

UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester: 2016/17/1

Course: Organic chemistry III.

Code: VEMKOKB112V

Responsible department: Department of Organic Chemistry

Department code: MKOK

Responsible instructor: Gergely Farkas

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 reactive organic species, their structure, stability and reactivity.

Course content:

Detailed content of the subject 1. Reactive intermediates and their importance in organic reation mechanisms. 2. Delocalization and delocalized bonds. 3. Conjugated molecules and aromatics. 4. The strengths of acids and bases. Kinetic and thermodynamic acidity. 5. Fluxional molecules. 5-6. Weak bonds in organic chemstry. 7-8. Carbocations, their reactivity and stability. 9. Free organic radicals. Their stability and reactivity 10-11. Carbenes and carbines. 12. Organic photochemistry. 13. Stereochemistry at organic molecules. 14. Carbanions and their reactions.

Requirements, evaluation and grading:

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

Required and recommended readings:

Dr. Markó László, Dr. Ungváry Ferenc Szerves Kémia V. Kézirat Veszprém 1997.Dr. Szántay Csaba Elméleti Szerves Kémia 3. kiad. Musz. Könyvkiadó Budapest 1984.Dr. Nógrádi Mihály Bevezetés a sztereokémiába Musz. Könyvkiadó Budapest 1975 (Dr. Nógrádi Mihály Stereochemistry, Basic Concepts & Applications, Pergamon Press, 1981. T. H. Lowry, K. Schueller Richardson: Mechanism and Theory in Organic Chemistry, 3. Edition, Harper and Row, New York 1990.