



**Karolinska
Institutet**

Course syllabus for

Sound perception, 7.5 credits

Ljudperception, 7.5 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

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

Spring2009 , [Autumn2010](#) , [Autumn2011](#) , [Autumn2012](#) , [Autumn2013](#) , [Autumn2014](#)

Course code	1AU005
Course name	Sound perception
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Audiology
Level	G2 - First cycle 2
Grading scale	Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Programnämnden för audionomprogrammet
Decision date	2008-10-22
Course syllabus valid from	Spring 2009

Specific entry requirements

Specific entry requirements according to the programme syllabus of the Study Programme in Audiology, 180 HE credits. For admission to courses in the main area of audiology at the G2 level, semester 3, 37.5 credits in the previous courses should have been given the grade Pass, among them: at least 15 credits of the course Hearing assessment, in addition, at least, 9 credits in the main field of study.

Objectives

The general aim of the course is to give the student basic knowledge of how humans observe and experience sounds, and about psychoacoustic concepts and methods of measurement. Learning outcomes of the course On completion of the course, the student should be able to describe and explain concepts such as auditory threshold, loudness, masking, time and frequency resolution, and binaural hearing phenomena, and be able to relate these concepts to the normal hearing individual's experience of sound and how this can be measured, be able to relate the most common types of hearing impairments to perceptual consequences, be able to critically choose and apply simple psychoacoustic methods of measurement.

Content

Part 1: Auditory perception (Auditory perception) 6 HE credits. This part clarifies how humans observe and experience sounds. The emphasis is on perception, but the course also includes cognitive aspects of hearing. Basic psychoacoustics is the main part of the course. Here, human perception of different physical properties of sound is treated. Concepts such as auditory threshold, loudness, masking, time and frequency resolution and localisation are discussed in detail. The normal hearing is treated as well as perceptual consequences of the most common types of hearing impairments. Part 2: Psychoacoustical measurements (Psychoacoustical measurements) 1.5 HE credits. In this part, psychoacoustical methods of measurement are treated. Here, the performance of psychoacoustical measurements, in theory and practice, is treated.

Auditory perception, 6.0 hp

Grading scale: GU

Psychoacoustical measurements, 1.5 hp

Grading scale: GU

Teaching methods

Lectures, laboratory sessions, seminars, an interactive computer program are provided as a complement to selfstudy.

Examination

Examination takes place through Part 1: Auditory perception, 6 HE credits Written examination Part 2: Psychoacoustical measurements, 1.5 HE credits Written laboratory report For a Pass in the course, satisfactory attendance in compulsory parts (laboratory sessions) is also required. In case of absence from a compulsory part, the student gets an individual complementary assignment determined by the course coordinator. Students who have not passed the regular examination are offered two re-examinations in connection with the regular opportunity. After that, an examination opportunity is provided before semester 6 starts. All in all, there is a possibility of six examinations, the last two in connection with the next regular course.

Transitional provisions

Examination may take place under the previous reading list during a period of one and a half years after the date of the renewal of the reading list. Examination will be provided during a period of three years after a close-down of the course.

Other directives

A study guide is distributed, comprising assessment criteria for examination, specific instructions for certain tasks, and a timetable specifying compulsory parts and a list of responsible teachers. Course evaluation will be carried out in accordance with the guidelines established by the Board of Education. Course evaluation is carried out both through a written evaluation at the end of the course, and through an oral forum at least once in connection with the course, where the students may express their opinions. The course replaces AUG004, Signal theory and auditory perception 2.

Literature and other teaching aids

Plack, Christopher J.

The sense of hearing

Mahwah, N. J. : Erlbaum, 2005 - xi, 267 s.

ISBN:0-8058-4883-5 (alk. paper) LIBRIS-ID:10035183

[Library search](#)

SAME

Handbok i hörselmätning

Almqvist, Bengt

[Ny utg.] : Bromma : SAME och C-A Tegner AB, 2004 - 242 s.

ISBN:91-631-4908-7 LIBRIS-ID:9481154

[Library search](#)

Stadler, S; Olsen, H; Johnson, A-C

Auditiv perception – ett interaktivt läromedel. : Ett datorprogram på CD

Stockholm : Karolinska Institutet, 2005

Audiology : diagnosis

Roeser, Ross J.

New York : Thieme, 2000 - xiii, 640 s.

ISBN:0-86577-857-4 (TNY) LIBRIS-ID:6172151

[Library search](#)

Hörapparatutprovning

Borрьd, Agneta; Smeds, Karolina; Leijon, Arne

1. uppl. : Bromma : CA Tegnér AB, cop. 2000 - 352 s.

ISBN:91-630-9498-3 (inb.) LIBRIS-ID:8364995

[Library search](#)

Moore, Brian C. J.

An introduction to the psychology of hearing

5. ed. : London : Academic Press, Press,c cop. 2004 - xvi, 413 s.

ISBN:0-12-505628-1 (hft.) LIBRIS-ID:8909395

[Library search](#)

Moore, Brian C. J.

Cochlear hearing loss

London : Whurr, c1998 - viii, 312p

ISBN:1-86156-091-5 (pbk) LIBRIS-ID:6509600

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