



Faculty of Health, Science and Technology  
Geo-Science

# Syllabus

## Introduction to GIS, as a Tool in Social Planning

<b>Course Code:</b>	NGGA18
<b>Course Title:</b>	Introduction to GIS, as a Tool in Social Planning <i>Introduktion till GIS som verktyg för samhällsplanering</i>
<b>Credits:</b>	7.5
<b>Degree Level:</b>	Undergraduate level
<b>Progressive Specialisation:</b>	First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

**Major Field of Study:**

### Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2019-02-18, and is valid from the Spring semester 2020 at Karlstad University.

### Prerequisites

60 ECTS credits of Social Planning Programme courses, including Social Planning I, 7.5 ECTS credits, and Social Planning II, 15 ECTS credits, or equivalent

### Learning Outcomes

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

- give an account of the basic geographic information technology in terms of methods and applications,
- give an account of geographic infrastructure,
- use a geographic information system in practice,
- describe the basics of cartography,
- outline the geographic information and data produced in Sweden by responsible authorities of relevance to a social planning officer.

**Content**

The course introduces the area of Geographic Information Technology (GIT) and the use of Geographic Informations Systems (GIS). The representation of reality in digital form in a GIS and how the data are collected and made available are treated, as well as basic concepts and definitions.

Students are introduced to a common GIS software. The introduction exercises are alternated with software exercises, which gives students the opportunity to reinforce and apply their knowledge.

Instruction is in the form of lectures, seminars, computer sessions, and group work. Theory and practice alternate throughout the course in the form of literature study and practical exercises.

An important part of the course is understanding the role of geographic information in society and the available infrastructure of geographic information in the form of:

- institutional frameworks (for instance legislation)
- standards, specifications, and guidelines for using geographic data
- regulations on basic geographic data needed in society
- technological infrastructure
- research, development, and education.

**Reading List**

See separate document.

**Examination**

Assessment is based on an individual written exam, individual and group computer exercises, and individual and group hand-in assignments.

**Grades**

One of the grades Distinction (VG), Pass (G), 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 course NGGA18 cannot be included in the same degree programme as the courses NGGA23 or NGGAD1.

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