Opasraportti

HuTK - Phonetics (2012 - 2013)

Phonetics

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Admission requirements

All students enrolled at the University of Oulu and registered as present are qualified to study Phonetics. Entering studies in Phonetics requires formal application. The application form is available from the Phonetics staff. To begin the Basic Level studies, students must first successfully complete the course Introduction to Phonetics (694500P). It is recommended that students begin the studies during the autumn term, although it is also possible to begin during the spring term.

Study guidance

Guidance on how to study Phonetics is given by lecturer Pentti Körkkö during his office hours and, by appointment, also at other times. Office hours: Thursdays from 12 noon to 1 p.m., telephone +358 29 448 3375. E-mail: pentti.korkko (at) oulu.fi.

Phonetics

Phonetics is the study of the sounds of human speech. It is concerned with the physical properties of speech sounds, their physiological production and auditory perception and also neurophysiological status. Phonetics is generally considered a special branch of linguistics dealing with the physical phenomena of speech communication.

The University of Oulu offers Basic, Intermediate and Advanced Level courses in Phonetics, but Phonetics can only be studied as a minor subject.

Phonetics investigates the transmission of linguistic messages and other kinds of information (including information that signals the speaker’s emotional state) through air, from the speaker to the listener, the relationship between speech and language, the form and working of the sound systems of different languages, speech production, the acoustic properties of speech, and speech perception. In principle, Phonetics approaches its object of study from three perspectives, as speaking is at the same time an individual, a language-specific and also a universal activity. In other words, the speech signal always contains speaker-specific properties, language-specific features and also properties that are common to all languages of the world.
Phonetics yields useful theoretical and practical information for everyone working with spoken language, including students of languages and logopedics. Areas of application of phonetic knowledge include teaching of pronunciation in foreign language didactics, disorders of speech and language that are manifested in the speaking voice, clinical speech therapy in logopedics, and in technical subjects, signal processing and speech technology. Phonetic research also converges with several other fields such as linguistics, psychology, cognitive sciences, language technology (automatic speech recognition, synthetic speech), anatomy, physiology and forensics (speaker recognition).

Students of many major subjects have chosen a phonetic topic for their theses. The basic studies of Phonetics at the University of Oulu consist of courses that are common to all, the intermediate studies consist partly of study courses common to all and partly of studies chosen according to the student’s own area of interest. The advanced studies consist of only studies chosen according to the student’s own area of interest.

**Employment prospects**

The work careers of students with Phonetics as a minor subject are fairly variable. Studies in Phonetics are no doubt profitable to students of languages leaning towards a more research oriented work or career and also to students of logopedics and communication disorders, who have a high rate of employment after graduation. Studies in Phonetics also enhance the formal and practical proficiency of students or graduates planning a career in areas as varied as linguistic research, language teaching, human information technology and speech signal processing.

**Practical instructions**

Taught courses can vary from one academic year to the next. Details of taught courses are available on WebOodi. Eventual changes in timetables, course details etc. are also announced on the Phonetics notice board and web pages (Notice board / Ilmoitustaulu).

At the end of each lecture course, a final examination is arranged which requires no preregistration. Registrations for examinations consisting of literature and other written study materials are to be negotiated in advance with the responsible teacher of each course. The registrations for literature-based examinations are made online using WebOodi.

The recommended schedule for the Basic Studies is as follows: Introduction to Phonetics, followed by Introduction to Phonology, and, after all other compulsory courses, Speech Processing in Computer Environment, and finally the Experimental Phonetic Research course.

The recommended schedule is therefore (*#* indicates that the course on the right cannot be completed before the course on the left; and *"/"* indicates that the order in which the courses are studied is not restricted):

Introduction to Phonetics # Introduction to Phonology # Phonology of Finnish / Introduction to Phonetics in Language Teaching / Prosody of Speech / Acoustics of Speech #

Speech Processing in Computer Environment # Experimental Phonetics Research course. Intermediate Studies can be started before the completion of Basic Studies.

