

Sampling Design, Analysis, and Interpretation of Environmental Data

Single subject and programme course

credits

Miljödata - insamlingsdesign och dataanalys

HMXC12

Valid from:

Determined by

The Quality Board at the Faculty of Arts
and Sciences

Date determined

2004-04-20

Main field of study

No main field of study

Course level

First cycle

Entry requirements

Documented knowledge of English equivalent to “Engelska B” is required, or an international proficiency test, e.g. TOEFL, minimum score 550/213. Applicants must satisfy the following general entrance requirements: Minimum formal requirements for admission to the course include earlier studies at least up to a level corresponding to two years of study at a Swedish university. All applicants must satisfy the specific requirements, that is, approximately two semesters of full-time in depth studies in a relevant major subject. (Environmental Science or any other relevant subject). Previous studies must include basic knowledge of environmental statistics, modelling-, and geographic information systems.

Intended learning outcomes

The aim of the course is for the student to acquire advanced level knowledge and skills in sampling design, analysis, and interpretation of quantitative and qualitative environmental data. A further aim is that the students improve their skills in communicating analysis and interpretations of environmental data. Both enterprise and public utilisation of data are of interest, as well as Swedish and international perspectives.

Course content

The content of the course includes scientific theories of importance for the analysis of environmental issues. The core of the course is sampling design for monitoring, control and basic data for decision support. Methodological tools for the analysis are environmental statistics, modelling, and geographic information systems.

Teaching and working methods

The pedagogic forms used are defined as project and problem based, where the students individual learning and critical thinking are in focus. This includes group assignments, lectures, seminars, laboratory work and excursions.

Examination

Examination of the students are based on active participation in group work, seminars, laboratory work and excursions. Written assignments and oral presentation is also basis for grading of the students.

Grades

Two-grade scale, U, G

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