

# KD1130 Inorganic Chemistry 6.0 credits

#### Oorganisk 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 KD1130 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

The course aims at giving the students knowledge in the broad field of inorganic chemistry, including its tools, properties and applications of inorganic compounds.

After completed course the students should be able to:

- Use the Periodic System of Elements as a tool for understanding and managing the properties of the elements and their compounds
- Master basic properties of inorganic substances
- Have knowledge of preparation and uses of important inorganic compounds
- Explain basic properties of the compounds of d-block elements using Crystal Field Theory
- Master inorganic reaction mechanisms
- Understand a catalyst's function on molecular level
- Understand function and molecular properties for the most important bio-inorganic systems
- Understand the energy production in the society and its border lines to chemistry, especiall inorganic chemistry
- Understand vatious solar cells' function and chemistry

#### **Course contents**

#### **Examination**

- LAB1 Laboratory Work, 1.5 credits, grading scale: P, F
- PRO1 Project, 1.5 credits, grading scale: P, F
- TEN1 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

TEN 2: 4 cr, LAB2: 2 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.