



## COURSE DATASHEET

<b>Semester:</b>	2014/15/2
<b>Course:</b>	General and Inorganic Chemistry for Chemists
<b>Code:</b>	VEMKAKB122V
<b>Responsible department:</b>	Department of General and Inorganic Chemistry
<b>Department code:</b>	MKAK
<b>Responsible instructor:</b>	Erzsébet Szabóné Dr. Bárdos

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### Course objectives:

To get calculation skill necessary for any kind of chemical laboratory work especially for the preparation of inorganic compounds.

### Course content:

1. General information. Testing of preliminary knowledge. 2. Working with gases in lab. Preparation of gases used in laboratory. Related calculation. 3. Partial pressure, tension of liquids, solubility of gases. Related calculation. 4. Properties of solution, process of dissolving. Principle of simple separation technique in laboratory: crystallization, extraction, distillation. 5. Calculation exercise related to recrystallization. 6. Chemical reaction types. Stoichiometry. 7. Middle semester test. 8. Calculation exercise related to combustion. 9. Calculation exercise related to combustion and calculation of the amount of starting material needed for a particular preparative work. 10. Calculation of the amount of starting material needed for a particular preparative work. 11. Calculation related to electrolysis and galvanic cells. 12. Calculation related to electrolysis and galvanic cells. 13. Thermochemistry, Hess law. 14. Thermochemistry, Hess law. 15. Final examination paper

### Requirements, evaluation and grading:

The final examination paper has to be satisfactory and the weighted average of middle semester and final examination paper is to be more than 2.00.

### Required and recommended readings:

Maleczkiné Szeness Márta: Kémiai számítások-kémiai gondolatok Kollár György és Kiss Júlia: Általános és szervetlen preparatív kémiai gyakorlatok