University College London
Department of Phonetics and Linguistics

MSc Speech and Hearing Sciences

Handbook 2005-2006
These notes should be read in conjunction with the UCL publication Student Handbook 2005-06 which you are given when you enrol. The Regulations governing the degree can be found in the UCL publication Regulations for Students (the "Blue Book"). Examination Regulations are in another booklet known as the "Pink Book". Copies of the Blue Book and the Pink Book are available in Departmental Offices.

1. Introduction

Aims of the programme
The programme provides a postgraduate combined specialisation in the Speech and Hearing Sciences. It is designed to provide a thorough multi-disciplinary introduction to modern knowledge and current research in the inter-related aspects of human spoken communication. It aims to prepare students from different backgrounds for work in the rapidly developing fields of speech and hearing research, and their technological applications.

The programme will enable students, for example, to engage in investigations of the relations between computational, auditory, and cognitive processing of speech; to contribute to the development and applications of speech synthesis and recognition; to contribute to technological advances in speech pathology - particularly to analysis, assessment and to training aids; and to contribute to audiology, particularly with electro-cochlear and speech-processing hearing aids, as well as receptive evaluation.

The course is run within the Centre for Human Communication at UCL, with the Department of Phonetics and Linguistics as the admitting department. Other members of the Centre co-operate in the design and teaching of the course, including the Department of Human Communication Science, the Department of Psychology, the Institute for Cognitive Neuroscience, the Institute of Laryngology and Otology, and the Department of Audiology at the Royal National Throat Nose and Ear Hospital.

The combination of expertise in speech and hearing within the centre is probably unmatched in the UK. The members of the centre are at the forefront of research in hearing, audiology, auditory rehabilitation, speech pathology, phonetics and linguistics, speech technology, speech perception and cognitive processing.

Organisation
The course is organised around two teaching terms, a period of examination and an individual research project. There is some flexibility available to students within a framework of taught courses in Speech Science, Hearing Science, Cognitive Science and Research Methods.
Regular tutorials provide additional support to learning, while seminars provide exposure to a range of research activities.

**Staff**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
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<tbody>
<tr>
<td>Course Tutor</td>
<td>Dr. Mark Huckvale</td>
<td>(<a href="mailto:mark@phon.ucl.ac.uk">mark@phon.ucl.ac.uk</a>)</td>
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<tr>
<td>External Examiner</td>
<td>Dr. Tom Baer</td>
<td>Cambridge University</td>
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<tr>
<td>Head of Speech and Hearing Sciences Section</td>
<td>Prof. Stuart Rosen</td>
<td>(<a href="mailto:stuart@phon.ucl.ac.uk">stuart@phon.ucl.ac.uk</a>)</td>
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<tr>
<td>Head of Department</td>
<td>Dr. Valerie Hazan</td>
<td>(<a href="mailto:val@phon.ucl.ac.uk">val@phon.ucl.ac.uk</a>)</td>
</tr>
<tr>
<td>Section Secretary</td>
<td>Lisa Migo</td>
<td>(<a href="mailto:lisa@phon.ucl.ac.uk">lisa@phon.ucl.ac.uk</a>)</td>
</tr>
<tr>
<td>Departmental Secretary</td>
<td>Molly Bennett</td>
<td>(<a href="mailto:molly@phon.ucl.ac.uk">molly@phon.ucl.ac.uk</a>)</td>
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<td>Laboratory Technician</td>
<td>David Cushing</td>
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<td>Listening Centre Secretary</td>
<td>Mary Wykes</td>
<td>(<a href="mailto:mary@phon.ucl.ac.uk">mary@phon.ucl.ac.uk</a>)</td>
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**Mail Address**

<table>
<thead>
<tr>
<th>Department of Phonetics and Linguistics</th>
<th>University College London</th>
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<tbody>
<tr>
<td>Wolfson House</td>
<td></td>
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<tr>
<td>4 Stephenson Way</td>
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<tr>
<td>London NW1 2HE</td>
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*Student pigeon holes for mail are in room G24.*

**Telephone Numbers**

<table>
<thead>
<tr>
<th>Role</th>
<th>Telephone Number</th>
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<tbody>
<tr>
<td>Course Tutor</td>
<td>020 7679 5002</td>
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<tr>
<td>Section Office</td>
<td>020 7679 7401</td>
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<tr>
<td>Departmental Office</td>
<td>020 7679 7174</td>
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<tr>
<td>Speech Sciences Laboratory</td>
<td>020 7679 7400</td>
</tr>
<tr>
<td>Chandler House</td>
<td>020 7679 4200</td>
</tr>
<tr>
<td>Wolfson House Fax</td>
<td>020 7383 0752</td>
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**Faculty Office**

The Life Sciences Faculty Office is in Drayton House, 30 Gordon Street on the ground floor. Drayton House is at the North End of Gordon Street; it is the last doorway before Euston Road. The Faculty Office is part of the Medical School Administration complex.

