



EF226X Degree Project in Space Physics, Second Cycle 30.0 credits

Examensarbete inom rymdfysik, avancerad nivå

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 EF226X valid from Autumn 2010

Grading scale

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

Education cycle

Second cycle

Main field of study

Electrical Engineering, Engineering Physics

Specific prerequisites

The student should have at least 240 hp from the Master of Science in Engineering program or similar, and should further have knowledge of the main areas within the work in question.

Language of instruction

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

Intended learning outcomes

The aim of the course is to develop the student's ability to independently carry out and report a project work within the area of space physics.

After the course, the student is expected to be able to

- formulate a scientific research idea associated with scientific theories and/or earlier research within the area.
- make appropriate choices of scientific method, motivate them, and use the chosen methods in a systematic and competent way.
- formulate relevant and well-founded conclusions with reference to earlier research.
- present the work in both written and oral form, in a form consistent with the practice of the scientific community.

Course contents

The thesis work should be about an interesting problem within the field of space physics. Examples of thesis work subjects can be found at the home page of the department. The student can also make her/his own suggestions, which will have to be approved by the tutor. For the thesis work subject to be approved, interesting problems within the research area must be defined. The focus of the work should be on investigation and analysis of the problem. The extent of the work should be such that it is clear that the student has performed at least five months worth of full-time work.

As an important part of the thesis work will be considered a careful specification and schedule for the task, and a search and study of relevant literature. The thesis work will be presented in both a written and an oral report.

Course literature

The course literature is determined together with the tutor.

Examination

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.

Other requirements for final grade

Project, part 1, literature study (PRO 1; 6 hp)

Project, part 2, investigation and analysis (PRO 2; 16 hp)

Project, part 2, report (PRO 3; 8 hp)

The thesis work can be performed individually or together with another student. In the latter case the examiner should make sure that the work of each student fulfills the requirements for an individual thesis work. The examiner determines the grading together with the tutor. The grade is determined by a weighting of several criteria, the time for completion of the work being one of them. The specific criteria used should be made known to the student at the start of the course. In some of the programs the student may be obliged to take part in the opposition of another students thesis 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.