

Module title:	ROTATION DOG AND CATS DISEASES	ECTS	6
Polish translation:	STAŻ CHOROBY PSÓW I KOTÓW		
Course:	Veterinary Medicine		

Module language:	English	Stage: JM-FVM	
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 checked="" type="checkbox"/> mandatory <input type="checkbox"/> elective	Semester: 10	<input type="checkbox"/> winter semester <input checked="" type="checkbox"/> summer semester
Academic year:	Intake 2020/2021	Catalogue number:	FVM-V-JMSS-10S-D20_20

Module coordinator:	PhD Magdalena Ostrzeszewicz
Teachers responsible for the module:	Academic teachers of the Institute of Veterinary Medicine; Department of Small Animal Diseases; PhD students in accordance to the internal legal acts; visiting professors; other specialists in the field of study
Unit responsible for the module:	IVM, Department of small animal internal diseases
Faculty in charge:	Faculty of Veterinary Medicine
Objectives of the module:	<p><b>INTERNAL MEDICINE</b> The aim of class is to give students opportunity to get contact with wide range of clinical cases, especially in aspect of diagnosing and treatment. Students assists clinicians during their work in Small Animal Clinic or shelter. They take part in additional diagnostic procedures and treatment, than clinical cases are discussed by the teacher.</p> <p><b>SURGERY</b> The aim of the teaching is to teach the students the skills of examining, diagnosing particular diseases which qualify the patient for surgical treatment, taking into account the method of surgery, choice of anaesthesia and postoperative procedures. During the classes, in particular, the student is required to acquire practical skills such as: injections, intubation, preparation of a tool table for surgery, aseptic preparation of hands for surgery, aseptic wearing of gloves, assisting in surgery with observing the principles of aseptics during the procedure, suturing of the skin, ligation of blood vessels, supervision of anaesthesia. The acquisition of the above skills is enforced from each student's grade and recorded in a personal record of passing the surgical skills. During classes, students also have the opportunity to improve selected surgical skills (suture, knot tying, ligation of blood vessels, osteosynthesis) on isolated organs or phantoms.</p> <p><b>REPRODUCTION</b> The course will provide the knowledge of the specificity of dogs and cats reproduction in comparison to other animal species. Content of the curriculum will be implemented in two groups of issues: 1) physiology of reproduction, 2) pathology of reproduction and obstetrics. The program is conducted in the form of practical training. Topics of practical training include diagnostics of estrous cycle phases, pregnancy detection, physical examination, complementary diagnostic methods used in gynaecology and obstetrics, contraception (including gonadectomy), identification of the causes of infertility, basic therapeutic methods and procedures, surgical treatment in gynaecology, obstetrics and diseases of mammary gland.</p> <p><b>INFECTIOUS DISEASES</b> 1. The aim of the course is to familiarize students with clinical cases of rarely occurring infectious diseases of dogs and cats in the aspect of their diagnosis, differential diagnosis and control.</p> <p>Subject:</p> <ol style="list-style-type: none"> <li>1. Aujeszky's disease - symptoms, course, diagnosis and control</li> <li>2. Pox virus in cats - symptoms, course, diagnosis and control</li> <li>3. Mumps - symptoms, course, diagnosis and control</li> <li>4. Brucellosis - symptoms, course, diagnosis and control</li> <li>5. Tuberculosis - symptoms, course, diagnosis and control</li> <li>6. Papillomas in dogs - symptoms, course, diagnosis and control</li> <li>7. Tetanus - symptoms, course, diagnosis and control</li> </ol> <p>2. The use of ultrasound techniques in the diagnosis of infectious diseases of dogs and cats. The aim of the course is to familiarize students with the usefulness of ultrasound examination in everyday veterinary work. AFAST, TFAST, VetBLUE and Focused ECHO protocols.</p> <ol style="list-style-type: none"> <li>1. Recognizing the presence of fluid in the abdomen in the course of e.g. infectious peritonitis, Rubarth's disease</li> <li>2. Diagnosis of pneumonia in the course of distemper and differentiation with the ultrasound image in the course of kennel cough, as well as in upper respiratory infections in cats</li> <li>3. Diagnosis of masses in the course of, among others, feline leukemia, tuberculosis (including changes in the heart)</li> <li>4. Diagnosis of infective endocarditis and myocarditis</li> <li>5. Recognizing the presence of fluid in the chest cavity in the course of e.g. infectious peritonitis, infectious myocarditis</li> <li>6. Ultrasound changes in the course of diseases involving gastroenteritis including parvovirus, coronaviruses, Rubarth's disease, distemper and enteritis due to feline coronavirus infection</li> </ol>
