UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester: 2014/15/2

Course: Laboratory practice on organic chemistry

Code: VEMKOK1232K

Responsible department: Department of Organic Chemistry

Department code: MKOK

Responsible instructor: József Sándor Pap

Course objectives:

Educational Objectives: Improvement of the lecture material. Improvement of laboratory practice and preparation of some compounds of different kinds.

Course content:

Contents: Week:1. Introducing, safety, requirements, introducing to literature (books, journals), taiking over laboratory devices, discussion of tasks. 2.-7. Safety report Preparation of five common compounds covering the main reaction mechanisms in organic chemistry. The students have to make a short design of the preparations, literature, equipment, risk and safety problems. During the above course short report on laboratory practice will be done on theoretical basis of laboratory methods and practical applications (distillation, recrystallization, filtration, extraction, measurements of melting pont and refractive index, etc.) Types of Practical Exersises (Assignments) for Students: – Substitution reactions (SE, SN) – Oxidation reactions – Halogenation – Preparation of azo dyestuffs – Condensation reactions – TLC (ident. of carbonyl comp.) – Esterifications and sapponification etc.

Requirements, evaluation and grading:

Examination Reuirements and Questions: Controlling the connected chemical and safety problems on starting each preparation. At the closing the course, controlling the complex knowledge of theoretical-, practical- and safety problems. Leader of practice controlls not more than 8-10 students it is possible. Calculations of the qualification: 1 part of preparation + 1 part of the reports.

Required and recommended readings:

Organikum, Budapest, 1967, Vogel: Practical Organic Chemistry, Organic Synthesis I-VII. Vol., Vanino: Handbuch der Preparative Chemie, Bognár: Szerveskémiai Praktikum, L.F.Fieser: Szerveskémiai laboratóriumi praktikum, stb