

2021-2022

INFECTIOUS DISEASES OF DOMESTIC ANIMALS

UNIVERSITY OF ZAGREB
FACULTY OF VETERINARY MEDICINE

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Tel. 01/2390-214

Division: Veterinary Public Health and Food safety

Department / Clinic: Department of Microbiology and Infectious Diseases with Clinic

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Register no.:

File no.:

Zagreb, 15/9/2021



130222	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	16.09.2021	
Klasifikacijska oznaka	Org. jed.	
605-03/21-04/31	251-61-32;	
Urudžbeni broj	Prilozi	Vrijednost
251-61-08-21-36	0	-

COURSE SYLLABUS

Course name: Infectious Diseases of Domestic Animals

Academic year 2021-2022

Course leader: Assist. Prof. Vladimir Stevanović

Teachers: Full Prof. Zoran Milas; Full Prof. Nenad Turk; Assoc. Prof. Vilim Starešina; Full Prof. Ljubo Barbić; Assoc. Prof. Zrinka Stritof; Assoc. Prof. Suzana Hađina; Assoc. Prof. Josipa Habuš; Assist. Prof. Vladimir Stevanović; Assist. Prof. Matko Perharić, Iva Zečević, DVM, Iva Benvin, DVM

Associate teachers:

First day of classes: 25/10/2021

Last day of classes: 14/1/2022

Timetable for LECTURES academic year 2021-2022

LECTURES				
Date	Methodological unit	Teacher	Location / time	Literature
25/10/2021	Introduction to epizootiology	Full Prof. Nenad Turk	Lecture Room, Department of Pharmacology and Toxicology/ 12:15 - 14:00	Written material Sellon, D. C., M. T. Long (2014): Equine infectious diseases. 2 nd 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.
27/10/2021	Infection, Macro-organism defence mechanisms, Development of active immunity	Assist. Prof. Vladimir Stevanović	Lecture Room Department of Microbiology and Infectious Diseases with Clinic 12:15 - 14:00	“ “
28/10/2021	Source of infection	Full Prof. Ljubo Barbić	Clinical Lecture Room 13:15 - 15:00	“ “
29/10/2021	Routes for spread of infectious diseases, Port of entry for pathogens	Full Prof. Ljubo Barbić	Lecture Room Department of Microbiology and Infectious Diseases with Clinic 10:15 -12:00	“ “
5/11/2021	Susceptibility to infection	Full Prof. Nenad Turk	Lecture Room, Department of Physics and Biophysics 10:15 – 12:00	“ “

08/11/2021	Prevention of infectious diseases	Assoc. Prof. Zrinka Štritof	Lecture Room, Department of Physiology and Radiobiology 10:15 - 12:00	“ “
09/11/2021	Immunoprofilaxis	Assist. Prof. Vladimir Stevanović	Lecture Room, Department of Physiology and Radiobiology 8:15 – 10:00	“ “
24/11/2021	Classification of infectious diseases; Stages of an acute infectious disease	Assoc. Prof. Suzana Hadina	Lecture Room Department of Microbiology and Infectious Diseases with Clinic 8:15 – 10:00	“ “
13/12/2021	Canine viral and bacterial gastroenteritidies I	Full Prof. Nenad Turk	Lecture Room, Department of Physiology and Radiobiology 8:15 – 10:00	“ “
15/12/2021	Canine viral and bacterial gastroenteritidies II	Full Prof. Nenad Turk	Lecture Room Department of Microbiology and Infectious Diseases with Clinic 11:15-13:00	“ “
16/12/2021	Feline immunodeficiency virus infection, Feline leukaemia virus infection, Feline infectious peritonitis	Assoc. Prof. Josipa Habuš	Lecture Room, Department of Pharmacology and Toxicology 14:15 – 16:00	“ “
17/12/2021	Feline parvovirus infection, Feline respiratory disease, Feline infectious anaemia	Assoc. Prof. Zrinka Štritof	Lecture Room Department of Microbiology and Infectious Diseases with Clinic 8:15-10:00	“ “
21/12/2021	Canine distemper, Infectious canine hepatitis, Canine infectious respiratory disease, Canine herpesvirus infection	Assoc. Prof. Josipa Habuš	Lecture Room, Department of Physics and Biophysics 11:15 – 13:00	“ “

