UNIVERSITY OF GOTHENBURG

DEPARTMENT OF EARTH SCIENCES

GVS150 Geographical Information System, 15 credits

Geografiska informationssystem (GIS), 15 högskolepoäng

First Cycle

Confirmation

This course syllabus was confirmed by Department of Earth Sciences on 2011-10-17 and was last revised on 2017-12-21 to be valid from 2017-12-21, spring semester of 2018.

Field of education: Science 100%
Department: Department of Earth Sciences

Position in the educational system

The course is included in the Bachelor's Programme in Earth Sciences (N1GVS). The course is offered as an elective course subject to availability.

The course can be part of the following programmes: 1) Bachelor's Programme in Earth Sciences (N1GVS) and 2) Master's Programme in Earth Sciences (N2GVS)

Main field of studies	*Specialization*
Earth Sciences	G1F, First Cycle, has less than 60 credits in first-cycle course/s as entry requirements

Entry requirements

Admission to the course, requires completed course in GV1410 Geosciences, Basic Level Course, 30 credits or GVS110 Earth Sciences, basic course, 30 credits, or the equivalent, of which 7.5% with the lowest grade Pass. Applicants with equivalent education can, after review and approval, be given access to the course. Students admitted to N1GVS Bachelor's Programme in Earth Sciences have precedence for admittance to the course.

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 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 data and technologies for data collection intended 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 a written examination. The course is computer-based.

Language of instruction: English

Assessment

Component 1 GIS Project Work (GIS): Project Work) 5.0 credits Fail/Pass/V

Component 2 GIS Exercises (GIS: Exercises) 5.0 credits Fail/Pass

Component 3 GIS Theory (GIS: Theory) 5.0 credits Fail/Pass/V

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

Grades

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

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.