

UNIVERSITY OF ZAGREB  
FACULTY OF VETERINARY MEDICINE  
Heinzelova 55  
Tel. 01/2390-214  
Division: Veterinary Public Health and Food safety  
Department / Clinic: Microbiology and Infectious Diseases  
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Register no.:  
File no.:  
Zagreb, 2/2/2024



178549	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
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Uredbeni broj	Prilozi	Vrijednost
251-61-08/422-24-92	0	-

## COURSE SYLLABUS

Course name: Infectious Diseases of Domestic Animals

Academic year 2023/2024

Course leader: Assoc. Prof. Vladimir Stevanović

Teachers: Full Prof. Nenad Turk; Full Prof. Ljubo Barbić; Full Prof. Zrinka Štritof; Assoc. Prof. Suzana Hađina; Assoc. Prof. Josipa Habuš; Assoc. Prof. Vladimir Stevanović; Assist. Prof. Matko Perharić, Iva Zečević, DVM, Iva Benvin, DVM, Ivona Čorić, DVM

First day of classes: 28/2/2024

Last day of classes: 27/5/2024

### Timetable for LECTURES academic year 2023/2024

LECTURES				
Date	Methodological unit	Teacher	Location/time	Literature
28/2/2024	Equine Infectious Anaemia. African Horse Sickness.	Assoc. Prof. Vladimir Stevanović	10:15-11:45 h <b>LECTURE</b> , Lecture Room Forensic and State Veterinary Medicine	Sellon, D. C., M. T. Long (2014): Equine infectious diseases. 2 <sup>nd</sup> Ed., Elsevier Saunders, St. Louis, Missouri, SAD. Green, C. (2012): Infectious diseases of dog and cat. 4th edition. Saunders Elsevier Constable P., K. W. Hinchcliff, S. Done, W. Gruenberg (2016): Veterinary Medicine, A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs and Goats, 11th Ed., 2 Volume set, W. B. Saunders Ltd. Aiello S. E., M. A. Moses (2016): The Merck Veterinary Manual. 11th Ed. Wiley, Hoboken, New Jersey, SAD.
29/2/2024	Equine Influenza. Equine Viral Arteritis. Equine Rhinopneumonitis.	Full Prof. Ljubo Barbić	12-13:30 h <b>LECTURE</b> , Lecture Room Microbiology	" "
1/3/2024	Contagious Equine Metritis. Equine Coital Exanthema. Equine Salmonellosis.	Assoc. Prof. Zrinka Štritof	14:30-16 h <b>LECTURE</b> , Lecture Room Microbiology	" "
5/3/2024	Strangles. <i>Rhodococcus equi</i> infection.	Assoc. Prof. Zrinka Štritof	12:15-13:45 h <b>LECTURE</b> , Lecture Room Microbiology	
12/3/2024	West Nile Fever. Bovine Viral Diarrhoea.	Full Prof. Ljubo Barbić	7:30-9 h <b>LECTURE</b> , Lecture Room Physics	" "
18/3/2024	Shipping Fever Pneumonia. Infectious Bovine Rhinotracheitis. Malignant Catarrhal Fever. Infectious Bovine Keratoconjunctivitis.	Assoc. Prof. Suzana Hađina	11:30-13 h <b>LECTURE</b> , Lecture Room Physics	" "
22/3/2024	Enzootic Bovine Leukosis. Bovine spongiform encephalopathy.	Assoc. Prof. Josipa Habuš	7:30-9 h <b>LECTURE</b> , Lecture Room Physics	" "
4/4/2024	Viral Enteritis in Calves. Winter Dysentery. Lumpy Skin Disease.	Assoc. Prof. Vladimir Stevanović	12:30-14 h <b>LECTURE</b> , Lecture Room Microbiology	" "