**Learning outcome and study packages**

Upon completion of the Basic Level studies, the student acquires an understanding of the significance and nature of speech and of Phonetics as a special field of linguistics focusing on speech and its phenomena. A more practical learning outcome is that the student acquires knowledge and skills necessary in planning and conducting phonetic research: he/ she is able to gather scientifically valid speech samples and is able to choose the proper analyses and measurements in order to achieve the goals and objectives of a particular research theme or project. The Intermediate and Advanced Level studies aim to advance and broaden the knowledge and skills acquired during the Basic Studies, and allow students to specialize in their topics of interest.
The Phonetics study programme is also co-ordinated with General Linguistics; therefore, students have the option of combining Phonetics and General Linguistics studies and may compile common study packages either in Phonetics or General Linguistics (Basic Studies or Intermediate Studies).

Courses

BASIC STUDIES (25 ECTS credits)

- 694500P Introduction to Phonetics (3 ECTS credits)
- 694501P Introduction to Phonology (4 ECTS credits)
- 694502P Phonology of Finnish (2 ECTS credits)
- 694503P Introduction to Phonetics in Language Teaching (3 ECTS credits)
- 694504P Speech prosody (3 ECTS credits)
- 694505P Acoustics of Speech Production (4 ECTS credits)
- 694506P Speech Processing in Computer Environment (2 ECTS credits)
- 694507P A Course in Experimental Phonetics (4 ECTS credits)

INTERMEDIATE STUDIES (35 ECTS credits)

- 694508A Areas of Phonetics (10 ECTS credits)
- 694509A Special studies according to students’ interests (25 ECTS credits)

ADVANCED STUDIES (60 ECTS credits)

- 694510S Advanced studies according to students’ interests (60 ECTS credits)

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

- 694505P: Acoustics of speech production, 4 op
- 694510S: Advanced studies in phonetic research, 60 op
- 694507P: Course in experimental phonetic, 4 op
- 694502P: Finnish phonology, 2 op
- 694500P: Introduction to Phonetics, 3 op
- 694503P: Introduction to phonetics in language teaching, 3 op
- 694501P: Introduction to phonology, 4 op
- 694508A: Research areas in phonetics, 10 op
- 694509A: Special studies in phonetics, 25 op
- 694506P: Speech processing in computer environment, 2 op
- 694504P: Speech prosody, 3 op
Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

694505P: Acoustics of speech production, 4 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Basic Studies
Laji: Course
Vastuuysikkö: Faculty of Humanities
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
4
Language of instruction:
Finnish
Timing:
Spring term
Learning outcomes:
Upon completion of the course, students have a general comprehension of the effects a language’s phonetic structure and speaker-subjective matters have on the acoustic qualities of speech. Students are able to use acoustic research methods.

Contents:
Acoustic qualities of speech
Mode of delivery:
Contact teaching and self study
Learning activities and teaching methods:
Lecture course and independent literature study, short written assignment
Target group:
Language students
Prerequisites and co-requisites:
Successful completion of Introduction to Phonetics and Introduction to Phonology required
Recommended optional programme components:
-
Recommended or required reading:
Suomi, Johdatusta puheen akustiikkaan
Assessment methods and criteria:
Lectures, book exam and written assignment
Grading:
0-5
Person responsible:
Lecturer of Phonetics
Working life cooperation:
No

694510S: Advanced studies in phonetic research, 60 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuysikkö: Faculty of Humanities
Arvostelu: 1 - 5, pass, fail
Opintokohde: Course in experimental phonetic, 4 op

ECTS Credits: 4
Language of instruction: Finnish
Timing: Spring and autumn term
Learning outcomes: Students study the design, execution and reporting of empirical phonetic research. Upon completion of the course, students are able to independently carry out evaluative research based on speech measurements; collect relevant data via field/studio recordings; carry out audio analysis and measurements according to research hypotheses; and can adhere to principles and tenets when reporting multimodal (text and graphic) research.
Contents: Completing the different stages of experimental phonetics research
Mode of delivery: Contact teaching
Learning activities and teaching methods:
Supervised, short experimental phonetic research and written final report on separately agreed upon topic.

