

Department of Physical Geography

Syllabus

for course at advanced level

Paleoglaciology Paleoglaciologi

7.5 Higher Education Credits 7.5 ECTS credits

 Course code:
 GE7053

 Valid from:
 Spring 2013

 Date of approval:
 2012-08-27

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 the Faculty of Science at Stockholm University 2012-08-27.

Prerequisites and special admittance requirements

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

Course structure

Examination codeNameHigher Education CreditsMOM1Theory3.5MOM2Project4

Course content

a. The course focuses on glacial landforms and how they can be used for reconstructions of ice sheets and ice sheet dynamics. More specifically, the course covers: Processes for formation and properties of glacial landforms; Paleoglaciological reconstructions based on mapping of glacial landforms using satellite imagery, aerial photographs, digital elevation models and field observations; Geographical analysis of landforms; Landform-based reconstructions of former ice sheets

- b. The course comprises the following elements:
- 1. Theory (Teori) 3,5 credits
- 2. Project (Projekt) 4 credits

Learning outcomes

After the course, students are expected to:

- •explain the formation of glacial landforms and how they can be used for paleoglaciological reconstructions
- •identify glacial landforms in remote sensing applications and in the field
- •explain the foundations of paleoglaciology
- •classify landform systems and perform a geographical analysis of landforms
- •perform and present a paleoglaciological reconstruction
- •explain the dynamics of ice sheets

Education

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

Participation in seminars, exercises and field trips 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: Measurement of knowledge takes place through:
- written and oral presentations.

Examination is in English.

- b. Grades are assigned according to a seven-point goal-related grading scale:
- A = Excellent
- B = Very good
- C = Good
- D = Satisfactory
- E = Sufficient
- Fx = Fail (more work required before credit can be awarded)
- $F = Total \hat{f}ail$
- c. The grading criteria will be distributed at the beginning of the course.
- d. To be awarded a pass, the minimum grade E is required and participation in all compulsory education.
- e. Students who fail an ordinary examination are entitled to sit additional examinations as long as the course is offered. There is no restriction on the number of examinations. Examinations also include other obligatory elements of the course. Students who have passed an examination may not resit it in order to achieve a higher grade. Students who have failed on two occasions are entitled to request the appointment of a different examiner for the next examination. Any such request must be made to the departmental board. The course has at least two examinations for each academic year in the years in which instruction is provided. Intervening years include at least one examination.
- 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

The course may not be included in examinations in combination with courses Glacial Sedimentology and Morphology (GE7001), Glaciology and Glacial Geomorphology (NG8460) or equivalent.

Misc

The course is part of Master's Programme in Quaternary Science and Climate Development and Master's Programme in Glaciology and Polar Environments, but can also be read as a separate course.

Required reading

Course literature is decided by the departmental board and described thereafter in an appendix to the course plan.