



## DEPARTMENT OF EARTH SCIENCES

### **GVS080 Geographical Information Systems: GIS, 7.5 credits**

Geografiska informationssystem: GIS, 7,5 högskolepoäng

*First Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Department of Earth Sciences on 2020-12-03 and was last revised on 2022-09-08 to be valid from 2023-01-16, spring semester of 2023.

*Field of education:* Science 100%

*Department:* Department of Earth Sciences

#### **Position in the educational system**

The course includes 7,5 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*

Geography

Earth Sciences

#### *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*

- demonstrate theoretical understanding of the use of Geographic Information

system (GIS).

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

#### *Competence and skills*

- demonstrate practical experience of the various techniques involved in geographic information processing.
- independently search, select and assess geographic data using GIS for analysis.
- collect geographic data from various sources.
- communicate the results orally and in writing.

#### *Judgement and approach*

- explain and justify application of GIS as a tool for solving more complex spatial problems.
- compare and evaluate different sources for geographic data and technologies, for data collection intended for geographic information processing.

#### **Course content**

The course aims to provide basic knowledge of Geographic Information Systems, GIS.

The course provides practice in the practical handling of geographic information systems and knowledge of the principles of GIS implementation and applications. A major part of the course is devoted to practical, mainly geoscientific exercises with GIS software.

#### **Form of teaching**

The teaching includes lectures, exercises and minor project-work.

*Language of instruction:* English

#### **Assessment**

Component 1 GIS Exercises, 3 credits: U/G

Component 2 GIS Theory, 4,5 credits: U/G/VG

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received recommendation from the University of Gothenburg for

special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

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 placements and professional placements (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) in the course as a whole, at least Pass (G) is required for all components in the course. For the grade Pass with Distinction (VG) the grade Pass with Distinction (VG) is required on component 2.

### **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 at N1GVS Bachelor's Programme in Earth Sciences have precedence for admittance to the course.