5/4/2024	Foot and Mouth Disease. Vesicular Stomatitis.	Full Prof. Nenad Turk	12:30-14 h <b>LECTURE</b> , Lecture Room Microbiology	
9/4/2024	Classical Swine Fever. African Swine Fever.	Full Prof. Nenad Turk	12:15-13:45 h <b>LECTURE</b> , Lecture Room Microbiology	'' ''
11/4/2024	Erysipelas. Exudative Epidermitis. <i>Streptococcus</i> sp. and <i>Staphylococcus</i> sp. infections in pigs	Assoc. Prof. Suzana Hađina	12:15-13:45 h <b>LECTURE</b> , Lecture Room Microbiology	'' ''
22/4/2024	Swine Dysentery. Transmissible gastroenteritis. Colibacillosis. Oedema Disease.	Assist. Prof. Matko Perharić	12:30-14 h <b>LECTURE</b> , Lecture Room Microbiology	'' ''
23/4/2024	Porcine Enzootic Pneumonia. Glässer's Disease. Swine Pleuropneumonia.	Full Prof. Ljubo Barbić	12:30-14 h <b>LECTURE</b> , Lecture Room Microbiology	'' ''
25/4/2024	Porcine Circovirus Infection. Porcine Reproductive and Respiratory Syndrome. Inclusion Body Rhinitis. Atrophic Rhinitis.	Assoc. Prof. Zrinka Štritof	12:30-14 h <b>LECTURE</b> , Lecture Room Microbiology	
6/5/2024	Caprine Arthritis and Encephalitis. Contagious Ecthyma. Sheep Pox. Goat Pox.	Assoc. Prof. Vladimir Stevanović	8:15-9:45 h <b>LECTURE</b> , Lecture Room Microbiology	
7/5/2024	Blue Tongue Disease. Foot Rot. Caseous Lymphadenitis of Sheep and Goat.	Assoc. Prof. Josipa Habuš	8:15-9:45 h <b>LECTURE</b> , Lecture Room Microbiology	
10/5/2024	Rabies. Aujeszky's Disease.	Assoc. Prof. Vladimir Stevanović	7:30-9 h <b>LECTURE</b> , Lecture Room Microbiology	'' ''
14/5/2024	Anthrax. Tetanus. Botulism.	Full Prof. Ljubo Barbić	10-11:30 h <b>LECTURE</b> , Lecture Room Microbiology	'' ''
15/5/2024	Enterotoxemia. Blackleg. Malignant Oedema.	Assoc. Prof. Suzana Hađina	10-11:30 h <b>LECTURE</b> , Lecture Room Microbiology	
16/5/2024	Tularemia. Listeriosis.	Assoc. Prof. Josipa Habuš	10-11:30 h <b>LECTURE</b> , Lecture Room Microbiology	'' ''

20/5/2024	Leptospirosis. Q-fever	Full Prof. Nenad Turk	10-11:30 h <b>LECTURE</b> , Lecture Room Microbiology	''''
20/5/2024	Brucellosis, Melitococosis.	Assist. Prof. Matko Perharić	12-13:30 h <b>LECTURE</b> , Lecture Room Microbiology	''''
21/5/2024	Tuberculosis. Paratuberculosis. Actinomycosis. Botryomycosis.	Full Prof. Nenad Turk	10-11:30 h <b>LECTURE</b> , Practical Hall Microbiology	''''
23/5/2024	Dermatophytosis. Papillomatosis. Eperythrozoonosis.	Assoc. Prof. Suzana Hađina	10-11:30 h <b>LECTURE</b> , Lecture Room Microbiology	''''
27/5/2024	Myxomatosis. Rabbit Haemorrhagic Disease. Pasteurellosis in Rabbits.	Assoc. Prof. Josipa Habuš	8:15-9:45 h <b>LECTURE</b> , Lecture Room Microbiology	''''

