publishing, London, UK 3. DEEMING, D. C. (1999): The Ostrich: Biology, Production and Health. CABI Publishing, London, UK. 4. DEWI, I. A., R. F. E. AXFORD, I. F. M. MARAI, H. OMED (1994): Pollution in Livestock Production Systems. CABI Publishing, London, UK. 5. GRANDIN, T. (2000): Livestock Handling and Transport. 2nd edition. CABI Publishing, London, UK. 6. HARRISON, R. M. (1995): Pollution: Causes, Effects and Control. 2nd edition. The Royal Society of Chemistry, Cambridge, UK. 7. McNAMARA, J. P., D. E. BEEVER (2000): Modeling Nutrient Utilization in Farm Animals. CABI Publishing, London, UK. 8. METHLING, V., J. UNSHELM (Hrsg.) (2002): Umwelt- und tier- gerechte Haltung von Nutz-, Heim- und Begleitern. Parey Buchverlag, Berlin, Deutschland. 9. STRAUCH, D., R. BÖHM (Hrsg.) (2002): Reinigung und Desinfektion in der Nutztierhaltung und Veredelungswirtschaft. Enke Verlag, Stuttgart, Deutschland. 10. WATHES, C. M., D. R. CHARLES (1994): Livestock Housing. CABI Publishing, London, UK. 11. WEBSTER, J. (Ed.) (2011): Management and Welfare of Farm Animals. The UFAW Farm Handbook. 5th edition. Wiley-Blackwell, UK.
<p>Optional literature</p>	<ol style="list-style-type: none"> 1. ASAJ, A. (1999): Deratizacija u praksi. Medicinska naklada, Zagreb. 2. ASAJ, A. (1999): Zdravstvena dezinfekcija u nastambama i okolišu. Medicinska naklada, Zagreb. 3. ASAJ, A. (2000): Dezinfekcija. Medicinska naklada, Zagreb. 4. ASAJ, A. (2003): Higijena na farmi i u okolišu. Medicinska naklada, Zagreb. 5. CAPUT, P. (1996): Govedarstvo. Celeber d.o.o., Zagreb. 6. DOLENEC, Ž. (1994): Svinjogojstvo. Nakladni zavod Globus, Zagreb. 7. MARTINOVIĆ, J. (2000): Tla u Hrvatskoj. Pokret prijatelja prirode „Lijepa naša“, Zagreb. 8. MIOČ, B., V. PAVIĆ (2002): Kozarstvo. Hrvatska mljekarska udruga, Zagreb. 9. NEMANIĆ, J., Ž. BERIĆ (1995): Peradarstvo. Nakladni zavod Globus, Zagreb. 10. OMRČEN, S. (1995): Kuničarstvo. Nakladni zavod Globus, Zagreb. 11. SENČIĆ, Đ., Ž. PAVIČIĆ, Ž. BUKVIĆ (1996): Intenzivno svinjogojstvo. NIP Nova Zemlja, Osijek. 12. UREMOVIĆ, M., Z. UREMOVIĆ (1997): Svinjogojstvo. Agronomski fakultet Sveučilišta u Zagrebu, Zagreb. 13. UREMOVIĆ, Z. (2004): Govedarstvo. Hrvatska mljekarska udruga, Zagreb. 14. UREMOVIĆ, Z., M. UREMOVIĆ, V. PAVIĆ, B. MIOČ, S. MUŽIĆ, Z. JANJEČIĆ (2002): Stočarstvo. Agronomski fakultet Sveučilišta u Zagrebu, Zagreb. 15. VUČEMILO, M. (2008): Higijena i bioekologija u peradarstvu. Veterinarski fakultet Sveučilišta u Zagrebu, Zagreb.

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	The objective of the course is to develop competences qualifying students for preservation of biological balance between the environment and the animal while exhibiting appropriate health state through optimal productivity and reproduction.
Learning outcomes	After successfully mastering the course students will be able to: <ol style="list-style-type: none">1. describe the impact of the accommodation and housing conditions of certain species and categories of animals on their health, production and reproductive performance2. define the role of veterinarians in the transportation and care of animals in order to avoid stress and disorders in their health due to improper transfer from one environment to another or poor hygiene of animals3. choose ways of animal waste disposal in order to prevent environmental pollution4. independently measure microclimatic conditions in certain animal facilities5. propose appropriate measures of disinfection and control of harmful insects and rodents in order to preserve the animal and human health status6. independently conclude about animal welfare on the basis of the production conditions.

GRADING SCHEME

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

Course leader:



Head of organizational unit:



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