

<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> STEREOCHEMISTRY(PhII-STCHM)			
<b>Teacher:</b> Mihalj M. Poša, Ana S. Pilipović			
<b>Course status:</b> elective			
<b>ECTS Credits:</b> 3			
<b>Condition:</b> Organic Chemistry I			
<b>Course aim</b> Stereochemistry application in complex biomolecules			
<b>Expected outcome of the course:</b> Introducing students to the stereochemistry of simple organic molecules in order to be able to apply knowledge of organic compounds that have pharmacological significance. Mastering the skills of working with molecular models to help understand space occupied by the selected classes of organic molecules.			
<b>Course description</b> <ol style="list-style-type: none"> <li>Theoretical education</li> <li>Elements of symmetry</li> <li>Symmetry operations</li> <li>Group theory</li> <li>Discrete mathematics of symmetry operations</li> <li>Quantum chemistry and molecular symmetry</li> <li>The conformational analysis</li> <li>Stereochemistry of biomolecules: steroid compounds, sugars, proteins, etc.</li> <li>Pharmacophore</li> <li>Isostere and bioisostere</li> <li>Construction of pharmacophore approach of active analogues</li> </ol> <i>Practical education: exercises, other forms of education, research related activities</i> <ol style="list-style-type: none"> <li>Working with molecular models</li> <li>Application of computer software to solve stereochemical problems</li> </ol>			
<b>Literature</b> <i>Compulsory</i> <ol style="list-style-type: none"> <li>Organic chemistry, Paula Yurnakis Bruce, Prentice Hall, 2004.</li> </ol>			
<b>Number of active classes</b>			Other:
Lectures: 30	Practice: 15	Other types of teaching:	
<b>Teaching methods</b> Lecture, practice			
<b>Student activity assessment</b> (maximally 100 points)			
<b>Pre-exam activities</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Lectures	10	Written	50
Practices		Oral	
Colloquium	20	.....	
Essay	20		