**Timetable for PRACTICALS academic year 2023/2024**

<b>PRACTICALS</b>						
<b>Date</b>	<b>Methodological unit</b>	<b>Teacher</b>	<b>Type of practical</b>	<b>Group</b>	<b>Location/time</b>	<b>Literature</b>
6/3/2024	1. Differential diagnosis of respiratory and gastrointestinal infections in horses	Course teachers	Special clinical practical	1	12-13:30 h Lecture Room Microbiology	Sellon, D. C., M. T. Long (2014): Equine infectious diseases. 2 <sup>nd</sup> Ed., Elsevier Saunders, St. Louis, Missouri, SAD. Green, C. (2012): Infectious diseases of dog and cat. 4th edition. Saunders Elsevier Constable P., K. W. Hinchcliff, S. Done, W. Gruenberg (2016): Veterinary Medicine, A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs and Goats, 11th Ed., 2 Volume set, W. B. Saunders Ltd. Aiello S. E., M. A. Moses (2016): The Merck Veterinary Manual. 11th Ed. Wiley, Hoboken, New Jersey, SAD.
6/3/2024	1. Differential diagnosis of respiratory and gastrointestinal infections in horses	Course teachers	Special clinical practical	2	13:45-15:15 Lecture Room Microbiology	“ “
20/3/2024	2. Differential diagnosis of infectious abortions and immunoprophylaxis in horses	Course teachers	Special clinical practical	2	13:30-15 h Lecture Room Microbiology 15-16:30 h Clinic of Infectious	“ “
21/3/2024	2. Differential diagnosis of infectious abortions and immunoprophylaxis in	Course teachers	Special clinical practical	1	12:30-14 h Lecture Room Microbiology 14-15:30 h Clinic of	“ “

	horses				Infectious	
25/3/2024	3. Differential diagnosis of respiratory infections and immunoprophylaxis in cattle	Course teachers	Special clinical practical	1	13:15-14:45 h Lecture Room Microbiology 14:45-16:15 h Clinic of Infectious Diseases	" "
27/3/2024	3. Differential diagnosis of respiratory infections and immunoprophylaxis in cattle	Course teachers	Special clinical practical	2	12:30-14 h Lecture Room Microbiology 14-15:30 h Clinic of Infectious Diseases	" "
2/4/2024	4. Differential diagnosis of infectious abortions and gastrointestinal infections in cattle	Course teachers	Special clinical practical	1	12:30-14 h Lecture Room Microbiology 14-15:30 h Clinic of Infectious Diseases	" "
3/4/2024	4. Differential diagnosis of infectious abortions and gastrointestinal infections in cattle	Course teachers	Special clinical practical	2	12:30-14 h Lecture Room Microbiology 14-15:30 h Clinic of Infectious Diseases	" "
17/4/2024	5. Differential diagnosis of infectious abortions and gastrointestinal infections in pigs	Course teachers	Special clinical practical	1	12:30-14 h Lecture Room Microbiology 14-15:30 h Clinic of Infectious Diseases	" "
18/4/2024	5. Differential diagnosis of infectious abortions and gastrointestinal infections in pigs	Course teachers	Special clinical practical	2	13-14:30 h Lecture Room Microbiology 14:30-16 h Clinic of Infectious Diseases	" "
30/4/2024	6. Differential diagnosis of respiratory infections and immunoprophylaxis in pigs	Course teachers	Special clinical practical	1	8-9:30 h Lecture Room Microbiology 9:30-11 h Clinic of Infectious Diseases	" "
30/4/2024	6. Differential diagnosis of respiratory infections and	Course teachers	Special clinical practical	2	11:30-13 h Lecture Room Microbiology	" "

	immunoprophylaxis in pigs				13-14:30 h Clinic of Infectious Diseases	
8/5/2024	7. Differential diagnosis of infectious diseases of sheep and goats	Course teachers	Special clinical practical	1	9-10:30 h Lecture Room Microbiology 10:30-12 h Clinic of Infectious Diseases	“ ”
9/5/2024	7. Differential diagnosis of infectious diseases of sheep and goats	Course teachers	Special clinical practical	2	9-10:30 h Lecture Room Microbiology 10:30-12 h Clinic of Infectious Diseases	“ ”
15/5/2024	8. Differential diagnosis of central nervous system infections	Course teachers	Special clinical practical	1	11:45-13:15 h Lecture Room Microbiology 13:15-14:45 h Clinic of Infectious Diseases	“ ”
16/5/2024	8. Differential diagnosis of central nervous system infections	Course teachers	Special clinical practical	2	12-13:30 h Lecture Room Microbiology 13:30-15 h Clinic of Infectious Diseases	“ ”

