Study Programme: Veterinary medicine

Course Unit Title: Fundamentals of clinical pharmacology and toxicology of the pets

Course Unit Code: 3IVM11I118

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

Course Aims:

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, toxikodinamics, 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.

Learning Outcomes:

Student should know the role and importance of pharmacokinetic processes for effectiveness of a drug, understood mode of action of drugs in the body, understands the importance of possible interactions between drugs, synergistic interactions, as well as drugs of choice in the treatment of some diseases. Likewise, the student should understand the role and importance of toxicokinetic processes and toxicity of a substance, mode of action of toxic substances in animals, as well as to know the methods of treatment of poisoned animals, including antidotes.

Syllabus:

Theory

Development, subject and scope of clinical pharmacology, drug therapy and other forms of drug use in veterinary medicine, the effect of the drug's mechanism of action of drugs, 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, including 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.

Practice

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.

Required Reading:

- 1. Jill, E. M., Page, NJ. S., Church, B. D., NJ B. Small animal clinical pharmacology. Sanders Company, 2002.
- 2. Peterson, E. M. and Tolcott, A. P. Small animal toxicology. Sanders Company, 2007.

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
Teaching Methods:				
Lectures, Practice/ Practical classes				
Knowledge Assessment (maximum of 100 points):				
Pre-exam obligations	points		Final exam	points
Active class	5		written exam	60
participation	5		written exam	00
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.				