Syllabus
for course at first level
Geographic Information Systems
Geografiska informationssystem

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 consists 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
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.