

Syllabus

for course at first level

**Geographic Information Systems
Geografiska informationssystem**

**7.5 Higher Education
Credits
7.5 ECTS credits**

Course code:	GE4019
Valid from:	Autumn 2014
Date of approval:	2014-01-20
Department	Department of Physical Geography
Main field:	Earth Sciences
Specialisation:	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 the Faculty of Science at Stockholm University 2014-01-20.

Prerequisites and special admittance requirements

Competence equivalent to Physical Geography and Quaternary Geology 30 ECTS credits (GE2011), Tellus III 7.5 ECTS credits (GG4034) or Geography III 30 ECTS credits (GE5001).

Course structure

Examination code	Name	Higher Education Credits
HELA	Geographic Information Systems	7.5

Course content

The course consists of theory for applications of spatial analysis and visualisation using GIS in geoscience and geography. During the course methods for data management, processing and visualisation will be trained for scientific and practical applications using geodata in GIS.

Learning outcomes

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

- * explain basic concepts and theory in GIS
- * analyse geodata using appropriate GIS processing tools
- * describe geodata models
- * use geodatabases
- * independently formulate, implement and present projects in GIS

Education

Instruction consists of lectures, group instruction, and project work. Instruction can consist of seminars.

Participation in group instruction, project work and seminars 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 exams
- * written project reports

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, students must receive the minimum grade E and participate in 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 course literature.

Limitations

The course may not be included in examinations in combination with courses Geographic Information Systems (GE3004), GIS and Remote Sensing (GE4012), Applied Remote Sensing and GIS for Environmental Analysis (GE7062) or equivalent.

Misc

The course is part of Bachelor's Programme in Earth Science, Distance Learning, 180 hp but can also be read as a separate course. Mandatory instructions and examination can be on Campus.

Required reading

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