

MH2285 Experimental Methods in Materials Processing 6.0 credits

Experimentella metoder i materialens processteknologi

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

Establishment

Course syllabus for MH2285 valid from Autumn 2008

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

MH2276 Physics for Materials Processing, MH2252 Casting Processing or equivalent.

Language of instruction

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

Intended learning outcomes

After completing the course the student will be able to

- understand and explain the physical mechanisms giving specific prperties to a material
- describe how to measure, characterize and quantify materials properties such as heat capacity, viscosity, interface energy, density etc
- identify limitations of the different methods

Course contents

The course will consist of lectures giving an overview of different techniques to measure, characterize and quantify properties in materials processing. Each lecture will be followed by a seminar where the students present their work consisting of theoretical as well as practical studies.

Course literature

Handouts

Examination

- SEM1 Seminar, 1.5 credits, grading scale: P, F
- TEN1 Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 Laboratory work, 1.5 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

Written exam (TEN1; 1,5hp) Seminar exercises (SEM1; 3hp) Lab exercises (LAB1; 1,5hp)

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.