Instructions for the mandatory course Problem analysis (8 credits)

Learning outcomes

The aim of the course is to give the PhD student a background to the research field and the specific topics and methodologies to be covered by the PhD project.

After completing the course the PhD student should be able to:

- Describe the research field and the main knowledge gaps.
- Define the main research questions to be addressed in the PhD studies.
- Describe concepts and methods that have been used within the research field to address similar questions.
- Explain how his/her research project will be organized and what methods will be used to address the research questions.

Course content

In collaboration with the supervisor, the PhD student writes a report consisting of an extensive literature review of the research field that concludes the current scientific knowledge base and existing research gaps. Built on this he/she will identify research questions to be addressed in the PhD studies, and describe the research methodologies to be used in order to address the research questions. Additionally data requirements and data availability are explored in order to investigate the possibilities to answer the research questions.

The written report should consist of the following parts:

- Introduction that puts the PhD project into a wider context, shows its relevance and clearly states the research questions that will be addressed.
- Theoretical background and literature review
- Methodology section where the relevant (present and future) methods for the project should be described in adequate detail.

The PhD student will towards the end of the course prepare for a seminar where the review, along with the plans for the PhD studies, will be presented. The course should be taken within the first year of PhD studies.

Teaching

Individual work in collaboration with the supervisor.

Assessment

The individual work is leading up to a final written report and an oral presentation at a seminar where the work is discussed, based on both the written report and the oral presentation. The final report and the oral presentation should be evaluated and accepted by the department representative of the PhD student, to receive a course grade.

Grading scale

Possible grades are Pass / Fail.

Language

English.

Entry requirements

To be admitted to this course the student must be admitted as PhD student.