

Syllabus

for course at advanced level

**Ecohydrology
Ekohydrologi**

**7.5 Higher Education
Credits
7.5 ECTS credits**

Course code:	GE7087
Valid from:	Spring 2021
Date of approval:	2020-08-17
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 course syllabus was approved by the Board of Science at Stockholm University on 17/08/2020.

Prerequisites and special admittance requirements

For admission to the course, knowledge is required equivalent to 120 credits in one natural science subject area or a combination of two natural science subject areas, including at least 7,5 credits in hydrology. Or 15 credits from the Master's Programme in Hydrology, Hydrogeology and Water Resources at Stockholm University. Swedish upper secondary school course English 6 or equivalent.

Course structure

Examination code	Name	Higher Education Credits
DEL1	Theory	3
DEL2	Project	4.5

Course content

a. The course covers eco-hydrological topics at the intersection of ecosystem/ecology and hydrology. Plant-water interactions and processes central in ecohydrological theories will be a focus. Ecohydrological concepts and processes will be placed in the context of the Mediterranean region as a specific example. Goals of the course include bridging ecohydrological theory and practical applications, using hydrological models in field applications, and placing local ecohydrological processes in a global context.

b. The course consists of the following modules:

1. Theory, 3 ECTS credits
2. Project, 4.5 ECTS credits

Learning outcomes

After completing the course, the student is expected to be able to:

- Explain the basic theories in the discipline of ecohydrology (module 1)
- Synthesize relevant data and observations to provide an ecohydrological framework to characterize a region and set up hydrologic models (module 1, module 2)
- Define, develop, and conduct field-based research experiments to test fundamental assumptions behind our understanding of the interactions between the water cycle and vegetation (module 2)
- Plan, conduct, and report results from a field-based research project (module 2).

Education

Instruction consists of seminars, excursions, field-based laboratory work and project work.

Instructions are in English.

Forms of examination

a. The course is examined as follows:

- Assessment of module 1 takes place through oral exams
- Assessment of module 2 takes place through written and oral exams.

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

Late submission of the individual assignment/take-home examination 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 seminars, excursions, field-based laboratory work and project work. 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

Grades of module 1 and module 2 will be set according to a seven-point criterion-referenced scale.

A passing final grade requires passing grades on all included parts.

The final grade of the course is determined by weighing the grades from all course modules, where each grade is weighed in relation to the scope of the course modules.

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 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

This course may not be included in a degree together with the course Ecohydrology - a Mediterranean perspective (GE7049/GE7085) or with equivalent courses.

Misc

The course is offered as a separate course.

The course include teaching in the field, which may entail additional cost for the student.

The course is offered in collaboration with Navarino Environmental Observatory (NEO).

Required reading

The required reading is decided by the department board and published on the Department of Physical Geography's website at least 2 months before the start of the course.