

SGEL64, Human Geography: GIS in Urban and Regional Planning - Level 1, 7.5 credits

Samhällsgeografi: GIS i urban och regional planering: en introduktion, 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 during the first year of the Bachelor of Science Programme in Urban and Regional Planning, 180 credits.

Language of instruction: Swedish

Components in other Scandinavian languages and English may be included.

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

After completing the course, the student should:

Knowledge and understanding

- demonstrate basic understanding of concepts that relate to spatial analyses and GIS (Geographic information systems)
- show basic understanding of GIS as a means to analyse and illustrate different planning issues,

Competence and skills

- demonstrate the ability to collect, manage, analyse and visualise geographic data using GIS software,
- demonstrate the ability to independently carry out vector-based GIS analyses,
- demonstrate the ability to describe the different parts of GIS processes in writing, using relevant concepts,
- demonstrate the ability to review texts critically, both scientific and practice oriented, that relate to the contents of the course,
- demonstrate the ability to independently use GIS in analyses and illustrations of different planning issues,

Judgement and approach

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

Course content

The course intends to give basic knowledge in GIS and to give an understanding of how this knowledge can be applied in urban and regional planning. The course starts with basic GIS theory and practical GIS components. Mainly, cartography, visualisation, data collection, digitalization, database management and vector-based analyses are taught. The course continues with overviews of current planning projects and problems in urban and regional planning. Practical examples are mainly retrieved from Skåne and the Öresund region with its cities.

Course design

The teaching consists of lectures, laboratory sessions and seminars. The lectures provide basic theoretical knowledge in collection, management, analysis and visualisation of geographic data and introduce the practical laboratory sessions. The lectures also intend to present relevant literature, research and different planning issues. The laboratory sessions introduce applied GIS knowledge and mainly of independent work using 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. Attendance at seminars is compulsory unless there are special grounds. An alternative form or date for compulsory components is offered to students who are not able to complete a compulsory component owing to circumstances beyond their control, e.g. accident, sudden illness or similar. 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 assignments, an invigilated exam, a written group assignment as well as oral presentations in seminars. In connection with the course, three examination sessions are offered; one regular examination and two re-examination. Two further re-examinations on the same course content are offered within a year of major revisions to or the cancellation of the course. After this, further

re-examination opportunities are offered but in accordance with the current syllabus and literature. 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 first written home assignment and the written group assignment are excepted 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 second written home assignment (weighted to 40%) and the invigilated exam (weighted to 60%). The joining of the grades of the two components to a final course grade 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 figures of 4.5 and over is rounded up to A (see the board decision of 24 September 2012).

At the start of the course, the student is informed about the intended learning outcomes of the course syllabus as well as about the grading scale and its application.

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 a degree together with SGEL05: GIS in Urban and Regional Planning: Project Work (7.5 credits), SGEL24 Human Geography: GIS in Urban and Regional Planning: Project Work (7.5 credits) or SGEL44 Human geography: GIS in Urban and Regional Planning: Project Work (7.5 credits).

Subcourses in SGEL64, Human Geography: GIS in Urban and Regional Planning - Level 1

Applies from V17

1601 GIS in Urban and Regional Planning - Level 1, 7,5 hp
Grading scale: Fail, E, D, C, B, A