



Syllabus

for course at advanced level

Polar and Alpine Environments and Climate Change
Polara och alpina miljöer och klimatförändringar

**15.0 Higher Education
Credits**
15.0 ECTS credits

Course code:	GE7079
Valid from:	Autumn 2019
Date of approval:	2019-01-14
Department	Department of Physical Geography
Main field:	Physical Geography and Quaternary Geology
Specialisation:	A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

This syllabus has been approved by the Board of Science at Stockholm University 2019-01-14.

Prerequisites and special admittance requirements

Admission to the course requires knowledge equivalent to at least 90 ECTS credits in biology-earth sciences, geography, Earth sciences. Also required is knowledge equivalent to Swedish upper secondary school course English B/English 6.

Course structure

Examination code	Name	Higher Education Credits
DEL1	Excursion	3
DEL2	Theory	12

Course content

a. The course addresses the climate system, glaciology and geomorphology. The main focus is on climate and environmental change during the Quaternary from a Scandinavian perspective.

b. The course consists of the following course units:

1. Excursion (Exkursion), 3 credits
2. Theory (Teori), 12 credits

Learning outcomes

Upon completion of the course, students are expected to be able to:

- describe the function of the global climate system and natural and anthropogenic causes for climate change (Course unit 2)
- analyse glacial environments and processes (Course units 1 and 2)
- describe landforms and explain processes for their formation (Course units 1 and 2)
- describe and explain Quaternary climate and environmental evolution (Course units 1 and 2)
- explain the interaction between climate processes, geomorphological processes and glacial processes in Scandinavia during the Quaternary (Course units 1 and 2)

Education

Instruction consists of field trips, lectures, seminars, exercises and project work.

Participation in field trips, seminars, exercises and project work and 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.

Instructions are in English.

Forms of examination

a. The course is examined as follows: Knowledge assessment takes the form of:

- Written presentations (Course unit 1)
- Written and oral presentations (Course unit 2)

Examination is in English.

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

The course unit 1 will be graded according to a two-point scale: Pass (G) or Fail (U).

c. The grading criteria will be distributed at the beginning of the course.

d. In order to pass the course, students must receive a passing grade 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 includes at least two examination opportunities per year when the course is given. At least one examination opportunity will be offered during a year when the course is not given.

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 departmental board. The provision also applies in the case of revisions to the course plan and the revisions of the course literature.

Limitations

The course may not be included in examinations in combination with course Quaternary Climate History (GE7056), Climate and Landscape (GE7072) or equivalent.

Misc

The course is part of Master's Programme in Polar Landscapes and Quaternary Climate but can also be read as a separate course. The course include teaching in the field, which may entail additional cost for the student.

Required reading

The course literature is decided by the department board and published on the Department of Physical Geography's website at least two months before the start of the course.