



**Karolinska  
Institutet**

Course syllabus for

# **Anatomy and physiology 1 - Communication and movement, 8 credits**

Anatomi och fysiologi 1 - Kommunikation och rörelse, 8 hp

This course syllabus is valid from autumn 2015.

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

[Autumn2010](#) , [Autumn2011](#) , [Autumn2012](#) , [Autumn2014](#) , Autumn2015 , [Autumn2016](#) , [Autumn2018](#) , [Autumn2021](#)

Course code	1RS024
Course name	Anatomy and physiology 1 - Communication and movement
Credits	8 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Programnämnd 6
Decision date	2010-05-12
Revised by	Programme Committee 6
Last revision	2015-05-05
Course syllabus valid from	Autumn 2015

## **Specific entry requirements**

Mathematics 2a / 2b / 2c, Natural Sciences 2, Social Sciences 1b / 1a1+1a2 (field specific entry requirements A14). Or: Mathematics B, Natural Sciences B, Social Sciences A (field specific entry requirements 16).

## **Objectives**

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

- explain cell – and the structure and function of tissue types
- identify and describe the structure and function of the musculoskeletal system
- describe the structure and function of the nervous system and the sensory system
- account for endocrine system's structure that is linked to the functions of the musculoskeletal and nervous system
- describe the position of bodies in relation to one another and the body as a whole.

## Content

The course starts with an overview of basic biochemical concepts in order to facilitate the further understanding of the function of the body based on scientific grounds.

The student is trained to understand and apply basic anatomic concepts and terminology. The course also treats adequate medical terminology used in anatomic position and motion descriptions.

The course takes its starting point in the structure and basic functions of the cell. Under the theme the musculoskeletal system is studied the different parts, the structure and function, and the subdivision and motion of joints of the skeleton. Here, the structure of the skeletal musculature and the structure and function of the muscle cells are also studied.

Under the theme the nervous system, an overview of the central and peripheral nervous system and how these interact with one another is made. Within sensory system, pain, smell, taste, hearing, balance and the approach are studied.

The endocrine system deals with glands and hormones that are linked to the musculoskeletal system and nervous system.

## Teaching methods

The course includes lectures and workshops.

## Examination

For a Pass grade in the course, approved participation in laboratory sessions and group work, and an approved individual written examination.

In consultation with the examiner of the course, the student may get a complementary assignment in case of absence from a compulsory part.

In connections to the course three occasions will be given. One within the course, two occasions at the following re-examinations. Three more opportunities will be provided as described above when the course is run next time.

## Transitional provisions

The student may be examined under a previous syllabus within a year after the date when a close-down or major changes of the course was decided.

## Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Board of Education at Karolinska Institutet.

## Literature and other teaching aids

*Sand, Olav*

**Människokroppen : fysiologi och anatomi**

2. uppl. : Stockholm : Liber, 2007 - 544 s.

ISBN:9147084359 (inb.) LIBRIS-ID:10455726

[Library search](#)

*Feneis, Heinz; Dauber, Wolfgang*

**Anatomisk bildordbok**

*Spitzer, Gerhard; Brinkman, Ingrid*

5., utökade uppl. /b [fackgranskning: Håkan Aldskogius] : Stockholm : Liber, 2006 - [4], 520 s.

ISBN:91-47-05301-1 LIBRIS-ID:10162715

URL: <http://www2.liber.se/bilder/omslag/100/4705301o.jpg>

[Library search](#)

**Fysiologi**

*Lännergren, Jan; Westerblad, Håkan; Ulfendahl, Mats; Lundeberg, Thomas*

5., [rev.] uppl. : Lund : Studentlitteratur, 2012 - 354 s.

ISBN:978-91-44-07747-5 LIBRIS-ID:13508738

[Library search](#)

**Atlas över människokroppen**

*Vigué, Jordi; Martín Orte, Emilio; Ferrón, Miquel; Ferrón, Myriam*

*Dunder, Kristina*

2. uppl. : Stockholm : Liber, 2012 - 164 s.

ISBN:9789147105878 (inb.) LIBRIS-ID:12744910

[Library search](#)

**Anatomi och fysiologi**

*Nicolaysen, Gunnar; Holck, Per*

1. uppl. : Lund : Studentlitteratur, 2014 - 336 s.

ISBN:9789144097398 LIBRIS-ID:16016423

[Library search](#)