



Faculty of Social and Life Sciences
Geo-Science

Syllabus

Course Approval

The syllabus was approved by the Faculty Board of Social and Life Sciences on 21 March 2007, and is valid from the Spring semester of at Karlstad University. It replaces the former syllabus GGI309.

Course Code: NGGC68

**Geographic Information Systems analysis, 7.5 ECTS Credits
(GIS analys, 7.5 Swedish credit points)**

Degree Level: Bachelor

Progressive Specialisation: G2F (First cycle, has at least 60 credits in first-cycle course/s as entry requirements)

Language of Instruction

The language of instruction is mainly Swedish.

Prerequisites

General admission requirements and the following courses: NGGA23 and NGGB45 or the equivalent.

Major Field of Study

NGA (Physical Geography)

Learning Outcomes

Upon completion of the course, the students should be able to:

- describe the social and scientific relevance of GIS analysis,
- explain why GIS analysis makes it possible to improve the efficiency of activities and operations in society and acquire a better understanding of spatial relationships in nature and society,
- present a written report on various methods and results of GIS analysis,
- analyse and model spatial relations and courses of events such as accessibility via road networks or the importance of topography for various natural processes.

Content and Form of Instruction

Instruction is in the form of lectures and lab work. The course requires previous knowledge and skills in using GIS software, primarily ArcGIS. The course includes analysis and design using GIS software and students are shown various applications of the methods. Much of the lab work consists of data preparation before various analyses are carried out. Forms of analysis covered on the course include: network analysis, spatial analysis, and 3D visualisation.

Reading List

See separate document.

Examination

Examination is in the form of written assignments to be submitted at the end of the course.

Grades

One of the grades Pass with Special Distinction (5), Pass with Distinction (4), Pass (3), or Fail (U) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.

Revised on 29 March 2010 and valid from the spring term 2010.

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