



SH2009 Project work in Physics, Smaller Course 15.0 credits

Projektarbete i fysik, mindre kurs

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 SH2009 valid from Spring 2018

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Engineering Physics

Specific prerequisites

As a general rule, the majority of the study programme should be finished before the project work is started. The examiner should make sure that the individual student has a suitable subject background and that the student has finished a sufficient part of the study programme before starting the project.

Language of instruction

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

Intended learning outcomes

- Apply knowledge and skills acquired in the subject area in order to solve a specified project task.
- Within the given framework, independently analyze and discuss complex questions and handle larger problems at an advanced level within the subject area.
- Reflect on, evaluate, and critically review and compare his/her own others scientific results.
- Document and present the work, for a given audience, with high demands on structure, form, and language, both orally and in writing.
- Identify the need for acquiring additional knowledge and continuously develop his/her skill set.

Course contents

The project work consists of an independent work focusing on a specific problem, decided by the examiner. The project should normally be a focused study within the chosen subject area, at advanced level, The project work should correspond to 10 weeks of full time study. The work should be presented in a written report as well as orally at an open seminar.

Course literature

The student is expected to be independent in finding and studying relevant literature in the subject field. Literature can also be recommended by the supervisor.

Examination

- PRO1 - Projects, 15.0 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.

The project work should be performed individually or, in exceptional cases, together with another student. In the case with two students, separate individual tasks within the project should be well defined and the examiner should make sure that the partition and interface between the students is realistic, and that the work for each student corresponds to the proper requirements. The work should be presented individually, both orally and in writing, in English or Swedish. Depending on the study programme of the student, opposition of another project work could be required to fulfill the criteria for passing the project course.

The project work will be evaluated according to the criteria below, within the evaluation areas process, scientific content, and presentation. The P/F grade is decided by the examiner as an overall assessment after a check for plagiarism has been performed of the written report. For passing the project work course, none of the three evaluation areas can be failed.

A student who has not finished the project work within twelve months runs the risk of failing the course. Such a decision is taken in consultation between the examiner and the programme coordinator.

Other requirements for final grade

Process

Passed

Plan and implement the work within the agreed time frames, show power of initiative, be open for supervision and criticism, be able to acquire new knowledge, show ability in understanding other's work, and formulate relevant criticism.

Failed

Lacking respect for agreements, considerable lack of independence or disobedience in supervision. Inability or unwillingness to acquire new knowledge.

Scientific content

Passed

From the problem at hand, and with a relevant methodology, show a good ability to, in a systematic way, apply engineering- and scientific skills in formulating the problem, modelling, analysis, development, and evaluation. When it is relevant for the problem at hand show awareness of social and ethical aspects, including economical-, social-, and ecologically sustainable development.

Failed

Major shortcomings in engineering- and scientific skills, or considerably lacking methodology despite requests.

Presentation

Passed

Present a well disposed report, with a clear presentation of the work and the results, an analysis and argumentation, as well as good language and form. Show a good ability to orally present and discuss the work.

Failed

Remaining shortcomings in the written report despite requests, or considerable inability to orally present or discuss the work.

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.