



SUBJECT DATASHEET

Semester:	2009/10/2
Subject:	Organic chemistry IV.
Code:	VEMKOK3212A
Responsible department:	Department of Organic Chemistry
Responsible department code:	MKOK
Responsible lecturer:	Dr. Ferenc Ungváry

Educational objectives:

Educational objectives: The goal of the course is to solidify the student's understanding of the basic concept of organic chemistry provided by an earlier one-year course in organic chemistry, and to present some quantitative information. This course focuses mainly of the mechanism of organic reactions and methods to investigate them.

Detailed content of the subject:

Detailed content of the subject 1. Structure, reactivity, and mechanism. 2. Energetics, kinetics, and the investigation of mechanism. 3. The strengths of acids and bases. 4. General and specific base- acid catalysis. 5. Nucleophilic substitution at a saturated carbon atom. 6. Carbocations, electron-deficient N and O atoms and their reactions. 7. Electrophilic and nucleophilic substitution in aromatic systems. 8. Electrophilic and nucleophilic addition to C=C. 9. Nucleophilic addition to C=O. 10. Elimination reactions. 11. Carbanions and their reactions. 12. Radicals and their reactions. 13. Symmetry controlled reactions. 14. Linear free energy relationships.

Requirements:

Requirements: - attendance is compulsory - passing 3 tests with an average score of 2 or above

Required and suggested references:

Irodalom: Peter Sykes: A Guidebook to Mechanism in Organic Chemistry, 6th Edition, Longman, 1986.