Teaching forms, number of hours:	a) Laboratory classes; hours 120

<p>Teaching methods:</p>	<p><b>INTERNAL MEDICINE</b>  Practical workshops in the Small Animal Clinic SGGW and animal shelters  Students are entitled to 1h of consultation weekly.  Detailed schedule will be defined by the coordinator of the course at the beginning of semester.  Detailed organization of consultations will be defined by the coordinator of the course at the beginning of semester.</p> <p><b>SURGERY</b>  The subject is conducted in the form of exercises carried out at the clinic's patients. During the classes, the students, in the presence of the lecturer, examine the patient, and then, on the basis of the provided data from the history and the results of the conducted examination and additional tests, the laboratory, radiological and ultrasound examinations make a diagnosis. After the diagnosis of the disease, the possibilities of surgical treatment of choosing one of them are discussed. In the further part of the classes, the students prepare the patient for surgery and participate in the procedure. During the procedure, the coordinator of the course comments stages of the operation. After the procedure is completed, the postoperative procedure, possible complications, methods of convalescence and the way of keeping records are discussed.  Detailed schedule will be defined by the coordinator of the course at the beginning of semester.  Students are also entitled to 1 hour of consultation per week. Detailed organization of consultations will be defined by the coordinator of the course at the beginning of semester</p> <p><b>REPRODUCTION</b></p> <ul style="list-style-type: none"> <li>• Methods aimed on teaching practical skills: <ul style="list-style-type: none"> <li>• - review medical history,</li> <li>• - perform a thorough physical examination,</li> <li>• - select diagnostic and therapeutic procedure,</li> <li>• - collect and interpret laboratory data,</li> <li>• - perform basic surgery procedures and anaesthesia protocols</li> <li>• - choose the right treatment and follow-up protocol</li> </ul> </li> <li>• Consultations (1h/week)</li> </ul> <p>Detailed schedule of the classes and detailed organization of consultations will be defined by the coordinator of the course at the beginning of semester</p> <p><b>INFECTIOUS DISEASES</b>  Presentation of clinical cases, scans, ultrasound examinations. Student will independently perform ultrasound examination in AFAST, TFAST, VetBlue and FocusedEcho protocols.</p>		
<p>Formal prerequisites and initial requirements:</p>	<p><b>INTERNAL MEDICINE</b>  Anatomy, topographic anatomy, physiology, pathophysiology, clinical and laboratory diagnostic, microbiology, pharmacology, toxicology, radiology, internal medicine, general surgery, surgery and anaesthesiology of small animal, obstetrics of small animal, epidemiology of small animal</p> <p><b>SURGERY</b>  Acquisition by students of knowledge in general surgery, traumatology, including the principles of wound healing, basics of anaesthesiology and pre- and postoperative management. The students have basic theoretical knowledge of anatomy and pathophysiology. Clinical and laboratory radiological diagnostics mastered during classes in previous subjects.</p> <p><b>REPRODUCTION</b>  Passing the courses: Animal anatomy, Animal physiology, Veterinary pharmacology, Pathomorphology, Diagnostic imaging, Veterinary microbiology, Animal pathophysiology, Clinical and laboratory diagnostics, General surgery and anaesthesiology</p> <p>Knowledge of basics of handling of animals, safety rules, general examination of the animal</p> <p><b>INFECTIOUS DISEASES</b>  Veterinary epidemiology, Microbiology, Immunology, Virology</p>		
