Linnæus University

Dnr: LNU-2025/2776

Course syllabus

Faculty of Health and Life Sciences

Department of Biology and Environmental Science

4MX320 Introduktion till forskning inom miljövetenskap, 15 högskolepoäng

Introduction to research in Environmental Science, 15 credits

Main field of study

Environmental Science

Subject

Environmental Science

Level

Second cycle

Progression

A1N

Date of Ratification

Approved 2025-10-06.

The course syllabus is valid from autumn semester 2026.

Prerequisites

- 90 credits in biology, geology, chemistry, engineering or environmental science, including an independent project/degree project of 15 credits
- 15 credits in chemistry
- English 6/nivå 2, or equivalent

Objectives

After completing Module 1, the student should be able to:

- describe the foundations in the field of environmental science,
- account for the history and future perspectives within environmental science,
- discuss environmental issues, of both natural and anthropogenic origin,
- assess how methods for sampling, data processing and evaluation are applied in

- environmental science research, and
- orally communicate the foundations of environmental science.

After completing Module 2, the student should be able to:

- describe the latest research findings within a specific subject area of environmental science,
- discuss a current environmental topic in detail,
- assess how methods for sampling, data processing and evaluation are applied in environmental science research within a specific subfield,
- find and critically analyze scientific literature focused on a specific environmental problem, and
- communicate the latest research findings within a chosen topic in environmental science both orally and in writing.

Content

The first module (7.5 credits) covers literature within the field of environmental science. The module includes:

- Introduction to environmental science
- Review of relevant and up-to-date literature in environmental science
- Literature search
- Seminars
- · Oral presentation

The second module (7.5 credits) covers literature within a specific focus area in environmental science, chosen by the student in consultation with the course coordinator. The module includes:

- Review of relevant and up-to-date literature in environmental science
- Literature search of a specific focus area in environmental science research
- Seminars
- Writing of a scientific report
- · Oral presentation

Type of Instruction

The teaching consists of literature seminars and lectures. There are two mandatory literature seminars.

Examination

The course is assessed with the grades A, B, C, D, E or F.

Grade A represents the highest level of achievement, with the remaining grades descending in order. Grade E is the lowest passing grade, while grade F indicates that the student's performance is considered insufficient.

Module 1 is assessed through an individual oral presentation, 7.5 credits (U-G). Module 2 is assessed through an individual written report, which is alo presented orally 7.5 credits (A-F).

The final course grade is based on the assessment of the written report. All examination components must be passed for a final grade to be reported.

Resit examination is offered in accordance with Linnaeus University's Local regulations for courses and examination at the first- and second-cycle levels. In the event that a student with a disability is entitled to special study support, the examiner will decide on adapted or alternative examination arrangements.

Course Evaluation

A course evaluation should be conducted during the course or in connection with its conclusion. The results and analysis of the completed course evaluation should be promptly communicated to students who have completed the course. Students participating in the next course instance should be informed of the results of the previous course evaluation and any improvements that have been made, no later than at the start of the course.

Required Reading and Additional Study Material

Required reading Module 1

Harrison Roy M. (red)(latest edition). *Understanding Our Environment: An Introduction to Environmental Chemistry and Pollution*. Cambridge: Royal Society of Chemistry, ca 450 pages.

Van Loon Gary W. & Duffy Stephen J. (latest edition). *Environmental Chemistry - A global perspective*. Oxford: Oxford University Press, ca 580 pages.

Required reading Module 2

A limited number of scientific articles within the chosen subject, selected in consultation between the course coordinator and the students after the subject has been chosen.