

## DEPARTMENT OF EARTH SCIENCES

# NGN200 Geographical Information Systems III(GIS), 7.5 higher education credits

Geografiska informationssystem III (GIS), 7,5 högskolepoäng Second Cycle

#### Confirmation

This course syllabus was confirmed by Department of Earth Sciences on 2010-10-04 and was last revised on 2017-05-09 to be valid from 2017-05-09, autumn semester of 2017.

Field of education: Science 100%

Department: Department of Earth Sciences

Other participating department
Department of Economy and Society

## Position in the educational system

The course includes 7.5 higher education credits (hec) at second cycle level and is included in a Master's Degree in Geography (120 hec). The Course can also be read as a single subject course.

The course can be part of the following programmes: 1) Master's Programme in Geography (N2GEO), 2) Bachelor's Programme in Earth Sciences (N1GVS) and 3) Master's Programme in Earth Sciences (N2GVS)

## **Entry requirements**

Course's entry requirements are completed courses geographic information systems I (NGN180) and GIS II (NGN190) or Geographic information systems (GVS150). Students with equivalent education can after assessment be given admission to the course.

## **Learning outcomes**

Having passed the course the student is expected to be able to:

## Knowledge and understanding

• Identify principles of the analysis of geographic data and presentation with GIS

#### Skills and abilities

- Independently search, choose and evaluate geographic data in GIS/remote sensing.
- Create databases for geographic analysis
- Produce digital maps especially with a focus on three-dimensional visualisation
- Used various types of geographic information systems and analytical methods
- Communicate result in speech and writing

## Judgement and approach

• evaluate critically the quality of geographic data and results critically generated by means of GIS

## **Course content**

The aim of the course is to give advanced knowledge of geographic information systems (GIS), to give advanced exercise in practical handling of geographic information systems and to provide advanced knowledge of principles of introduction of and applications with GIS. The course is given full-time. A main part of the course is devoted to practical, mainly geoscientific exercises with GIS programs focusing on the urban environment.

## Form of teaching

Teaching includes lectures, teaching in groups, practical exercises and study visits.

Language of instruction: English

## **Assessment**

Moment 1 Written assignments 3.5 credits Fail/Pass/Pass with distinction 1) Moment 2 Project Work 4 credits Fail/Pass/Pass with distinction 1)

1) Decides the final grade which is issued by the course only when all components been accepted. For course grade is required that all, including compulsory components are passed.

#### **Grades**

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

## **Course evaluation**

The course in its entirety and each component should be evaluated and the results should become object for discussion between the students and the teachers in the course. At planning of the following course date it should be document how the results of the evaluation have been taken advantage of. A compilation of the result of the course evaluation is available via the study administration at the department.

#### **Additional information**

Students on N2GEO have precedence to the course.