



COURSE DATASHEET

Semester:	2014/15/2
Course:	Chemical analysis lab practice
Code:	VEMKKAB234A
Responsible department:	Department of Analytical Chemistry
Department code:	MKKA
Responsible instructor:	dr. Tamás Pap

Course objectives:

Understanding of the fundamentals of the analytical chemistry practice.

Course content:

1-2. Determination of basicity of water sample. Acid-base titrations. 3-4. Determination of sulfate-ions by gravimetric method. 5. Determination of chloride-ion by argentometric method (Mohr method). 6-7. Determination of oxygen consumption of water sample. Permanganometric titration. 8. Determination of hardness of water sample using complexometric titration. 9. Instrumental methods: Atom emission spectroscopy (AES) 10. Atom absorption spectrometry (AAS). 11. UV-Vis and Infra-red spectrophotometry. 12. Electroanalytical methods: Potentiometry. Coulometry. 13. Electroanalytical methods: Conductometry. Amperometry. 14. Gaschromatography (GC). Calculation of Kováts-index.

Requirements, evaluation and grading:

The accomplishment of the allocated measurements.

Required and recommended readings:

Dr. Kristóf János - Dr. Horváth Erzsébet: Kémiai analízis I. (Klasszikus és kisműszeres analízis). Veszprémi Egyetemi Kiadó, Veszprém, 2002. (Tankönyv). Dr. Kristóf János: Kémiai analízis II. (Nagyműszeres analízis). Veszprémi Egyetemi Kiadó, Veszprém, 2000. (Tankönyv).