



KH1120 General and Physical Chemistry 15.0 credits

Allmän och fysikalisk kemi

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for KH1120 valid from Autumn 2007

Grading scale

A, B, C, D, E, FX, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

To deepen and strengthen the students' knowledge of general chemistry.

To present the basic foundations of physical chemistry as needed in analytical and organic chemistry as well as chemical technology.

Course contents

Nomenclature, reactions, atomic structure and chemical bonding thermodynamics with applications to chemical equilibria and electrochemistry, stoichiometry and chemical kinetics, gas laws colligative properties of solutions and introduction to inorganic chemistry.

Course literature

Atkins, P W & Jones, L: Chemistry – Molecules, Matter and Change, 4th Ed., Freeman 2000.

Examination

- INL1 - Exercises, 1.5 credits, grading scale: P, F
- LAB1 - Laboratory Work, 4.5 credits, grading scale: P, F
- LAB2 - Laboratory Work, 1.0 credits, grading scale: P, F
- LAB3 - Laboratory Work, 1.0 credits, grading scale: P, F
- PRO1 - Group Work, 1.0 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN2 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade

Passed written exams (TEN1; 3 cr.) and (TEN2; 3 cr.). Passed exercises (INL1; 1,5 cr.). Passed lab sessions (LAB1; 4,5 cr.). Passed computerized lab session and team work (LAB2; 1 cr. And LAB3; 1cr) and team work (PRO1;1 cr)

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.

- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.