

SYLLABUS

Medical science: Anatomy and Physiology in position to Occupational Therapy 15 credits M0104H

Medicinsk vetenskap: Anatomi och fysiologi med inriktning mot arbetsterapi

Course syllabus admitted: Spring 2022 Sp 3 - Spring 2022 Sp 4

**DECISION DATE
2021-10-27**

Medical science: Anatomy and Physiology in position to Occupational Therapy 15 credits M0104H

Medicinsk vetenskap: Anatomi och fysiologi med inriktning mot arbetsterapi

First cycle, M0104H

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG	Medicinsk vetenskap	Medicine

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language +

Swedish upper secondary school courses Mathematics 2a/2b/2c , General Science 2, Social Studies 1b/1a1 +1a2 (specifik entry A14).

Or:

Swedish upper secondary school courses Mathematics B, General Science B, Social Studies A (specifik entry 16)

Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

Examiner

Cecilia Björklund

Course Aim

After completing the course the student will be able to:

- Explain the fundamental concepts of anatomy, cells, tissues and their functions, as well as maturation and aging.
- Describe the anatomy of the musculoskeletal system, the anatomy and physiology of skeletal muscle.
- Conduct analyses of movement and carry out assessments of movement during activity.
- Describe the nerve cell and the anatomy and physiology of the nervous system.
- Describe the physiological mechanisms of pain and explain these in relation to activity.
- Describe the anatomy and physiology of the respiratory and circulatory organs and explain their importance to human activity and the requirements for different activities.
- Explain the functions of normal working physiology and nutritional needs, as well as how they relate to different types of activity and activity requirements.
- Explain the physiological differences over the lifespan from the perspective of gender.
- Explain the anatomy, physiology and nutritional needs of the internal organs.
- Describe how the different organ systems interact.
- Evaluate their own knowledge and identify needs for development of knowledge.

The knowledge acquired constitutes a basis for future courses in the educational programme for an occupational therapist.

Contents

- Medical terminology
- Cells and tissue anatomy and physiology
- Anatomy of movement systems
- Muscle physiology
- Movement systems laboratory
- Anatomy and physiology of the nervous system
- Physiology of pain
- Respiratory system
- Circulation system including lymphatic system
- Anatomy and physiology of internal organs
- Physiology of work
- Physiology of nutrition

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Teaching and learning takes place through self-directed studies, study assignments, group discussions, laboratory work and seminars with verbal presentations. Lectures are held in selected parts of the course. Participation in laboratory work and seminars is compulsory.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

The learning outcomes for the course are examined and assessed through an examination, individual assignments and/or assignments in groups, as well as seminars. To receive a Pass for the whole course a Pass is required in all parts, and that compulsory components have been completed.

Remarks

The course is a first cycle course. A Pass grade for this course constitutes a special entry requirement for placement courses.

Overlap

The course M0104H is equal to M0118H, M0031H

Literature. Valid from Spring 2021 Sp 3

Bojsen-Møller, F. (2000 eller senare). Rörelseapparatens anatomi. (1. uppl.) Stockholm: Liber.

Henriksson, O., Rasmusson, M. (2013 eller senare). Fysiologi med relevant anatomi. Studentlitteratur.

Referenslitteratur

Skolin, I. (2010 eller senare). Näringslära för sjuksköterskor: teori och praktik. (1 uppl.) Stockholm: Norstedt.

Working material to be added.

Course offered by

Department of Health, Education and Technology

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Examination in cell and tissue	U G#	1	Mandatory	S21	
0002	Laboration	U G#	0.5	Mandatory	S21	
0003	Examination in the musculoskeletal system	U G VG	4.5	Mandatory	S21	
0004	Examination in neuro- anatomy and physiology	U G VG	3.5	Mandatory	S21	
0006	Seminar internal organs anatomy and physiology	U G#	1	Mandatory	S21	
0007	Seminar nutrition and exercise physiology	U G#	2	Mandatory	S21	
0008	Examination circulation and respiration	U G VG	2.5	Mandatory	S21	

Last revised

by Anna Öqvist, Director of Undergraduate Studies at the Department of Health, Education and Technology 2021-10-27

Syllabus established

by Dean of Department of Health Sciences 2020-02-21