### STUDENT OBLIGATIONS

Lecture attendance	During the 9th semester, students must attend at least 50% of the lectures (13 hours or 7 methodological units). Minimal number of points: is 1,5 (13) hours; the maximal number of points is 3 (25 hours) During the 10th semester, students must be present at a minimum of 50 % of the lectures (25 hours or 13 methodological units). The minimum number of points is 1,5 (26) hours; the maximal number of points is 3 (50 hours).
Seminars attendance	-
Practicals attendance	During the 9th semester, students must attend at least 70 % of the practicals (60 hours or 16 methodological units). Minimal number of points: is 4 (60 hours); the maximal number of points is 6 (75 hours) During the 10th semester, students must attend at least 70 % of the practicals (21 hours or 6 methodological units). Minimal number of points: is 4 (21 hours); the maximal number of points is 6 (30 hours)
Active participation in seminars and practicals	During practicals, students can be examined orally without prior notice. The complete answer to a question at practicals is 2.5 points. Students must earn at least 2.5 points per semester (5 in two semesters). The maximum number of points students can earn during the semester is 5 (10 in two semesters).
Final exam	The final exam is in oral form and consists of 10 questions. The maximum number of points a student can earn on the final exam is 40 (4 points per question). The minimum number of points earned on the final exam must be 24.
Examination requirements	Student requirements are defined in the Regulations on the Integrated Undergraduate and Graduate Study of Veterinary Medicine. To take the final exam, the student must acquire minimum points from all assessment elements.

### GRADING AND EVALUATING STUDENT WORK

Continuous knowledge-checking (mid-terms)	After the 9th semester, students can take a colloquium comprising 8 oral questions. The maximum number of points a student can gain on the final exam is 32 (4 points per question). The minimal number of points gained at colloquium must be 20.
Final exams (dates)	20/3/2024, 23/4/2024, 21/5/2024, 12/6/2024, 28/6/2024, 8/7/2024, 6/9/2024, 20/9/2024
Form of final exam	Oral exam



