

Syllabus

Module title:	Rotation - avian diseases	<b>ECTS</b>	<b>2</b>
Polish translation:	Staż kliniczny - choroby ptaków		
Course:	<b>Veterinary medicine</b>		

Module language: English		Stage: JM	
Form of studies: <input checked="" type="checkbox"/> intramural <input type="checkbox"/> extramural	Type of module: <input type="checkbox"/> basic <input checked="" type="checkbox"/> directional <input type="checkbox"/> accessory <input checked="" type="checkbox"/> rotation <input type="checkbox"/> summer practice	<input checked="" type="checkbox"/> mandatory <input type="checkbox"/> elective	Semester: ...10..... Year 5 <input type="checkbox"/> winter semester <input checked="" type="checkbox"/> summer semester
Academic year:		Intake <b>2020/2021</b>	Catalogue number: FVM-V-JMSS-10S-R01_23

Module coordinator:	dr Artur Żbikowski		
Teachers responsible for the module:	Staff and PhD students of the Division of Avian, Exotic Animals and Fish Diseases		
Unit responsible for the module:	Department of Pathology and Veterinary Diagnostics, Institute of Veterinary Medicine		
Faculty in charge:	Faculty of Veterinary Medicine		
Objectives of the module:	<p>Student learns about basic issues of avian anatomy, immunology, correct diagnosis of birds diseases based on the clinical, pathological examinations and laboratory tests.</p> <p>During the course student should acquire the theoretical knowledge and practical skills necessary to diagnose and treat diseases in birds. Student acquires both basic and detailed information and knowledge in the field of poultry production, pigeons, exotic birds and wild birds.</p> <p>Students practice their skills in avian necropsy, embryo-pathology, lesion-scoring (coccidiosis), vaccination and treatment birds, collecting samples, estimation of biosecurity strategies in poultry farm. Students learn how to interpret the results of histopathology, serological monitoring. This course focuses on the ambulatory-domestic and pet birds, perlustration of poultry farm and hatchery. Students get practical knowledge of therapy, molecular and virological methods in diagnosis of avian diseases, welfare of poultry.</p>		
Teaching forms, number of hours:	a) Practicals: 40 h b) ... c)		
Teaching methods:	Clinical course: courses in farm, ambulatory, laboratory and necropsy room; presentations showing the clinical and pathological symptoms of diseases with active involvement of students Consultations outside the time reserved for regular classes (1 hour/week) - date and time will be arrange by the course coordinator at the beginning of the semester.		
Formal prerequisites and initial requirements:	Avian diseases.		
Learning outcomes:	Knowledge: Student has a basic knowledge of anatomy and embryology, topographic of domestic and pet birds. Student can perform clinical examination and poultry condition and welfare. Student can perform necropsy of birds carcasses and can interpret of results. Student performs veterinary investigation, is able to diagnose the most common contagious and metabolic diseases in birds. Student can collect samples for laboratory tests and interpret results of these tests. Student knows practical aspects of birds therapy. Student has knowledge about major diseases in poultry and principles of disease prevention.	Skills: Student has a basic knowledge of immunology and prevention of poultry diseases	Competences: ..... .....
Assessment methods:	Clinical training card + protocols + short essay and PowerPoint presentation on selected topic + oral examination at the end of rotation Credit points are obtained for completing the forms correctly, answering the questions, demonstrating knowledge acquired during the rotation, and presenting the topic of the essay.		

