

# Department of Geological Sciences

# **Syllabus**

for course at first level

Geochemistry Geokemi

7.5 Higher Education Credits
7.5 ECTS credits

 Course code:
 GG2013

 Valid from:
 Spring 2018

 Date of approval:
 2017-08-18

**Department** Department of Geological Sciences

Subject Earth Science and Physical Geography

Specialisation: G1N - First cycle, has only upper-secondary level entry requirements

#### **Decision**

This syllabus was approved by the Faculty of Science at Stockholm University 2016-08-xx

### Prerequisites and special admittance requirements

Admission to the course requires either completion of Swedish upper secondary school courses Mathematics D,

Physics B and Chemistry B, or Tellus I - Geology 15 credits and Tellus II - Geology 12.5 credits, or equivalent.

#### Course structure

Examination codeNameHigher Education CreditsHELAGeochemistry7.5

# Course content

The course is an introduction to the geochemistry where chemistry is used to understand and explain the geological processes.

The course covers:

- basic geochemistry
- basic thermodynamics
- acid-base balance
- redox processes
- introduction to isotope geochemistry

# Learning outcomes

After completing the course the student:

- be familiar with the basics of chemistry and their application to understand the basic geochemical concepts
- have an insight into the Earth's geochemical systems

# **Education**

The course is given at distance. Instruction consists of online lectures and exercises. Participation in exercises 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 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.

#### Limitations

The course may not be included in examinations in combination with courses Geochemistry I, 15 hp (GG2001/GG2011).

#### Misc

The course is part of the Bachelor Programme in Geology and the Bachelor Bachelor's Programme in Earth Science, Distance Learning, but can also be read as a separate course.

# 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.