## University of Szeged Foundation Year

Curriculum (2016-2017)

## SUBJECT: CHEMISTRY 2nd semester WEEK **CLASS** (5 hrs/week) Introduction to organic chemistry. Classification of organic compounds. Functional groups. Isomerism. 1. 2. Alkanes and cycloalkanes. Reactions (substitution). Alkenes. Reactions (addition, polymerization). Dienes (butadiene and isoprene). Alkynes. 3. Aromatic hydrocarbons and their reactions (substitution). Huckel's rule. 4. Organic halogen compounds. 5. 6. Alcohols, phenols and their reactions. Ethers. 7. Oxo compounds: aldehydes and ketones. 8. SPRING HOLIDAY 9. Carboxylic acids and their derivatives (esters and amides). Lipids. 10. Chirality. Optical isomerism. Enantiomers, diastereomers. 11. Amines and heterocyclic compounds. Carbohydrates: monosaccharides, oligo- and polysaccharides. 12. 13. Amino acids, peptides, proteins. 14. Nucleosides, nucleotides, nucleic acids. Consultation week 15. 16. **EXAMINATION PERIOD**