

<b>Study program:</b> Integrated academic studies of Pharmacy			
<b>Type and level of the study program:</b> integrated academic studies			
<b>Course title:</b> CLINICAL PHARMACY (PhIV-CPHAR)			
<b>Teacher:</b> Jovan K. Popović, Božana S. Nikolić			
<b>Course status:</b> compulsory			
<b>ECTS Credits:</b> 5			
<b>Condition:</b> Pharmacokinetics (exam taking)			
<b>Course aim</b> Adoption of the principles of rational pharmacotherapy and their application in contemporary medical and pharmaceutical practice.			
<b>Expected outcome of the course:</b> After passing the exam students are expected to apply the concept of medicine / pharmacy based on evidence, critical evaluation of sources of information about medicines, applying the principles of clinical pharmacokinetics in order to implement rational pharmacotherapy, identify, evaluate 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, the student is expected to be able to implement, monitor, evaluate and, where necessary, propose modification therapy in order to ensure rational pharmacotherapy			
<b>Course description</b> <i>Theoretical education</i> <ol style="list-style-type: none"> <li>1. The aim and significance of clinical pharmacy</li> <li>2. The interpretation of the results of laboratory analysis</li> <li>3. Parenteral and enteral nutrition</li> <li>4. Development of new drugs and clinical testing of drugs</li> <li>5. Sources of information about medicines</li> <li>6. Pharmacy-based evidence (EBP, EBM)</li> <li>7. Clinical audit</li> <li>8. Therapeutic drug monitoring</li> <li>9. Individualization of pharmacotherapy</li> <li>10. Compliance (adherence)</li> <li>11. Safety of medicines - pharmacovigilance.</li> <li>12. Pharmacoeconomic aspects (Rational pharmacotherapy.</li> <li>13. Rational pharmacotherapy (specifics according to drug groups)</li> <li>14. Specific pharmacotherapy of specific age groups</li> <li>15. Specific pharmacotherapy of specific physiological and pathophysiological conditions</li> </ol> <i>Practical education: exercises, other forms of education, research related activities</i> <ol style="list-style-type: none"> <li>1. Communication Skills</li> <li>2. Rational pharmacotherapy (specific groups of drugs and pathophysiological states)</li> <li>3. Specific pharmacotherapy in elderly patients, children, patients with renal and hepatic failure, pregnant women, breast-feeding women</li> <li>4. Organization and implementation of clinical Audits</li> <li>5. Identifying, measuring and comparing costs and benefits of therapeutic programs</li> <li>6. Using independent information about medicines</li> <li>7. Critical analysis of clinical studies, meta-analysis and systematic medical check-ups</li> </ol>			
<b>Literature</b> <i>Compulsory</i> 1. Walker R, Edwards C. Clinical Pharmacy and Therapeutics, 3rd edition.Churchill Livingstone, 2004. <i>Additional</i> -			
<b>Number of active classes</b>			Other:
Lectures: 45	Practice: 30	Other types of teaching: Research related activities:	
<b>Teaching methods</b> Lecture, interactive, Internet use, e-learning, practical classes, workshops, learning based on computational problems, the analysis of cases from the practice, participation in research and development projects.			
<b>Student activity assessment (maximally 100 points)</b>			
<b>Pre-exam activities</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Lectures	25	Written	50
Practices	25	Oral	
Colloquium		.....	
Essay			