Study program: Integrated academic studies of Pharmacy

Type and level of the study program: integrated academic studies

Course title: PHARMACEUTICAL INFORMATICS (PhV-COMPS)

Teacher: Momir M. Mikov, Jovan K. Popović, Zdenko S. Tomić, Božana S. Nikolić, Vesna B. Tepavčević

Course status: elective

ECTS Credits: 3

Condition: General Pharmacology; Special Pharmacology

Course aim

The aim of the theoretical and practical course is to familiarize students with good information practices in the promotion of rational pharmacotherapy (safe, effective, economically justified).

Expected outcome of the course:

After passing the exam, students are expected to know and use authoritative sources of information in solving problems related to drug use, understanding and applying the concept of evidence-based pharmacotherapy.

After passing the exam, students are expected to possess the skills of collecting, selecting, evaluating and reporting information on the safe and reliable use of the drug to patients and health professionals.

Course description

Theoretical education

- Informatics in medicine and pharmacy, the importance of information for healthcare
- Biomedical scientific information
- Scientific and professional literature, structure of research paper
- Generating biomedical information, databases
- Concept of evidence-based pharmacotherapy
- Design of preclinical and clinical drug trial, advantages and disadvantages
- Clinical drug trials, data interpretation and measuring of effects
- Tools for assessment the quality of study methodology
- Tools for assessment the clinical significance of study results
- Tools for assessment adverse drug reactions

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

- Introduction to the pharmacy informatics, search and use of information
- Introduction to the pharmacy information systems
- Pharmacoinformatics center in the pharmaceutical industry
- Pharmacoinformatics center at the university level
- Pharmacoinformatics center at the national level
- The application of the concept of evidence-based pharmacotherapy, finding the evidence
- The application of the concept of evidence-based pharmacotherapy, critical assessment of guide
- The application of the concept of evidence-based pharmacotherapy, critical assessment of efficiency study
- The application of the concept of evidence-based pharmacotherapy, critical assessment of safety study
- The application of the concept of evidence-based pharmacotherapy, critical assessment of pharmacoeconomic study

Literature

Compulsory

1. Heneghan C, Badenoch D. Evidence Based Medicine Toolkit, 2nd ed. Wiley-Blackwell, 2006.

Additional

2. Internal script

Number of active classes				Other:
Lectures: 30	Practice: 15	Other types of teaching:	Research related activities:	

Teaching methods

Lectures, interactive classes, practical classes, case analysis

Student activity assessment (maximally 100 points)

Pre-exam activities	**points**	**Final exam**	**points**
Lectures	10	Written	50
Practices	20	Oral	
Colloquium		.....	
Essay	20		