

# Syllabus

for course at first level

**Structural Geology and Mapping**  
**Strukturgeologi och kartering**

**7.5 Higher Education**  
**Credits**  
**7.5 ECTS credits**

<b>Course code:</b>	GG4213
<b>Valid from:</b>	Spring 2019
<b>Date of approval:</b>	2017-01-16
<b>Department</b>	Department of Geological Sciences
<b>Main field:</b>	Earth Sciences
<b>Specialisation:</b>	G1F - First cycle, has less than 60 credits in 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

Admission to the course requires completion of 30 credits in Geology or Earth science, including the course Geology and geophysics 15 credits and Mineralogy and Petrology 7,5 credits, or Tellus I - Geology 15 credits, Tellus II - Geology 12.5 credits, Tellus III - Geology 2.5 credits and Mineralogy and Petrology 7,5 credits, or equivalent.

## Course structure

Examination code	Name	Higher Education Credits
F1GG	Field	3
T1GG	Theory	4.5

## Course content

The course covers:

- large scale geological structures (folds, shear zones, faults)
- geological micro structures
- deformation mechanisms
- kinematic indicators
- tectonics
- rock mechanics
- mapping and interpretation of geological structures in the field

## Learning outcomes

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

Part 1, T1GG, Theory, 4.5 credits:

- understand the basic principles of structural geology
- identify and classify large scale and microscopic geological structures
- understand deformation mechanisms and rock mechanics
- use kinematic indicators to interpret deformation history

Part 2, F1GG, Field / Project, 3 credits:

- be able to map geological structures in the field

- measure geological structures in field, making a map and plot data into standard diagrams

### **Education**

The course consists of lectures, exercises and field work. Seminars may occur. Participation in exercises, seminars and field work 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 a degree in combination with the course Structural Geology 5/7.5 credits (GG40010/GG4031/GG4005/GG4032/GG4132/GG5106), or equivalent.

### **Misc**

The course is part of the Bachelor's Programme in Geology, Geochemistry and Geophysics and the Bachelor Programme in Earth 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.