



DEPARTMENT OF EARTH SCIENCES

GVS160 Geographical Information Systems: GIS, 15 credits

Geografiska informationssystem: GIS, 15 högskolepoäng

First Cycle

Confirmation

This course syllabus was confirmed by Department of Earth Sciences on 2020-12-03 to be valid from 2022-01-17, spring semester of 2022.

Field of education: Science 100%

Department: Department of Earth Sciences

Position in the educational system

The course includes 15 credits at the undergraduate level. The course is offered as an elective course subject to availability.

The course can be part of the following programme: 1) Bachelor's Programme in Earth Sciences (N1GVS)

Main field of studies

Earth Sciences

Specialization

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

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 Geographical Information Systems (GIS).

- identify appropriate principles for the analysis of geographic data and applications with GIS.

Competence and skills

- have practical experience in different technologies that are included in geographic information processing.
- independently search, choose and assess geographic data needed for GIS analysis.
- collect geographic data from different sources.
- communicate the result through maps and writing.

Judgement and approach

- explain and justify the application of GIS as tool for solving more complicated spatial problems.
- compare and evaluate different sources for geographic information processing.

Course content

The aim of the course is to give basic knowledge of geographic information systems (GIS), practice handling of geographic information systems and their application. A main part of the course is devoted to practical, mainly geoscientific exercises with GIS programs.

Form of teaching

The teaching includes lectures, exercises, project work and written examination. The course is an online course.

Language of instruction: English

Assessment

Component 1 GIS Project Work, 5 credits: U/G/VG

Component 2 GIS Exercises, 5 credits: U/G

Component 3 GIS Theory, 5 credits: U/G/VG

If a student, who has failed the same examined element on two occasions, wishes to change examiner before the next examination session, such a request is to be submitted to the department in writing and granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In the event that a course has ceased or undergone major changes, students are to be

guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, though at most two years after the course has ceased/been changed. The same applies to work experience and VFU, although this is restricted to just one additional examination session.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U). For the grade Pass (G) for the whole course it is required that all, including compulsory, components are passed. For the grade Pass with Distinction (VG) for the whole course, the grade Pass with Distinction (VG) in components 1 and 3 are required.

Course evaluation

Course evaluation is carried out at the end of the course via Canvas where the student can participate anonymously.

The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.

Additional information

Students admitted to NIGVS Bachelor's Programme in Earth Sciences have precedence for admittance to the course.