



DEPARTMENT OF EARTH SCIENCES

NGN180 Geographical Information Systems (GIS) - Introduction, 7.5 credits

Geografiska informationssystem (GIS) - introduktion, 7,5 högskolepoäng

First Cycle

Confirmation

This course syllabus was confirmed by Department of Earth Sciences on 2009-05-12 and was last revised on 2019-06-10 to be valid from 2019-09-01, autumn semester of 2019.

Field of education: Science 100%

Department: Department of Earth Sciences

Position in the educational system

The course can be include in Degree of Bachelor in Earth Sciences and Geography. The course is also offered as an elective course subject to availability.

The course can be part of the following programmes: 1) Master's Programme in Geography (N2GEO), 2) Bachelor's Programme in Geography (N1GEO) and 3) Master's Programme in Earth Sciences (N2GVS)

Main field of studies

Earth Sciences

Geography

Environmental Science

Specialization

G1N, First cycle, has only upper-secondary level entry requirements

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Entry requirements

General entrance requirements

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- show theoretical understanding of the use of Geographic Information systems (GIS).
- identify principles of applications with GIS.

Competence and skills

- independently apply GIS-techniques on simple geographical problems.

Judgement and approach

- explain and justify the application of GIS as tools to solve simple spatial problems.

Course content

The course is an introduction course to GIS and treat basic components as data collection processing, analysis, visualisation, different types of data, as well as basic vector and raster analysis tools.

The course is entirely web-based and is based on own work with a GIS program. For the theoretical learning, there are recorded lectures as well as the reading list. The practical component consists of exercises and assignments that are submitted individually. The content of these also contributes to increased theoretical understanding.

Form of teaching

The course is given as a web-based distance course.

The teaching consists of recorded lectures as well as practical exercises and assignments with supervision at a distance.

Language of instruction: Swedish and English

Assessment

Written examination (Theory). 3.5 credits Fail/Pass/Pass with Distinction

Exercises 2 credits Fail/Pass

Assignments 2 credits Fail/Pass

A student has the right to request a change of examiner, if this is practically possible, after they have failed the same examination twice. The application shall be sent to the board of the department and has to be in writing.

In cases where a course has been discontinued or undergone major changes, the student should be guaranteed access to at least three examination sessions based on the earlier planning of the course (including regular examination session) during a period of at least

one year.

If there are special reasons, the examiner may allow other examination forms than those specified in the syllabus.

To obtain a passing grade on the course or individual examination, supplementary assignment can be offered after assessment and decision by the examiner.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

The grade on the entire course is determined by the exam once all the parts have been passed.

Course evaluation

The result and any changes in the course structure should be communicated to both the students who completed the evaluation and to the students who will start the course.