

SGEL65, Human Geography: GIS in Urban and Regional Planning - Level 2, 7.5 credits

*GIS i urban och regional planering - fortsättningskurs, 7,5
högskolepoäng*
First Cycle / Grundnivå

Details of approval

The syllabus was approved by the board of the Department of Human Geography on 2016-06-07 to be valid from 2017-01-16, spring semester 2017.

General Information

The course is a compulsory component in the Bachelor's programme in urban and regional planning, 180 credits.

Language of instruction: Swedish

Some components may be in other Scandinavian languages and English.

Main field of studies

Human Geography

Depth of study relative to the degree requirements

G1N, First cycle, has only upper-secondary level entry requirements

Learning outcomes

Upon the completion of the course, the students shall:

Knowledge and understanding

- demonstrate good knowledge in concepts that relate to GIS (Geographic information systems) and spatial analyses,
- demonstrate good knowledge in how different GIS methods can be applied in urban and regional planning,
- demonstrate good theoretical knowledge of the different components in GIS processes,

Competence and skills

- demonstrate the ability to carry out a delimited project with GIS-applications as well as present the results in an appropriate manner,
- demonstrate the ability to independently use GIS in analyses and illustrations of different planning issues,
- demonstrate the ability to independently collect, handle, analyse and visualise geographic data,
- demonstrate the ability to implement models with relevance for planning,
- demonstrate the ability to carry out both raster and vector based analyses,
- demonstrate the ability to apply correct academic referencing at scientific texts and maps,
- demonstrate an ability to critically review and assess texts, scholarly as well as mass media, related to the contents of the course,

Judgement and approach

- demonstrate a critical approach to geographic data and analysis results,
- demonstrate the ability to evaluate the possible and appropriate applications of the GIS tool in both quantitative and qualitative methods.

Course content

The course is a continuation of SGEL64: Human geography: GIS in urban and regional planning- Level 1 (7.5 credits). The course gives deepening knowledge of the methods and tools that were introduced during SGEL64, as well as introduces some new methods. The methods are both vector and raster based. The course intends to provide advanced knowledge and studies in GIS, geospatial technology and analysis of geographic data, and to apply these within planning through a project work. During the course, current planning projects and problems in planning are presented. At the end of the course, a project work is carried out that is partly done individually and partly done in small groups where the students choose objects and specialisation within a given frame. The project work is presented in a individual written report, that includes maps that have been produced by the group.

Course design

The teaching consists of lectures, laboratory sessions and seminars. The lectures provide basic theoretical knowledge in collection, handling, analysis and visualisation of geographic data and introduce the practical laboratory sessions. The lectures also intend to present relevant literature, research as well as different planning issues. The laboratory sessions introduce applicable GIS knowledge and consist to the largest part of independent work with a GIS software. Supervision is given during the laboratory sessions at scheduled occasions.

The seminars intend to increase the understanding of the theoretical and practical components, through group discussions and oral presentations. Unless there are valid reasons to the contrary, compulsory participation is required in the seminars. Students who have been unable to participate due to circumstances such as accidents or sudden illness will be offered the opportunity to compensate for or re-take compulsory components. This also applies to students who have been absent because of duties as an elected student representative.

Assessment

The course is assessed through two written home exams, a project report and oral presentations in seminars.

The course includes opportunities for assessment at a first examination, a re-sit close to the first examination and a second re-sit for courses that have ended during that school year. Two further re-examinations on the same course content are offered within a year of the end of the course. After this, further re-examination opportunities are offered but in accordance with the current course syllabus. The hours for supervision are restricted to the semester for which the student was initially registered. Exceptions can be made if there are valid reasons.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, E, D, C, B, A.

Grade for failed results is denoted with failed. The student's performance is assessed with reference to the learning outcomes of the course. For the grade of E the student must show acceptable results. For the grade of D the student must show satisfactory results. For the grade of C the student must show good results. For the grade of B the student must show very good results. For the grade A the student must show excellent results. For the grade of Fail the student must have shown unacceptable results.

The oral presentations in seminars are exempted from the grading scale above. Pass or Fail are used as grades in these course components. For the grade Pass, the student must show acceptable results. For the grade of Fail the student must have shown unacceptable results.

The weighted final grade consists of the two written home assignments (be weighted to 30 respective 40 the %) and the written project report (be weighted to 30 the %). The conversion of the grades on the course components to a grade on the whole course is based on a mathematical formula in which the letter grades are translated into the following figures: A=5.0; B=4.0; C=3.5; D=3.0 and E=2.5, on which an average for the assessed components is calculated. Figures are rounded down, with the exception of the grade of A for which the figure of 4.5 and over is rounded up to A (see the board decision of 24 September 2012).

At the start of the course, students are informed of about the learning outcomes stated in the syllabus and about the grading scale and it is applicatied in the course.

Entry requirements

General and courses corresponding to the following Swedish Upper Secondary School Programs: Social Studies 1b/1a1 + 1a2

Further information

The course may not be included in degree together with SGEL11: Human Geography: GIS in regional planning (7.5 credits), SGEL25: Human Geography: GIS in regional planning (7.5 credits) or SGEL45: Human Geography: GIS in regional planning (7.5 credits).

Subcourses in SGEL65, Human Geography: GIS in Urban and Regional Planning - Level 2

Applies from V17

1601 GIS in Urban and Regional Planning - Level 2, 7,5 hp
Grading scale: Fail, E, D, C, B, A