

Hygiene and Housing of Animals

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE

Heinzlova 55

Tel. 01/2390294

Division: Animal Production and Biotechnology

Organizational unit: Animal Hygiene, Behaviour and Welfare

Email: mostovic@vef.unizg.hr

Register No of the organisational unit: 90/2023

Zagreb, 8/9/2023

		
170452	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	08.09.2023	
Klasifikacijska oznaka	Org. jed.	
605-03/23-04/28	251-61-32;	
Urudžbeni broj	Prilozi	Vrijednost
251-61-16/559-23-16	0	-

COURSE SYLLABUS

Course name: Hygiene and Housing of Animals

Academic year 2023-24, winter semester

Course leader: Mario Ostović, PhD, Assoc. Professor

Deputy course leader: Kristina Matković, PhD, Full Professor

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

First day of classes: 1/12/2023

Last day of classes: 25/1/2024

Handwritten signature or initials in blue ink.

Activities - Hygiene and Housing of Animals (1/4)							
Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
01/12/2023	10:15	11:45	p01 Introduction, Environment and Health	3E-1, 3E-2, 3E-3	Matkovic K.	V_zoohigijena	1:30
04/12/2023	12:15	13:45	v01 Heat balance	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
05/12/2023	8:15	9:45	p02 Microclimate	3E-1, 3E-2, 3E-3	Ostovic M.	V_zoohigijena	1:30
05/12/2023	14:15	15:45	v01 Heat balance	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
06/12/2023	10:15	11:45	p03 Stables	3E-1, 3E-2, 3E-3	Greguric Gracner G.	V_zoohigijena	1:30
07/12/2023	8:15	9:45	p04 Transport	3E-1, 3E-2, 3E-3	Greguric Gracner G.	V_zoohigijena	1:30
07/12/2023	14:15	15:45	v02 Microclimate 1	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
08/12/2023	14:15	15:45	v02 Microclimate 1	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
11/12/2023	10:15	11:00	p05 Biosecurity	3E-1, 3E-2, 3E-3	Matkovic K.	V_zoohigijena	0:45
11/12/2023	11:00	11:45	p05 Carcasses and confiscate	3E-1, 3E-2, 3E-3	Ostovic M.	V_zoohigijena	0:45
12/12/2023	8:15	9:45	p06 Disinfection	3E-1, 3E-2, 3E-3	Ostovic M.	V_zoohigijena	1:30
12/12/2023	14:15	15:45	v03 Microclimate 2	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30

12. Orednik

Activities - Hygiene and Housing of Animals (2/4)							
Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
14/12/202	8:15	9:45	p07 Disinsection	3E-1, 3E-2, 3E-3	Matkovic K.	V_zoohigijena	1:30
14/12/202 3	12:15	13:45	v03 Microclimate 2	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
15/12/202 3	14:15	15:45	v04 Stables	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
18/12/202	8:15	9:45	p08 Deratisation	3E-1, 3E-2, 3E-3	Matkovic K.	V_zoohigijena	1:30
18/12/202 3	14:15	15:45	v04 Stables	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
19/12/202 3	12:15	13:45	v06 Repetitorium and colloquium	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
19/12/202 3	14:15	15:45	v06 Repetitorium and colloquium	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
08/01/202 4	8:15	9:45	v05 Transport	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
09/01/202 4	14:15	15:45	v05 Transport	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
10/01/202 4	8:15	9:45	v07 Sanitary measures and environment	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30

12. cartoon

Activities - Hygiene and Housing of Animals (3/4)							
Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
11/01/2024	14:15	15:45	v07 Sanitary measures and environment	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
12/01/2024	8:15	9:45	v08 Disinfection	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
15/01/2024	14:15	15:45	v08 Disinfection	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
16/01/2024	14:15	15:45	v09 Sanitary measures and environment	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
17/01/2024	8:15	9:45	v09 Sanitary measures and environment	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
19/01/2024	8:15	9:45	v10 Harmful insects	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
19/01/2024	14:15	15:45	v10 Harmful insects	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
22/01/2024	8:15	9:45	v11 Harmful rodents	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
23/01/2024	14:15	15:45	v11 Harmful rodents	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30

UR. Octonid

Activities - Hygiene and Housing of Animals (4/4)							
Start Dat	Start Tim	End Tim	Subject	Group	Instructor	Room	Length
24/01/2024	8:15	9:45	v12 Repetitorium and colloquium	3E-3	Nastavnici na predmetu	V_zoohigijena	1:30
25/01/2024	8:15	9:45	v12 Repetitorium and colloquium	3E-1, 3E-2	Nastavnici na predmetu	V_zoohigijena	1:30
Total: 33							48:00

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 practical's to get minimal 4 credits. An achievable maximum point in this element is 6.
Active participation in seminars and practicals	Activity in the practical's and seminars shall be graded as follows: for correct answers during practicals in III semester student achieves min 1 point, max 2 points; to create a seminar paper in IV semester achieves 2 points. If the seminar is held at the Power Point, the student achieves an additional 2 points. (IV semester – 4 points,); Creating reports from field practical's (IV semester) 4 points, max in IV semester 8 points. In total student can for active participation in seminars and practicals achieve min 5 points and 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 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. 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)	First colloquium 19/12/2023 Second colloquium 25/1/2024
Final exams (dates)	7/12/2023/, 6/2/2024/, 16/2/2024
Form of final exam	Written exam

LITERATURE

Obligatory literature	<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. Mc NAMARA, 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. UFAW Animal welfare series. Wiley-Blackwell. UK.
Optional literature	<ol style="list-style-type: none"> 1. ASAJ, A. (2003): Higijena na farmi i u okolišu. Medicinska naklada, Zagreb 2. ASAJ, A. (1999): Deratizacija u praksi. Medicinska naklada, Zagreb. 3. ASAJ, A. (1999): Dezinfekcija. Medicinska naklada, Zagreb.

4. ASAJ, A. (1999): Zdravstvena dezinfekcija u nastambama i 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. NEMANIČ, 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, Zagreb.
13. UREMOVIĆ, Z. (2004): Govedarstvo. Hrvatska mljekarska udruga, Zagreb.
14. UREMOVIĆ, Z., M. UREMOVIĆ, V. PAVIĆ, B. MIOČ, S. MUŽIC, Z. JANJEČIĆ (2002): Stočarstvo. Agronomski fakultet, 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 performance;2. 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 animals;3. choose ways of animal waste substances disposing for the environmental pollution prevention;4. independently verify the microclimatic conditions in certain animal facilities;5. propose appropriate measures of disinfection and control of harmful insects and rodents in order to preserve the animals and humans health status;6. 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)
60-68	2 (E)
69-76	2 (D)
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