Timetable for SEMINARS academic year 2021-2022

SEMINARS					
Date	Methodological unit	Teacher	Group	Location / time	Literature

Timetable for PRACTICALS academic year 2021-2022

PRACTICALS						
Date	Methodological unit	Teacher	Type of practical	Group	Location / time	Literature
28/10/2021	Biosafety	Assoc. Prof. Zrinka Štritof	Special clinical practical	1	Clinical Lecture Room 10:15-13:00	Written material
29/10/2021	Pathogenesis and clinical manifestations of infectious diseases	Assist. Prof. Vladimir Stevanović	Special clinical practical	1	Lecture Room Department of Microbiology and Infectious Diseases with Clinic 12:15-15:00	“ “
02/11/2021	Clinical examination in infectious disease	Iva Zečević, DVM	Special clinical practical	1	Clinic for Infectious Diseases 9:15-12:00	“ “
23/11/2021	Diagnostics of infectious diseases – epizootiological and clinical methods	Full Prof. Ljubo Barbić	Special clinical practical	1	Lecture Room, Department of Pharmacology and Toxicology 14:15-17:00	“ “
24/11/2021	Diagnostics of infectious diseases – Pathoanatomical diagnosis, experimental infections and success of treatment as a diagnostic method	Assist. Prof. Matko Perharić, PhD, DVM	Special clinical practical	1	Lecture Room, Department of Pharmacology and Toxicology 12:15 – 15:00	“ “

29/11/2021	Sampling and submission of laboratory samples	Iva Benvin, DVM	Special clinical practical	1	Clinic for Infectious Diseases 14:15-17:00	“ “
10/12/2021	Microbiological, immunological and molecular diagnostic methods I	Full Prof. Ljubo Barbić	Special clinical practical	1	ARTERlab, Department of Microbiology and Infectious Diseases with Clinic 10:15-13:00	“ “
13/12/2021	Microbiological, immunological and molecular diagnostic methods II	Assoc. Prof. Suzana Hađina	Special clinical practical	1	ARTERlab, Department of Microbiology and Infectious Diseases with Clinic 12:15-15:00	“ “
14/12/2021	Microbiological, immunological and molecular diagnostic methods III	Assoc. Prof. Josipa Habuš	Special clinical practical	1	LEPTOlab, Department of Microbiology and Infectious Diseases with Clinic 09:15-12:00	“ “
15/12/2021	Microbiological, immunological and molecular diagnostic methods IV	Assist. Prof. Matko Perharić, PhD, DVM	Special clinical practical	1	IAKlab, Department of Microbiology and Infectious Diseases with Clinic 13:15-16:00	“ “
16/12/2021	Microbiological, immunological and molecular diagnostic methods V	Assist. Prof. Matko Perharić, PhD, DVM	Special clinical practical	1	IAKlab, Department of Microbiology and Infectious Diseases with Clinic 9:15-12:00	“ “
17/12/2021	Microbiological, immunological and molecular diagnostic methods	Iva Benvin, DVM	Special clinical practical	1	Clinic for Infectious Diseases 13:15-16:00	“ “