**Target group:**
Language students

**Prerequisites and co-requisites:**
Successful completion of Acoustics of Speech and Speech Processing in Computer Environment required

**Recommended optional programme components:**
- 

**Recommended or required reading:**
Separately agreed upon

**Assessment methods and criteria:**
Written research report

**Grading:**
0-5

**Person responsible:**
Lecturer of Phonetics

**Working life cooperation:**
No

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694502P: Finnish phonology, 2 op

**Voimassaolo:** 01.08.2005 -

**Opiskelumuoto:** Basic Studies

**Laji:** Course

**Vastuuysikkö:** Faculty of Humanities

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
2

**Language of instruction:**
Finnish

**Timing:**
Autumn or spring term

**Learning outcomes:**
Upon completion of the course, students have a systematic comprehension of and are able to analyse the segmental, prosodic and phonotactical structures of Finnish.

**Contents:**
Phonetic structures of Finnish

**Mode of delivery:**
Self study

**Learning activities and teaching methods:**
Literature analysis

**Target group:**
Language students

**Prerequisites and co-requisites:**
Successful completion of Introduction to Phonetics and Introduction to Phonology required

**Recommended optional programme components:**
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**Recommended or required reading:**
Suomi, Toivanen & Ylitalo, Fonetiikan ja suomen äänneopin perusteet (Osa II Johdatus suomen kielen äänneoppin

**Assessment methods and criteria:**
Book exam

**Grading:**
0-5

**Person responsible:**
Lecturer of Phonetics

**Working life cooperation:**
No
694500P: Introduction to Phonetics, 3 op

Voice: 01.08.2005 -
Opiskelumoto: Basic Studies
Laji: Course
Vastuuyksikkö: Faculty of Humanities
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
3
Language of instruction:
Finnish
Timing:
1st autumn term
Learning outcomes:
Upon completion of the course, students know and understand the significance of speech in linguistic communication, as well as the key phonetic terms describing the phonetic qualities of Finnish as well as other languages.
Contents:
Speech production and perception, the phonetic categorizing and description of vocal phenomena
Mode of delivery:
Contact teaching
Learning activities and teaching methods:
Lecture course
Target group:
Language students
Prerequisites and co-requisites:
None
Recommended optional programme components:
-
Recommended or required reading:
Separately agreed upon
Assessment methods and criteria:
Lectures and formal lecture exam
Grading:
0-5
Person responsible:
Lecturer of Phonetics
Working life cooperation:
No

694503P: Introduction to phonetics in language teaching, 3 op

Voice: 01.08.2005 -
Opiskelumoto: Basic Studies
Laji: Course
Vastuuyksikkö: Faculty of Humanities
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
3
Language of instruction:
Finnish
Timing:
Autumn or spring term
Learning outcomes:
Upon completion of the course, students are familiar with theories related to the pronunciation of foreign languages, the basics of phonetic comparison of languages; can understand the reasons for pronunciation errors and are familiar with the principles of error analysis. Students are able to evaluate the theories of teaching foreign language pronunciation and can explain the basics of phonetic comparison of languages; students can categorize pronunciation mistakes and use error analysis to evaluate pronunciation.

Contents:
- Theory and practices of phonetic language instruction

Mode of delivery:
- Self study

Learning activities and teaching methods:
- Studying the literature and research of the field

Target group:
- Language students

Prerequisites and co-requisites:
- Successful completion of Introduction to Phonetics and Introduction to Phonology required

Recommended optional programme components:
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Recommended or required reading:
- Separately agreed upon

Assessment methods and criteria:
- Book exam

Grading:
- 0-5

Person responsible:
- Lecturer of Phonetics

Working life cooperation:
- No

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694501P: Introduction to phonology, 4 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuysikkö: Faculty of Humanities

Arvostelu: 1 - 5, pass, fail

Opintokohteen kiele: Finnish

ECTS Credits:
- 4

Language of instruction:
- Finnish

Timing:
- Autumn or spring term

Learning outcomes:
- Upon completion of the course, students know and understand the basics of systematic description of the phonetic phenomena of languages as well as the key concepts of phonology, phonotactics and morphophonology. Students are able to analyse phonological, phonotactical and morphophonological phenomena.

