

COURSE DESCRIPTION

University: Comenius University Bratislava	
Faculty: Faculty of Pharmacy	
Course ID: FaF.KFChL/14-Mgr/22	Course title: Problem solving in physical chemistry
Educational activities: Type of activities: seminar Number of hours: per week: 2 per level/semester: 28 Form of the course:	
Number of credits: 1	
Recommended semester:	
Educational level:	
Prerequisites:	
Course requirements: Continuous assessment by tests (minimum 2 per semester) and final test. Evaluation/grade: A 92-100 %, B 84-91 %, C 76-83 %, D 68-75, E 60-67 %, Fx <60 % Scale of assessment (preliminary/final): 30/70	
Learning outcomes: The course help students to acquire skill in solving selected problems in Physical chemistry using adequate mathematics and numerical calculation. At the same time this course provides understanding of theoretical principles applied in specialized pharmaceutical areas like analysis of drugs, drug formulae quality control, pharmacokinetics, action of drugs on the molecular level, drug absorption, etc.	
Class syllabus: Students will improve their theoretical knowledge obtained at lectures on Physical chemistry by solving problems related to selected chapters as structure of molecules and spectral methods (UV-VIS, IR, NMR), kinetics of radioactive decay, chemical thermodynamics esp. phase equilibriums and solutions, electrochemistry and acid-base equilibriums, chemical kinetics, colloids and surfaces.	
Recommended literature: Oremusová J., Greksáková O.: Fyzikálna chémia, Zbierka úloh pre študentov farmácie, 2019, 1. vyd., Bratislava, UK. Kopecký F.: Fyzikálna chémia pre farmaceutov I. : štruktúra a vlastnosti atómov a molekúl. 3. vyd. Bratislava: UK, 2000 (skriptá). Oremusová J., Greksáková O.: Fyzikálna chémia: Laboratórne cvičenia pre farmaceutov, 2010, Univerzita Komenského Bratislava (skriptá) Kopecký, F. a kol.: Praktické a výpočtové cvičenia z fyzikálnej chémie. Bratislava : UK, 1989 (skriptá). Atkins, P. W.: Fyzikálna chémia : časť 1, 2a, 2b, 3. 6.vyd.. Bratislava : STU 1999.	
Languages necessary to complete the course: Slovak	
Notes:	

Past grade distribution

Total number of evaluated students: 0

Hodnotenie predmetu sa zobrazí až v prípade zaradenia predmetu do nejakého študijného plánu.

Lecturers: Ing. Jarmila Oremusová, CSc., RNDr. Alexander Búcsi, PhD., Mgr. Lukáš Hubčík, PhD., prof. RNDr. Daniela Uhríková, CSc.

Last change: 29.03.2022

Approved by: prof. RNDr. Daniela Uhríková, CSc.