



**LUND**  
UNIVERSITY

Faculty of Science

## **GISN27, GIS: Research Methodology, 5 credits**

*GIS: Forskningsmetodik, 5 högskolepoäng*

Second Cycle / Avancerad nivå

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### **Details of approval**

The syllabus was approved by Study programmes board, Faculty of Science on 2013-03-21 to be valid from 2013-03-22, autumn semester 2013.

### **General Information**

The course is an elective course for second-cycle studies for a Degree of Master of Science (120 credits) in geographic information science.

*Language of instruction:* English

*Main field of studies*

Geographical Information Science

*Depth of study relative to the degree requirements*

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

### **Learning outcomes**

The aim of the course is that students should on completion of the course be able to:

Knowledge and understanding

- Account for basic philosophy of science
- Explain and develop relevant research methodology to solve a scientific problem
- Evaluate different tools for literature search

*Skills and ability*

- Use tools for literature search
- Plan a scientific work based on applicable theories
- Use adequate presentation tools for conveyance of scientific information

*Judgement and approach*

- Compile, evaluate and discuss choice of materials and analytical methods to solve a given problem
- Review, evaluate and discuss the reliability of source materials and analyses critically

## Course content

The course consists of four subparts:

- Library science. In this part, different tools and methods for literature search are studied.
- Philosophy of Science. This part treats basic philosophy of science. Different concepts such as realism, idealism, empiricism and positivism are treated.
- Research methodology. The part treats both quantitative and qualitative methods. Interview technique and participating observation techniques are presented and discussed.
- Argumentation theory. Skills to identify and analyse sustainable and unsustainable arguments in e.g. text material are developed within this part. Focus is on various types of arguments, e.g. deductive and inductive.

## Course design

The course is a distance course and is distributed on the Internet. It is flexible designed which facilitate for the student to carry out the course on full-, half-, or part-time.

## Assessment

Examination takes place through passed written assignments during the course.

*Subcourses that are part of this course can be found in an appendix at the end of this document.*

## Grades

Marking scale: Fail, Pass, Pass with distinction.

To pass the entire course is required passed on all included compulsory parts and passed project reports.

## Entry requirements

For admission to the course, general entry requirements are required, English B and at least 180 credits completed courses. The course is however recommended primarily for students who stand in concept to start degree project for second-cycle studies.

## Further information

The course may not be included in a higher education qualification together with GIS404 Research methodology 7.5 credits and/or GISN15 Research methodology, 7.5 credits.

## Subcourses in GISN27, GIS: Research Methodology

Applies from V13

1301 Research Methodology, 5,0 hp  
Grading scale: Fail, Pass, Pass with distinction