Contents:
- Basic concepts of phonetics, phonology, phonotactics and morphophonology

Mode of delivery:
- Self study

Learning activities and teaching methods:
- Literature analysis

Target group:
- Language students

Prerequisites and co-requisites:
- Successful completion of Introduction to Phonetics required

Recommended optional programme components:
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Recommended or required reading:
694508A: Research areas in phonetics, 10 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Humanities
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
10

Language of instruction:
Finnish

Timing:
Spring or autumn term

Learning outcomes:
Students further their elementary knowledge of the various fields of phonetics. Upon completion of the course, students are able to categorize phenomena of speech production, voice and speech detection.

Contents:
Studying the central fields within phonetics via literature

Mode of delivery:
Self study

Learning activities and teaching methods:
Independent literature study

Target group:
Language students

Prerequisites and co-requisites:
Successful completion of the Basic Level study package required

Recommended optional programme components:
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Recommended or required reading:
Separately agreed upon extracts from, e.g. the following:
Hardcastle & Laver (eds.), The Handbook of Phonetic Sciences; Ladefoged & Maddieson, The Sounds of the World’s Languages;
Laver, Principles of Phonetics;
Ryalls, A Basic Introduction to Speech Perception;
A. livonen (ed.), Puheen salaisuudet

Assessment methods and criteria:
Book exam
Grading:
0-5

Person responsible:
Lecturer of Phonetics

Working life cooperation:
No

694509A: Special studies in phonetics, 25 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Humanities
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
25
Language of instruction:
Finnish
Timing:
Autumn and spring term
Learning outcomes:
Students study some sub-fields of phonetics according to their own academic interests. Upon completion of the course, students are able to analyse the phenomena of some key field(s) of phonetics.
Contents:
These studies can consist merely of literature review or they can also include an empirical study
Mode of delivery:
Self study
Learning activities and teaching methods:
Independent literature study, possibly an empiric research
Target group:
Language students
Prerequisites and co-requisites:
Successful completion of the Basic Level study package required
Recommended optional programme components:
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Recommended or required reading:
Separately agreed upon
Assessment methods and criteria:
Book exam, or optionally a research report
Grading:
0-5
Person responsible:
Lecturer of Phonetics
Working life cooperation:
No

694506P: Speech processing in computer environment, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Basic Studies
Laji: Course
Vastuuysikkö: Faculty of Humanities
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2
Language of instruction:
Finnish
Timing:
Free
Learning outcomes:
Upon completion of the course, students are familiar with the collection and processing of audio material for phonetic research in computer environment. Students are able to independently collect speech audio-data via field /studio recording, and can edit and modify collected data according to research purposes.
Contents:
Demonstrations and compulsory exercises; a guided, short data collection and audio file editing exercise.
Mode of delivery: Contact teaching and self study
Learning activities and teaching methods: Demonstration course and independent study
Target group: Language and Logopedics students
Prerequisites and co-requisites: Successful completion of Introduction to Phonetics and Acoustics of Speech required
Recommended optional programme components: 

Recommended or required reading: Separately agreed upon
Assessment methods and criteria: Attending exercises and demonstrations, written assignment
Grading: 0-5

Person responsible: Lecturer of Phonetics
Working life cooperation: No

694504P: Speech prosody, 3 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Basic Studies
Laji: Course
Vastuuysikkö: Faculty of Humanities
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 3
Language of instruction: Finnish
Timing: Autumn or spring term
Learning outcomes:
Upon completion of the course, students are familiar with the key lexical and non-lexical qualities of speech (e.g. quantity, tone, intonation, sentence and word stress), their phonetic realizations and linguistic, functions etc. Students are able to categorize the realizations and functions of prosodic phenomena.
Contents:
Prosodics of speech
Mode of delivery: Self study
Learning activities and teaching methods: Literature analysis
Target group: Language students
Prerequisites and co-requisites: Successful completion of Introduction to Phonetics and Introduction to Phonology required
Recommended optional programme components: 

Recommended or required reading: Separately agreed upon
Assessment methods and criteria: Book exam
Grading: 0-5

Person responsible: Lecturer of Phonetics
Working life cooperation: No
No