

Syllabus

for course at advanced level

Air Quality - From Emissions to Impacts
Luftkvalitet - från utsläpp till effekter

**7.5 Higher Education
Credits**
7.5 ECTS credits

Course code:	MI7026
Valid from:	Autumn 2023
Date of approval:	2022-10-19
Department	Department of Environmental Science
Main field:	Environmental Science
Specialisation:	A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

This syllabus has been approved by the Area Board of Natural Sciences at Stockholm University on October 19, 2022.

Prerequisites and special admittance requirements

To be eligible you must have knowledge corresponding to a bachelor's degree including at least 90 ECTS in biology, physics, geosciences, chemistry or mathematics. Also required is knowledge equivalent to Swedish upper secondary school course English 6.

Course structure

Examination code	Name	Higher Education Credits
HELA	Air Quality	7.5

Course content

This course addresses air quality and outdoor and indoor air pollution. Specifically, it includes:

- The main sources of outdoor air pollution, in workplaces, residences, and public spaces.
- How transformation, dispersion, and deposition of air pollutants, as well as ventilation, affect air quality.
- Health and environmental effects of air pollution.
- Society's costs and policy instruments for addressing air quality and reducing the environmental and health impacts of air pollution.

Learning outcomes

After completing the course, the student is expected to be able to:

- Explain the occurrence of outdoor, indoor, and workplace air pollution and describe how basic factors influence air quality.
- Describe and analyze the information needed to identify the causes of an air quality problem.
- Provide examples of how air quality in a specific situation could be improved.
- Discuss the application of societal regulations and the significance of air quality for human health.

- Describe how the societal costs for human health caused by air pollution can be quantified.

Education

Teaching consists of lectures, seminars and exercises.
The course is offered in English.

Forms of examination

a. The course is examined as follows: Assessment takes place through written and oral presentations, as well as a written exam.

The examiner can decide on adapted or alternative examination formats for students with disabilities.

b. A passing final grade requires participation in exercises, seminars, and study visits. If special reasons exist, following consultation with the teacher involved, the examiner may grant the student exemption from the obligation to participate in certain compulsory instruction.

c. Grading: The course's final grade is set according to a seven-point criterion-referenced scale:

A = Excellent

B = Very good

C = Good

D = Satisfactory

E = Adequate

Fx = Failed, some additional work is required

F = Failed, much additional work is required

d. The course's grading criteria are handed out at the start of the course.

e. Students who receive a failing grade on a regular examination are allowed to retake the examination as long as the course is still provided. The number of examination opportunities is not limited. Other mandatory course elements are equated with examinations. A student who has received a passing grade on an examination may not retake the examination to attain a higher grade. A student who has failed the same examination twice is entitled to have another examiner appointed, unless there are special reasons to the contrary. Such requests should be made to the department board. The course includes at least three examination opportunities (if necessary: for each course module) per academic year the course is offered. For the academic years that the course is not offered, at least one examination opportunity is offered.

f. Students awarded the grade Fx are given the opportunity to improve their grade to E. The examiner decides on the supplementary assignments to be performed and the pass mark criteria. The supplementary assignments will take place before the next examination opportunity.

Interim

Students may request that the examination be conducted in accordance with this course plan even after it has ceased to be valid. However, this may not take place more than three times over a two-year period after the course was discontinued. Requests must be made to the departmental board. The provision also applies in the case of revisions of the course syllabus and revisions of the required reading.

Misc

The course can be included in the Master's programs in Environmental Science but can also be taken as a standalone course.

Required reading

The course literature is decided by the board of the institution and is published on the course page in the digital educational catalog no later than 2 months before the start of the course.