<p>Learning outcomes:</p>	<p><b>Knowledge:</b>  Student knows:  Student knows mechanisms of normal organism's function, causes and mechanisms of disorders on the cellular, tissue, organ, system and organism levels occurring in the internal diseases; how to interpret clinical data, results of the laboratory tests and other diagnostics techniques; diagnostic (including differential diagnostics) and therapeutic procedures; rules of clinical evaluation and animal health monitoring</p> <p>02 rules of clinical evaluation and animal health monitoring;  03 rules of clinical evaluation and animal health monitoring; causes and symptoms of patomorphological changes, procedures for therapy and prevention in the particular diseases  04 diagnostic (including differential diagnostics) and therapeutic procedures</p> <p>05 and differentiates the normal and abnormal reproductive mechanisms  06 the clinical manifestations of reproductive mediated diseases and knows</p>	<p><b>Skills:</b>  Student is able to:</p> <p>01 handle animals in safe and humane way, and instructs others to do alike;  02 conduct anamnesis in order to acquire precise information on animal or group of animals (heard), and their environment;  03 carry out full clinical evaluation;  04 evaluate nutritional state of the animal and ordains information on proper animal nutrition;  05 collect and safeguard the biological material, conduct basic laboratory analyses, properly evaluate and interpret results of laboratory analyses;  06 use diagnostic devices including x-ray, ultrasound, endoscopy, according to its manuals and health and safety regulations concerning animals and humans, interpret the results obtained from those diagnostic devices;  07 acquire and use information on registered veterinary pharmaceuticals;  08 prescribe and use veterinary pharmaceuticals and medical</p>	<p><b>Competences:</b>  Student is ready to:</p> <p>01 take responsibility for his decisions concerning humans, animals and environment;  02 act within the current standards and ethical obligations, perform actions based on the code of professional ethics, show tolerance to beliefs and behaviour influenced by different sociological and cultural background;  03 utilise unbiased sources of information;  04 formulate conclusions from personal measurements or observations;  05 formulate opinions regarding various aspects of professional conduct;  06 perform critical self-evaluation, formulate constructive criticism regarding veterinary practice, accept criticism regarding postulated solutions, factual respond to that criticism based on the current scientific knowledge;</p>

	<p>other diseases with similar clinical appearance  07 the diagnostic schemes and protocols (including differential diagnosis) for reproductive diseases  08 the therapeutic schemes and protocols recommended for reproductive diseases, pharmacodynamics properties of recommended products and the interactions among medicinal products  09 the occurrence, significance, symptoms and control of rare infectious diseases of dogs and cats presented.  10 infectious diseases in which the use of ultrasound techniques will speed up the diagnosis and introduction of treatment.</p>	<p>materials, including their safe storage and utilisation;  09 choose the treatment adequate for the diagnosed disease;  10 evaluate the need for euthanasia, properly informs the owner of the animal and carry out the euthanasia procedure according to rules and obligations of professional ethics and proper care and utilisation of the body  11 prepare the preventive schemes according to the species specifics;  12 critically analyze veterinary literature and formulate conclusions based on available literature  13 use computer systems and current sources of veterinary knowledge for effective use and process of information;  14 perform first aid procedures for all animal species for haemorrhage, wounds, respiratory disorders, eye and ear injuries, loss of consciousness, cahexia, burns, tissue injuries, internal injuries and heart block;  15 monitor patient status during surgery and intensive care upon the basic life parameters;  16 implement rules of aseptic and antiseptic surgery procedures, and use proper methods of tools sterilisation;  17 use methods of safe sedation, general