Code of subject	M_WE_SEM9 CHP 2
Field of study	Veterinary medicine
Name of the training module including the Polish name	Diseases of birds 2
	Choroby ptaków 2
Language of instruction	English
Type of the training module	obligatory
Level of the training module	Master level
Form of studies	Stationary
Location in the programme (year)	V
Location in the programme (semester)	X
Number of ECTS credits with a division into contact/noncontact	3 (2/1)
Name and surname of the person in charge	Dr hab. Agnieszka Marek university professor
Unit offering the subject	Department of Veterinary Prevention and Diseases of Birds
Aim of the module	Students learn practical issues in the field of anatomy, topographic anatomy, clinical physiology, pathophysiology and clinical immunology of birds, learn to correctly diagnose bird diseases on the basis of clinical, anatomopathological and laboratory tests and how to deal with poultry diseases subject to official control as well as the principles of non-specific prophylaxis and specific diseases of poultry.
Learning outcomes	Knowledge:
	K1- basic knowledge of topographic anatomy and embryology of farm and domestic birds
	K2- basic knowledge of bird physiology and pathophysiology
	K3- basic knowledge in the field of bird pathomorphology
	K4- basic information on the contagious diseases of birds
	K5- has basic knowledge of the pharmacodynamics and pharmacokinetics of drugs used in birds
	K6- knowledge in the field of immunology and prevention of bird diseases
	Skills:
	S1- is able to carry out clinical examination and basic laboratory tests in farm and domestic birds
	S2- performs an autopsy of birds and prepares an autopsy report, correctly interprets the autopsy results
	S3- correctly takes samples for laboratory tests and interprets the results of laboratory tests
	Social competences:
	C1- diagnoses health problem and introduces appropriate therapy to the best of his knowledge
	C2- adheres to ethical principles
	C3- is aware that the decisions made by him / her will have an impact on the patient's condition and the environment
Preliminary and additional requirements	Diseases of birds 1

Contents of the training module – a compact description	Lectures: 1. The act on preventing and combating infectious diseases of poultry 2. Poisoning in poultry (knowledge of factors causing poisoning in birds, clinical symptoms, anatomopathological changes, diagnostics, therapeutic procedures in case of poisoning) 3. Metabolic disorders or disorders with incompletely explained etiology. 4. Metabolic diseases (health problems related to the skeletal system) 5. Metabolic diseases (health problems related to the circulatory system of birds) 6. Diseases due to nutrient deficiencies (mineral and vitamin deficiencies) 7. Birds as a source of zoonoses (chlamydophilosis, tosoplasmosis, campylobacetriosis and their zoonotic factors; symptoms and anatomopathological changes in birds; routes of transmission to humans) Exercises: 1. Practical improvement of the techniques of clinical and anatomopathological examination of birds. 2. Poultry enteropathies (selected issues related to the pathology of the digestive system, infectious and non-infectious diseases) 3. Laboratory diagnosis of parasitic diseases of birds Invasive diseases of birds (invasions caused by protozoa: trichomonosis, histomonosis, hexamitosis) 4. Invasive diseases of birds (invasions caused by protozoa: coccidiosis) 5. Invasive diseases of birds (invasions caused by nematodes) 6. Invasive diseases of birds (infections caused by flukes and tapeworms) 7. Invasive diseases of birds (ectoparasitic infections)) 8. Selected diseases of water birds (Derzsy's disease S.M.M.D.R Syndrome, Dwarfism and Shortened Beak Syndrome, Reovirosis) 9. Selected diseases of waterbirds (Duck hepatitis, Duck fever, Infectious penile and steak inflammation, -Infectious serositis) 10. Selected diseases of turkeys (viral infections) 11. Selected diseases of turkeys (bacterial infections) 12. Medicines for birds 13. Principles of rational use of antibacterial therapies in poultry 14. Differential diagnosis of bird diseases.

