

## **MSc/Postgraduate Diploma in the Neuroscience of Language For students entering in 2009**

Awarding Institution:	The University of Reading
Teaching Institution:	The University of Reading Faculty of Life Science
Programme length:	12 months (24 part-time)
Date of specification:	November 2008
Programme Director:	Dr Vesna Stojanovik
Board of Studies:	

### **Summary of programme aims**

The purpose of this programme is to prepare graduates in linguistics, speech and language therapy, psychology, health science, education and allied disciplines for research-related careers in the Neuroscience of Language. The programme provides a theoretical background and practical experience for students to realise their potential as independent researchers in the field of the neuroscience of language.

The expected outcomes are that students should acquire and demonstrate:

- Appreciation of the theoretical and philosophical context in which research is designed, conducted, and interpreted;
- Competence in and understanding of a range of research methods cognitive neuroscience and detailed expertise in a subset relevant to the student's own research interests.
- In-depth knowledge of the work done by neuroscientists on speech and language and awareness of possibilities and limitations of using imaging technology in studying language processing in typical and atypical populations
- The ability to synthesise, analyse, interpret and evaluate information and theoretical claims;
- Expertise in data management and analysis, and awareness of issues affecting data interpretation.
- Understanding of ethical issues in research and intellectual property rights.
- Competence in research management.
- Written and oral skills for disseminating research outputs to different types of audience and in different formats.
- Awareness of issues relevant to the pursuit of a research career.
- Acquisition of a broad range of transferable employment-related skills.

### **Transferable skills**

By the end of the course, students will have developed the following transferable skills:

- Ability to use computers for statistics, data analysis, and communication.
- Ability to use database/library resources.
- Writing skills: writing of papers, abstraction of others' work from written and oral material, reviewing of work of peers.
- Ability to make oral presentations.

## Programme content

<i>Compulsory Modules</i>		<i>Credits</i>	<i>Level</i>
PLMRT	<i>Research Methods and Transferable Skills</i>	10 A	7
PYMOS1	<i>Data Collection &amp; Analysis 1</i>	10 A	7
PYMOS2	<i>Data Collection &amp; Analysis 2</i>	10 A	7
PYM0NS	<i>Methods in Neuroscience</i>	10 A	7
PLMFS	<i>Foundations of Syntax</i>	10 A	7
PLMEL	<i>Electrophysiology of Language</i>	10 S	7
PLMLP	<i>Language Processing</i>	10 S	7
LSMPH	<i>Foundations of Phonetics and Phonology</i>	10 A	7
PLMRDN	<i>Dissertation</i>	60	7
		Spr/Sum	
		<b>140</b>	

### *Optional Modules:*

<i>Modules totalling 40 credits must be selected from the following:</i>		<i>Credits</i>	<i>Level</i>
PLMCLA	<i>Child Language Acquisition</i>	10 S	7
PLMCPH	<i>Clinical Phonetics and Phonology</i>	10 A/S	7
PLMLAC	<i>Linguistic Assessment Clinic</i>	10	7
		AorS	
PLMLAA	<i>Linguistic aspects of aphasia</i>	10 S	7
PLMLI	<i>Specific Language Impairment</i>	10 S	7
PLMAL	<i>Application of Linguistics</i>	10 S	7
PLM0FM	<i>fMRI Data Analysis</i>	10 S	7
PLMLPT	<i>Introduction to Language Pathology</i>	10 A	7

**Please note: you can take any of the optional modules listed above, provided that the timetable permits this. The available option modules may vary from year to year. Students will need to consult with the programme director with regard to option modules. Also, students with adequate prior learning in subject areas which are obligatory may be able to get exempt from taking the obligatory modules and choose a different option module instead to the same number of credits.**

### **Part-time/Modular arrangements**

The programme may be undertaken over two years on a part-time basis. Selection of modules between the two years will be agreed between the student and the Board of Studies, at the commencement of the course. It is anticipated that students will normally complete at least 80 credits' worth of modules in Year 1. Modules will be assessed in the year that they are studied. Dissertation (PLMRDN) must be taken in year 2.

### **Progression requirements**

N/A

### **Summary of teaching and assessment**

Teaching is by a variety of methods, including lectures, small group seminars, workshops, individual feedback on written work, and one-to-one supervision. Assessment includes written assignments, short notes examinations, open-book tests, submission of practical reports, oral presentations, and submission of project dissertation.

