



## DEPARTMENT OF EARTH SCIENCES

### **GVN400 Investigation Methods In Earth Science, 15 credits**

Geovetenskaplig metodik G4, 15 högskolepoäng

*First Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Department of Earth Sciences on 2011-11-02 and was last revised on 2021-11-02 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 undergraduate level and can be part of an Earth Science bachelor's degree. The course is also 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*

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

#### **Entry requirements**

Admission to the course requires completion of GV1410, 30 credits, of which at least 75% with passing grade. Applicants with equivalent education can, after review and approval, be given access to the course.

#### **Learning outcomes**

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

*Knowledge and understanding*

- explain, exemplify and use simple methods used in geoscience.

*Competence and skills*

- prepare and plan field mapping, including using map studies, geographical and geological data and interpret and synthesize field mapping.
- demonstrate knowledge of basic methods and tools (e.g., software, temperature gauges, etc.) used in collection and analysis of data in geoscientific studies.
- prepare and document sampling.
- prepare and process samples in the laboratory and evaluate analytical results.
- write a scientific report and orally present results.

*Judgement and approach*

- identify problems that may arise during fieldwork, sampling, analysis and measurement methods.
- demonstrate the ability to evaluate analytical results.

The course is sustainability-related, which means that at least one of the learning outcomes clearly shows that the course content meets at least one of the University of Gothenburg's confirmed sustainability criteria.

**Course content**

The aim of the course is to provide an overview of and skills in geoscientific investigation methods. The course is divided into three sub-courses: Physical geography, Geodata Analysis and Geology.

**Form of teaching**

The course is conducted as several small projects with the application of different geoscientific research methods. The results are presented in written reports. The teaching consists of lectures (online and/or on campus), seminars, laboratories, field courses and field trips.

*Language of instruction:* Swedish and English

**Assessment**

Module 1 Physical geography, 7 credits: U/G

Module 2 Geodata analysis, 1 credit: U/G

Module 3 Geology, 7 credits: U/G

If a student who has twice received a failing grade for the same examination component wishes to change examiner ahead of the next examination session, such a request should be made to the department in writing and 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 a recommendation from the University of Gothenburg for study support for students with disabilities, the examiner may, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, 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, but no more than two years after the course has ceased/been changed. The same applies to internships and professional placements (VFU), although this is restricted to just one additional examination session.

### **Grades**

The grading scale comprises: Pass (G) and Fail (U).

For a Pass (G) grade on the whole course, all modules must be passed.

All modules are presented in written reports and the student is assessed according to active participation in the field, the written report and the presentation of the same.

### **Course evaluation**

The students are given the opportunity to make a written, anonymous evaluation of the course.

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