Anatomy and Physiology

Programme course

6 credits

Anatomi och fysiologi

TBME04

Valid from: 2017 Spring semester

Determined by
Board of Studies for Electrical Engineering,
Physics and Mathematics

Date determined
2017-01-25

Main field of study

Biomedical Engineering

Course level

First cycle

Advancement level

G2X

Course offered for

- Biomedical Engineering, Master's Programme
- Engineering Electronics
- Computer Science and Engineering, M Sc in Engineering
- Information Technology, M Sc in Engineering
- Computer Science and Software Engineering, M Sc in Engineering
- Applied Physics and Electrical Engineering - International, M Sc in Engineering
- Applied Physics and Electrical Engineering, M Sc in Engineering
- Mechanical Engineering, M Sc in Engineering

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites

Basic skills from first and second academic year at LiTH.

Intended learning outcomes

The course will provide the student the possibility to acquire basic knowledge in the science of medicine, usable for a general understanding of the human anatomy and physiology. The course is preparatory for further studies in Biomedical Engineering and Medical Informatics. After finishing the course, the student will independently be able to:

- Explain the human anatomy. The student must be able to describe how different parts of the body are compounded and to name the most important parts.
- Explain the human physiology. The student must be able to describe how the different parts of the body work, independently as well as in a context.

Course content

Medical terminology. Medical Ethics. The cellular level of organisation. Organ systems of the body: bone-, skeletal- and muscle tissue, nervous system, special senses, cardiovascular system, respiratory system, digestive system, reproductive system.

Teaching and working methods

Lectures, seminars and laboratory work.

Examination

TEN2	Written examination	U, 3, 4, 5	3.5 credits
LAB1	Laboratory Work	U, G	2 credits
UPG1	Seminars	U, G	0.5 credits

Grades

Four-grade scale, LiU, U, 3, 4, 5

Other information

Supplementary courses: Biomedical Signal Processing, Medical Imaging, Physiological Pressures and Flows, Intensive Care and Therapeutic Systems, Medical Information Systems, Biomedical Modeling and Simulation

Department

Institutionen för medicinsk teknik

Director of Studies or equivalent

Linda Rattfält

Examiner

Daniel Karlsson

Course website and other links

http://www.imt.liu.se/edu/courses/TBME04/

Education components

Preliminary scheduled hours: 48 h
Recommended self-study hours: 112 h

Course literature

Tortora G, Derrickson B. Principles of Anatomy and Physiology, Wiley, 14th ed. 2014
ISBN 9781118808436.

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.