



**Karolinska  
Institutet**

Course syllabus for

## **Theme Intervention - Physiology 4, 3 credits**

Tema intervention - Fysiologi 4, 3 hp

This course syllabus is valid from autumn 2022.

Please note that the course syllabus is available in the following versions:

Spring2016 , Spring2017 , Spring2018 , Autumn2018 , Autumn2022

Course code	1FY022
Course name	Theme Intervention - Physiology 4
Credits	3 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass, Fail
Department	Department of Physiology and Pharmacology
Decided by	Programnämnd 3
Decision date	2015-11-02
Revised by	Education committee NVS
Last revision	2022-04-01
Course syllabus valid from	Autumn 2022

### **Specific entry requirements**

Physical Education 1, Mathematics 2a or 2b or 2c, Natural Sciences 2, Social Sciences 1b or 1a1+1a2.

### **Objectives**

The aim of the course is that the student should acquire theoretical knowledge in the field of pain physiology with goals to be integrated into clinical reasoning for assessment of patients with pain and planning of physiotherapeutic interventions. The course also aims to stimulate a reflective and scientific approach.

Learning objectives

On completion of the course, the student should be able to:

- explain physiological origin and modulation of pain
- report principles for pain classification and pain analysis and discuss them in relation to different types of pain
- give examples of physiotherapeutic interventions applied to different types of pain and explain their possible underlying physiological mechanisms

- explain the different types of pain pharmacological treatment principles and their application
- explain individual variability of perceived pain in relation to biopsychosocial aspects

## Content

The course Theme Intervention - Physiology 4 contains:

- The signaling of the pain system
- Endogenous pain control system
- Pain classification
- Pain analysis
- Possible physiological mechanisms of physiotherapeutic pain relief interventions
- Placebo-nocebo
- Pain pharmacology

## Teaching methods

The teaching is based on a problem-oriented and collaborative approach to learning in which the tasks provide opportunities for the student to take active responsibility for their learning. The used teaching methods are lectures, laboration, seminar and own work with study questions where the student is expected to acquire a large part of the knowledge through theoretical self-study and at laboration and seminar.

The student is given the opportunity to feedback on his or her knowledge through electronic questionnaires on the learning platform and through active participation in question time with teaching teachers.

Compulsory course elements are:

- Laboration and seminar

The course coordinator decides whether, and if so how, absence from compulsory course elements can be made up. Study results cannot be reported until the student has participated in compulsory course elements or compensated for any absence in accordance with instructions from the course coordinator. Absence from a compulsory course element could mean that the student can not retake the element until the next time the course is offered.

## Examination

The course is examined with a written examination i.

A student who has not approved after the ordinary examination opportunity are entitled to participate in further five examinations. If the student has completed six failed examinations/tests, no further examination opportunity will be given. As an exam opportunity, the times are counted when the student participated in one and the same exam. The submission of blank written exam is counted as an examination opportunity.

Examination opportunity to which the student was enrolled but did not participate is not counted as an examination opportunity.

In the case of failed results of regular examination, the student is given the opportunity to return to a re-examination in the same semester. After that, the student is given the opportunity to be examined on two occasions per semester, in connection with the regular and rest occasions (rest exam), the coming semesters.

## Transitional provisions

An examination will be made available for a period of one year in the event of the course being discontinued or a new course syllabus being devised.

## Other directives

Course evaluation is conducted according to the guidelines established by the Board of Education at KI, and based on established evaluation routines within the programme.

## Literature and other teaching aids

### **Om smärta : ett fysiologiskt perspektiv**

*Norrbrink, Cecilia; Lundeberg, Thomas*

2. uppl. : Lund : Studentlitteratur, 2014 - 184 s.

ISBN:9789144089706 LIBRIS-ID:16592713

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