

Visualizing Climate Change

Single subject and programme course

7.5 credits

Visualizing Climate Change

746A58

Valid from: 2010 Autumn semester

Determined by

The Quality Board at the Faculty of Arts
and Sciences

Date determined

2010-06-17

Replaced by

746A88

Main field of study

Environmental Science

Course level

Second cycle

Advancement level

A1N

Course offered for

- Master´s Programme in Science for Sustainable Development

Entry requirements

- Bachelor´s degree equivalent to a Swedish Kandidatexamen of 180 ECTS credits including 90 ECTS credits in natural science, social science, health science, humanities or engineering that relate to the environment, social economic aspects of sustainable development, including an in-depth academic paper 15 ECTS credits
- English corresponding to the level of English in Swedish upper secondary education (Engelska 6/B)
(Exemption from Swedish)

Intended learning outcomes

After completion of the course the student should be able to:

- identify, describe and apply fundamental concepts of visualization
- critically analyse and discuss visualization tools and techniques for climate communication and decision making
- apply skills in analysing climate data and present results orally and in writing.
- develop visual presentations including data management, data transformation, graphical representations, interaction and narratives.

Course content

The aim of the course is to gain a professional understanding for visualization of climate change as a tool for analysis, science communication and decision making support. The course will cover the basics of geospatial and information visualization as well as the handling of databases/datasets, data collection and creation of presentations for a broad audience from experts and policy makers, industry, planners to the general public.

This course will cover visualization as a tool for

- Analysis of linkages within climate change, social and environmental systems
- Visual communication of climate change related issues
- Visualization for planning and decision making support in terms of interactive decision theatres through role-plays, narratives and interactive seminars.

Teaching and working methods

Lectures, seminars, laboratories, dome presentations, individually written assignments and oral presentations. Language of instruction: English

Examination

The course is examined through written tasks, oral presentations and active participation in seminars and exercises.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it. If the coordinator has instead recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

Grades

ECTS, EC

Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is carried out in such a way that both men's and women's experience and knowledge is made visible and developed.

Department
Institutionen för Tema