



# FSI3010 Seminar Course in Theoretical Physics 7.5 credits

Seminariekurs i teoretisk fysik

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 FSI3010 valid from Spring 2019

## Grading scale

P, F

## Education cycle

Third cycle

## Specific prerequisites

Quantum Physics and Relativity or equivalent prerequisites.

## Language of instruction

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

## Intended learning outcomes

After completed course, the PhD student should be able to:

- write a personally composed report on a topic in modern theoretical physics,
- use the typesetting program LaTeX,
- present a report at a seminar,
- critically evaluate another person's report and seminar,
- have a general knowledge of different topics in modern theoretical physics.

## Course contents

The course is a student and PhD student seminar series in topics from modern theoretical physics such as quantum mechanics, condensed matter theory, elementary particle physics, astroparticle physics, and cosmology. The concept of the student seminars is similar to the one of the German "Proseminar".

## Course literature

- **P. Jacobsson, Introduktion till LaTeX, Studentlitteratur (2004)**
- **Utdelat material och "online-material" samt studenternas rapporter.**
- **Studenterna söker själva med hjälp av handledning från kursansvarig efter bakgrundsmaterial till sina rapporter och seminarier.**

## Examination

- DEL1 - Participation, 1.5 credits, grading scale: P, F
- RAP1 - Report, 3.0 credits, grading scale: P, F
- SEM1 - Seminars, 1.5 credits, grading scale: P, F
- TEN1 - Exam, 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.

## Other requirements for final grade

A exam about the typesetting program LaTeX. An own written report, oral presentation of the report in form of a seminar and oral and written objection on another student's report and seminar as well as 75 % attendance of all meetings and seminars.

## 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.