



Department of Earth and Environmental Sciences

NGEA04, Physical Geography: Ecosystems Analysis, 15 credits

Naturgeografi: Ekosystemanalys, 15 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2007-06-14 (N2007266) and was last revised on 2013-01-08 (N 2007/266). The revised syllabus comes into effect 2013-01-08 and is valid from the spring semester 2013.

General information

Language of instruction: Swedish and English

Main field of study *Specialisation*

Physical Geography G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding:

The student is expected to be able to describe the basics of how the ecology and function of the landscape are influenced by and influence the exchange processes between soil, vegetation and atmosphere.

Skills and abilities

The student is expected to be able to:

- carry out and use qualified measurement methodology in field and laboratory environment
- compile, process, evaluate and present observations from literature, field and laboratory activities

Course content

The course intends to give a basic understanding of how different ecosystems influences and are influenced by atmosphere and geology. The course aims furthermore to give the student understanding of the basic scientific the background of different environmental problems such as the greenhouse effect and the ozone problems.

The course contains lectures within the subject areas biogeography, biogeochemistry, hydrology and practical ecosystem analysis with aim to give a solid theoretical background for practical work with problems that relate to global environmental problems as climate changes ozone problems and deposition issues. The course contains from start a fieldwork that is expanded through the course and that is crowned by a week-long field trip followed by project work. Measurement methodology includes basic repeated vegetation inventory, chemical soil and vegetation analysis and measurements of gas exchange between soil, vegetation and atmosphere.

Course design

The teaching consists of lectures, laboratory sessions, field exercises, seminars, group work and project work. Participation in laboratory sessions, field exercises, seminars, group work and project work and thereby integrated other teaching is compulsory.

Assessment

Examination takes place via written assignments and project presentations during the course and via a written examination. Re-sit examinations are offered soon after the examination to students who do not pass.

Grades

Grading scale includes the grades: Fail, Pass, Pass with distinction

To pass the course requires approved examination and passed results on written assignments and project presentations and participation in all compulsory parts.

Entry requirements

For admission to the course is required:

General entry requirements and 30 credits scientific studies and English B or the equivalent.

Further information

The course may not be included in a higher education degree together with NGE621 Ecosystem analysis, 10p.