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	VI					“ “
20/12/2021	Interpretation of serological test results	Assist. Prof. Vladimir Stevanović	Special clinical practical	1	Lecture Room, Department of Microbiology and Infectious Diseases with Clinic 09:15-12:00	“ “
21/12/2021	Infectious diseases surveillance, Reporting of infectious disease	Assoc. Prof. Suzana Hađina	Special clinical practical	1	Lecture Room, Department of Physics and Biophysics 8:30-11:00	“ “
22/12/2021	Intensive care and treatment of patients with infectious diseases	Iva Zečević, DVM	Special clinical practical	1	Lecture Room, Department of Microbiology and Infectious Diseases with Clinic 9:00 – 12:00	“ “
10/1/2022	Antibiotic therapy	Assoc. Prof. Zrinka Štritof	Special clinical practical	1	Lecture Room, Department of Veterinary Pathology 13:15-16:00	“ “
11/1/2022	Differential diagnosis of canine and feline infectious gastroenteritis	Assist. Prof. Matko Perharić, PhD, DVM	Special clinical practical	1	Lecture Room, Department of Veterinary Pathology 12:15-15:00	Written material Green, C. (2012): Infectious diseases of dog and cat. 4 th edition. Saunders Elsevier
12/1/2022	Differential diagnosis of canine and feline respiratory infections	Assoc. Prof. Suzana Hađina	Special clinical practical	1	Lecture Room, Department of Veterinary Pathology 9:15-12:00	Written material Green, C. (2012): Infectious diseases of dog and cat. 4 th edition. Saunders Elsevier
13/1/2022	Immunoprophylaxi	Iva Zečević,	Special clinical	1	Lecture Room,	Written material

	disease in dogs and cats				Veterinary Pathology 12:15 – 15:00	Infectious diseases of dog and cat. 4 th edition. Saunders Elsevier
14/1/2022	Vector-borne diseases	Assoc. Prof. Josipa Habuš	Special clinical practical	1	Lecture Room, Department of Veterinary Pathology 13:15 – 16:00	Written material Sellon, D. C., M. T. Long (2014): Equine infectious diseases. 2 nd 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.

STUDENT OBLIGATIONS

Lecture attendance	Student can justifiably be absent from up to 50 % of the lectures. Minimal number of points: 6 (13) hours; maximal number of points 8 (26 hours)
Seminars attendance	-
Practicals attendance	Student can justifiably be absent from up to 30 % of the practicals. Minimal number of points: 6 (42) hours; maximal number of points 8 (60 hours)
Active participation in seminars and practicals	4 oral testing during practical (complete answer to a question at exercises = 4 point). Minimal number of points: 8; maximal number of points 16.
Final exam	The final exam is in oral form and consists of 10 questions. The maximum number of points student can gain at final exam is 40 (4 points per question). The minimal number of points gained at final exam must be 24.
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.

GRADING AND EVALUATING STUDENT WORK

Continuous knowledge-checking (mid-terms)	After 9 th semester student can take colloquium which consists of 8 oral questions. The maximum number of points student can gain at final exam is 32 (4 points per question). The minimal number of points gained at colloquium must be 20.
Final exams (dates)	4/11/2021/, 14/12/2021, 4/2/2022, 18/2/2022
Form of final exam	Oral exam

