

Syllabus

for course at advanced level

Terrestrial Geophysics

Terrestrisk geofysik

7.5 Higher Education

Credits

7.5 ECTS credits

Course code:	GG7025
Valid from:	Autumn 2019
Date of approval:	2019-03-11
Department	Department of Geological Sciences
Main field:	Geological Sciences
Specialisation:	A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

This syllabus was approved by the Faculty of Science at Stockholm University 2017-01-16.

Prerequisites and special admittance requirements

For admission to the course, knowledge equivalent to a bachelor's degree is required, which must include at least 90 credits in geology, earth sciences, or the equivalent natural science subject in biogeo science, environmental science, or oceanography. Mathematics corresponding to at least 7.5 higher education credits at the undergraduate level is required. English 6.

Course structure

Examination code	Name	Higher Education Credits
HELA	Terrestrial geophysics	7.5

Course content

The course addresses:

The course covers terrestrial geophysics and geophysical survey methods, and includes:

- geophysical theory including gravity, magnetism, geo-electric properties, radiometric properties and seismic properties
- geophysical properties of rocks and planet Earth
- function and use of geophysical instruments
- geologic interpretation of geophysical data

Learning outcomes

After completing the course, the student is expected to be able to:

- explain basic geophysical principles
- describe and explain the relationship between the geophysical properties of bedrock and its structure and composition
- show proficiency in using geophysical instruments
- process and interpret geophysical data

Education

The course consists of lectures, seminars, field work, laboratory and exercises. Participation in exercises, field work, laboratory and seminars and in any associated integrated instruction is compulsory. In the event of special circumstances, the examiner may, after consultation with the teacher concerned, grant a student

exemption from the obligation to participate in certain compulsory instruction. The teaching language is English.

Forms of examination

- a. Knowledge assessment and examination are in the form of written and oral examinations.
- b. Grades will be set according to a seven-point scale related to the learning objectives of the course:
A = Excellent
B = Very good
C = Good
D = Satisfactory
E = Adequate
Fx = Fail, some additional work required
F = Fail, much additional work required
- c. The grading criteria will be distributed at the beginning of the course.
- d. In order to pass the course, students must receive the minimum passing grade E on all course units and participate in all mandatory instruction.
- e. Students who receive a failing grade on a regular examination are allowed to retake the examination as long as the course is still provided. The number of examination opportunities is not limited. Other mandatory course elements are equated with examinations. A student who has received a passing grade on an examination may not retake the examination to attain a higher grade. A student who has failed the same examination twice is entitled to have another examiner appointed, unless there are special reasons to the contrary. Such requests should be made to the department board.
- f. There is no facility to improve the grade Fx to a pass grade in this course.

Interim

Students may request that the examination be conducted in accordance with this course plan even after it has ceased to be valid. However, this may not take place more than three times over a two-year period after course instruction has ended. Requests must be made to the department board. The provision also applies in the case of revisions to the course plan.

Limitations

The course may not be included in degree with Terrestrial Geophysics (GO2160/GG4003) or equivalent.

Misc

The course is part of the Master Programme in Geological Science, but can also be read as a separate course.

The course may include field trips that can entail costs for the student.

Required reading

The course literature is decided by the department board and published on the Department of Geological Sciences website at least two months before the start of the course.