

UNIVERSITY OF ZAGREB
 FACULTY OF VETERINARY MEDICINE
 Heinzelova 55
 Tel. 01/2390 410
 Division: Veterinary public health and food safety
 Department / Clinic: Department of poultry diseases with clinic
 Email: maja.lukac@vef.unizg.hr
 File no.: 61-18-023-145
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174301	REPUBLIKA HRVATSKA	
Veterinarski fakultet u Zagrebu		
Primljeno:	21.11.2023	
Klasifikacijska oznaka	Org. jed.	
605-03/23-04/28	251-61-32;	
Uredžbeni broj	Prilozi	Vrijednost
251-61-18/427-23-57	0	-

COURSE SYLLABUS

Course name: Diseases of pet birds, exotic and laboratory animals
 Academic year 2023-24

Course leader: assist. prof. Maja Lukač, DipECZM
 Course leader deputy: prof. dr. S. Nejedli

Teachers: prof. dr. J. Aladrović, prof. dr. E. Gjurčević, prof. dr. A. Gudan Kurilj, prof. dr. A. Marinculić, prof. dr. S. Nejedli, prof. dr. Ivana Tlak Gajger, assoc. prof. dr. Ž. Gottstein, assoc. prof. dr. G. Gregurić Gračner, assoc. prof. dr. M. Hohšteter, assoc. prof. dr. D. Horvatek Tomić, , assoc. prof. I. C. Šoštaric Zuckerman, assist prof Maja Lukač, DipECZM, assist. prof. K. Matanović

Associate teachers: Liča Lozica, PhD; G. Jurkić Krsteska, PhD

First day of classes: November 23th 2023

Last day of classes: January 22th 2024

Timetable for LECTURES academic year 2023-2024

LECTURES				
Date	Methodological unit	Teacher	Location / time	Literature
23.11.2023. 1 st lecture	Avian anatomy	Prof. S. Nejedli	Department of Physics and Biophysics 12:15-13	Check the Literature list
24.11.2023. 2 nd lecture	Avian systematization and nutrition	Assoc. prof. D. Horvatek Tomić (14:15-15), assist. prof. M. Lukač (15-15:45)	Department of Physiology and Radiobiology 14:15-15:45	Check the Literature list
08.12.2023. 3 th lecture	Avian bacterial diseases	Assoc. prof. D. Horvatek Tomić	Department of Poultry Diseases 14:15-16	Check the Literature list
12.12.2023 4 th lecture	Avian parasitic diseases	Prof. A. Marinculić	Department of Parasitology 12:15-13	Check the Literature list
12.12.2024. 5 th lecture	Rodent pharmacotherapy	Prof. F. Božić	Amphitheater 14:15-15	Check the Literature list
12.12.2023. 6 th lecture	Avian behaviour	Assist. prof. M. Lukač	Amphitheater 15:15-16	Check the Literature list
14.12.2023. 7 th lecture	Avian fungal diseases	Assoc. prof. D. Horvatek Tomić	Department of Chemistry and Biochemistry 14:15-16	Check the Literature list
15.12.2023. 8 th lecture	Avian viral diseases	Assoc. prof. Ž. Gottstein	Amphitheater 14:15-16	Check the Literature list
18.12.2023. 9 th lecture	Treatment of birds	Assoc. prof. D. Horvatek Tomić	Department of Chemistry and Biochemistry 14:15-16	Check the Literature list
19.12.2023 10 th lecture	Reptile diseases	Prof. A. Gudan Kurilj	Department of Veterinary Pathology 13:15-16	Check the Literature list
19.12.2023. 11 th lecture	Reptile necropsy	Prof. A. Gudan Kurilj	Department of Veterinary Pathology 16:15-17	Check the Literature list
21.12.2023. 12 th lecture	Reptiles in captivity- clinical biology and husbandry	Assist. prof. M. Lukač	Department of Chemistry and Biochemistry 8:15-10	Check the Literature list
21.12.2023	Reptile parasitic diseases	Prof. A. Marinculić	Department of Chemistry and	Check the Literature list