and local anaesthesia, and methods for pain evaluation and relief;  18 describe the mechanisms of reproductive diseases  19 use the current nomenclature  20 plan the diagnostic procedures (including differential diagnosis) in the reproductive diseases  21 plan and monitor the treatment strategies  22 recognize rare infectious diseases, including using laboratory diagnostics  23 adjust the pharmacological treatment to individual infectious diseases  24 control rare infectious diseases  25 perform basic ultrasound examination using AFAST, TFAST, VetBlue and FocusedECHO protocols</p>	<p>07 constantly update knowledge and skills for professional development;  08 communicate with co-workers and share the knowledge;  09 operate under stress and duress;</p> <p>Student formulates:</p> <p>10 responsible clinical decisions based primarily on the animal welfare  11 his opinion about understand the onset of the disease, clinical appearance and therapeutic process in the context of normal and abnormal reproductive function</p> <p>The student is ready to :</p> <p>12 recognize, plan and conduct treatment of infectious diseases  13 use basic ultrasound examination techniques in everyday veterinary practice</p>
<p>Assessment methods:</p>	<p><b>INTERNAL MEDICINE</b>  No extra assessment methods are anticipated.  In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.</p> <p><b>SURGERY</b>  Confirmed attendance. Completed traineeship logbooks signed by the teacher leading the rotation group.  Credit is given on the basis of confirmation of the acquisition of selected practical skills during the course of classes. The assessment of practical skills acquisition (preparation of the surgical field, preparation of the instrumental table, aseptic wearing of gloves, intubation, assistance for surgery, vessel ligation, tissue suturing, supervision of anaesthesia) is carried out successively during the clinical examination, surgical treatment or classes on isolated organs or phantoms. The student is obliged to record surgical cases in the traineeship diaries. In addition, a selected group of students (after the division into surgery, internal diseases, reproduction and infectious diseases according to the established key resulting from the division of the internship) performs and presents a detailed description of the selected case of surgical operations.  In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted. No extra assessment methods are anticipated</p> <p><b>REPRODUCTION</b>  The full assessment will be accomplished on the basis of combined presents and activity on elective  No extra assessment methods are anticipated.  In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.</p> <p><b>INFECTIOUS DISEASES</b>  No extra assessment methods are anticipated.</p>		

	In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.												
Formal documentation of learning outcomes:	<p>INTERNAL MEDICINE eHMS entry. Records collected in the Student's Daybook of Summer Practice and Clinical Training, presence lists, written assessments of the students</p> <p>SURGERY An entry in the training card confirming the performance of a specific activity: preparation of the operating field, preparation of the instrument table, aseptic wearing of gloves, intubation, assistance for surgery, vessel ligation, suturing of tissues, supervision of anaesthesia. In case of designated persons (according to the above key) - a detailed description of the selected clinical case together with a description of surgical treatment. eHMS entry. Records collected in the course portfolio i.e. individual records of student results, presence lists, database of oral and written questions, written assessments of the students</p> <p>REPRODUCTION eHMS entry. Records collected in the course portfolio (general rules of the course)</p> <p>INFECTIOUS. DISEASES eHMS entry. Records collected in the Student's Daybook of Summer Practice and Clinical Training, presence lists, written assessments of the students</p>												
