

Syllabus

for course at advanced level

Advanced Hydrology

Avancerad hydrologi

7.5 Higher Education

Credits

7.5 ECTS credits

Course code:	GE8024
Valid from:	Autumn 2013
Date of approval:	2013-05-20
Department	Department of Physical Geography
Main field:	Physical Geography and Quaternary Geology
Specialisation:	A1F - Second cycle, has second-cycle course/s as entry requirements

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University 2013-05-20.

Prerequisites and special admittance requirements

Competence equivalent to Hydrology and Hydrogeology, 15 credits (GE5022) and also required is knowledge equivalent to Local to Global Water Vulnerability and Resilience, 15 ECTS credits (GE7025) or Information and Modelling Systems for Land and Water Methods, 15 credits (GE7006/GE8029). Also required is knowledge equivalent to Swedish upper secondary school course English B/English 6.

Course structure

Examination code	Name	Higher Education Credits
8024	Advanced Hydrology	7.5

Course content

The course deals with the theory relevant to advanced studies and research in the field of hydrology and water resources. The course is divided in three key themes of hydrology: water flow, waterborne transport (trace elements, nutrients, pollutants), and water resource variability and change. The students will focus on three articles related to these areas, and complete a related assignment involving calculations, analysis and critical thinking.

Learning outcomes

After the course, students are expected to:

- integrate theory and scientific methodology in advanced hydrology
- identify, formulate, solve and present problems related to water flow, waterborne transport (trace elements, nutrients, pollutants), and water resource variability and change

Education

Instruction consists of lectures, exercises and project work.

Participation in lectures, exercises, 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 and oral presentations of project work.

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 fail

- 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 all mandatory instruction.

- 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 and the revisions of the course literature.

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

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