HL1010 Systems Biology 7.5 credits

Systembiologi

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for HL1010 valid from Autumn 2010

Grading scale

A, B, C, D, E, FX, F

Education cycle

First cycle

Main field of study

Electrical Engineering, Technology

Specific prerequisites

Eligibility for studies at KTH including knowledge corresponding to Mathematics D, Physics B and Chemistry A.

Anatomy and Physiology equivalent to HL1201 Medicine and Medical Engineering, Basic Course or HL2006 Medical Enginnering, Basic Course

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The aim of the course is to provide basic theoretical knowledge about the physiology and pato-physiology of the human body. Practical exercises will demonstrate the use of clinical equipment and methodology for study of different physiological parameters and diagnosis of pathological changes. The acquired biomedical knowledge will provide a basis for improving and developing new clinical techniques.

Course contents

Anatomy, physiology and pato-physiology in the following areas will be studied: Heart and circulation, respiratory system, gastro-intestinal system, kidneys, body fluids and acid-base balance, and endocrinology.

Course literature

Tortora & Derricksson, Principles of Anatomy & Physiology, 11th ed., 2006

Examination

- TEN1 - Examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 1.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Practical exercises and written examination.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.

- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.