Study program: Integrated academic studies of Pharmacy

Type and level of the study program: integrated academic studies

### **Course title: BASIC TOXICOLOGY (PhIV-BTOX)**

Teacher: Velibor M. Vasović, Branislava U. Srđenović Čonić

Course status: compulsory

ECTS Credits: 3
Condition: -

Course aim

Basic toxicology course is intended to provide a basic understanding of toxicology (general toxicology, clinic toxicology, toxic substances legislation).

### **Expected outcome of the course:**

Students will gain knowledge of the basic principles of toxic exposure, toxicity mechanisms, toxicokinetics, toxodynamics, poisoning treatment and antidotes.

Students will be able to describe and explain basic toxicological topics and terms, estimate procedures of first aid and therapy and apply principles of regulatory toxicology.

## **Course description**

Theoretical education

- 1. Introduction to toxicology, classification of toxic agents, toxicity tests
- 2. Mechanisms of toxicity
- 3. Absorption, distribution, metabolism and excretion of toxicants
- 4. Toxicocinetics
- 5. Genetic toxicology and chemical carcinogenesis
- 6. Toxic responses of the nervous system
- 7. Toxic responses of the heart and vascular systems
- 8. Toxic responses of the kidney
- 9. Toxic responses of the liver
- 10. Toxic responses of the reproductive system
- 11. Diagnosis and evaluation of poisoning, cardiopulmonary resuscitation
- 12. Procedures used to minimize poison absorption
- 13. procedures used for poison removal, specific antidotes, symptomatic therapy
- 14. The most common drug poisoning
- 15. Regulatory toxicology

Practical education: exercises, other forms of education, research related activities

# Literature

Compulsory

- 1. True BL, Dreisbach RH. Dreisbach's Handbook of Poisoning: Prevention, Diagnosis and Treatment, Thirteenth Edition: Taylor & Francis; 2001.
- 2. Klaassen CD. Casarett & Doull's Toxicology: The Basic Science of Poisons, 6th Edition: McGraw-Hill; 2001.

#### Additional

Number of active c	Other:					
Lectures:	Practice:	Other types of teaching:	Research related activities:			
45						
Topohing methods I notices seminar nances data hases and literature searching						

**Teaching methods** Lectures, seminar papers, data bases and literature searching

Student activity assessment (maximally 100 points)					
Pre-exam activities	Points	Final exam	Points		
Lectures	10	Written			
Practices		Oral	70		
Colloquium					
Essay	20				