The University's taught postgraduate marks classification is as follows:

<u>Mark</u>	<u>Interpretation</u>
70 – 100%	Distinction
60 – 69%	Merit
50 – 59%	Good standard (Pass)
<u>Failing categories:</u>	
40 – 49%	Work below threshold standard
0 – 39%	Unsatisfactory Work

### ***For Masters Degrees (180 credits)***

To pass the MSc students must gain an average mark of 50 or more overall including a mark of 50 or more for PLMRDN. In addition, the total credit value of all modules marked below 40 must not exceed 30 credits, and for all modules marked below 50 must not exceed 55 credits.\*

Students who gain an average mark of 70 or more overall including a mark of 60 or more for the dissertation and have no mark below 40 will be eligible for a Distinction. Those gaining an average mark of 60 or more overall including a mark of 50 or more for the dissertation and have no mark below 40 will be eligible for a Merit.

### ***For PG Diplomas (120 credits: as MSc but without a Project)***

To pass the Postgraduate Diploma students must gain an average mark of 50 or more. In addition the total credit value of all modules marked below 40 must not exceed 30 credits and for all modules marked below 50 must not exceed 55 credits.\*

Students who gain an average mark of 70 or more and have no mark below 40 will be eligible for the award of a Distinction. Those gaining an average mark of 60 or more and have no mark below 40 will be eligible for a Merit.

In addition, the full-time programme must be completed within 24 months from the date of registration, whereas the part-time programme must be completed within 48 months from the date of registration.

\* The provision to permit a candidate to be passed overall with a profile containing marks below 40 is made subject to the condition that there is evidence that the candidate applied his or herself to the work of those modules with reasonable diligence and has not been absent from the examination without reasonable cause.

### **Admission requirements**

Entrants to this programme are normally required to have obtained an Honours degree in linguistics, speech and language therapy or related discipline (e.g., modern languages, cognitive science, psychology, education, health sciences, philosophy). Applicants should have gained, or expect to gain, a class mark of 2(1) or higher (i.e., 60%+ [or international equivalent, e.g. B+ US letter grade]). Applicants holding 2(2) degrees may apply and each case will be considered on its own merits. Applicants whose academic qualifications do not meet these formal standards may in the first instance be admitted to the Diploma course; they may then transfer to MSc status subject to satisfactory performance in their first two terms. Applicants who do not have English as their first language, must have an IELTS score of 7 with no component less than 6.

The Admissions Tutor for this programme is Dr Vesna Stojanovik.

### **Support for students and their learning**

University support for students and their learning falls into two categories. Learning support includes IT Services, which has several hundred computers and the University Library, which across its three sites holds over a million volumes, subscribes to around 4,000 current periodicals,

has a range of electronic sources of information and houses the Student Access to Independent Learning (S@IL) computer-based teaching and learning facilities. There are language laboratory facilities both for those students studying on a language degree and for those taking modules offered by the Institution-wide Language Programme.

Student guidance and welfare support is provided by Personal Tutors, School Senior Tutors, the Students' Union, the Medical Practice and the Student Services Centre. The Student Services Centre is housed in the Carrington Building and includes the Careers Advisory Service, the Disability Advisory Service, Accommodation Advisory Team, Student Financial Support, Counselling and Study Advisors. Student Services has a Helpdesk available for enquiries made in person or online ([www.risisweb.reading.ac.uk](http://www.risisweb.reading.ac.uk)), or by calling the central enquiry number on (0118) 378 5555. Students can get key information and guidance from the team of Helpdesk Advisers, or make an appointment with a specialist adviser; Student Services also offer drop-in sessions on everything from accommodation to finance. The Carrington Building is open between 8:30 and 17:30 Monday to Thursday (17:00 Friday and during vacation periods). Further information can be found in the Student Diary (given to students at enrolment) or on the Student website ([www.reading.ac.uk/student](http://www.reading.ac.uk/student)).

Within the School, there is the Centre for Integrative Neuroscience and Neurodynamics, which is an interdisciplinary centre and houses a A 3T research-dedicated MRI scanner and high-density EEG laboratory. These facilities are complemented by high resolution stimulus display systems with integrated high-speed eye tracking. In addition to dedicated CINN facilities, contributing departments house state-of-the-art research laboratories, supporting research in developmental, social and clinical psychology, neurophysiology (EEG/ERP), psychophysiology, speech and language perception and production, visual and auditory perception and motor systems, genomics, post-genomics, structural and computational biology, computational modeling and pharmacology. There is also a large and well-equipped Speech Research Laboratory within the School, offering facilities in acoustic, articulatory and physiological aspects of speech analysis, and supported by a range of computational and electronic hardware. There is also a Speech and Language Therapy Clinic which functions partly as a community clinic for the local area health authority, while offering a specialist linguistic assessment service. It also supports a teaching and research facility including a large resource of tests and assessments with recording and viewing facilities. The School also has a Learning support access is provided through the departmental networked computers and printers, the departmental assessment library, provision of photocopying cards, and ready access to members of staff who are all respected scholars in the fields taught. Pastoral support augments the University's care systems, with each student being allocated a Personal Tutor.

