

Study program: Integrated academic studies of Pharmacy			
Type and level of the study program: integrated academic studies			
Course title: TOXICOLOGY OF POISONOUS PLANTS (PhV-TOXPL)			
Teachers: Velibor M. Vasović, Branislava U. Srdenović Čović			
Course status: elective			
ECTS Credits: 3			
Condition: Basics of phytotherapy; Basic Toxicology; Toxicological Chemistry			
Course aim The aim of the course is to provide students a detailed insight into the toxicity of certain fungi and plants, which are used in traditional medicine of many nations. Furthermore, they are used in the modern pharmaceutical industry for isolation of the active compounds and for semisynthetic production of conventional medicines, but also as opiates.			
Expected outcome of the course: Students should be able to recognize and explain the toxic effects and symptoms of poisoning after oral intake of certain fungi or plants, as well as after their contact with the skin or mucous membranes. Students are expected to integrate the skills acquired in the subject Basics of Phytotherapy, Basic Toxicology and Toxicological Chemistry, and to acquire the skills to recognize intoxication and to perform the analysis of toxic plant material.			
Course description <i>Theoretical education:</i> 1. Toxins and toxic fungi and plants 2. Psychoactive substances 3. Poisonous plants throughout the history of humanity (murders and magic) 4. The importance of poisonous plants in modern society 5. The mechanisms of toxicity of certain classes of biomolecules 6. Intake of poisonous plants 7. Diagnosis of poisoning 8. First Aid and Therapy <i>Practical education (labs):</i> 1. Methods for testing the toxicity of plants and fungi 2. Macroscopic and microscopic identification of drugs 3. Examination of the composition of plant material by classes of biomolecules 4. Determination of the toxic components by appropriate analytical methods			
Literature <i>Compulsory</i> 1. Blumenthal R. The Complete German Commission E Monographs. American Botanical Council, Austin, 1999. 2. Wink M, van Wyk BE: Mind-altering and poisonous plants of the world. Timber Press, Inc., Portland, 2008. <i>Additional</i> 1. WHO Monographs, Vol. 1-4. World Health Organization, Geneva.			
Number of active classes			Other:
Lectures: 30	Practice: 15	Other types of teaching: -	Research related activities: - -
Teaching methods 1. Theoretical education 2. Practical education (Practical classes, Seminars)			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	5	Written	30
Practices	15		
Colloquium			
Essay	50		