

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Pharmacy	
Course ID: FaF.KChTL/08-Mgr-A/26	Course title: Selected Chapters in Organic Chemistry
Educational activities: Type of activities: lecture / seminar Number of hours: per week: 1 / 1 per level/semester: 14 / 14 Form of the course: on-site learning	
Number of credits: 2	
Recommended semester: 2.	
Educational level: I.II.	
Prerequisites:	
Course requirements: Examination in the form of a summary test. Successful completion of the test is conditional on obtaining more than 60% of the written test. A: 92,00 % – 100,00 %; B: 84,00 % – 91,99 %; C: 76,00 % – 83,99 %; D: 68,00 % – 75,99 %; E: 60,00 % – 67,99 %; Fx: 0,00 - 59,99 %. Scale of assessment (preliminary/final): 0/100	
Learning outcomes: The course provides a comprehensive preparation in the field of nomenclature, stereochemistry and chemical-physical properties of organic and pharmaceutical compounds with biological activity.	
Class syllabus: Nomenclature (common and IUPAC) of pharmaceutical organic compounds. Isomerism and stereochemistry of organic compounds (conformers, E, Z isomers). The relationship stereoisomers-biological activity. Chirality and symmetry of pharmaceutical compounds. Enantiomerism (S, R-enantiomers), diastomerism, meso compounds. Biological activity of optically active drugs. Hybridization types in organic compounds. Single and multiple covalent bonds in organic molecules. Intermolecular interactions and their importance in pharmaceutical activity. Electronic effects of functional groups attached to organic compounds, resonance effects, and hyperconjugation phenomenon. Tautomerism of organic compounds. Aromaticity of organic molecules. Organic acids and bases and their importance in pharmacy. Classification of organic reactive intermediates and chemistry reactions (substitutions, eliminations, additions, molecular rearrangements).	
Recommended literature: Devínsky F. et al. Organic chemistry for pharmacy students, Comenius University 2010; McMurry J. E. Organic Chemistry; A.David Baker and R. Engel Organic Chemistry 1992.	
Languages necessary to complete the course: English language	

Notes:

The course is held only in summer semester.

Past grade distribution

Total number of evaluated students: 0

A	ABS	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: RNDr. Roman Mikláš, PhD., doc. PharmDr. Miloš Lukáč, PhD., Ing. Patrícia Oláh Paračková, PhD., Mgr. Klára Stankovianska, PhD., PharmDr. Adrian Lengyel, PhD.

Last change: 11.06.2026

Approved by: prof. PharmDr. Ján Klimas, PhD., MPH