



**Karolinska  
Institutet**

Course syllabus for

# **Medicine 2: Pathology, Speech and Voice Physiology and Audiology, 4.5 credits**

Medicin 2: patologi, tal-och röstfysiologi och audiologi, 4.5 hp

This course syllabus is valid from spring 2019.

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

Spring2017 , Spring2019 , Spring2023 , Spring2024 , Spring2025

Course code	2LG074
Course name	Medicine 2: Pathology, Speech and Voice Physiology and Audiology
Credits	4.5 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 Clinical Science, Intervention and Technology
Decided by	Utbildningsnämnden CLINTEC
Decision date	2016-11-03
Revised by	Education committee CLINTEC
Last revision	2018-10-16
Course syllabus valid from	Spring 2019

## **Specific entry requirements**

For admission to semester 2 apply that student may remain with no more than 15 credits from previous semester in The Study Programme in Speech-Language Pathology

## **Objectives**

The course contains three modules.

### **Pathology, 1.5 credits**

After implemented component the student should be able to:

- describe basic structural cell-, tissue och organ change in different diseases as well as their cause and functional/clinical importance
- give examples of how health and illness vary in and between different parts of world

### **Speech- , voice and swallowing physiology, 1.5 credits**

After implemented component the student should be able to:

- show general understanding of embryological and later development of voice, speech and swallowing apparatus
- name and describe function of the cranial nervs that are active at vocal effort speech and deglutition
- account for the relationship between speech and voice characteristics and the properties of the vocal tract
- in detail describe velopharynx function at vocal effort number and deglutition

### **Audiology, 1.5 credits**

After implemented component the student should be able to:

- describe how different hearing impairments can influence children's and adult's communication activity and participation
- account for different acoustic and psychoacoustic concepts such as auditory threshold, dynamic range, hearing level and loudness
- describe different audiometry methods for children and adult, as well as at a general level account for different types of intervention and aid at hearing impairment

## **Content**

Course contain three modules:

### **Pathology, 1.5 hp**

Grading scale: GU

The component gives general knowledge in the science about diseases and their causes. How cells and tissues react to exposure for pathogenic agents is treated as well as mechanisms of inflammation and the most common immune reactions. The component also includes disorders in cell growth, tumours and their different basis of division, allergies, circulation, respiration, digestion and urogenital organ diseases. Endocrine diseases and the most common infectious diseases are treated. Different vaccinations as well as principles of these are described.

### **Physiology of Speech, Voice and Swallowing, 1.5 hp**

Grading scale: GU

Component intends to provide knowledge of development of normal neurological and motor basic functions in mouth and throat at vocal effort number and deglutition. Protective mechanisms of the respiratory system are treated. The course content is an important prerequisite for further studies in speech and language pathology.

### **Audiology, 1.5 hp**

Grading scale: GU

The part intends to provide knowledge in early development of hearing, deviations and aging and causes and origin of different hearing impairments in children and adults. Acoustic and psychoacoustic concepts are treated as well as audiometry methods and different technical aids and hearing aids. In this part, interpretation of speech audiometry test result, different methods and aids is also included and how these can support individuals with hearing impairment. Hearing screening of the newborn.

## **Teaching methods**

Lectures, seminars and group work. Seminars and exercises are compulsory unless other state in timetable.

In case of absence at compulsory teaching activities, the student is responsible to contact the course coordinator for complementary assignment. Assessing responsible about and if so how absence from compulsory education elements can be taken again. Until the student has participated in the compulsory parts (or compensated any absence with assigned tasks in accordance with instructions from the course director) the final study results can not be reported. Absence from a mandatory education element could mean that the student can not do the part until the next time the course is offered.

## Examination

### **Pathology, 1.5 credits**

Oral test.

### **Speech- , voice and swallow physiology, 1.5 credits**

Written examination

### **Audiology, 1.5 credits**

Written examination assignment as well as seminar assignment.

Written examination is corrected anonymously. Student who do not pass the regular examination are entitled to re-sit the examination at five more occasions. The third examination is the following regular examination in the course. As examination, the times are counted when the student has participated in the same test. Submission of blank exam is counted as examination. Examination to which student registered but not participated be counted not as examination.

## Transitional provisions

Examination can be carried out according to an earlier literature list during a period of one year after the date of a renewal of the literature list. Examination will be provided during a period of one year after a possible closing of the course.

## Other directives

Course evaluation will be carried out according to the guidelines established by the Board of Higher Education.

## Literature and other teaching aids

*Hartelius, L.; Nettelbladt, U.; Hammarberg, B.*

### **Logopedi**

1. uppl. : Lund : Studentlitteratur, 2008 - 540 s.

ISBN:978-91-44-03886-5 (inb.) LIBRIS-ID:10352718

[Library search](#)

*Andersson, Gerhard*

### **Nordisk lärobok i audiologi : b**

*Arlinger, Stig*

Bromma : CA Tegnér, 2007 - 480 s.

ISBN:9789163194405 LIBRIS-ID:10472809

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