



# FDT3313 Speech and Hearing Functions, basic course 15.0 credits

Tal- och hörsselfunktionerna, grundkurs

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

## Establishment

Course syllabus for FDT3313 valid from Spring 2019

## Grading scale

P, F

## Education cycle

Third cycle

## Specific prerequisites

Admitted as doctoral student

## Language of instruction

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

## Intended learning outcomes

1. Describe the processes involved in human speech and hearing
2. Account for the implications of human speech and hearing processes for the development, applications and deployment of technological systems employing speech and spoken dialogue.
3. Describe current scientific methods used in investigating speech and hearing processes

## Course contents

1. Speech and hearing processes
2. Anatomy and physiology of the speech and hearing mechanisms
3. Acoustics for speech and hearing
4. Basic neuroscience for speech and hearing
5. Computational models of speech and hearing functions
6. Review of scientific methods used in investigating speech and hearing processes

## Disposition

The course is organized in the form of a reading course in which current, relevant research articles are to be chosen and discussed together with the PhD student's supervisors. Credits may also be obtained by submitting reports from participation in relevant external PhD activities such as seminars, workshops and conferences.

## Course literature

Relevant research articles are to be chosen in cooperation with the doctoral student's supervisors.

## Examination

- EXA1 - Exam, 15.0 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

Written and oral reports approved by the doctoral student's supervisors.

## 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.