UNIVERSITY OF GOTHENBURG

DEPARTMENT OF EARTH SCIENCES

GVG350 Geophysics I, 7.5 credits

Geofysik I, 7,5 högskolepoäng

First Cycle

Confirmation

This course syllabus was confirmed by Department of Earth Sciences on 2012-09-27 and was last revised on 2016-09-13 to be valid from 2016-09-13, autumn semester of 2016.

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. The course can also be taken as an elective course.

The course can be part of the following programmes: 1) Marine Science, Bachelor's Programme (N1MAV) and 2) Bachelor's Programme in Earth Sciences (N1GVS)

Main field of studies	*Specialization*
Earth Sciences	G2F, First Cycle, has at least 60 credits in first-cycle course/s as entry requirements

Entry requirements

Admission to the course requires at least 60 credits in the main field of study: Earth Sciences. Students with an equivalent education can after assessment be given admission to the course.

Learning outcomes

On completion of the course, the student is expected to be able to:

Knowledge and understanding

- describe the theoretical backgrounds of geophysical methods (seismics, force of gravity, magnetism, electricity, electromagnetism)
- define and explain physical properties for different rocks and soil types
- summarise basic mathematical and physical relationships

Competence and skills

- use geophysical data (seismics, force of gravity, magnetism, electricity, electromagnetism)
- carry out corrections and model calculations

Judgement and approach

- summarise geophysical relationships in geology, environment, water and prospecting from raw materials
- explain geophysical measurement results

Course content

The course is given full-time, and the teaching consists of lectures and compulsory exercises. The course covers physical properties of rocks and earth types, basic mathematical and physical relationships, seismics, force of gravity, magnetism, electricity, electromagnetism, radiation measurements and applications in geology, environment, water and prospecting from raw materials and interpretation.

Form of teaching

The course consists of lectures and compulsory exercises.

- The theoretical examination decides the final grade of the course.

- The exercises/If a student has obtained the reports passed before the written examination is received 1 p on examination, host about 5%, this applies only to regular examination and the first regular retake.

All grades, including compulsory parts, are required for grades on the entire course.

Language of instruction: Swedish and English

Assessment

Component 1 Theory (Examination), 5 credits in Fail/Pass/Pass with distinction
Component 2 Exercises (Exercises), 2.5 credits in 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.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).
In the course, one of the grades is given Pass (G) or Fail (U).

All grades, including compulsory parts, are required for a grade on the entire course.

Course evaluation

Course evaluation is carried out partly in connection with a seminar and partly through the course platform Canvas where the student can participate anonymously. A summary of the result of the course evaluation is available through the study expedition at the responsible department.

Additional information

Students in N1GVS and N1GEO have precedence for admittance to the course.