FSH3202 Statistics for Medical Physicists 7.5 credits

Statistik för medicinska fysiker

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

Establishment

Course syllabus for FSH3202 valid from Spring 2014

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

Enrolled as PhD student

Language of instruction

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

Intended learning outcomes

To learn about the most common statistical distributions and how they relate to medical physics. Error estimation and propagation, least square and maximum likelihood optimizations and Monte Carlo simulations relating to medical physics.

Course contents

The course will be based on literature study and solving assignements. At the end an oral presentation relating the course to an actual challenge in medical physics research today.

Course literature

Edward L. Nickoloff, Applications of Statistics to Medicine and Medical Physics, ISBN-10: 193052451X I ISBN-13: 978-1930524514 and/or similar literature

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.

Exercises, PRO1 (7.5 credits), grade scale: P, F

Other requirements for final grade

Approved oral and written presentation of assignment.

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.