



## DEPARTMENT OF EARTH SCIENCES

### **NGN230 Urban GIS, 7.5 credits**

Urban GIS, 7,5 högskolepoäng

*Second Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Department of Earth Sciences on 2021-05-19 and was last revised on 2021-09-28 to be valid from 2022-01-17, spring semester of 2022.

*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 credits at Master's level and can be included in a Master's Degree in Geography (120 credits). The course is offered as an elective course subject to availability.

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)

*Main field of studies*

Geography

*Specialization*

A1N, Second cycle, has only first-cycle course/s as entry requirements

#### **Entry requirements**

Admission to the course requires a completed course in Geographic Information Systems (GIS) at undergraduate level, comprising at least 15 credits, or equivalent. Applicants with equivalent education can, after review and approval, be admitted to the course.

## Learning outcomes

On successful completion of the course the student will be able to:

### *Knowledge and understanding*

- identify principles of the analysis of geographical data and presentation with GIS.

### *Competence and skills*

- 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 visualization.
- use various types of geographic information systems and analytical methods.
- communicate results orally and in writing.

### *Judgement and approach*

- critically evaluate the quality of geographic data and results generated using GIS.

## Course content

The aim of the course is to provide in-depth knowledge of geographic information systems (GIS), to provide in-depth practice and exercise in the practical management of geographic information systems, and to provide in-depth knowledge of principles for implementation of and applications with GIS with a focus on urban areas and issues.

A majority of the course is devoted to practical exercises with GIS programs.

## Form of teaching

The teaching consists of lectures, teaching, practical exercises and study visits.

*Language of instruction:* English

## Assessment

Moment 1: Written assignment, 3.5 credits: Fail/Pass/Pass with Distinction

Moment 2: Project Work, 4 credits: Fail/Pass/Pass with Distinction

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6

Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years, after the course has ceased/been changed. The same applies to placements and professional placements (VFU), although this is restricted to just one additional examination session.

### **Grades**

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

For the grade Pass (G) in the course as a whole, it is required that all, including compulsory parts, are passed. For the grade Pass with Distinction (VG), the grade Pass with Distinction is required on all components.

Moment 1 determine the final grade of the course, which is issued only when all components in the course have been passed.

### **Course evaluation**

The students are given the opportunity to make a written, anonymous evaluation of the course.

The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.

### **Additional information**

Students admitted to N2GEO Master's Programme in Geograpy have precedence for admittance to the course.