Elements impelling final grade:	<p>Final grade under conditions:</p> <ol style="list-style-type: none"> <li>1. Positive grade from internal, surgery, obstetrics and infectious diseases accordingly to specific demands.</li> <li>2. Positive grade from rotation paper work <ul style="list-style-type: none"> <li>- 4 pages A4 computer printout</li> <li>- Self-contained work of student (not reprint)</li> <li>- One work could be prepared by 4 students maximum</li> <li>- Detailed informations students can get from responsible teachers from appropriate divisions.</li> </ul> </li> <li>3. Obligatory one night shift in Small Animal Clinic</li> <li>4. Final grade in eHMS is medial from 4 subjects and paper work</li> </ol> <table border="1"> <tr> <td>grade</td> <td>3.0</td> <td>3.5</td> <td>4.0</td> <td>4.5</td> <td>5.0</td> </tr> <tr> <td>Points from medial value</td> <td>3.0-3.25</td> <td>3.26-3.75</td> <td>3.76-4.25</td> <td>4.26-4.75</td> <td>4.76-5.0</td> </tr> </table>	grade	3.0	3.5	4.0	4.5	5.0	Points from medial value	3.0-3.25	3.26-3.75	3.76-4.25	4.26-4.75	4.76-5.0
grade	3.0	3.5	4.0	4.5	5.0								
Points from medial value	3.0-3.25	3.26-3.75	3.76-4.25	4.26-4.75	4.76-5.0								
Teaching base:	Clinic of Small Animals SGGW, cooperating outside units (eg. shelter)												
<p>Mandatory and supportive materials:</p> <ul style="list-style-type: none"> <li>- S. Birchard, R. Sherding: "Saunders Manual of Small Animal Practice", 3rd edition</li> <li>- J. Elliott, G. Grauer: "BSAVA Manual of Canine and Feline Nephrology and Urology", 2nd edition</li> <li>- S. Ettinger, E. Feldman: „Textbook of Veterinary Internal Medicine“, 7th edition</li> <li>- E. Hall, JW. Simpson, D. Williams: BSAVA Manual of Canine and Feline Gastroenterology“ 2nd edition</li> <li>- R. Nelson, C. Couto: "Small Animal Internal Medicine", 4th edition</li> <li>- Platt. S., Olby N. : "BSAVA Manual of Canine and Feline Neurology", 2nd edition</li> <li>- J. Steiner: "Small Animal Gastroenterology", 2008</li> <li>- Small Animal Surgery by Theresa Welch Fossum ELSEVIER 2018</li> <li>- Johnston S and all. Canine and Feline Theriogenology, 2001</li> <li>- Dreier, K.-H., 2009: Klinik der Reproduktionsmedizin des Hundes. Schlutersche Verlagsgesellschaft</li> <li>- Noakes, D., 2009: Veterinary Reproduction and Obstetrics. W.B. Saunders Company</li> <li>- Long, S., 2006: Veterinary Genetics and Reproductive Physiology, Butterworth Heinemann.</li> <li>- C.E. Greene, Infectious Diseases of the Dog and cat. ed.: IV edition, 2012, Elsevier</li> <li>- E. Thiry: Clinical Virology of the Dog and Cat, , 2006, Les Editions du Point Veterinaire</li> <li>- Focused Ultrasound Techniques for the Small Animal Practitioner" Gregory R. Lisciandro, 2013</li> </ul> <p>Supportive E. Thiry: Clinical Virology of the Dog and Cat, , 2006, Les Editions du Point Veterinaire</p> <p>Relevant scientific publications, including those of the module coordinator.</p>													
<p>ANNOTATIONS compliance with health and safety rules, protective apron</p>													

Records collected in the course portfolio (general rules of the course)

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 - base for quantifying ECTS:	<b>120h</b>
Total ECTS points, accumulated by students during contact learning:	<b>6 ECTS</b>

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 (each)
Knowledge -01	Student knows mechanisms of normal organism's function, causes and mechanisms of disorders on the cellular, tissue, organ, system and organism levels occurring in the internal diseases; how to interpret clinical data, results of the laboratory tests and other diagnostics techniques; diagnostic (including differential diagnostics) and therapeutic procedures; rules of clinical evaluation and animal health monitoring;	B.W.1, B.W.2	2
		B.W.3, B.W.4, B.W.5, B.W.6	3
Knowledge- 02	Student knows rules of clinical evaluation and animal health monitoring;	B.W.5	2
Knowledge - 03	Student knows causes and symptoms of patomorphological changes, procedures for therapy and prevention in the particular diseases;	B.W.3	2
Knowledge - 04	Student knows diagnostic (including differential diagnostics) and therapeutic procedures;	B.W.4	3
Knowledge 05	Student knows and differentiates the normal and abnormal reproductive mechanisms	B.W.1; B.W.2	3
		B.W.3	2
Knowledge 06	Student knows the clinical manifestations of reproductive and knows other diseases with similar clinical appearance	B.W.4; B.W.5	3
		B.W.6; B.W.9	2
Knowledge 07	Student knows the diagnostic schemes and protocols (including differential diagnosis) for reproductive diseases	B.W.4	3
		B.W.5; B.W.6; B.W.9	2