13 th lecture			Biochemistry 11:15-12	
21.12.2023. 14 th lecture	Nonspecific avian diseases	Assoc. prof. D. Horvatek Tomić (13:15-14), assist. prof. M. Lukač (14-14:45)	Department of Chemistry and Biochemistry 13:15-14:45	Check the Literature list
08.01.2024. 15 th lecture	Rodent anatomy	Prof. S. Nejedli	Department of Veterinary Pathology 8:15-10	Check the Literature list
08.01.2024. 16 th lecture	Rodent physiology	Prof. J. Aladrović	Department of Veterinary Pathology 10:15-12	Check the Literature list
9.01.2024. 17 th lecture	Basic care and caging - Laboratory animals and rodents	Prof. G. Gregurić Gračner	Department of Veterinary Pathology 8:15-10	Check the Literature list
9.01.2024. 18 th lecture	Diseases of rats	Assoc. prof. I. Conrado Šoštarić Zuckermann	Department of Veterinary Pathology 10:15-14	Check the Literature list
10.01.2024. 19 th lecture	Rabbits' diseases	Assoc. prof. M. Hohšteter	Department of Veterinary Pathology 8:15-12	Check the Literature list
10.01.2024. 20 th lecture	Diseases of mice	Assoc. prof. M. Hohšteter, assoc. prof. I. Conrado Šoštarić- Zuckermann	Department of Veterinary Pathology 12:15-16	Check the Literature list
17.01.2024. 21 st lecture	Introduction to aquaristic	Prof. I. Tlak Gajger	Department for Biology and Pathology of Fish and Bees 8:15-9	Check the Literature list
17.01.2024. 22 nd lecture	Aquarium	Prof. I. Tlak Gajger	Department for Biology and Pathology of Fish and Bees 9:15-10	Check the Literature list
17.01.2024. 23 th lecture	Vivarium	Prof. I. Tlak Gajger	Department for Biology and Pathology of Fish and Bees 10:15-11	Check the Literature list
17.01.2024. 24 th lecture	Keeping animals in vivarium	Prof. I. Tlak Gajger	Department for Biology and Pathology of Fish and Bees 11:15-12	Check the Literature list

17.01.2024. 25 th lecture	Water quality parameters	Assist. prof. K. Matanović	Department for Biology and Pathology of Fish and Bees 12:15-13	Check the Literature list
17.01.2024. 26 th lecture	Monitoring of water quality in aquarium	Assist. prof. K. Matanović	Department for Biology and Pathology of Fish and Bees 13:15-14	Check the Literature list
18.01.2024. 27 th lecture	Aquarium fish health assessment	Prof. E. Gjurčević	Department for Biology and Pathology of Fish and Bees 8:15-9	Check the Literature list
18.01.2024. 28 th lecture	Aquarium fish diseases	Prof. E. Gjurčević	Department for Biology and Pathology of Fish and Bees 9:15-11	Check the Literature list

Timetable for SEMINARS academic year 2023-2024

SEMINARS					
Date	Methodological unit	Teacher	Group	Location / time	Literature
23.11.2023. 1 st seminar	Avian anatomy	Prof. S. Nejedli	1,2	Department of Physics and Biophysics 13:15-14	Check the Literature list
12.12.2023. 1 nd seminar	Avian parasitic diseases	Prof. A. Marinculić	1,2	Department of Parasitology 13:15-14	Check the Literature list
21.12.2023. 3 th seminar	Reptile manipulation and clinical examination	Assist. prof. M. Lukač	1,2	Department of Chemistry and Biochemistry 10:15-11	Check the Literature list
12.01.2024. 4 th seminar	Laboratory analysis	Assist. prof. M. Lukač	1,2	Department of Chemistry and Biochemistry 14:15-16	Check the Literature list
15.01.2024. 5 th seminar	Avian behaviour	Assist. prof. M. Lukač	1,2	Department of Chemistry and Biochemistry 8:15-10	Check the Literature list
15.01.2024. 6 th seminar	Diseases of Passeriformes, birds of prey	Assist. prof. M. Lukač	1,2	Department of Chemistry and Biochemistry 10:15-12	Check the Literature list
16.01.2024. 7 th seminar	Case reports	Assist. prof. M. Lukač	1,2	Department of Chemistry and Biochemistry 12:15-14	Check the Literature list