	Two terms for rotation credit are anticipated (I - first term, II - retake). Both terms have the same form - oral. The retake is for students who failed the first term and students who were absent on the first term. Absences from rotation can be excused based on a doctor's certification of a short-term inability to participate in classes or by the student's demonstrating other important reasons that prevented participation in classes and which justify such absences within 7 days.
Formal documentation of learning outcomes:	Signed individual clinical training cards; the final grade is the average of the grades received during the individual parts of the rotation: rotation protocols, essay and oral presentation; the gained knowledge, skills and competencies acquired during the rotation, grade in eHMS.
Elements impelling final grade:	1. Evaluation of protocols – 33% 2. Evaluation of essay and oral presentation – 33% 3. Evaluation of the knowledge, skills and competencies acquired during the rotation - 34%
Teaching base:	Division of Avian, Exotic Animals and Fish Diseases (IMW), necropsy room of the Division of Animal Patomorphology (IMW), poultry farm (eg. Obory, WULS-SGGW), Clinic for Small Animals (IMW)
Mandatory and supportive materials :	
Basic literature:	
1. Capua I., Alexander D. J.: Avian influenza and Newcastle Disease. A field and laboratory manual. Springer, Italy, 2009.	
2. Davison F., Kaspers B., Schat K.: Avian immunology. Elsevier Ltd., UK, 2008.	
3. Harrison G. J., Lightfoot T. L.: Clinical avian medicine. Spix Publishing, Inc, Florida, USA, 2006.	
4. McLelland J.: A colour atlas of avian anatomy. Wolfe Publishing Ltd., England, UK, 1990.	
5. Pattison M., McMullin P.F., Bradbur J.M.: Poultry diseases. Elsevier. 2008	
6. Ritchie B. W., Harrison G. J., Harrison L. R.: Avian Medicine: Principles and application. Wingers Publishing, Lake Worth, Florida, USA, 1994.	
7. Saif Y. M. (red.): Diseases of poultry, 12th ed. Blackwell Publishing, Oxford, United Kingdom, 2008.	
8. Spackman E.: Avian influenza virus. Humana Press. Totowa, New Jersey, 2008.	
9. Sturkie P.D., Whittow G.C.: Sturkie's Avian Physiology (Fifth Edition).Elsevier Inc. 2000.	
Supplementary/additional literature:	
1. Calnek B.W.(Edit.): Diseases of Poultry, Ames Iowa, 1995	
2. Campbell T. W., Ellis C. K.: Avian and exotic animal hematology and cytology (3rd ed.). Blackwell Publishing, Ames, Iowa, USA, 2007, 3-50.	
3. Doneley B.: Avian Medicine and Surgery in Practice.Manson Publishing Ltd. 2010.	
4. <a href="http://www.bifs.be/pdf/en_racing_pigeon_sport.pdf">http://www.bifs.be/pdf/en_racing_pigeon_sport.pdf</a>	
5. <a href="http://www.efsa.europa.eu/">http://www.efsa.europa.eu/</a>	
6. <a href="http://www.oie.int/">http://www.oie.int/</a>	
7. <a href="http://www.thepoultrysite.com/publications/6/Diseases_Of_Poultry">http://www.thepoultrysite.com/publications/6/Diseases_Of_Poultry</a>	
8. <a href="http://www.who.int/en/">http://www.who.int/en/</a>	
9. Quinn P. J.: Veterinary Microbiology and Microbial Diseases. John Wiley & Sons. 2011.	
10. Randall C.J. Disease of the domestic fowl and turkey, London, 1985	
11. Sturkie P.D.: Avian Physiology. Paul Verlag, New York, 1986	
12. Webster R. G., Bean W. J., Gorman, O. T., Chambers T. M., Kawaoka Y.: Evolution and ecology of influenza A viruses. Microbiol. Rev. 1992. 56 (1), 152 – 179.	
13. Diseases of Poultry, 2 Volume Set, 14th Edition. David E. Swayne, Martine Boulianne, Catherine M. Logue, Larry R. McDougald, Venugopal Nair, David L. Suarez. 2020.	
14. Avian Immunology. Second Edition. Karel A. Schat, Bernd Kaspers, Pete Kaiser. 2014.	
ANNOTATIONS	
Annotations <sup>24</sup> ):	
Student's Daybook of Summer Practice and Clinical Training	

Quantitative summary of the module:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module <sup>18)</sup> - base for quantifying ECTS <sup>2</sup> :	60 h
Total ECTS points, accumulated by students during contact learning:	1 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	1 ECTS