LITERATURE

Obligatory literature	<p>Sellon, D. C., M. T. Long (2014): Equine infectious diseases. 2nd Ed., Elsevier Saunders, St. Louis, Missouri, SAD.</p> <p>Green, C. (2012): Infectious diseases of dog and cat. 4th edition. Saunders Elsevier</p> <p>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.</p> <p>Aiello S. E., M. A. Moses (2016). The Merck Veterinary Manual. 11th Ed. Wiley, Hoboken, New Jersey, SAD.</p>
Optional literature	<p>Hagan, W. A. and Bruner, D. W. (1998): Microbiology and Infectious Diseases of Domestic Animals. 8th ed., Comstock, Ithaca.</p> <p>Rolle, M. (2001): Mikrobiologie, Infektions- und Seuchenlehre. 7th Ed., Ferdinand Enke Verlag., Stuttgart.</p> <p>Naglić, T., D. Hajsig, J. Madić, L. Pinter (2005): Specijalna veterinarska bakteriologija i mikologija. Veterinarski fakultet Sveučilišta u Zagrebu i Hrvatsko mikrobiološko društvo, Zagreb.</p> <p>Hajsig, D., Lj. Pinter, T. Naglić, R. Antolović (2012): Veterinarska klinička imunologija. Sveučilišni udžbenik, Veterinarski fakultet Sveučilišta u Zagrebu i Hrvatsko mikrobiološko društvo, Zagreb.</p> <p>Pugh, D. G., N. Baird (2012): Sheep and Goat Medicine, 2nd Ed., Elsevier Saunders, St. Louis, Missouri, SAD.</p> <p>Sykes, J. E. (2013): Canine and feline infectious diseases, 1st Ed., Elsevier Saunders, St. Louis, Missouri, SAD.</p> <p>Cvetnić, Ž. (2013): Bakterijske i gljivične zoonoze. Medicinska naklada, Zagreb.</p> <p>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.</p> <p>Cvetnić, S. (1993): Opća epizootiologija; Školska knjiga, Zagreb.</p> <p>Zaharija, I. (1980): Opća epizootiologija; Školska knjiga, Zagreb.</p> <p>Cvetnić, S. (1997): Virusne bolesti životinja; Školska knjiga, Zagreb.</p> <p>Cvetnić, S. (2002): Bakterijske i gljivične bolesti životinja, Medicinska naklada, Zagreb</p> <p>Zaharija, I. (1978): Zarazne bolesti domaćih životinja; Školska knjiga, Zagreb.</p> <p>Jukić, B. (2003): Tropske zarazne bolesti životinja; Veterinarski fakultet Sveučilišta u Zagrebu</p>

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	Study of Infectious diseases of domestic animals includes perception of occurrence, spreading and eradication of infectious diseases, diagnostics and application of measures and procedures in prophylaxis of infectious diseases in order to eradicate them. Cognition on natural focus of infectious diseases, infection containers and causative agents of zoonoses are particularly important in animal health maintenance as well as for lives of stock breeders and veterinarians working with animals. Students are to gain practical knowledge on diagnostics of infectious diseases occurred at one or more animal species by epizootiological, clinical, microbiological, serological, pathologicoanatomical and therapeutic method, as well as by biological experiment. In that way attendants are enabled to be single-handed 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.
Learning outcomes	<p>After successfully mastering the course the student will be able to:</p> <ul style="list-style-type: none"> - recognize the suspicion of an infectious disease - identify the factors that determine the occurrence, spread and termination of infectious disease - apply measures to temporarily prevent the spread of infectious diseases - carry out a diagnostic procedure with the aim of raising the suspicion of an infectious disease - choose the method of sampling of diagnostic material and the necessary laboratory tests for objective diagnosis of infectious diseases - judge the findings of laboratory tests - choose a further procedure with the animals suffering from an infectious disease - carry out targeted treatment - implement legally prescribed measures for the control and / or eradication of infectious diseases - recommend measures for the suppression and prevention of infectious diseases that are not legally regulated

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

Type of activity	Minimum number of points	Maximum number of points
Lectures attendance	3	6
Seminar attendance	4	6
Practicals attendance	4	6
Active participation in seminars and practicals	5	10
Continuous knowledge checking (mid-terms)	20	32
Final exam	24	40
TOTAL	60	100

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

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

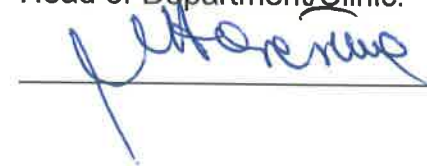
GRADING AND EVALUATION OF STUDENT WORK ON COURSES WITH SEMINARS and EXERCISES

Type of activity	Minimum number of points	Maximum number of points
Seminar / practicals attendance	11	18
Active participation in seminars and practicals	5	10
Continuous knowledge checking (mid-terms)	20	32
Final exam	24	40
TOTAL	60	100

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 Cours