



Course syllabus

Faculty of Technology

Department of Mechanical Engineering

4MT318 Vetenskaplig metodik och planering, 3 högskolepoäng

Scientific Methodology and Planning, 3 credits

Main field of study

Mechanical Engineering

Subject Group

Mechanical Engineering

Level of classification

Second Level

Progression

A1N

Date of Ratification

Approved 2018-11-26

Revised 2021-06-15 by Faculty of Technology. Literature list is revised.

The course syllabus is valid from autumn semester 2021

Prerequisites

- Bachelor of Science within technology.
- English B.

Objectives

After this course students should be able to:

- Account for principles of research ethics
- Write a text with academic structure, language and style
- Perform a structured literature search
- Orally and in writing present and discuss engineering research with regard to social and ethical aspects

Content

The course consists of the following parts:

- Project planning
- Research ethics
- Academic writing, with focus on engineering science
- Structured literature search, reference handling and copyright
- Oral presentation techniques

Type of Instruction

The teaching consists of lectures, exercises and seminars. Seminars are compulsory.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Examination is done through oral seminar (1 credit P/F) and written report (2 credits A-F).

Grade G is required at the seminar and at least grade E on the report. The final grade is determined from the report.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Credit Overlap

The course cannot be included in a degree along with the following courses of which the content fully, or partly, corresponds to the content of this course: 4BY063, 7.5 credits and 4MT316, 7.5 credits.

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Hoffman A.; 2011; *Thinking and Writing in Academic Contexts*, latest edition; Studentlitteratur in Lund, Sweden; ISBN 9789144056319; 160 pages

Björklund M., Paulsson U.; 2014; *Academic papers and theses to write and present and to act as an opponent*, latest edition; Studentlitteratur in Lund, Sweden; ISBN 9789144093765; 152 pages

Eco U.; 2015; *How to Write a Thesis*, latest edition; MIT Press in Cambridge, Massachusetts, USA; ISBN 9780262527132; 256 pages

Literature provided by the department