

## Syllabus

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|---------------------|-------------------------------------------------|------|---|
| Module title:       | Applied pharmacology of companion animals       | ECTS | 1 |
| Polish translation: | Farmakologia stosowana – zwierzęta towarzyszące |      |   |
| Course:             | Veterinary Medicine                             |      |   |

|                  |                                                                                       |                   |                                                                                                                                                                         |
|------------------|---------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module language: | English                                                                               | Stage:            | JM-FVM                                                                                                                                                                  |
| Form of studies: | <input checked="" type="checkbox"/> intramural<br><input type="checkbox"/> extramural | Type of module:   | <input type="checkbox"/> basic<br><input checked="" type="checkbox"/> directional<br><input type="checkbox"/> mandatory<br><input checked="" type="checkbox"/> elective |
| Semester:        | 11                                                                                    |                   | <input checked="" type="checkbox"/> winter semester<br><input type="checkbox"/> summer semester                                                                         |
| Academic year:   | 2021/2022                                                                             | Catalogue number: | FVM-JMSS-11W-ED33_19                                                                                                                                                    |

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| Module coordinator:                            | dr Wojciech Karlik                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Teachers responsible for the module:           | Academic teachers of the Institute of Veterinary Medicine; Department of Preclinical Sciences. 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 Preclinical Sciences                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Faculty in charge:                             | Faculty of Veterinary Medicine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Objectives of the module:                      | <p>To familiarize students with clinical pharmacology and principles of pharmacotherapy of selected disease occurring in companion animals, based on veterinary medicinal products currently authorized in UE. Familiarization with the current list of authorized medicines. An indication of the limitations of pharmacotherapy resulting from the shape of the pharmaceutical market, loss of drug activity, interactions. Indication of differences in practical use between authorized formulations with the same active substance. Possibilities and restrictions with the extra-label use of drugs.</p> <p>Course topics</p> <ol style="list-style-type: none"> <li>1. Organization of classes. Introduction to applied pharmacology.</li> <li>2. Drugs used in pharmacotherapy of cardio-vascular system.</li> <li>3. Drugs used in pharmacotherapy of respiratory system.</li> <li>4. Drugs used in pharmacotherapy of skin and ear diseases. Part 1</li> <li>5. Drugs used in pharmacotherapy of skin and ear diseases. Part 2</li> <li>6. Drugs used in chemotherapy for urinary tract infections</li> <li>7. Drugs used in neuropharmacology (pharmacotherapy of convulsions)</li> <li>8. Colloquium</li> </ol> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Teaching forms, number of hours:               | Lectures; hours 15;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Teaching methods:                              | <p>Lecture with increased teacher-student interaction.</p> <p>Consultation - 1 hour / week</p> <p>Detailed schedule will be defined by the coordinator of the course at the beginning of semester.</p> <p>Detailed organization of consultations will be defined by the coordinator of the course at the beginning of semester.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Formal prerequisites and initial requirements: | Subjects with which the student must have a positive assessment: veterinary pharmacology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Learning outcomes:                             | <p>Knowledge:</p> <p>01 / student knows approved veterinary medicinal products for use in companion animals,</p> <p>02 / student knows and understands the practical principles of drug selection in given clinical symptom and disease units in companion animals</p> <p>03 / student knows and understands the practical principles of using chemotherapeutic in companion animals</p> <p>04 / student knows the principles of combining drugs in combination therapy in selected disease in companion animals</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Skills:</p> <p>05 / student is able to explain the differences, and critically assess the effectiveness of therapy conducted with different drugs with the same basic effect</p> <p>06 / student can assess the benefits and risks of therapy</p> <p>07 / student has the ability to critically evaluate the proposed therapeutic solutions</p> <p>08 / student correctly assesses the importance of the selected medicinal product in the planned therapy</p> | <p>Competences:</p> <p>09 / from available, approved veterinary medicinal products selects products for therapy in a responsible manner</p> <p>10 / in the selection of a medicinal product is primarily guided by the well-being of the patient</p> <p>11 / student supplements knowledge in the field of new medicinal products,</p> <p>12 / student selects the medicinal product based on reliable knowledge</p> <p>13 / student is aware of the effects of decisions taken regarding the selection of the medicinal product</p> |

