

II2202 Research Methodology and Scientific Writing 7.5 credits

Forskningsmetodik och vetenskapligt skrivande

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

Establishment

Course syllabus for II2202 valid from Autumn 2014

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Computer Science and Engineering, Information and Communication Technology, Electrical Engineering

Specific prerequisites

Good knowledge of English and basic knowledge of information and communication technology.

Language of instruction

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

Intended learning outcomes

The aim of the course is to give the students the theoretical and practical skills to plan, conduct, analyze and present, orally and in written form, a scientific assignment in the area of information and communication technology and to give insight and understanding of research methodology, ethics and sustainability.

This means that, after the course, students will be able to:

- explain and apply scientific methodologies, methods, as well as techniques for scientific writing, and research methodology to prepare the writing of a scientific report, as well as a degree project.
- perform investigation and evaluation using methods, explain and take position to the results, as well as list and summarize related work.
- apply the knowledge in scientific writing and research methodology and use the knowledge to write a scientific report and opposition report.
- identify and describe examples of sustainability related to ICT-area.
- verbally and in writing give examples of and explain societal and ethical aspects and sustainability in the ICT-area.
- perform opposition.

Course contents

The course is divided into three parts where the parts are integrated in a final project. The three parts are:

- research methodology
- scientific writing
- scientific assignment

These three parts are examined by a project plan, a method description and a scientific report, as well as an opposition report.

Disposition

The course contains lectures, among some are compulsory, seminars, which all are mandatory, and laboratories.

Course literature

Kurslitteratur kommer i huvudsak bestå av böcker och material, artiklar och verktyg, tillgängliga via Internet.

Examination

- INLA Assignment 1, 0.5 credits, grading scale: P, F
- INLB Assignment 2, 1.5 credits, grading scale: P, F
- VSK1 Scientific Writing, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- INLC Report, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- INLD Opposition, 0.5 credits, grading scale: A, B, C, D, E, FX, 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.

Other requirements for final grade

The course is divided into four parts, and to receive a final grade "pass" all four parts must be approved:

- scientific writing (A-F): mandatory participation in lectures and submission of an approved written report
- opposition on written report (A-F)
- research methodology (Pass/Fail): mandatory participation in lectures and approved assignments
- project plan, scientific assignment (Pass/Fail): mandatory participation with presentation and opposition

A higher degree is determined by the quality of the written report, method description and opposition report. A higher degree requires high quality on report structure, research methodology, summary technique, handling of references, description of experiment, and analysis of experimental data including quality assurance.

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.