

SYLLABUS

Medical Science Physiology with specialization towards Physiotherapy 7.5 credits M0113H

Medicinsk vetenskap Fysiologi inriktning fysioterapi

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2023-01-13**

Medical Science Physiology with specialization towards Physiotherapy 7.5 credits M0113H

Medicinsk vetenskap Fysiologi inriktning fysioterapi

First cycle, M0113H

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 Sport and Health 1, Mathematics 2a or 2b or 2c, General Science 2, Social Studies 1b or 1a1+1a2.

Selection

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

Course Aim

a Knowledge and understanding

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

1. Explain basic physiological processes and how different organ systems work together to achieve homeostasis
2. Describe physiological differences between women and men, as well as the changes that take place during a lifespan
3. Explain basic pain physiology and pain classification
4. Describe how physiological functions and nutritional needs relate to the different levels of physical strain

Competence and skills

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

5. Perform a submaximal fitness test
6. Perform a manual blood pressure measurement
7. Evaluate other individual projects and evaluate the quality of the work on physiological processes

Contents

- Physiology of the respiratory system
- Work physiology
- Circulatory physiology
- Endocrine system
- Gastrointestinal physiology with nutritional physiology
- Muscle Physiology
- Neurophysiology
- Kidney physiology
- Function of the sense organs
- Pain physiology

Realization

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

Lessons are conducted by individual study of literature and study materials, lectures, and participation in group and laboratory work. The lessons include reflection, evaluating others' progress and giving each other feedback.

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.

Objectives 1,2 are examined through an individual written exam (Module 5)

Objectives 3 is examined through a digital home exam (Module 9)

Objectives 1,2,4,7 are examined through seminars and hand-in assignment (Module 7)

Objectives 5,6 are examined by individual assignment (Module 8)

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Overlap

The course M0113H is equal to M0077H

The course M0113H corresponds to parts of courses M0077H and M0080H

Course offered by

Department of Health, Education and Technology

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0005	Written exam circulatory, respiratory and neurophysiology	U G VG	3	Mandatory	A22	
0007	Seminar in work, nutrition and muscle physiology	U G#	2	Mandatory	A22	
0008	Assignments in organ physiology and the function of the senses	U G#	1	Mandatory	A22	
0009	Digital home examination in pain physiology	U G VG	1.5	Mandatory	S23	

Last revised

by Anna Öqvist, Director of Undergraduate Studies at the Department of Health, Education and Technology 2023-01-13

Syllabus established

by Head of department of Department of Health, Education and Technology 2021-02-17