

Study Programme: Veterinary medicine
Course Unit Title: Fundamentals of clinical pharmacology and toxicology of farm animals and horses
Course Unit Code: 3IVM11I114
Name of Lecturer(s): Full Professor Dragica Stojanović, Assistant Professor Zorana Kovačević
Type and Level of Studies: Undergraduate academic studies
Course Status (compulsory/elective): elective
Semester (winter/summer): winter
Language of instruction: English
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 2
Prerequisites: Pharmacology and toxicology I and II
<p>Course Aims:</p> <p>Acquiring knowledge about the dosage, the fate of the drug in the body, place and mode of action of drugs on the body of the animal, drug interactions, side effects of drugs, as well as the assessment of whether a remedy for certain diseases useful, and if so how it can best be used in clinical practice. Acquiring knowledge about toxicokinetics, toxikodynamics, risk of poisoning, toxic effects of pesticides, heavy metals, poisonous plants and other chemicals in the body, or individual organ systems of animals, as well as on the possible treatment of poisoned animals.</p>
<p>Learning Outcomes:</p> <p>Student should know the role and importance of pharmacokinetic processes for effectiveness of a drug, understood mode of action of drugs in the body, as well as possible interactions, known synergistic interactions and medication of choice in the treatment of some disease. Likewise, the student should understand the role and importance of toxicokinetic processes on the toxicity of a substance, mode of action of toxic substances in animals and known methods of treatment of poisoned animals, including antidotes.</p>
<p>Syllabus:</p> <p><i>Theory</i></p> <p>Development, subject and scope of clinical pharmacology, pharmacotherapy and other forms of drug use in veterinary medicine, the effect of the drug's mechanism of action, evaluation of therapeutic value of drugs. Development, subject and scope of clinical toxicology, the role and importance of toxicokinetics, the mechanism of action of poisons, risk assessment for the generation of poisoning, the effects of toxic effects of toxic substances. Selection and use of local and general anesthetics, hypnotics and sedatives, analgesics and antipyretics, selection and use of adrenergic and cholinergic drugs, antihistamines, and drugs in the treatment of organ systems, infectious and parasitic diseases. The most common poisoning of animals in veterinary practice, poisoning by pesticides, heavy metals, mycotoxins and poisonous plants, treatment of poisoning.</p> <p><i>Practice</i></p> <p>Exercises determination of pharmacotherapy in the treatment of diseases and disorders in the function of organ systems and treatment of infectious, parasitic, malignant and autoimmune diseases. Sampling and sending materials for the chemical-toxicological analysis, diagnosis and treatment of poisoning.</p>
<p>Required Reading:</p> <ol style="list-style-type: none"> 1. Katzung, B.G. Basic and Clinical Pharmacology, 10th edition, Lange medical book, 2007. 2. Plumlee, H. K. Clinical veterinary toxicology. Mosby, 2004.

3. Cynthia Kahn. The Merck Veterinary Manual, 9th edition. Merck and Co., Inc. Rahway, N. J., USA, 2005.

Weekly Contact Hours:	Lectures: 1	Practical work:1
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Teaching Methods:

Lectures, Practice/ Practical classes

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	60
Practical work	10	oral exam	-
Preliminary exam(s)	20	
Seminar(s)	5		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.