Recommended and obligatory reading list	Basic literature: 1. Sturkie P.D.: Avian Physiology. Paul Verlag, New York, 1986 2. Swayne D.E. (Edit): Diseases of Poultry.,Wiley-Blackwell, 13th Edition, 2013 3. Randall C.J. Disease of the domestic fowl and turkey, London, 1985
The intended forms/activities/ teaching methods	a) lectures; number of hours 15; (multimedia presentations, films, discussion) b) Exercises; number of hours 30; (practical improvement of the techniques of clinical and pathological examinations, laboratory diagnostics, laboratory exercises report) c) consultation

Methods of verification and documentation forms of the achieved learning outcomes	During the semester, the following are planned: 1) one credit script with mixed questions (test, open, supplementing the issues, true / false). Credit includes the knowledge provided during lectures and exercises in the field of: metabolic diseases, poultry poisoning; zoonotic factors; poultry enteropathies; laboratory diagnosis of parasitic diseases of birds; selected diseases of waterfowl and turkeys; prevention and rules of fighting poultry diseases; principles of rational use of antibacterial therapies in poultry - 61% of points are required to pass credit. There are two dates for the written test (first term, second term). Both terms have the same form. The second term may be joined by students who did not obtain the required number of points and students who were absent after justifying their absence. The absence must be justified within 7 days of the situation. Details can be found in the course regulations and will be provided to students during the first class. The number of questions and points that can be obtained from partial credits will be given to students during the first class and in the regulations of the subject. Criteria used to assess the pass: Insufficient (2.0) <60% obtained percentage of the sum of points assessing the level of required knowledge / skills Sufficient (3.0) 61–68% obtained percentage of the sum of points assessing the level of required knowledge / skills Sufficient plus (3+) 69–76% obtained percentage of the sum of points assessing the level of required knowledge / skills Good (4.0) 77–84% obtained percentage of the sum of points assessing the level of required knowledge / skills Good plus (4+) 85–92% obtained percentage of the sum of points assessing the level of required knowledge / skills Very good (5.0) 93–100% obtained percentage of the sum of points assessing the level of required knowledge / skills Active participation of the student in performing an autopsy (no grade). This activity is documented by recording your presence. Each student is required to complete at least one autopsy during the semester. Completion of the dissection technique in the practical and oral form (questions asked from the list of questions), including carrying out the autopsy of the bird along with checking the level of knowledge of the material covering the exercises. To pass the exercises, it is necessary to meet the following criteria: -crediting (without assessing) the autopsy technique during the classes, noted by the lecturer in the attendance register, - obtaining at least 61% of possible points from a written credit - obtaining at least 61% of the possible points in the written exam.

<table>
<tr><td rowspan="5">Balance of ECTS credits</td><td>Form of classes.</td><td>number of contact hours</td><td>ECTS points</td></tr>
<tr><td>Lectures
Exercise
Exam</td><td>15
30
4</td><td>0,6
1.2
0,2</td></tr>
<tr><td></td><td>number of non-contact hours</td><td></td></tr>
<tr><td>preparation for laboratory exercises
preparation of reports from exercises:
Reading the recommended literature
Preparation for credit</td><td>16
6
2
6</td><td>0,53
0,2
0,07
0,2</td></tr>
<tr><td>Total</td><td>79 hours</td><td></td></tr>
<tr><td>Number of contact hours</td><td colspan="3">15 h lectures
30 h exercis
4 hours exam
consultation
A total of 49 hours, which corresponds to 2 ECTS</td></tr>
<tr><td>Relationship between subject learning outcomes and veterinary studies learning outcomes</td><td colspan="3">K1 – A.W1 ++
K2 - A.W2 ++
K3 - B.W1+++
K4 - B.W3 +++
K5- A.W16 +++
K6 - B.W3 +++
S1 - B.U3 +++
S2- B.U16 +++
S3 - B.U6 ++
C1- K5 +++
C2 – K2 ++
C3 - K1 ++</td></tr>
<tr><td>Impact of selected compounds to final grade</td><td colspan="3">Weights of the final grade for the subject:
Credit Written Score (CS) = 50%
Grade from the written examination (EG) = 50%
Calculation of the final grade for the subject: FG = (0.5 x CS) + (0.5 x EG)</td></tr>
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