



# FSH3900 Physics, the PhD student and Society 9.0 credits

Fysiken, doktoranden och samhället

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

## Establishment

The course plan applies from and including HT2024 according to school head decision: S-2022-2283 Decision date: 2022-12-23

## Grading scale

P, F

## Education cycle

Third cycle

## Specific prerequisites

Admitted to doctoral studies in either of the subjects Physics or Applied physics

## Language of instruction

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

## Intended learning outcomes

With this course as well as other courses taken during the PhD studies, the thesis work, and dissertation, the formal requirements for the PhD degree should be satisfied. Upon completion of the course, the student should:

- show broad knowledge within physics and a systematic understanding of the subject
- show the ability to analyze and summarize research, perform independent critical review, and assess new issues and situations
- show intellectual independence, scientific honesty, and the ability to perform assessments within research ethics
- show deepened insight regarding the possibilities and limitations of science, its role in society, and people's responsibility for how it is used with specific focus on sustainability issues
- show the ability to clearly present and discuss research and research results with both experts and in a popular scientific manner
- show knowledge and awareness regarding questions within research ethics
- show awareness of aspects regarding equality, diversity, and equal treatment within the physics subject and its history

## Course contents

The course consists of five modules

1. Research ethics and the role of research in society
2. Critical review and evaluation
3. Broad knowledge in physics
4. Presentation
5. Equality, diversity, and equal treatment aspects in physics

The modules can be completed in several ways such that the course can be taken within the framework of the different traditions within the Physics and Applied Physics subjects at KTH.

In order to collect a large part of the conference in a structured manner, a physics conference for PhD students is arranged biannually. At this conference, the PhD students may present their work and broaden their subject knowledge.

## Examination

- INL1 - Hand-in assignments, 9.0 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.

If the course is discontinued, students may request to be examined during the following two academic years.

## **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.