



Course syllabus for

## **Degree project in toxicology, 30 credits**

Examensarbete i toxikologi, 30 hp

This course syllabus is valid from autumn 2024.

Please note that the course syllabus is available in the following versions:

[Autumn2009](#) , [Spring2013](#) , [Autumn2013](#) , [Autumn2015](#) , [Autumn2016](#) , [Autumn2018](#) , [Autumn2020](#) , [Autumn2023](#) , [Autumn2024](#)

Course code	4TX007
Course name	Degree project in toxicology
Credits	30 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Toxicology
Level	AV - Second cycle
Grading scale	Fail (U), pass (G) or pass with distinction (VG)
Department	Institute of Environmental Medicine
Decided by	Programnämnden för biomedicinprogrammen
Decision date	2009-05-06
Revised by	Education committee IMM
Last revision	2024-03-13
Course syllabus valid from	Autumn 2024

### **Specific entry requirements**

Lowest the grade Pass at all courses on semester 1 and 2, as well as the courses Global toxicology in a sustainable society, and either Molecular and cellular toxicology or Risk assessment and in silico toxicology, within the Master's Programme in Toxicology.

### **Objectives**

The course enables students to, under supervision and via independent work, plan and carry out a research or risk assessment-related project within the toxicological field.

Upon completion of the course, the student should be able to:

Regarding knowledge and understanding

- demonstrate deep knowledge and understanding in the area of study and related toxicological field
- demonstrate specialized methodological knowledge and understanding in the area of study,

Regarding skills and ability

- demonstrate the ability to independently, critically and creatively integrate knowledge and analyse and deal with complex issues related to the area of study,
- acquire and critically review relevant scientific literature in support of broadening and deepening his or her knowledge of the chosen project and related toxicological field,
- collect data and/or other relevant information for compilation and analysis,
- in a reliable way and with good order handle scientific material,
- apply adequate methods to solve a stated scientific issue,
- critically evaluate and discuss the applied methodology,
- carry out the project according to Karolinska Institutet's guidelines for ethically correct research,
- clearly present and critically discuss his or her work in written and oral forms, for the scientific community,
- clearly present his or her work in oral and written form for laymen,
- critically and objectively assess others' scientific work and give relevant feedback,

Regarding judgement and approach

- show a professional approach regarding planning of tasks within the chosen project, time planning and collegial cooperation,
- evaluate the relevance of his or her own project in a broader scientific and societal perspective,
- reflect upon the ethical aspects of the project,
- identify needs for further knowledge, research and development within the area of study.

## Content

Individual work with a research or risk assessment-related project. An individual project plan is written by the supervisor together with the student. The project work can be carried out at a university, public authority or company.

## Teaching methods

Individual work under supervision, but with a certain degree of independence, participation in seminars, meetings and other similar activities taking place where the work is carried out. Systematic search for scientific literature according to the recommendation of the supervisor and the student's own assessment. Seminars, written assignments and a study visit with other students in the course.

## Examination

The examination consists of a written report, oral presentation and discussion of the report and oral assessment and feedback of other students' reports. The examiner sets the grade after consultation with the supervisor and the teacher opponent, based on the student's written report, oral presentation and discussion of the report, assessment and feedback of other students' reports as well as work performance.

If there are special grounds, or a need for adaptation for a student with a disability, the examiner may decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section/s of the course etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities may not be changed, removed or reduced.

Compulsory participation

A study visit, seminars, assignment in scientific writing and presentations of degree projects are compulsory. The examiner assesses if, and in that case how, absence can be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the

examiner's instructions, the student's results for respective part will not be registered. Absence from a compulsory activity may result in that the student cannot compensate the absence until the next time the course is given.

#### Project placement

The examiner may immediately suspend a student's project placement or equivalent if the student demonstrates serious deficiencies in knowledge, skills or attitudes in a way that trust with the partner may be damaged or broken.

## **Other directives**

The course language is English.

## **Literature and other teaching aids**

Scientific literature of relevance for the project.