

Syllabus

for course at advanced level

Research Trends in Toxicology
Forskningstrender i toxikologi

**7.5 Higher Education
Credits**
7.5 ECTS credits

Course code:	MI8016
Valid from:	Spring 2020
Date of approval:	2018-10-01
Department	Department of Environmental Science
Main field:	Environmental Science
Specialisation:	A1F - Second cycle, has second-cycle course/s as entry requirements

Decision

Prerequisites and special admittance requirements

Knowledge equivalent to Toxicology for Environmental Scientists, 7.5 ECTS credits (MI7015). Swedish Upper Secondary School course English 6 or equivalent.

Course structure

Examination code	Name	Higher Education Credits
HELA	Report	7.5

Course content

This course builds on the principles of toxicology through exploration and discussion of relevant topics, case-studies and challenges in modern applied toxicology. Topics may include Toxicity Testing in the 21st Century, Toxicogenomics, Ecotoxicology, Genetic Toxicology and Carcinogenicity, Endocrine Disruption, Reproductive or Developmental Toxicology, Chemical Mixture Toxicology, or Emerging Challenges such as nanotoxicology and microplastics. Both human and environmental toxicology applications will be considered.

Learning outcomes

The primary aim of the course is to understand how the principles of toxicology are being applied to cutting-edge research questions in human and environmental toxicology today. After taking the course, students should be able to:

- Describe how new tools in toxicological research are leading to discovery of new effects, new modes-of-action and adverse outcome pathways in human and environmental toxicology.
- Explain the distinct field of ecotoxicology and the concepts and challenges inherent to understanding effects at the population and ecosystem level.
- Read and critically discuss modern literature in toxicology with your peers.

Education

The education consists of lectures, group exercises and moderated discussions, a written literature assignment and associated oral presentation of a recent research paper of interest to the student. Participation in the literature task and presentation is compulsory. After consultation with the relevant teacher, an examiner may rule that a student is not obliged to participate in certain compulsory education, if there are special grounds for this.

Forms of examination

a. The course is assessed through written and oral presentation of a project work.

b. Grades for the written examination:

A - Excellent
B - Very good
C - Good
D - Satisfactory
E - Sufficient
FX - Fail
F – Fail

c. The grade criteria are provided at the start of the course.

d. To pass the course requires at least grade E and participation in all compulsory parts of the course

e. Students who have failed in the regular examination are entitled to take the exam at least four times as long as the course is offered. This includes all compulsory parts. Students who have passed an examination may not be retake exams for higher grades. Students who fail an examination twice have the right to request a different teacher appointed to determine the grade. Such requests should be made to the Board of the Department.

Interim

Students may request that the examination is performed under this syllabus even after it has ceased to be valid up to three times during the two years after the course was terminated. Such requests should be made to the Board of the Department.

Misc

The course could be a part of the Master programme in Environmental and Health protection, but may also be taken as an independent course.

Required reading

Will be decided by the Board of the Department and described in an appendix to the syllabus.