

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
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Register No of the organisational unit: 88/25
Zagreb, 5/9/2025

	
207041	REPUBLIKA HRVATSKA
Veterinarski fakultet u Zagrebu	
Primljeno:	05.09.2025
Klasifikacijska oznaka	Org. jed.
602-04/25-22/34	251-61-41; 251-61-32;
Uredbeni broj	Prilozi Vrijednost
251-61-16-25-45	0 -

COURSE SYLLABUS

Course name: Hygiene and Housing of Animals
Academic year 2025/2026 IIIrd (winter) semester

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

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

First day of classes: 1/12/2025
Last day of classes: 22/1/2026

Activities - Hygiene and Housing of Animals (1/5)

Start Dat	Start	End	Subject	Subject	Group	Note	Length	Instructor	Room
01/12/2025	10:00	11:30	Hygiene and Housing of Animals	p01 Introduction, Environment and Health	3E-1, 3E-2, 3E-3		1:30	Matković K.	V_zoohigijena
03/12/2025	9:45	11:15	Hygiene and Housing of Animals	p02 Microclimate	3E-1, 3E-2, 3E-3		1:30	Ostović M.	V_zoohigijena
04/12/2025	10:00	11:30	Hygiene and Housing of Animals	p03 Stables	3E-1, 3E-2, 3E-3		1:30	Gregurić Gračner G.	V_zoohigijena
09/12/2025	9:00	10:30	Hygiene and Housing of Animals	p04 Transport	3E-1, 3E-2, 3E-3		1:30	Gregurić Gračner G.	V_zoohigijena
09/12/2025	11:00	12:30	Hygiene and Housing of Animals	v01 Heat balance	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
09/12/2025	13:00	14:30	Hygiene and Housing of Animals	v01 Heat balance	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
11/12/2025	8:00	8:45	Hygiene and Housing of Animals	p05 Biosecurity	3E-1, 3E-2, 3E-3		0:45	Matković K.	V_zoohigijena
11/12/2025	8:45	9:30	Hygiene and Housing of Animals	p05 Carcasses and confiscate	3E-1, 3E-2, 3E-3		0:45	Ostović M.	V_zoohigijena

Activities - Hygiene and Housing of Animals (2/5)

Start Dat	Start	End	Subject	Subject	Group	Note	Length	Instructor	Room
12/12/2025	13:30	15:00	Hygiene and Housing of Animals	p06 Disinfection	3E-1, 3E-2, 3E-3		1:30	Ostović M.	V_zoohigijena
15/12/2025	8:15	9:45	Hygiene and Housing of Animals	p07 Disinsection	3E-1, 3E-2, 3E-3		1:30	Matković K.	V_zoohigijena
15/12/2025	14:15	15:45	Hygiene and Housing of Animals	v02 Microclimate 1	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
16/12/2025	10:00	11:30	Hygiene and Housing of Animals	v02 Microclimate 1	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
16/12/2025	13:30	15:00	Hygiene and Housing of Animals	v03 Microclimate 2	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
17/12/2025	8:15	9:45	Hygiene and Housing of Animals	v03 Microclimate 2	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
18/12/2025	14:25	15:55	Hygiene and Housing of Animals	v04 Stables	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
19/12/2025	8:15	9:45	Hygiene and Housing of Animals	v04 Stables	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena

Activities - Hygiene and Housing of Animals (3/5)

Start Dat	Start	End	Subject	Subject	Group	Note	Length	Instructor	Room
08/01/2026	8:15	9:45	Hygiene and Housing of Animals	v05 Transport	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
08/01/2026	13:30	15:00	Hygiene and Housing of Animals	v05 Transport	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
09/01/2026	8:00	9:30	Hygiene and Housing of Animals	v06 Repetitorium and colloquium	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
09/01/2026	15:15	16:45	Hygiene and Housing of Animals	v06 Repetitorium and colloquium	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
12/01/2026	8:15	9:45	Hygiene and Housing of Animals	v07 Sanitary measures and environment	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
12/01/2026	10:00	11:30	Hygiene and Housing of Animals	p08 Deratisation	3E-1, 3E-2, 3E-3		1:30	Matković K.	V_zoohigijena
13/01/2026	8:15	9:45	Hygiene and Housing of Animals	v07 Sanitary measures and environment	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
14/01/2026	8:15	9:45	Hygiene and Housing of Animals	v08 Disinfection	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena

Activities - Hygiene and Housing of Animals (4/5)

Start Dat	Start	End	Subject	Subject	Group	Note	Length	Instructor	Room
14/01/2026	13:30	15:00	Hygiene and Housing of Animals	v08 Disinfection	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
15/01/2026	8:15	9:45	Hygiene and Housing of Animals	v09 Sanitary measures and environment	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
15/01/2026	13:30	15:00	Hygiene and Housing of Animals	v09 Sanitary measures and environment	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
16/01/2026	13:30	15:00	Hygiene and Housing of Animals	v10 Harmful insects	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
19/01/2026	11:00	12:30	Hygiene and Housing of Animals	v10 Harmful insects	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
20/01/2026	13:30	15:00	Hygiene and Housing of Animals	v11 Harmful rodents	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena
21/01/2026	14:00	15:30	Hygiene and Housing of Animals	v11 Harmful rodents	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
22/01/2026	8:15	9:45	Hygiene and Housing of Animals	v12 Repetitorium and colloquium	3E-1, 3E-2		1:30	Nastavnici na predmetu	V_zoohigijena

Activities - Hygiene and Housing of Animals (5/5)									
Start Dat	Start	End	Subject	Subject	Group	Note	Length	Instructor	Room
22/01/2026	15:15	16:45	Hygiene and Housing of Animals	v12 Repetitorium and colloquium	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
Total: 33							48:00		

Start Dat	Start	End	Subject	Subject	Group	Note	Length	Instructor	Room
22/01/2026	15:15	16:45	Hygiene and Housing of Animals	v12 Repetitorium and colloquium	3E-3		1:30	Nastavnici na predmetu	V_zoohigijena
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 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 (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 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 9/1/2026 Second colloquium 22/1/2026
Final exams (dates)	2/12/2025, 2/2/2026, 17/2/2026
Form of final exam	Written exam

LITERATURE**Obligatory literature**

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 Begleitteren. 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.

Optional literature

1. ASAJ, A. (1999): Deratizacija u praksi. Medicinska naklada, Zagreb.
2. ASAJ, A. (1999): Zdravstvena dezinsekcija u nastambama i okolišu. Medicinska naklada, Zagreb.
3. ASAJ, A. (2000): Dezinsekcija. 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: - review the impact of the accommodation and housing conditions of certain species and categories of animals on their health, production and reproductive performance - argue 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 - differentiate ways of animal waste disposal in order to prevent environmental pollution - independently measure microclimatic conditions in certain animal facilities - propose appropriate measures of disinfection and control of harmful insects and rodents in order to preserve the animal and human health status - independently assess 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:

Ostojic

Head of organizational unit:

Ostojic

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