Faculty of Science

NGEM21, Physical Geography and Ecosystem Science: Master's Degree Project, 30 credits

Naturgeografi och ekosystemvetenskap: Examensarbete för masterexamen, 30 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Education Board of Faculty of Science on 2025-06-10. The syllabus comes into effect 2025-06-10 and is valid from the spring semester 2026.

General information

The course is a compulsory course at second cycle level for a Degree of Master of Science (120 credits) in physical geography and ecosystem science. The course is also given as a freestanding course.

Language of instruction: English
The course is given in English as it is part of an Engligh-language Master programme.

Main field of study	*Specialisation*
Physical Geography and Ecosystem Science	A2E, Second cycle, contains degree project for Master of Arts/Master of Science (120 credits)

Learning outcomes

The overall aim of the course is to enable students to plan, execute and report on a scientific project within a chosen area related to physical geography and ecosystem science, with a high degree of independence.

Knowledge and understanding

On completion of the course the student shall be able to:

- demonstrate subject knowledge and provide a detailed account of the current state of knowledge within the chosen field of physical geography and ecosystem science

- provide an in-depth explaination of methods as well as their possibilities and limitations within the chosen field of physical geography and ecosystem science

Competence and skills

On completion of the course the student shall be able to:

- formulate specific research questions relevant to the development of the subject area, based on the current state of knowledge
- independently search for, acquire, compile, assimilate and evaluate the knowledge required to scientifically address a scientific problem using scientific literature or other sources
- develop a project plan that includes problem analysis and a timeline
- discuss scientific methods applicable to the subject area and justify the choice of methods for the current degree project
- apply the methods necessary to carry out the degree project
- independently conduct a research project within planned timeframes, based on a project plan
- collect data, including documentation of the work.
- analyse and compile the results obtained and discuss them from a broader perspective
- organise and write a project report in a scientific format
- orally present and discuss a scientific project, including its research question, methods, and results
- identify the need for further knowledge within the subject area

Judgement and approach

On completion of the course the student shall be able to:

- evaluate and synthesise scientific information, and critically interpret scientific data.
- assess the results of their degree project in relation to the research front in the relevant field linked to physical geography and ecosystem science
- identify their own knowledge needs and take responsibility for their ongoing learning within the subject area
- reflect on relevant societal and ethical aspects related to the project's research question, implementation, and obtained results.

Course content

The thesis is an individual assignment, that is carried out in project form. The student chooses a subject study field in consultation with a supervisor. The subject study field is preferably included in one of the research projects that are carried out at the department.

The thesis can also be carried out as a collaborative project with external departments, universities, organisations, national authorities or companies.

The student should carry out a limited and well-defined task. Within the frame of the work, problems that are linked to the selected field and aims of the study are processed.

Course design

The work is carried out individually but certain parts, such as laboratory work and/or field investigations, may be conducted in groups. If parts of the work are carried out together with another student, each individual's area of responsibility must be clearly defined and a separate report must be submitted by each student. To allow for individual assessment, each student's contribution must be clearly identifiable in the submitted material.

The course includes a number of compulsory components in the form of lectures and seminars that address various aspects of communication, including both written and oral presentation, discussion, and feedback.

Assessment

The work is presented in the form of a scientific report written in Swedish or English. The report must be supplemented with a popular summary aimed at a broader audience. The thesis is presented and defended at a seminar, with opposition carried out by a fellow student or a teacher.

The thesis includes:

- written report in Swedish or English,

- an oral presentation and defence of the thesis at a seminar.

The report should be available in a version that admits review at least a week before the seminar. The department archives the degree project after approval and publishes it in electronic format in the Lund University portal LUP Student Paper.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Grades

Grading scale includes the grades: Fail, Pass, Pass with distinction
The grade is awarded by an examiner who also attends the oral presentation. The supervisor assists the examiner with information but is not part of the formal assessment. To pass the course, both the report and the presentation must be approved. The final grade is determined by combining the results of these components. For a grade of 'Pass with Distinction', the work must not exceed the time plan by more than 20%.

Entry requirements

Admission to the course requires a Bachelor's degree in Physical Geography and Ecosystem Science or equivalent and 45 credits of second-cycle (Master's level) studies in Physical Geography and Ecosystem Science.

Further information

The course replaces NGEM01, Physical Geography and Ecosystem Analysis: Master's Degree Project, 30 credits, and credits from that course cannot count towards a degree together with this course.

See also the rules and recommendations for degree projects at the faculty of Science.

The course is offered at the Department of Earth and Environmental Sciences, Lund University