FSK3415 Seminar Course in Laser Safety 1.5 credits

Seminariekurs i lasersäkerhet

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

Establishment

Course syllabus for FSK3415 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Research students within the field of physics.

Language of instruction

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

Intended learning outcomes

To understand functionality and hazards for different types of lasers in different situations, and to be able to minimize the hazards when using them.

Course contents

- Function of different lasers and their wavelength domains.
- Classification of lasers.
- Basic safety rules.
- The biological effects of laser radiation.
- Use of protective equipment.
- Control of related hazards including electrical safety and fire safety.
- Emergency response procedures.

Disposition

Each course participant attend the series of seminars, where each participant gives a seminar. The content of the seminars is decided after consultation with the examinor. Demonstrations during seminars is encouraged.

Course literature

Laser Safety, Hendersson R. Schulmeister K., Institute of Physics Publishing, 2003. Articles adapted to the seminars.

Examination

- SEM1 - Seminars, 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.

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

The student prepares and gives a seminar during one lesson (45 min.) and attend the other students seminars and participate in the discussions in connection with that.

Other requirements for final grade

Passed seminar and 75 % attendance is demanded for passed (P).

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.