

Study Programme: Veterinary medicine
Course Unit Title: Pharmacology and toxicology I and II
Course Unit Code: 3IVM6O27
Name of Lecturer(s): Full Professor Dragica Stojanović, Assistant Professor Zorana Kovačević
Type and Level of Studies: Undergraduate academic studies
Course Status (compulsory/elective): compulsory
Semester (winter/summer): winter/summer
Language of instruction: English
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 6+6
Prerequisites: None
<p>Course Aims:</p> <p>Pharmacology need to provide students with basic knowledge of pharmaceutical forms of drugs, the prescribing, the fate of the drug in the body, place and mode of action of drugs on the body of the animal. Toxicology need to provide students with basic knowledge about the origins and types of toxins, the degree of toxicity, toxicokinetics, toksikodinamici, the clinical picture of poisoning and the manner of treatment of poisoned animals.</p>
<p>Learning Outcomes:</p> <p>Student should know the origin of drugs, types and forms of drugs, prescription medication rules, he can dosed medications, knows the ways applications, pharmacokinetics and pharmacodynamics, how to recognize the adverse effects of drugs, known synergistic and antagonistic interactions between drugs, knows the origin and types of poisons and poisoning, toxicokinetics and toxicodynamics poisons and method of treatment of poisoned animals.</p>
<p>Syllabus:</p> <p><i>Theory</i></p> <p>Introduction, preclinical and clinical trials. The doses and dosage of drugs. Transport of drugs through physical barriers, pharmacokinetics. The pharmacodynamics of drugs. Drug interactions, adverse effects of drugs. Pharmacology of organ systems, blood and fluids for rehydration and so on. Introduction, division, antibacterial, antiviral and antifungal medicines, antiseptics and disinfectants. Cytostatic and immunomodulators. Antiparasitic drugs. Introduction and importance in veterinary medicine, toxicology, classification of poisons and poisoning. Toxicokinetics, toxicodynamics. Poisoning animals pesticides, heavy metals, toxins originating from plants, animals and micro-organisms and way of treatment of poisoned animals.</p> <p><i>Practice</i></p> <p>Parts of prescriptions, principles, rules and examples of prescribing solid, soft and liquid main and officinal drugs, finished medicines, incompatibility, etc. Biological variation. Drug interactions. Excitans of CNS and anticonvulsant drugs. The effects of sedatives and hypnotics, and antagonizing these effects. General and local anesthesia. Legislation in the production and transport of toxic substances, organo toxicology, the mechanisms of action of poisons.</p>

Required Reading:

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: 3****Practical work: 2****Teaching Methods:**

Lectures, Practice/ Practical classes

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class participation	3	written exam	70
Practical work	2	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.