



SUBJECT DATASHEET

Semester:	2010/11/2
Subject:	Laboratory practice on organic chemistry
Code:	VEMKOK1234A
Responsible department:	Department of Organic Chemistry
Responsible department code:	MKOK
Responsible lecturer:	Dr. Sándor Vastag

Educational objectives:

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

Detailed content of the subject:

Contents: Week: 1. Introducing, safety, requirements, introducing to literature (books, journals), talking over laboratory devices, discussion of tasks. 2.-7. Safety report Preparation of five common compounds covering the main reaction mechanisms in organic chemistry. 8-15. Technical report Preparation of further six compound. 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 (atm., and vacuum distillation, water-steam distillation, recrystallization, filtration, extraction, measurements of melting point and refractive index, etc.). Types of Practical Exercises (Assignments) for Students: - Substitution reactions (SE, SN) - Oxidation reactions - Halogenation - Preparation of azo dyestuffs - Condensation reactions - TLC (ident. of carbonyl comp.) - Esterifications and saponification etc.

Requirements:

Examination Requirements 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 controls not more than 8-10 students it is possible. Calculations of the qualification: 1 part of preparation + 1 part of the reports.

Required and suggested references:

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