Timetable for PRACTICALS academic year 2023-2024

PRACTICALS						
Date	Methodological unit	Teacher	Type of practical	Group	Location / time	Literature
5.12.2023. 1 st practical	Species, breeding	teachers in the course	practicals	1,2	Department of Poultry Diseases 14:15-16	Check the Literature list
6.12.2023. 2 nd practical	Housing	teachers in the course	practicals	1,2	Department of Poultry Diseases 14:15-15	Check the Literature list
20.12.2023. 3 th practical	Pathomorphological examination	teachers in the course	practicals	1,2	Department of Poultry Diseases 8:15-10	Check the Literature list
20.12.2023. 4 th practical	Preventive medicine	teachers in the course	practicals	1,2	Department of Poultry Diseases 14:15-15	Check the Literature list
08.01.2024. 5 th practical	Clinical examination of birds	teachers in the course	Special clinical	1,2	Department of Poultry Diseases 12:15-14	Check the Literature list
08.01.2024. 6 th practical	Bandages and wound management	teachers in the course	Special clinical	1,2	Department of Poultry Diseases 14:15-15	Check the Literature list
08.01.2024. 7 th practical	Anaesthesia and pain management	teachers in the course	clinical	1,2	Department of Poultry Diseases 15:15-16	Check the Literature list
11.01.2024. 8 th practical	Reptiles – additional diagnostics, medication	teachers in the course	practicals	1,2	Department of Poultry Diseases 8:15-10	Check the Literature list
11.01.2024. 9 th practical	Reptiles – specific techniques	teachers in the course	Special clinical	1,2	Department of Poultry Diseases 10:15-12	Check the Literature list

11.01.2024. 8 th practical	Free living reptiles	teachers in the course	practicals	1,2	Department of Poultry Diseases 12:15-13	Check the Literature list
11.01.2024. 9 th practical.	Diagnostic imaging	teachers in the course	practicals	1,2	Department of Poultry Diseases 13:15-14	Check the Literature list
15.01.2024. 10 th practical	Emergency medicine	teachers in the course	clinical	1,2	Department of Poultry Diseases 12:15-13	Check the Literature list
16.01.2024. 11 th practical	Clinical examination of small mammals	teachers in the course	practicals	1,2	Internal Diseases Clinic 8:15-12	Check the Literature list
18.01.2024. 12 th practical	Aquarium	teachers in the course	practicals	1,2	Department of biology and pathology of fish and bees 11:15-13	Check the Literature list
18.01.2024. 13 th practical	Examination of fish	teachers in the course	practicals	1,2	Department of biology and pathology of fish and bees 13:15-15	Check the Literature list
22.01.2024. 14 th practical	ZOO Zagreb visit	teachers in the course	practicals	1,2	ZOO Zagreb 10-14	Check the Literature list

STUDENT OBLIGATIONS

Lecture attendance	During the semester, the student achieves a maximum of 6 points for 50 hours of lectures and at least 3 points for 25 hours (0.12 points per hour).
Seminars attendance	Student has a total of 10 hours of seminars and can achieve at least 4 points for 7 hours of seminars or 6 points for presence in 10 seminars (0.6 points per hour of seminar).
Practicals attendance	The student participates in a total of 30 hours of exercises; for a maximum of 30 hours of practical exercise can achieve 6 points, and for at least 21 hours of exercises can achieve 4 points (0.2 points per exercise).
Active participation in seminars and practicals	For activities in seminars and exercises student can achieve a maximum of 10 points and at least 5 points. Activity in seminars and exercises is mandatory and carried through successfully prepared and presented seminar, and to positively oriented response during exercises.
Final exam	The final exam is written. Exam must be evaluated with a minimum of 24 points, and a maximum of 40 points. Student answers 40 questions.
Examination requirements	Student requirements are defined in the Regulations on the Integrated Undergraduate and Graduate Study of Veterinary Medicine (2022). Given the above, the student must acquire a minimum number of points from all assessment elements 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)	During the course students must pass the preliminary exam related to the aquaristic with at least 20 points, and maximum of 32 points (student answer 8 questions).
Final exams (dates)	6/11/2023; 7/12/2023; 6/2/2024; 16/2/2024
Form of final exam	Written

