



FAL3300 GIS for Environmental Modelling 7.5 credits

GIS för miljömodellering

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

Establishment

Course syllabus for FAL3300 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Master degree or corresponding, in environmental engineering or equivalent.

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 provide knowledge and skills in geographic information technology useful for environmental modelling. After taking the course, the student should be able to:

- Review and assess spatial data and their usefulness for environmental modelling
- Review and assess spatial models and their usefulness for environmental modelling
- Be able to perform spatial modelling within a selected field, including, for example, spatial hydrological or ecological models, and/or decision support models
- Integrate and use such models in their own research (when appropriate), as well as discussing pros and cons with integrating spatial models in their own research.

Course contents

Overview of spatial data and geographic information technology, together with basic and advanced models for spatial environmental modelling will be covered by initial lectures.

This will be followed by practical exercises organised so that basic GIS skills can be derived from self-instructed GIS laboratories and ESRI Virtual Campus, while more advanced modelling exercises will be led by course assistants, and are tailored for the research needs. In the project work, own models can be applied when relevant. The course project is examined by a report and a seminar.

Examination

- INL1 - Homework, 7.5 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 course will be given in cooperation with the Geoinformatics division, KTH. Teachers will be Ulla Mörtberg, Katrin Grunfeld, and other. Examiner is Ulla Mörtberg.

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.