

# Syllabus

for course at first level

**Climate Variability  
Klimatvariationer**

**7.5 Higher Education  
Credits  
7.5 ECTS credits**

<b>Course code:</b>	GE4032
<b>Valid from:</b>	Autumn 2019
<b>Date of approval:</b>	2019-01-14
<b>Department</b>	Department of Physical Geography
<b>Main field:</b>	Earth Sciences
<b>Specialisation:</b>	G1F - First cycle, has less than 60 credits in 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 30 ECTS credits in Earth sciences, or 60 ECTS credits in geography.

## Course structure

Examination code	Name	Higher Education Credits
HELA	Climate Variability	7.5

## Course content

The course covers the natural and anthropogenic processes that control the Earth's climate and climate variability over time.

The course covers:

- Theories of climate variability on different time scales
- Theories of the climate control mechanisms and feedback mechanisms
- Natural climate archives
- Human impact on climate

## Learning outcomes

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

- Describe and analyze the theories of climate variability on different time scales
- Describe and explain the different control mechanisms and feedback mechanisms in the climate system
- Analyze human impacts on the climate system
- Describe the different natural climate archives

## Education

The course is given only as a distance learning course. The teaching consists of web-based teaching and independent project work.

Instructions are in English.

**Forms of examination**

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

- Written examination
- Written 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 = 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 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. 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 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 and the revisions of the course literature.

**Limitations**

The course may not be included in examinations in combination with courses Climate Variability (GE5005/GE4021), Climate and Society (GE4011/GE5034) or equivalent.

**Misc**

The course is part of 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 Physical Geography's website at least two months before the start of the course.