ROYAL HOLLOWAY
University of London

PROGRAMME SPECIFICATION

This document describes the **Master of Science in Human Neuroscience.** This specification is valid for new entrants from **September 2009** but please note that the last intake for this programme was in September 2010.

The aims of the programme are:

- to equip students with an understanding of the anatomy and physiology of the nervous system, and of ways in which this informs an understanding of behaviour;
- to equip students with an understanding of the methods used for studying brain-behaviour relationships;
- to develop students' analytical, methodological and statistical skills to advanced levels commensurate with the research demands neuroscience and behaviour;
- to give students opportunities to become acquainted with relevant research literature through reading and group discussion;
- to develop the ability of students to conduct and report research under supervised guidance.

The programme is delivered over one year of full-time study (52 weeks) or two years of part-time study (104 weeks).

Further information

This document provides a summary of the main features of the programme(s), and of the outcomes which a student might reasonably be expected to achieve if full advantage is taken of the learning opportunities provided. Further information is contained in the College prospectus, the College Regulations and in various handbooks issued to students upon arrival. Whilst Royal Holloway keeps all its information for prospective applicants and students under review, programmes and the availability of individual courses are necessarily subject to change at any time, and prospective applicants are therefore advised to seek confirmation of any factors which might affect their decision to follow a specific programme. In turn, Royal Holloway will inform applicants and students as soon as is practicable of any substantial changes which might affect their studies.

Learning outcomes

By the end of the course, students will:

- understand the microstructural and macrostructural anatomical principles of brain organisation;
- understand the physiological basis of neuronal information processing;
- understand the methods by which physiological and behavioural data are acquired and statistically analysed;
- understand the relationships between anatomy, physiology and behaviour.

Skills and other attributes

Students following the programme will gain the following transferrable skills:

- to critically evaluate the quality of research in the neurosciences;
- to carry out original research projects independently, including conception, literature review, study design, data collection, data analysis, data interpretation, and dissemination;*
- to communicate clearly in both written and oral form;*
- to work collaboratively within a group;*
- to work to deadlines;*
- to apply their advanced statistical skills to a range of issues;*
- to approach problems logically and systematically.*

* transferable skills

Back to top

Teaching, learning and assessment

Teaching and learning are mainly by means of two-hour lecture sessions and workshops, or one hour seminar-style discussions. There will also be supervision in small groups for projects. Some modules include oral presentations given by students which are formatively assessed. Summative assessments are conducted through a combination of coursework essays and examinations. Laboratory record-keeping for the project will also be assessed, and the outcome will contribute to the final mark. The Programme Director may also decide whether viva examinations may be conducted under certain circumstances. Full details of the assessments for individual courses can be obtained from the Department.

Back to top

Details of the programme structure

	Term 1	Term 2	Term 3
Current Topics in Human Neuroscience			
Foundations of Neuroscience			
Advanced Neurophysiological Methods			
Computational Neuroscience			
Topics in Psychological Science			
Advanced Statistics for Psychology			
Research Project			

- **Current Topics in Human Neuroscience (12.5%)**
- **Foundations of Neuroscience (12.5%)**
- **Advanced Neurophysiological Methods (12.5%)**
- **Computational Neuroscience (12.5%)**
- **Topics in Psychological Science (12.5%)**
- **Advanced Statistics for Psychology (12.5%)**
- **Research Project (25%)**

Students studying the programme part-time will decide, in conjunction with the Programme Director, which courses will be taken in their first and second years of study.

Back to top

Progression and award requirements

Progression throughout the year/s is monitored through performance in oral presentations, contributions to seminar discussion and coursework. To pass the programme a student must achieve an overall weighted average of at least 50.00%, with no mark in any element which counts towards the final assessment falling below 50%.

The Masters degree with Merit may be awarded if a student achieves an overall weighted average of 65.00% or above, with no mark in any element which counts towards the final assessment falling below 50%.