**2. Term and week dates**

**Autumn Term 2005:**

- Registration Week: 26 September to 30 September
- Teaching Weeks 1-5: 3 October to 4 November
- Reading Week: 7 November to 11 November
- Teaching Weeks 6-10: 14 November to 16 December

**Spring Term 2006:**

- Teaching Weeks 1-5: 9 January to 10 February
- Reading Week: 13 February to 17 February
- Teaching Weeks 6-10: 20 February to 24 March

**Summer Term 2006:**

- Revision Classes & Examinations: 24 April to 9 June
- Project Deadline: 15 September
3. Syllabus (Draft)

Speech Science Components

S1: **Introduction to Speech Science.** An introduction to key concepts in acoustics, speech production & perception. Taught by Paul Iverson. Lectures and laboratory classes. Term 1. Assessed by one piece of coursework and part of Speech Science exam.

S2: **Signals and Systems.** An introduction to quantitative description of signals and systems. Taught by Stuart Rosen. Lectures and laboratory classes. Term 1. Assessed by coursework only.


Hearing Science Components


H3: **Speech Perception and Hearing Seminar Series.** Research Topics in Speech Perception and Hearing. Taught by the Speech Sciences section staff. Seminars only. Term 2. Assessed by coursework only.

Cognitive Science Components

C1: **Cognitive Neuroscience and Psychology.** Introduction to the cognitive psychology and cognitive neuropsychology of language processing. Taught by Judit Druks and others in Human Communication Sciences. Lectures only. Terms 1 & 2. Assessed by part of Cognitive Science exam.

C2: **Psycholinguistics.** An introduction to how experimental psychologists have studied and modelled language processing. Taught by Richard Breheny. Lectures only. Term 2. Assessed as part of Cognitive Science exam.

C3: **Either:**

**Introduction to Linguistics.** An introduction to some of the main concepts in current linguistic theory that have particular relevance to the study of language disorder. Also includes a practical introduction to conversational analysis techniques. Taught by Maria Black. Lectures only. Term 1. Assessed by single essay.

Or:

**Other linguistics component.** From courses running in Term 1. Assessed by coursework only. See [http://www.phon.ucl.ac.uk/courses/](http://www.phon.ucl.ac.uk/courses/).

C4: **Either:**

*Or:*

**Other phonetics component.** From courses running in Term 1. Assessed by coursework only. See [http://www.phon.ucl.ac.uk/courses/](http://www.phon.ucl.ac.uk/courses/).

**Research Methods Components**

R1: **Statistics and Research Methodology.** Introduction to statistics and experimental design using computer tools. Taught by Chris Donlan and others in Human Communication Science. Practical classes only. Term 1 only. Assessed by essay and short test.

R2: **Experimental design in Speech and Hearing Science.** Design of experiments in speech and hearing science. Taught by Speech Sciences section. Term 2. Assessed by coursework.

R3: **Introduction to Programming in MATLAB.** Introduction to the use of computers and elementary computer programming. Taught by Mark Huckvale. Lectures and practicals. Terms 1 & 2. Assessment by mini-project.

Open seminars are held frequently at a number of nearby sites. Look out for seminar series in the Linguistics section, the Phonetics section, the Psychology department and the department of Human Communication Sciences. There will also be a Speech and Hearing sciences seminar series at Wolfson House with a number of invited speakers. Check regularly the Departmental web pages on [http://www.phon.ucl.ac.uk/events/](http://www.phon.ucl.ac.uk/events/).

**4. Text Books & Reading List**

There is no single text book that covers the majority of material taught on the programme. You will find that each course component and even each teaching session will make specific reading recommendations. As far as possible we make copies of hard-to-get readings available for loan from the Listening Centre. Students are under no obligation to purchase textbooks, and UCL has excellent library facilities. However, if you would like to purchase books, these are suggestions.

For the MATLAB programming course, you may find it convenient to be able to write MATLAB programs on your own computer. For that we recommend *The student edition of MATLAB* version for Windows/Mac. The newest version is release 14, but release 13 would be just as good for this course. This can be purchased from the manufacturers at www.mathworks.com.


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### 5. Assessment

**Coursework**

Many courses will set coursework to be completed by the student within the teaching term. Submission dates will always be given. Coursework should be handed to the tutor for the course on or before the submission date. Coursework should be always be written in clear and precise English and be well presented. Word processing of coursework is recommended but not required.

Coursework is first marked by the course tutor and usually returned to the student within two weeks. Students are responsible for keeping the marked work until the end of the teaching period. Students should then submit a folder containing all marked work for second marking by an independent internal examiner and checking by the external examiner.
UCL uses a letter grading scheme which is related to a percentage mark as follows: 0-35%: F, 35-40%: E, 40-50%: D, 50-60%: C, 60-70%: B, 70-80%: A, 80-100%: A*. The pass mark for all MSc assessments is 50%, i.e. 'C' or above. The distinction mark is ‘A’ or above.

