FSK3513 Seminar Course in Cell Physics 2.0 credits

Seminarkurs på cellens fysik

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

Establishment

Course syllabus for FSK3513 valid from Autumn 2016

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

PhD students registered at the Department of Applied Physics, School of Engineering Sciences (SCI) at KTH.

Language of instruction

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

Intended learning outcomes

To broaden and deepen the student's knowledge in the different areas of ongoing research of the Division of Cell Physics at the Department of Applied Physics. Upon completion of the

course, the student should be able to describe cutting-edge research and technology in a few areas different from his/her own shown during the seminars and identify their connections with other fields of research and technical development carried out by collaborators, competitors and industry.

Course contents

The course encompasses seminars organized by the four groups of the division (cellular biophysics, cell screening and migration, quantum dot development and nanobiophotonics, super-resolution light microscope and nanoscope). The speakers present state-of-the-art and cutting-edge research in their respective areas as well as continguous ones.

Disposition

The PhD student takes part to the seminars organized by the Division of Cell Physics (every Friday, 8:30-10:00) and provides a record of his/her presence by signing on the list of participants, which is circulated during the seminars.
The examination ls held ad-hoc in the form of a seminar lecture in which the doctoral student reports on one of the seminars that she/he has followed in one year, The selected topic should be outside his/her own area of research, but the PhD student is also encouraged to consider and analyze applications, differences and possible relationships with his/her own and other research fields.

Course literature

Provided during the seminar, plus ev. additional self-study material.

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.

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

The attendance lists are filed in by the Cell Physics administrator. The doctoral student requests from the Cell Physics administrator a certificate of attendances, and an examination-seminar Is arranged ad-hoc with the examiner and other students.

Other requirements for final grade

• Attendance rate to the departmental seminars above 70% (per year)
• One oral presentation on specific seminar topics, approved by the examiner, providing a total of 2,0 credits - over one year.

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.