The Masters degree with Distinction may be awarded if a student achieves an overall weighted average of 70.00% or above, with no mark in any element which counts towards the final assessment falling below 60%. A Distinction will not normally be awarded if a student re-sits or re-takes any element of the programme. In exceptional circumstances a viva may be held for a student at the request of the Examiners.

Students must achieve a pass mark for the Project in order to pass the programme.

In the event that a student fails particular course units, s/he will be entitled to re-take these units in the following academic year should they wish to do so. Students who withdraw from the Project may be considered for the award of a Postgraduate Diploma instead of a Masters Degree.

Back to top

Student support and guidance

- The Programme Director can advise on academic, pastoral and welfare issues (if the latter are sufficiently severe, students will be offered specialist support from relevant personnel). The programme director is available for consultation within office hours.
- All members of staff teaching on the course are available via their e-mail, and addresses are published in the programme handbook.
- Detailed student handbook and course resources.
- The department's postgraduate Induction sessions for incoming students in the first week of the Autumn term, aligned with the college's induction procedures.
- Extensive supporting materials and learning resources in College libraries and computer centre.
- College Careers Service and Departmental Careers Service Liaison Officer. The department also arranges careers events for undergraduates. Many of these events might be interesting to MSc students also, and they are welcome to participate on a voluntary basis.
- Access to all College and University support services, including Student Counselling Service, the Language Centre, Health Centre and the Education Support Unit for students with special needs.
- A staff/student committee is held each term with representatives from each pathway. Minutes of these meetings are posted in the Department.

Back to top

Admission requirements

A Bachelor degree in subjects allied to the psychological, biological or physical sciences, as well as those with degrees in subjects related to mathematics and statistics (minimum grade 2.1 in the UK system, or an equivalent grade for an overseas qualification. Academic results from non-UK institutions will be assessed individually for equivalence to this criterion.) Applications that are not clearly within these areas will still be considered, in which case the Programme Director will decide whether the background will equip the student sufficiently for embarking on the MSc course. Students whose first language is not English may also be asked for a qualification in English Language at an appropriate level. For further details please refer to the Prospective Students web page. It may also be helpful to contact the Admissions Office for specific guidance on the entrance requirements for particular programmes.

Back to top

Further learning and career opportunities

The programme will equip students with knowledge about cutting edge developments and issues in the neurosciences, as well as an array of analytical, methodological, and statistical research skills. While these skills are particularly useful for a career in research (e.g. a PhD or research assistantship), the course is designed such that these skills are readily transferrable. They will add value in settings of where critical thinking, research skills, or working knowledge of statistics and/or biology are important. For further details on further learning and career opportunities please refer to the Careers Service.

Back to top

Indicators of quality and standards

Royal Holloway's position as one of the UK's leading research-intensive institutions was confirmed by the results of the most recent Research Assessment Exercise (RAE 2008) conducted by the Higher Education Funding Council (HEFCE). The new scoring system for the RAE 2008 measures research quality in four categories, with the top score of 4* indicating quality that is world-leading and of the highest standards in terms of originality, significance and rigour. 60% of the College's research profile is rated as world-leading or internationally excellent outperforming the national average of 50%. The College is ranked 16th in the UK for research of 4* standard and 18th for 3* and 4* research. The Department of Psychology was ranked joint 5th in the top 10 universities in the country in terms of proportion of 3* and 4* research, with 70% of its research profile being of 3* and 4* standard.

Back to top

List of programmes

The programme is taught by staff at Royal Holloway and by contracted external NET staff, and the Masters leads to an award of the University of London. The Postgraduate Diploma leads to an award of Royal Holloway and Bedford New College. The programme is not subject to accreditation by a professional body. The Banner programme codes are given in parentheses.

Master of Science Programme in Human Neuroscience

MSc in Human Neuroscience (2340)

Postgraduate Diploma in Human Neuroscience

PG Diploma in Human Neuroscience (2437)

Back to top