Level: bachelor

Course title: Physical Chemistry II

Status: obligatory

ECTS: 10

Requirements: Physical Chemistry I passed or teacher's estimation about satisfaction of necessary pre-examination requirements

Learning objectives

Acquiring the necessary theoretical and practical knowledge from selected topics of physical chemistry which will enable understanding and explanation of physicochemical phenomena and processes. Understanding of the relevant fields of chemistry in further education or professional work.

Learning outcomes

Students should be able to:

- demonstrate the acquired theoretical knowledge of physicochemical principles and apply it to explanation of phenomena in real life;
- set the experiments using standard laboratory procedures and explain the obtained results after graphical and mathematical interpretation of characteristic functions and constants.

Syllabus

Theoretical instruction

Phase equilibria in binary systems. Thermodynamics of phase boundaries. Adsorption phenomena. Chemical equilibrium. Selected topics of chemical kinetics, catalysis, electrochemistry, colloidal chemistry and photochemistry.

Practical instruction. Laboratory work is consistent with delivered lectures.

Weekly teaching load				Other:
Lectures: 3	Exercises: 3	Other forms of teaching: 2	Student research:	