

EN2100 Sound Perception 7.5 credits

Ljudperception

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for EN2100 valid from Autumn 2009

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Specific prerequisites

For single course students: 120 credits and documented proficiency in English B or equivalent

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The participants shall after the course

- understand in some detail how human hearing works
- be able to assess how sound perception affects the usefulness of technical systems for sound reproduction
- be able to apply basic psychoacoustic testing methods to measure hearing or to evaluate the sound quality of reproducing systems
- be able to use computational models for estimating subjective properties of sounds and systems, such as loudness and speech intelligibility
- have some knowledge of the consequences of hearing impairments and limitations in technical aids for the hearing impaired.

Course contents

The course is about human hearing and gives basic knowledge about design requirements for technical sound presentation and sound transmission systems, with regard for human auditory perception.

Course literature

Moore B. 2003. An Introduction to the Psychology of Hearing. 5th Ed. Academic Press.

Arne Leijon (20xx) Sound Perception: Introduction and Exercise Problems. KTH. (latest version)

Examination

- INL1 Individual Assignment, 1.0 credits, grading scale: P, F
- TEN1 Examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 Laboratory Work, 0.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Exam 6 p (A-F). Homework assignment 1 p (P/F). Lab exercise 0.5 p (P/F).

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.