New students undergo an induction programme in the week before they start the programme. A comprehensive handbook is available for the programme; this is available on-line, as are a wealth of other resources via the department's intranet. There is an active Student-Staff Committee with postgraduate representation.

### **Career prospects**

Since the programme is primarily intended as research training, the focus must be on outcomes in this area. Students will be fully equipped to undertake doctoral research in the neuroscience of language. However, it is also envisaged that the skills acquired (specialist and generic) will be applicable to careers involving research management, such as government and market research.

### **Educational aims of the programme**

Students are required to operate at a more advanced level than in an Honours degree, with emphasis on the current theoretical issues which arise with particular prominence in this field of enquiry.

## Programme Outcomes

### *Knowledge and Understanding*

#### **A. Knowledge and understanding of:**

1. Typical and atypical language acquisition and disorders
2. Contemporary theoretical issues in research in the neuroscience of language
3. Knowledge of a range of brain imaging methods as applied to the neuroscience of language
4. Understanding of a broad variety of methods in, and approaches to, empirical enquiry in the social sciences, and especially in the neuroscience of language.
5. The use of computer programs to perform qualitative and quantitative analysis of data
6. Ethical issues as they relate to research in the neuroscience of language.
7. Detailed subject-specific substantive knowledge

#### **Teaching/learning methods and strategies**

1, 2, 3, 4, 5 and 6 are achieved through lectures, seminars, workshops, written work and through self-paced exercises followed up by supported workshops, and 7 will be covered by the student's dissertation

#### *Assessment*

1, 2, 3, 4, 5, 6 and 7 are assessed by practical coursework, essays, written exams and the requirement to complete an original piece of research in the neuroscience of language. In all cases, students are expected to perform at a level above that required for undergraduate study.

*Skills and other attributes*

**B. Intellectual skills** – able to:

1. Understand, at an advanced level, the theoretical framework(s) in which research in the neuroscience of is conducted.
2. Analyse and evaluate data;
3. Evaluate linguistic theories in light of clinical data;
4. Synthesise and evaluate information from different sources;
5. Write well-structured and well-argued essays.
6. Select from a number of possible methods, the one most appropriate to a particular data set and a given research question or questions.
7. Plan, carry out and present an extended independent investigation of a research topic

**Teaching/learning methods and strategies**

Intellectual skills are developed throughout the programme through interactive teaching, small group tutorials, students' written work and oral presentations. In order to achieve 7, students are allocated a research supervisor who monitors closely their progress and gives feedback.

*Assessment*

1-5 are assessed in coursework and examinations; 6 and 7 is assessed by a dissertation.

**C. Practical skills** – able to:

1. Perform advanced searches for information relevant to specific topics.
2. Collect and manage data
3. Make an application for ethical approval.
4. Transcribe non-clinical and clinical data using the International Phonetic Alphabet
5. Ability to use available data bases such as CHILDES and software such as SALT
6. Plan experiments using a range of methodologies including brain imaging

**Teaching/learning methods and strategies**

Dedicated seminars, practical classes, and exercises deliver 4, 5 and 6. A dedicated library and resources session supports 1. 2 and 3 are initially explicated as part of the Methods modules (i.e., PYMRT and PLMRDN); they are then consolidated by direct supervision of a research project and associated dissertation.

*Assessment*

Through practical exercises, data analyses assignments and a research dissertation.

**D. Transferable skills** – able to perform the following at graduate level:

1. Communicate concisely or at length in writing.
2. Define a research topic and mount a principled investigation by means of the formulation of research questions and the establishment of an appropriate methodology;
3. Give oral presentations.
4. Work with a group.
5. Plan and implement a project.
6. Solve practical problems.
7. Use IT to write, to present information visually, to manage and analyse numeric data, to communicate, and to find information.
8. Take a critical stance to literature read
9. Manage time.
10. Manage research

**Teaching/learning methods and strategies**

Transferable skills are integrated in subject-based teaching. 1 is learned, with formative feedback, through essays and other written assignments. 2 is included in seminars and through supervision. 3 forms part of the compulsory modules PLMRDN and PLMEL and in a number of optional modules (PLMLI; PLMLAC). 4 is included in the compulsory module PLMRDN and in a number of optional modules PLMLAC, PLMLI, PLMLAA. 6, 7, 8 and 9 pervade all aspects of the programme. 5 and 10 are explicated in PLMRDN.

*Assessment*

1-3 and 5, 7, 8 and 10 are assessed through essays, examinations and the dissertation. 4 is assessed through An adequate standard in 4 and 6 are required to pass the programme.

**Please note - This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the module description and in the programme handbook. The University reserves the right to modify this specification in unforeseen circumstances, or where the process of academic development and feedback from students, quality assurance processes or external sources, such as professional bodies, requires a change to be made. In such circumstances, a revised specification will be issued.**