MH2452 Equilibria in Metallurgical Processes 6.0 credits

Jämvikter i metallurgiska system

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

Establishment

Course syllabus for MH2452 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

4H1951/MH1010 Materials Thermodynamics

Language of instruction

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

Intended learning outcomes

When the course has ended the students should have a sound theoretical knowledge of materials thermodynamics, phase diagram and metallurgical process science.

Course contents

- Review of the fundamental laws of thermodynamics
- Thermodynamics of dissolution
- Structure of slags
- Thermodynamic models for the description of slags
- Slag - metal equilibrium
- Construction of binary phase diagrams
- Ternary phase diagrams and the solidification of slags

Course literature

Compendium

Examination

- TEN1 - Examination, 3.8 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 2.2 credits, grading scale: P, 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.

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

Other requirements for final grade

Exam (TEN1; 3,2 cr)
Lab work (LAB1; 2,2 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.