

Study program: Integrated academic studies of Pharmacy			
Type and level of the study program: integrated academic studies			
Course title: STEREOCHEMISTRY(PhII-STCHM)			
Teacher: Mihalj M. Poša, Ana S. Pilipović			
Course status: elective			
ECTS Credits: 3			
Condition: Organic Chemistry I			
Course aim Stereochemistry application in complex biomolecules			
Expected outcome of the course: 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.			
Course description <ol style="list-style-type: none"> Theoretical education Elements of symmetry Symmetry operations Group theory Discrete mathematics of symmetry operations Quantum chemistry and molecular symmetry The conformational analysis Stereochemistry of biomolecules: steroid compounds, sugars, proteins, etc. Pharmacophore Isostere and bioisostere Construction of pharmacophore approach of active analogues <i>Practical education: exercises, other forms of education, research related activities</i> <ol style="list-style-type: none"> Working with molecular models Application of computer software to solve stereochemical problems 			
Literature <i>Compulsory</i> <ol style="list-style-type: none"> Organic chemistry, Paula Yurnakis Bruce, Prentice Hall, 2004. 			
Number of active classes			Other:
Lectures: 30	Practice: 15	Other types of teaching: Research related activities:	
Teaching methods Lecture, practice			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	10	Written	50
Practices		Oral	
Colloquium	20	
Essay	20		