Learning outcomes of the module relative to the learning outcomes of the subject:

Outcome category	Learning outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*)
Knowledge -	Student has a basic knowledge of anatomy and embryology, topographic of domestic and pet birds	WW_NP2, WW_NP3	3;3
Skills	Student has a basic knowledge of immunology and prevention of poultry diseases	U_PUZ18	3
Knowledge/Skills	Student can perform clinical examination and poultry condition and welfare	W_NK5, W_PZ4, U_PUZ3, U_PUZ5	3;3;3;3

Knowledge/Skills	Student can perform necropsy of birds carcasses and can interpret of results	W_NK2, W_NK3, U_PUZ15	3;3;3
Knowledge/Skills	Student performs veterinary investigation, is able to diagnose the most common contagious and metabolic diseases in birds	W_NK4, U_PUZ1	3;3
Knowledge/Skills	Student can collect samples for laboratory tests and interpret results of these tests	W_NK7, U_PUZ6, U_PUZ15	3;3;3
Knowledge/Skills	Student knows practical aspects of therapy	WW_NP11, W_NK4, U_OUZ5, U_PUZ10, U_PUZ12	3;3;3;3;3
Knowledge/Skills	Student has knowledge about major diseases in poultry and principles of disease prevention	W_NK6, U_PUZ8	3;3

\*)

3 – Significant and detailed,

2 – Partial,

1 – Basic,

**WNZ-ZT-1Z-08Z-03\_19**

**Kod Wydziału-Kod kierunku-Kod poziomu i formy-numer semestru Z zimowy L letni-numer przedmiotu w planie semestru\_rok akademicki, od którego obowiązuje opis / 2019-2020 →19/**

WNZ – Wydział nauk o zwierzętach (kod HMS)

ROL	Rolnictwa i Biologii
WET	Medycyny Weterynaryjnej
LES	Leśny
OGR	Ogrodnictwa, Biotechnologii i Architektury Krajobrazu
BIS	Budownictwa i Inżynierii Środowiska
TDR	Technologii Drewna
WNZ	Nauk o Zwierzętach
EKR	Nauk Ekonomicznych
NoZ	Nauk o Żywności
ZCZ	Nauk o Żywieniu Człowieka i Konsumpcji
WIP	Inżynierii Produkcji
ZIM	Zastosowań Informatyki i Matematyki
WNH	Nauk Społecznych

**ZT – zootechnika**

A	architektura krajobrazu
B	biologia
BD	budownictwo
BT	biotechnologia
BW	bioinżynieria zwierząt
BZ	bezpieczeństwo żywności
D	dietetyka
E	ekonomia
ER	ekologiczne rolnictwo i produkcja żywności
F	finanse i rachunkowość weterynaria
GH	gastronomia i hotelarstwo
GP	gospodarka przestrzenna
H	hodowla i ochrona zwierząt towarzyszących i dzikich
IB	inżynieria systemów biotechnicznych
IE	informatyka i ekonometria
IG	inżynieria i gospodarka wodna
IK	inżynieria ekologiczna
IN	informatyka
IS	inżynieria środowiska
L	logistyka
LS	leśnictwo
M	meblarstwo
O	ogrodnictwo
OR	ochrona zdrowia roślin
OS	ochrona środowiska
P	pedagogika
R	rolnictwo
S	socjologia
TD	technologia drewna
TE	technologie energii odnawialnej
TU	turystyka i rekreacja
TB	towaroznawstwo w biogospodarce
TZ	technologia żywności i żywienie człowieka
W	weterynaria
W-N	weterynaria
	weterynaria
Z	zarządzanie
ZC	żywienie człowieka i ocena żywności
ZP	zarządzanie i inżynieria produkcji
ZT	zootechnika

**1Z – studia I stopnia niestacjonarne**

**1S – I st., stacjonarne;**

**2S – II st., stacjonarne;**

**2Z – II st., niestacjonarne**