## LITERATURE

Obligatory literature	Sellon, D. C., M. T. Long (2014): Equine infectious diseases. 2 <sup>nd</sup> Ed., Elsevier Saunders, St. Louis, Missouri, SAD. Green, C. (2012): Infectious diseases of dog and cat. 4th edition. Saunders Elsevier Constable P., K. W. Hinchcliff, S. Done, W. Gruenberg (2016): Veterinary Medicine, A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs and Goats, 11th Ed., 2 Volume set, W. B. Saunders Ltd. Aiello S. E., M. A. Moses (2016). The Merck Veterinary Manual. 11th Ed. Wiley, Hoboken, New Jersey, SAD.
Optional literature	Hagan, W. A. and Bruner, D. W. (1998): Microbiology and Infectious Diseases of Domestic Animals. 8th ed., Comstock, Ithaca. Rolle, M. (2001): Mikrobiologie, Infektions- und Seuchenlehre. 7 <sup>th</sup> Ed., Ferdinand Enke Verlag., Stuttgart. Naglić, T., D. Hajsig, J. Madić, L. Pinter (2005): Specijalna veterinarska bakteriologija i mikologija. Veterinarski fakultet Sveučilišta u Zagrebu i Hrvatsko mikrobiološko društvo, Zagreb. Hajsig, D., Lj. Pinter, T. Naglić, R. Antolović (2012): Veterinarska klinička imunologija. Sveučilišni udžbenik, Veterinarski fakultet Sveučilišta u Zagrebu i Hrvatsko mikrobiološko društvo, Zagreb. Pugh, D. G., N. Baird (2012): Sheep and Goat Medicine, 2 <sup>nd</sup> Ed., Elsevier Saunders, St. Louis, Missouri, SAD. Sykes, J. E. (2013): Canine and feline infectious diseases, 1 <sup>st</sup> Ed., Elsevier Saunders, St. Louis, Missouri, SAD. Cvetnić, Ž. (2013): Bakterijske i gljivične zoonoze. Medicinska naklada, Zagreb. Šeol Martinec, B., V. Herak Perković, urednice hrvatskog izdanja (2013): Veterinarska imunologija, Načela i primjena, prijevod: M. J. Day, R. D. Schultz: Veterinary Immunology: Principles and Practice, 1st. Ed. CRC Press, Taylor & Francis Group, 2010. Medicinska naklada, Zagreb. Cvetnić, S. (1993): Opća epizootiologija; Školska knjiga, Zagreb. Zaharija, I. (1980): Opća epizootiologija; Školska knjiga, Zagreb. Cvetnić, S. (1997): Virusne bolesti životinja; Školska knjiga, Zagreb. Cvetnić, S. (2002): Bakterijske i gljivične bolesti životinja, Medicinska naklada, Zagreb Zaharija, I. (1978): Zarazne bolesti domaćih životinja; Školska knjiga, Zagreb. Jukić, B. (2003): Tropske zarazne bolesti životinja; Veterinarski fakultet Sveučilišta u Zagrebu

### OBJECTIVES AND LEARNING OUTCOMES

<b>Course objectives</b>	<p>The study of Infectious diseases of domestic animals includes understanding underlying mechanisms of occurrence, spreading and eradicating of infectious diseases diagnostics and application of measures and procedures in the prophylaxis of infectious diseases to eradicate them. Awareness of natural foci and infection reservoirs for zoonotic causative agents is particularly important in preserving animal health as well as the health of stock breeders and veterinarians. Students are to gain practical knowledge on diagnostics of infectious diseases occurring in one or more animal species by epizootiological, clinical, microbiological, serological, pathologicoanatomical and therapeutic methods, and biological experiments. In that way, attendants are enabled to be independent in practice and to comprehend all the procedures taken elsewhere as support in objective diagnostics. In case of infection, it is important for a veterinarian to be competent in using the right procedure while taking the samples for diagnostics and to use the statutory prophylactic measures.</p>
<b>Learning outcomes</b>	<p>After successfully mastering the course the student will be able to:</p> <ul style="list-style-type: none"><li>- recognize the suspicion of an infectious disease</li><li>- identify the factors that determine the occurrence, spread and termination of infectious disease</li><li>- apply measures to temporarily prevent the spread of infectious diseases</li><li>- carry out a diagnostic procedure with the aim of raising the suspicion of an infectious disease</li><li>- choose the sampling method of diagnostic material and the necessary laboratory tests for objective diagnosis of infectious diseases</li><li>- evaluate the laboratory test results</li><li>- choose a further procedure with the animals suffering from an infectious disease</li><li>- carry out targeted treatment</li><li>- implement legally prescribed measures for the control and/or eradication of infectious diseases</li><li>- recommend measures for the suppression and prevention of infectious diseases that are not legally regulated</li></ul>

**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)

**GRADING AND EVALUATION OF STUDENT WORK ON COURSES WITH LECTURES, SEMINARS and PRACTICALS**

<b>Type of Activity</b>	<b>Minimum number of points</b>	<b>Maximum number of points</b>
Lectures attendance	3	6
Practicals attendance	8	12
Active participation in practicals	5	10
Continuous knowledge checking (mid-terms)	20	32
Final exam	24	40
<b>TOTAL</b>	<b>60</b>	<b>100</b>

Course leader:



Head of organizational unit:

