



Study program: Integrated Academic Studies in Pharmacy		
Course title: Clinical Pharmacy		
Teacher: Božana S. Nikolić, Nataša P. Milošević, Kosta J. Popović, Zdenko S. Tomić, Aleksandar L. Rašković, Isidora N. Samojlik, Olga J. Horvat, Nebojša P. Stilinović, Saša N. Vukmirović, Boris T. Milijašević, Vesna M. Mijatović Jovin, Maja P. Đanić		
Course status: compulsory		
ECTS Credits: 5		
Condition: General Pharmacology (exam taking)		
Course aim Adoption of the principles of rational pharmacotherapy and their application in contemporary medical and pharmaceutical practice.		
Expected outcome of the course: After completing the course, students will be trained to apply the concept evidence based medicine/pharmacy, critically evaluate of drug information sources, apply the principles of clinical pharmacokinetics in order to implement rational pharmacotherapy, identify and solve problems related to drug use, apply the individual approach to the patient, communicate with health professionals and patients on rational pharmacotherapy and health promotion. Upon completion of the course, students will be trained to implement, monitor, evaluate and, when it is necessary, propose therapy modification in order to ensure rational pharmacotherapy		
Course description <i>Theoretical education</i> <ol style="list-style-type: none"> 1. The aim and significance of clinical pharmacy 2. The interpretation of the results of laboratory analysis 3. Parenteral and enteral nutrition 4. Development of new drugs and clinical testing of drugs 5. Sources of information about medicines 6. Pharmacy-based evidence 7. Clinical audit 8. Therapeutic drug monitoring 9. Individualization of pharmacotherapy 10. Compliance, adherence, concordance 11. Safety of medicines - pharmacovigilance. 12. Pharmacoeconomic aspects of rational pharmacotherapy. 13. Rational pharmacotherapy (specifics according to drug groups) 14. 14. Pharmacotherapy in specific age groups 15. Pharmacotherapy of specific physiological and pathophysiological conditions <i>Practical education</i> <ol style="list-style-type: none"> 1. Communication skills 2. Rational pharmacotherapy (specific groups of drugs and pathophysiological states) 3. Specific pharmacotherapy in elderly patients, children, patients with renal and hepatic failure, pregnant women, breast-feeding women 4. Organization and implementation of clinical audits 5. Identifying, measuring and comparing costs and benefits of therapeutic programs 6. Using reference information about medicines 7. Critical analysis of clinical studies, meta-analysis and systematic reviews 		
Literature <i>Compulsory</i> <ol style="list-style-type: none"> 1. Whittlesea C, Hodson K. Clinical Pharmacy and Therapeutics, 6th edition. Elsevier Science, 2018. 		
Number of active classes	Theoretical classes: 45	Practical classes: 30
Teaching methods Lecture, interactive lecture, Internet use, e-learning, practical classes, workshops, learning based on computational problems, the analysis of cases from the practice.		

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