Knowledge 08	Student knows the therapeutic schemes and protocols recommended for reproductive diseases, pharmacodynamic properties of recommended products and the interactions among medicinal products	B.W.6	2
Knowledge 09	Student knows the occurrence, significance, symptoms and control of rare infectious diseases of dogs and cats presented.	B.W.4	3
		B.W.5	3
Knowledge 10	Student knows infectious diseases in which the use of ultrasound techniques will speed up the diagnosis and introduction of treatment.	B.W.4	3
Skills 01	Student is able to handle animals in safe and humane way, and instructs others to do alike;	B.U.1	2
Skills 02	Student is able to conduct anamnesis in order to acquire precise information on animal or group of animals (heard), and their environment;	B.U.2	3
Skills 03	Student is able to carry out full clinical evaluation;	B.U.3	3
Skills 04	Student is able to perform first aid procedures for all animal species for haemorrhage, wounds, respiratory disorders, eye and ear injuries, loss of consciousness, cahexia, burns, tissue injuries, internal injuries and heart block;	B.U.4	3
Skills 05	Student is able to monitor patient status during surgery and intensive care upon the basic life parameters;	B.U.12	2
Skills 06	Student is able to implement rules of aseptic and antiseptic surgery procedures, and use proper methods of tools sterilisation;	B.U.14	3
Skills 07	Student is able to use methods of safe sedation, general and local anaesthesia, and methods for pain evaluation and relief;	B.U.11	2
Skills 08	Student is able to use the current nomenclature	B.U.2, B.U.9	3
		B.U.5; B.U.7	2
Skills 09	Student is able to plan the diagnostic procedures (including differential diagnosis) in the reproductive diseases	B.U.2	2
		B.U.1; B.U.7	1
Skills 10	Student is able to plan and monitor the treatment strategies	B.U.10; B.U.13	3
		B.U.15; B.U.20	2
Skills 11	Student is able to recognize rare infectious diseases, including using laboratory diagnostics	B.U.2	3
		B.U.3	3
Skills 12	Student is able to adjust the pharmacological treatment to individual infectious diseases	B.U.13	3

Skills 13	Student is able to control rare infectious diseases	B.U.19	3
Skills 14	Student is able to perform basic ultrasound examination using AFAST, TFAST, VetBlue and FocusedECHO protocols	B.U.7	3
Competences 01	student is ready to take responsibility for his decisions concerning humans, animals and environment;	KS.1	2
Competences 02	Student is ready to act within the current standards and ethical obligations, perform actions based on the code of professional ethics, show tolerance to beliefs and behaviour influenced by different sociological and cultural background;	KS.2	1
Competences 03	Student is ready to use unbiased sources of information	KS.3	1
Competences 04	student is ready to formulate conclusions from personal measurements or observations;	KS.4	1
Competences 05	student is ready to formulate opinions regarding various aspects of professional conduct;	KS.5	2
Competences 06	student is ready to formulate opinions regarding various aspects of professional conduct;	KS.6	2
Competences 07	student is ready to perform critical self-evaluation, formulate constructive criticism regarding veterinary practice, accept criticism regarding postulated solutions, factual respond to that criticism based on the current scientific knowledge;	KS.7	1
Competences 08	Student is ready to constantly update knowledge and skills for professional development;	KS.8	2
Competences 09	Student is ready to communicate with co-workers and share the knowledge;	KS. 9	2
Competences 10	student is ready to operate under stress and duress;	KS.10	2
Competences 11	Student formulates responsible clinical decisions based primarily on the animal welfare	KS.1; KS.2; KS.3; KS.6; KS.7; KS.9	2
Competences 12	Student formulates his opinion about understand the onset of the disease, clinical appearance and therapeutic process in the context of normal and abnormal immune functions	KS.4; KS.5; KS.6; KS.8	2
Competences 13	Student formulates the necessity of constant education using scientific sources	KS.4; KS.5; KS.6;KS.7; KS.8	2
Competences 14	Student is ready to recognize, plan and conduct treatment of infectious diseases	K.S.1 K.S.8	3 2
Competences 15	Student is ready to use basic ultrasound examination techniques in everyday veterinary practice	K.S.1 K.S.8	2 2