



Study program: Integrated academic study of Pharmacy			
Course title: Pharmaceutical Informatics			
Teacher: Zdenko S Tomić, Božana S Nikolić			
Course status: elective			
ECTS credits: 3			
Condition: -			
Course aim: To familiarize students with good information practices in the promotion of rational pharmacotherapy (safe, effective and economically justified).			
Expected outcome of the course: Upon completion of the course, students will be trained to use authoritative sources of information in solving problems related to drug use, apply the concept of evidence-based pharmacotherapy, collect, evaluate and report information on the safe and reliable use of the drug to patients and health professionals.			
Course description			
<i>Theoretical education</i>			
<ol style="list-style-type: none"> 1. Informatics in medicine and pharmacy, the importance of information for healthcare 2. Drug information: legal aspects 3. Drug information: ethical aspects 4. Concept of evidence-based pharmacotherapy 5. Design of preclinical and clinical drug trials 6. Tools to assessment quality of study methodology 7. Descriptive statistics in clinical therapy trials: data interpretation 8. Inferential statistics in clinical therapy trials: data interpretation 9. Tools to assessment clinical significance of study results 10. Tools for assessment adverse drug reactions 			
<i>Practical education</i>			
<ol style="list-style-type: none"> 1. Introduction to the pharmaceutical informatics, search and use of information 2. The application of the concept of evidence based pharmacotherapy – critical assessment of guide 3. The application of the concept of evidence based pharmacotherapy – critical assessment of efficiency study 4. The application of the concept of evidence based pharmacotherapy – critical assessment of safety study 5. The application of the concept of evidence based pharmacotherapy – critical assessment of pharmacoeconomic study 6. Pharmacoinformatics center in a health system, pharmaceutical industry, university, regulatory authorities: survey of activities 7. Example of drug information consult documentation form, standard questions 8. Example drug monograph 9. Identifying information regarding the new, innovative drugs 10. Preparing a bibliography 			
Literature			
<i>Compulsory</i>			
<ol style="list-style-type: none"> 1. Gabay M. The clinical practice of drug information. Jones & Bartlett Learning, 2015. 			
<i>Additional</i>			
<ol style="list-style-type: none"> 1. Internal script 			
Number of active classes		Theoretical classes: 30	Practical classes: 15
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		
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