

# Syllabus

for course at advanced level

**Advanced Hydrology**

**Avancerad hydrologi**

**7.5 Higher Education**

**Credits**

**7.5 ECTS credits**

<b>Course code:</b>	GE8036
<b>Valid from:</b>	Spring 2022
<b>Date of approval:</b>	2021-06-17
<b>Department</b>	Department of Physical Geography
<b>Main field:</b>	Physical Geography and Quaternary Geology
<b>Specialisation:</b>	A1F - Second cycle, has second-cycle course/s as entry requirements

## Decision

This course syllabus was approved by the Board of Science at Stockholm University on 17/06/2021.

## Prerequisites and special admittance requirements

For admission to the course, knowledge is required equivalent to the course Water Resources Sustainability, 15 ECTS credits (GE7086) and the course module 1 Computer Exercises, 5 ECTS credits within the course Hydrological Modelling 5 ECTS credits (GE8034).

Also required is knowledge equivalent to Swedish upper secondary school course English 6 or equivalent.

## Course structure

Examination code	Name	Higher Education Credits
HELA	Advanced Hydrology	7.5

## Course content

The course deals with the theory required for advanced studies and research in the fields of hydrology and water resources. Central to the course is the knowledge and methods to understand water flows, water availability, waterborne transport and the variability and change of water resources.

## Learning outcomes

After the course, students are expected to:

- integrate the theory and the scientific methods for hydrological themes considered at an advanced level
- identify, formulate, solve and present problems related to water flow, waterborne transport and the variability and change of water resources.

## Education

Instruction consists of lectures, seminars and exercises.

The course is offered in English.

## Forms of examination

a. The course is examined as follows: Assessment takes place through written examination of exercises and written examinations.

The examiner can decide on adapted or alternative examination formats for students with disabilities.

Late submission of written examination of exercises and written examinations has consequences for the final grade of the course. These consequences are described in detail in the grading criteria of the course.

The examination will be conducted in English.

b. A passing final grade requires participation in lectures, seminars and exercises. If special reasons exist, following consultation with the teacher involved, the examiner may grant the student exemption from the obligation to participate in certain compulsory instruction.

c. Grading: The course's final grade is set according to a seven-point criterion-referenced scale:

A = Excellent

B = Very good

C = Good

D = Satisfactory

E = Adequate

Fx = Failed, some additional work is required

F = Failed, much additional work is required

d. The course's grading criteria are handed out at the start of the course.

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 in the normal case at least three examination opportunities per academic year the course is offered. For the academic years that the course is not offered, at least one examination opportunity is offered.

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

### **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 the course was discontinued. Requests must be made to the departmental board. The provision also applies in the case of revisions of the course syllabus and revisions of the required reading.

### **Limitations**

The course may not be included in examinations in combination with courses Advanced Hydrology (GE8024/GE8032) or equivalent.

### **Misc**

The course can be a part of Master's Programme in Hydrology, Hydrogeology and Water Resources but can also be read as a separate course.

### **Required reading**

The required reading is decided by the department board and published on the course catalog at least 2 months before the start of the course.