Course syllabus for

Target organ toxicology, 15 credits
System och vävnadstoxikologi, 15 hp

This course syllabus is valid from autumn 2008.
Please note that the course syllabus is available in the following versions: Autumn2008, Autumn2010, Autumn2012, Autumn2014

Course code: 4TX000
Course name: Target organ toxicology
Credits: 15 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: 2008-05-14
Revised by: Programnämnden för biomedicinprogrammen
Last revision: 2008-05-15
Course syllabus valid from: Autumn 2008

Specific entry requirements

Bachelor of Science or professional qualification of at least 180 credits, equivalent to a degree in biomedicine, biology, cell and molecular biology, pharmacy, chemistry or medicine. Furthermore, knowledge is required in Swedish and English equivalent to Swedish B and English A (with at least the Pass grade).

Objectives

After the course, the student should: demonstrate good knowledge of toxicological testing methods, including theory, performance, application and understanding of their limitations, be able to identify and evaluate harmful effects of chemical substances on tissues and organ systems, be able to explain underlying molecular mechanisms of these injuries or be able to account for any hypotheses about underlying mechanisms in relation to the structure of tissues/organs and be able to analyse and explain the symptoms caused by tissue damaging substances.

Content
The course comprises two parts including toxicological information retrieval, toxicological testing, toxic effects and their underlying mechanisms within various organ systems (liver, kidneys, lung, heart, and nervous, reproductive, blood and immune systems), as well as genotoxicity and chemical carcinogenesis. Furthermore, clinical toxicology, and the toxicology of metals and persistent organic environmental pollution is included. Tissue and System Toxicology - part 1, 7.5 credits Tissue and System Toxicology - Part 1, 7.5 ECTS Tissue and System Toxicology - part 2, 7.5 credits Tissue and System Toxicology - Part 2, 7.5 ECTS

Tissue and system toxicology -- part 1, 7.5 hp

Grading scale : VU

Tissue and system toxicology -- part 2, 7.5 hp

Grading scale : VU

Teaching methods

The course builds largely on problem-based teaching in the form of different case studies with oral and written presentation. Furthermore, lectures, seminars, group discussions, practical demonstrations and study visits are included.

Examination

The examination consists of two partial examinations. The PBL tasks are presented in the form of written reports and oral presentations. During the current semester, a regular examination and an occasion for re-examination are given. Compulsory participation All practical demonstrations, study visits and group exercises including presentations are compulsory. Absence is compensated by submission of an individual written assignment after agreement with the course director. Not until the student has participated in compulsory parts, or compensated for absence in accordance with the instructions of the course coordinator, is the course registered in LADOK (student registry). Limited number of examinations or practical training sessions Students who have not passed the regular examination are entitled to participate in five more examinations. If the student is not approved after four examinations, he/she is recommend to retake the course at the next regular course date, and may, after that, participate in two more examinations. If the student has failed six examinations/tests, no additional examination or new admission is provided. The number of times that the student has participated in one and the same examination is regarded as an examination session. Submission of a blank examination is regarded as an examination. An examination for which the student registered but not participated in, will not be regarded as an examination.

Transitional provisions

If the course is closed-down or undergoes major changes, parts may, in consultation with the course director, be examined during a period of no more than two years.

Other directives
Course evaluation will be carried out in accordance with the guidelines established by the Board of Education. Course council meeting is held with the course coordinator and student representatives. The syllabus replaces part of QTOA04.

**Literature and other teaching aids**

There is no literature specified for this course. Please contact the department for more information.