**Written Examinations**
There are three written examinations that are normally held in May:
1. Speech Science, 3 hours (based on S1 and S3)
2. Hearing Science, 3 hours (based on H1, and H2)
3. Cognitive Science, 2 hours (based on C1 and C2)

You will need to register for the exams at the start of the spring term. Written examinations are marked anonymously and independently by two internal examiners, and the marking checked by the external examiner. You will be informed whether you have passed the examinations (but not the percentage mark) before the end of June.

Students who are dyslexic may, in some cases, be allowed extra time for examinations. Applications must be made through the course tutor. The deadline for applications for extra time is 1st March. Arrangements can also be made for students to sit examinations in a special facility with medical help on call.

**Project Dissertation**
The dissertation is assessed by the student’s supervisor and an independent internal examiner, with the marking validated by the course external examiner.

**Balance of Marks**
The course assessment is organised under five headings: Speech Science (16.7%), Hearing Science (16.7%), Cognitive Science (16.7%), Research Methods (16.7%), and Project (33.3%). Within the taught components, coursework typically counts for 30% with the final exam counting for 70%. To obtain a degree, students normally need to pass all five sections, i.e. obtain an average of at least 50% in each. To obtain a distinction, students normally need to obtain an average mark of 70% or greater in the project and in at least 2 other sections, and have good marks in the other sections.

**Final Degree Results**
The final examiners’ meeting usually takes place at the end of October, with results sent to the University in early November.

**6. Project**

**General**
The summer project is assessed for the degree solely by the dissertation. The dissertation should be word-processed and bound to usual good practice. The dissertation is due on or
before 15th September. Any extensions caused by extenuating circumstances must be agreed before that date. There is no length limit, but dissertations should not be much longer (nor much shorter!) than 10,000 words. The original and one copy should be submitted. One of these will be returned, the other will be put in the Wolfson House library.

**Content**
As well as describing the research work done in the project, the dissertation should include:

- An abstract, giving the main results of the project
- An introduction which sets the scene of the research work, suitable for a speech scientist without specific experience of the particular area.
- A conclusion which states what has been achieved and what else could be done in the area of the project.
- Bibliography and/or references of relevant articles.

Make sure you acknowledge any contribution made by others to the research work you describe. You may like to include an appendix giving raw results, so that others may study them in the future.

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**7. General Information**

**Submission of Coursework**
Students are advised to make all efforts to submit coursework on time. Work that is late may be penalised or not even considered for assessment. Where illness or unforeseen difficulties cause a problem in meeting a deadline, the student is advised to obtain an extension from the tutor. Extensions may only be granted in advance of the submission date.

**Plagiarism**
Students are advised that the College has severe penalties for students found guilty of plagiarism (passing off others’ work as ones own). To reduce any possibility of such a charge, students are advised to use clear and precise referencing for all bibliographic material used in coursework. Students may also be required to sign forms that coursework submitted is substantially their own work.

**Complaints**
All complaints should, in the first instance, be made to the course tutor. The student may also pursue complaints with the Head of Department and the Dean of the Life Sciences faculty.

**Health**
If you are likely to be away from College because of ill health for more than a single day, please let the section secretary know (020 7679 7401). The University health centre provides medical care for students of the College and can be found in Gower Place. The student counselling service provides help for individuals with any non-medical problems. The counselling service is at 3 Taviton Street.

**Contact Address**
Please make sure that the Course Tutor, the Section secretary and the Departmental secretary have up-to-date information about your term-time address and contact telephone number.
Access Fund
The College Access fund can provide limited support to students in financial difficulties. Applications may be made in December and March. Application forms are available from the Dean of Students’ office. Judith Crompton is the Departmental co-ordinator for Access funds (020 7679 7317)

Access to Buildings
College buildings are normally open between 8am and 6pm. Outside those hours, students must be supervised by a member of staff. The front door of Wolfson House is locked at 4.30pm.

Tuition Fees
Students who are having problems with their tuition fee payment should discuss matters straight away with the Student Finance office (Registrar's Division, room G19 in the South Wing of the main building).

Disabled Students
The Disabilities Co-ordinator can also advise on other matters such as access and help for students with impaired hearing or vision. Advice is available from the UCL Disabilities Co-ordinator Marion Hingston Lamb (email disability@ucl.ac.uk, tel 020 7679 1343).
The Internet Institute for Speech and Hearing is a virtual centre of expertise in the science and technology of human spoken communication.

- Visit the Entrance Hall to find basic information about the field of speech and hearing. Also look here for answers to some frequently asked questions.
- Visit the Library to locate journals, books and reference materials. Books are catalogued under Beginner, Intermediate and Advanced.
- Visit the Lecture Room to sit in on some web-based teaching going on now. There are interactive web tutorials to try.
- Visit the Laboratory to try out some practical experiments in sound, speech and hearing. There are also some tools you can download for your own computer.
- Visit the Meeting Room to make contact with other people interested in speech and hearing. Join a mailing list or confer on a news group.
- Or just Send us a message, telling us what you like, or what you don’t like, or what you want to find out.

Visit
www.speechandhearing.net
for links to web-based learning resources in speech and hearing