MH1008 Fundamentals of Materials and Process Design 6.0 credits

Material och processdesigns grunder

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

Establishment

Course syllabus for MH1008 valid from Spring 2011

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completed upper secondary education including documented proficiency in English corresponding to English A. For students who received/will receive their final school grades after 31 December 2009, there is an additional entry requirement for mathematics as follows: documented proficiency in mathematics corresponding to Mathematics A. Swedish B is not required.

Language of instruction

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

Intended learning outcomes

After completed the course the student will have a fundamental understanding of:

• thermodynamics related to metallurgical processes

• phase equilibria, phase transformations, phase diagrams and their relation to microstructures in metals

• chemistry and kinetics in metallurgical processes

Course contents

Freshmen metallurgical Thermodynamics and Kinetics, Chemistry, and Micro and nano structures, with phase equilibria, phase transformations, phase diagrams

Course literature

Ej specificerad. Generella grundläggande läroböcker inom ämnesområdena. Icke-engelska läroböcker rekommenderas ej, eventuella problem i förståelsen av specifika ord kan försvåra din prestation i kursen

Examination

- TEN3 - Examination, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN2 - Examination, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 2.0 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.

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

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.