

# Syllabus

for course at advanced level

**Geochemistry, Degree Project**

**Geokemi, självständigt arbete**

**60.0 Higher Education**

**Credits**

**60.0 ECTS credits**

<b>Course code:</b>	GG9122
<b>Valid from:</b>	Autumn 2019
<b>Date of approval:</b>	2019-03-11
<b>Department</b>	Department of Geological Sciences
<b>Main field:</b>	Geological Sciences
<b>Specialisation:</b>	A2E - Second cycle, contains degree project for Master of Arts/Master of Science (120 credits)

## Decision

This syllabus was approved by the Faculty of Science at Stockholm University 2019-03-13

## Prerequisites and special admittance requirements

For admission to the course, knowledge equivalent to a Bachelor's degree is required, which shall include at least 90 credits in geology, earth sciences, environmental sciences, oceanography, or biosciences. In addition, at least 15 credits in geochemistry at advanced level are required. English 6.

## Course structure

Examination code	Name	Higher Education Credits
HELA	Geochemistry, Degree Project	60

## Course content

The independent project aims to provide experience and in-depth knowledge of science and scientific work in geochemistry. Central elements are the planning, implementation and reporting of the scientific study. Furthermore, literature search, writing of a scientific report and exercise in oral reporting of research results in the form of seminars are trained.

## Learning outcomes

After having completed the course, the student is expected to be able to:

- plan, carry out, document and complete the experimental / field / theoretical work within a specified time
- demonstrate experimental / field skills
- evaluate, analyze and draw conclusions from the results obtained,
- present a scientific approach to the project
- read and understand geoscientific primary literature and utilize the necessary theory for the implementation of the project
- implement goal-related scientific literature search
- compile and write a scientific report
- verbally report and present research results

## Education

The independent project can include field work and / or laboratory work. The work is carried out in areas

where expertise is available at the Department of Geological Sciences or related external activities. The teaching mainly consists of independent work under the supervision of the principal supervisor and possibly assistant supervisor. The student is entitled to at least 40 hours of supervision, where individual supervision must be at least one third of the time. If a student does not finish in time with his / her degree project during the course period, the student will receive guidance within the reasonable limits until the degree project is completed. In special circumstances, the student is entitled to change the supervisor. Requests for this must be made to the department board.

### **Forms of examination**

a. The course is examined as follows: Knowledge assessment takes the form of written and oral presentation of scientific work and by assessing experimental and / or field skills.

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 course's grading criteria are awarded at the start of the course.

Late submission of the independent project has consequences for the course's final grade, which is described in more detail in the course's grading criteria.

Basic assessment criteria are:

1. Understanding the proposed task

2. Implementation of the experiments / field work / the theoretical task

3. Knowledge of the theoretical background

4. Interpretation and analysis of results

5. Independence

6. Ability to keep the fixed schedule for work

7 Presentation - oral presentation

8. Presentation - written report

d. The final grade on the course is determined by weighting the grades from all course units, where each grade is weighted in relation to the scope of the course unit.

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. Students awarded the grade Fx are given the opportunity to improve their grade to E. The examiner decides the supplementary assignments to be performed and the pass mark criteria. The supplementary assignments will take place before the next examination session.

### **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 departmental board. The provision also applies in the case of revisions to the course plan

### **Limitations**

Introductory courses may not be included in a Master's degrees at the Faculty of Science, Stockholm University.

A maximum of 15 credits may be included in the degree in the Faculty of Science's main areas.

The course may not be included in examinations in combination with courses Geochemistry, degree project 60 credits (GG9003/GG9103) or equivalent

### **Misc**

The course may include field elements that may entail costs for the student. The course is part of a master's program in geological sciences, but can also be read as a free standing course.

### **Required reading**

The literature is based on scientific publications and reports in the relevant subject area found by students in literature searches and literature distributed by the main tutor and/or assistant tutor.