

# **UNIVERSITY OF PANNONIA**

### COURSE DATASHEET

**Semester:** 2014/15/1

Course: Organic chemistry II.

Code: VEMKOK1112A

Responsible department: Department of Organic Chemistry

Department code: MKOK

Responsible instructor: Dt. József Bakos

### Course objectives:

Educational Objectives: Basic principles and systematics in organic chemistry.

#### Course content:

Contents: Week 1.Unsaturated, aliphatic carbonyl compounds. Ketenes. 2.Conjugated, unsaturated and aromatic carbonyl compounds 3.Dicarbonyls. 1,2- and 1,3-dicarbonyls. Quinones. 4.Hydroxyoxocompounds. Sugars. Mono-, di-, and polysacharides. 5.Carboxylic acids. Aliphatic and aromatic carboxylic acids. 6.Substituted carboxylic acids. Dicarboxylic acids. Unsaturated carboxylic acids. 7.Carboxylic acid derivatives. Anhydrides, carboxylic acid halides, esters, amides, imides, nitriles, lactams, and izocyanides. 8.Sulphurcontaining organic compounds. Thiols, thiophenols, sulphide, sulfonic acides, sulfenic acids, sulphinic acids and derivatives. Detergents. 9.Amines. 10.Aminoacids and peptides. 11.Nitrozo- and nitrocompounds. 12.Organometallic compounds. 13.Carbonic acid derivatives. Thio- and dithiocarbonic acid derivatives. 14.Heterocyclic compounds Five- and six-membered rings with one or two heteroatoms. Fused heterocycles. Heterocyclic alkaloids. 15.Nucleosides, nucleotides, and nucleic acids. RNS and DNS. The genetical code.

### Requirements, evaluation and grading:

Examination: Test

## Required and recommended readings:

Markó-Farády: Szervers kémia I-VIII Lempert Károly: Szerves kémia Kajtár Márton: Változatok négy elemre: Szerves kémia