



COURSE DATASHEET

Semester:	2012/13/2
Course:	Organic chemistry IV.
Code:	VEMKOK3212A
Responsible department:	Department of Organic Chemistry
Department code:	MKOK
Responsible instructor:	Dr. Ferenc Ungváry

Course 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.

Course content:

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, evaluation and grading:

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

Required and recommended readings:

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