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| Assessment methods:                                                                                                           | <p>Written colloquium, which consists of 10 descriptive questions. A total of 100 percentage points can be obtained from the test, where 100% is the sum of points to be obtained from individual questions.<br/>A report prepared by a student on veterinary medicinal products authorized in his country.<br/>To obtain a passing grade, the student must obtain 51% of the test and prepare a report in accordance with the requirements.</p> <p>No extra assessment methods are anticipated.<br/>In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.</p> |       |
| Formal documentation of learning outcomes:                                                                                    | <p>eHMS entry.<br/>Records collected in the course portfolio i.e. individual records of student results, presence lists, database of written questions, written assessments of the students.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                |       |
| Elements impelling final grade:                                                                                               | <p>The final grade entered into the eHMS protocol is calculated based on the result of the written colloquium.<br/>Points obtained during the colloquium are converted into grades on the following scale:</p>                                                                                                                                                                                                                                                                                                                                                                                                                  |       |
|                                                                                                                               | Points                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Grade |
|                                                                                                                               | <0-50)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2     |
|                                                                                                                               | <50-65>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3     |
|                                                                                                                               | (65-70>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3,5   |
| (70-85>                                                                                                                       | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |       |
| (85-90>                                                                                                                       | 4,5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |
| (90-100>                                                                                                                      | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |       |
|                                                                                                                               | <p>The colloquium has two terms. Each student has the right to join two terms, regardless of the result obtained.<br/>The result obtained from the latest term cancels the result from previous term of the given test. An absence justified on the first term gives the right to re-schedule the first term. Absence on the second term does not result in setting another term.</p>                                                                                                                                                                                                                                           |       |
| Teaching base:                                                                                                                | Lecture halls SGGW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |
| <p>Mandatory and supportive materials :</p> <p>(1) List of authorized medicines<br/>(2) Relevant scientific publications.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |
| ANNOTATIONS                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |

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: |    |                  |  |                           |  | 25 h                       |
| Hours theoretical:                                                                                                                                             | 25 | Hours practical: |  | Hours of field exercises: |  | Total contact hours: ..... |
| Total ECTS points, accumulated by students during contact learning:                                                                                            |    |                  |  |                           |  | 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 -      | 01 / student knows approved veterinary medicinal products for use in companion animals,                                                                       | A.W.16, A.W.17                                    | 3                               |
| Knowledge -      | 02 / student knows and understands the practical principles of drug selection in given clinical symptom and disease units in companion animals                | B.W.3                                             | 3                               |
| Knowledge -      | 03 / student knows and understands the practical principles of using chemotherapeutic in companion animals                                                    | B.W.3                                             | 3                               |
| Knowledge -      | 04 / student knows the principles of combining drugs in combination therapy in selected disease in companion animals                                          | B.W.3                                             | 3                               |
| Skills -         | 05 / student is able to explain the differences, and critically assess the effectiveness of therapy conducted with different drugs with the same basic effect | B.U.9, B.U.13                                     | 1                               |
| Skills -         | 06 / student can assess the benefits and risks of therapy                                                                                                     | B.U.9, B.U.13                                     | 1                               |
| Skills -         | 07 / student has the ability to critically evaluate the proposed therapeutic solutions                                                                        | B.U.9, B.U.13                                     | 1                               |

|               |                                                                                                                  |                       |   |
|---------------|------------------------------------------------------------------------------------------------------------------|-----------------------|---|
| Skills -      | 08 / student correctly assesses the importance of the selected medicinal product in the planned therapy          | B.U.9, B.U.10, B.U.13 | 1 |
| Competences - | 09 / from available, approved veterinary medicinal products selects products for therapy in a responsible manner | KS.1                  | 1 |
| Competences - | 10 / in the selection of a medicinal product is primarily guided by the well-being of the patient                | KS.2, KS.4            | 1 |
| Competences - | 11 / student supplements knowledge in the field of new medicinal products,                                       | KS.4, KS.8            | 1 |
| Competences - | 12 / student selects the medicinal product based on reliable knowledge                                           | KS.4, KS.8            | 1 |
| Competences - | 13 / student is aware of the effects of decisions taken regarding the selection of the medicinal product         | KS.1, KS.2            | 1 |