



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 12 November 2008, and is valid from the Spring semester of 2009 at Karlstad University. It replaces the former syllabus GGI102.

**Course Code:** NGGA22

**Cartography I, 7.5 ECTS Credits**

**(Kartografi I, 7.5 Swedish credit points)**

**Degree Level:** Bachelor

**Progressive Specialisation:** GIF (First cycle, has less than 60 credits in first-cycle course/s as entry requirements)

### Language of Instruction

Swedish

### Prerequisites

General admission requirements plus upper secondary school level Mathematics or the course MAGA09 Introductory Mathematics.

### Major Field of Study

MÅT (Surveying and Mapping), NGA (Physical Geography)

## Learning Outcomes

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

- basic knowledge of cartography and the methods, concepts, and problems pertaining to this field, as well as familiarity with various kinds of maps,
- give an account of the steps in the planning of analogue and digital map production,
- give an account of the laws pertaining to map production,
- basic knowledge of cartography which qualifies students for further studies in Geographic Information Systems (GIS) and photogrammetry,
- the practical ability to use cartographic software,
- knowledge of how various objects and conditions on earth (such as soil types, vegetation, settlements, etc) can be represented in maps.

## Content and Form of Instruction

The course covers the historical background of cartography. The course also gives a general introduction to Geographic Information Technology (GIT) and basic cartographic concepts such as projection and coordination systems, scales, generalisation, symbolics, and chromatology. In a series of practical exercises, students learn about different types of maps, with an emphasis on Swedish maps. Students are also introduced to digital cartography through practical lab work.

The students learn how to assess, plan, and create appropriate map designs, investigate the connection between shapes and colours, and discuss the efficiency of maps as a medium of communication.

## Reading List

See separate document.

## Examination

Examination is in the form of a written exam and a number of hand-in assignments related to practical exercises.

## 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 course NGGA22 cannot be included in the same degree programme as the courses GGI100 and NGGA21.

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.

The course is mandatory for the GIS-engineering programme.

The course is an optional course open to surveying and mapping students admitted in the autumn of 2008 and a mandatory for students admitted from the autumn of 2009 and onwards.

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

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