Reg No: NGGA32/20231



Faculty of Health, Science and Technology Geo-Science

# **Syllabus**

# Cartographic design

Course Code: NGGA32

Course Title: Cartographic design

Kartografisk design

Credits: 15

**Degree Level:** Undergraduate level

**Progressive** First cycle, has less than 60 credits in first-cycle

**Specialisation:** course/s as entry requirements (G1F)

### Major Field of Study:

MAT (Surveying and Mapping)

#### **Course Approval**

The syllabus was approved by the Faculty of Health, Science and Technology 2022-08-29, and is valid from the Spring semester 2023 at Karlstad University.

## **Prerequisites**

3 ECTS credits completed in Introduction to Geographic Information Technology Engineering and Surveying and Mapping (7.5 ECTS credits), or equivalent

# **Learning Outcomes**

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

- give an account of the basic principles of cartographic design,
- give an account of the steps included in the planning of analogue and digital map production, respectively,
- give an account of the laws pertaining to map production,
- plan and carry out a project in cartographic design,
- assess the quality of maps,
- use data from national and international databases for map preparation, and
- give an account of different printing methods used to produce maps.

#### Content

The course content combines theory and practice in the form of lectures, literature study, and practical exercises.

The various steps of map production constitute the main focus of the course, and range from the decision to produce a map, analogue or digital, to the final product. The course covers basic cartographic concepts such as scale, generalisation, symbols, typography, and chromatology, as well as thematic map production. Students are introduced to digital cartography through computer-based lab work. The course treats the steps of assessing, planning, and creating suitable map designs, and examines the interaction of colour and form. The effectiveness of maps as a mode of communication is discussed, and how various conditions and objects on the surface of the

earth (soil types, vegetation, buildings, and so on) can be represented. The course outlines the technology behind maps on the internet (web-based maps).

#### **Reading List**

See separate document.

#### **Examination**

Assessment is based on an individual written take-home exam, individual hand-in assignments, and an individual seminar presentation.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

#### **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 evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

# **Course Certificate**

A course certificate will be provided upon request.

# **Additional information**

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