LITERATURE

Obligatory literature	<ol style="list-style-type: none"> 1. HARRISON, G. J., T. L. LIGHTFOOT (2011): Clinical Avian Medicine, Vol I and II. Spix Publishing. USA 2. CAMPBELL, T. (1995): Avian Hematology And Cytology. Iowa State University Press. Ames, Iowa. 3. ANDREWS, C., A. EXCELL, N. CARRINGTON (1998): The Manual Of Fish Health. Salamander book. London, New York. 4. CARPENTER, J., C. MARION (2017): Exotic Animal Formulary. W. B. Saunders Company. Toronto. 5. GIRLING, S. J., P. RAITI (2019): BSAVA Manual of Reptiles, third edition. British Small Animal Veterinary Association. Gloucester. 6. O'MALLEY, B (2005): Clinical anatomy and Physiology of Exotic pets. Elsevier Saunders. London 7. DIVERS, S., D. MADER (2005): Reptile Medicine and Surgery 2nd Edition. Elsevier Saunders. St. Louis. Missouri. 8. BARTHOLD, S.W., S.M., GRIFFEY, D.H., PERCY (2016): Pathology of Laboratory Rodents and Rabbits, Fourth Edition. John Wiley & Sons, Inc.
Optional literature	<ol style="list-style-type: none"> 9. MANN, P., E. McINNES (2011): Background Lesions in Laboratory Animals - 1st Edition - A Color Atlas. Saunders Ltd. 10. PRUKNER-RADOVČIĆ, E. (2010): Bolesti ptica kućnih ljubimaca. Medicinska naklada. Zagreb. 11. OBRADOVIĆ, J. (1997): Akvarij i terarij u kući U: Vaši kućni ljubimci (Smokvina-Boranić, Č., ur.), Nakladni zavod Znanje. Zagreb. S. 358-417. 12. GRABAREVIĆ, Ž., R. Sabočanec (2002): Patologija laboratorijskih životinja. Skripta. Veterinarski fakultet. Zagreb. 13. HERAK-PERKOVIĆ, V., Ž. GRABAREVIĆ, J. KOS (2012): Veterinarski priručnik 6. izdanje. Medicinska naklada. Zagreb. 14. Journal articles

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	The course aims to educate students from several veterinary fields that relate mainly to exotic pets, but also to some free-living animals. Students will learn the handling, care, clinical propaedeutics, diseases and treatment of birds, rodents, reptiles, fish, and laboratory animals.
Learning outcomes	<ol style="list-style-type: none"> 1. To estimate the impact of the accommodation conditions, keeping and feeding of birds, other exotic, laboratory, and aquarium animals on their health 2. To distinguish natural from unnatural behavior of birds, exotic, laboratory, and aquarium animals 3. To apply the appropriate procedures on clinical examination and diagnosis of disease 4. To identify different diseases based on clinical and histopathological findings 5. To choose drugs and methods of treatment and prevention of diseases 6. To propose appropriate housing conditions, treatment, and care of animals 7. To recommend the ways of nutrition and adequate food

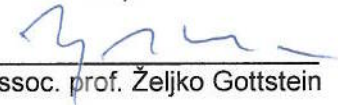
GRADING SCHEME

<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:


Assist. prof. Maja Lukač, DipECZM

Head of Department/Clinic:


Assoc. prof. Željko Gottstein

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