Syllabus
for course at first level
Geology and Geophysics
Geologi och geofysik

Course code: GG2202
Valid from: Autumn 2018
Date of approval: 2018-03-12
Department: Department of Geological Sciences
Main field: Earth Sciences
Specialisation: G1N - First cycle, has only upper-secondary level entry requirements

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

Prerequisites and special admittance requirements

Course structure

<table>
<thead>
<tr>
<th>Examination code</th>
<th>Name</th>
<th>Higher Education Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1GG</td>
<td>Excursions</td>
<td>3</td>
</tr>
<tr>
<td>T1GG</td>
<td>Geology and geophysics</td>
<td>12</td>
</tr>
</tbody>
</table>

Course content
The course deals with basic geology and geophysics.

The course covers:
• the Earth's internal structure
• theory of plate tectonics
• minerals, rocks, sediments and fossils
• volcanoes
• earthquakes
• tsunamis
• mountain building
• geological time
• the Earth's geological history
• geological resources (ores, oil, energy)
• ocean's formation and development

Learning outcomes
After completing the course, the student will be able to:
Part 1, T1GG, Geology and geophysics, 12 credits:
• describe the Earth's internal structure and the techniques used to study it
• describe and explain the theory of plate tectonics
• describe geological hazards (volcanic eruptions, earthquakes and tsunamis) and how mountain ranges are formed and deformed
• explain how the geological time scale is built and know its major sub-divisions
• describe the Earth's geological history
• explain how the Earth's geological resources are formed
• describe the ocean's formation and development

Part 2, F1GG, Excursions, 3 credits:
• describe and identify common minerals, rocks and fossils and explain how they formed
• describe and identify types of sediments and explain how they are formed

Education
The course consists of lectures, seminars, excursions and exercises. Participation in exercises, excursions 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 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. The course has at least two examination sessions per academic year the year of tuition given. Intermediate years are given at least one examination.

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 Geology 30 credits (GG2006) or Tellus I - Geologi (GG2008), Tellus II - Geologi (GG4039) och Tellus III - Geologi (GG4042).

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.

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