BSc in Psychology with Neuroscience For students entering Part 1 in 2013/4

Awarding Institution: University of Reading Teaching Institution: University of Reading

Relevant QAA subject Benchmarking group(s): Psychology

Faculty: Life Sciences Faculty

Programme length: 3 years
Date of specification: 22/Jun/2015

Programme Director:

Programme Advisor: Dr Philip Beaman Board of Studies: Psychology

Accreditation: British Psychological Society Graduate Basis for

Chartered Membership

UCAS code: C8B1

Summary of programme aims

This is a Psychology programme with an emphasis on Biological Psychology and Neuroscience, provision of Neuroscience available within the Department of Psychology being supplemented by relevant optional modules from other Schools. Students would be introduced to the wide range of approaches that constitute modern Psychology as a social AND biological science, and to concepts and evidence within the domains of the subject required for British Psychological Society accreditation, which are covered in the Part 2 core modules. A substantial proportion of work at Part 3 will be devoted to Biological Psychology and Neuroscience, focusing upon recent findings made possible by the advancement of neuroimaging (fMRI, PET) and other techniques of Cognitive Neuroscience (EEG, TMS) which are routinely used within the School and within the Centre for Integrative Neuroscience and Neurodynamics (CINN). Students may also choose to take optional modules in computational neuroscience, leading to a broader understanding of brain function as computation.

Transferable skills

During the course of their studies at Reading, all students will be expected to enhance their academic and personal transferable skills. In following this programme, students will have had the opportunity to develop such skills, in particular relating to written and oral communication, interpersonal skills, learning skills, numeracy, self-management, use of IT, problem-solving, project management and reporting, and will have been encouraged to further develop and enhance the full set of skills through a variety of opportunities available outside their curriculum.

Programme content

This is primarily focused on biological psychology, neuropsychology and cognitive and affective neuroscience, all of which can be provided from within the School. The psychology content will also necessarily be broad enough to meet BPS accreditation requirements (notably at Part 2). Relevant optional modules from other Schools are also identified below. With the agreement of the School of Systems Engineering, there is a route for interested students to follow a course of modules in computational neuroscience and artificial neural networks through to Part 3, which would provide students with a broader appreciation of the neural foundations of cognitive science and intelligent function, analytical techniques in neuroscience, and neurodynamics.

Part 1 (three terms)

Compulsory modules

PY1PR Psychological Research	ch	20	4
PY1PC Perception		10	4
PY1IN Introduction to Neuro	oscience	10	4
PY1CG Cognition and Learning	ng	10	4
PY1DV Developmental Psych	nology	10	4

Optional modules

Students may choose from the range available across the University, but it is strongly recommended that up to 60 credits be chosen from the following:

PY1CL	Clinical Psychology	10	4
PY1SK	Skills for Psychology	20	4

PY1PAW	Psychology at Work	10	4
PY1DIP	Debates in Psychology	10	4
PY1AP	Applied Psychology	10	4
SE1CA11*	Computing Applications	20	4
SE1PR11*	Maths for Computer Science	20	4

^{*}These modules are pre-requisites for choosing the Part 2 modules SE2NE11 Neurocience, SE2NN11 Machine Intelligence or SE2MI11 Neural Networks

Part 2 (three terms)

Compulsory modules

Mod Code PY2RM PY2CP	Module Title Research Methods and Data Analysis Careers in Psychology	Credits 20 20	Level 5 5
No less than 10	00 credits from the following:		
PY2CN	Cognition	20	5
PY2TA	Typical and Atypical Development	20	5
PY2NS	Neuroscience	20	5
PY2RM	Research Methods and Data Analysis	20	5
PY2PS	Personality and Social Psychology	20	5
PY2CP	Careers in Psychology	20	5

British Psychological Society Graduate Basis for Chartered Membership (GBC)

Students must gain Lower Second Class Honours or higher to qualify for BPS GBC. Part 2 modules PY2RM+PY2TA+PY2PS+PY2NS+PY2CN (or equivalent Combined Subject module) are the minimum required for BPS accreditation. All the modules from this list that are taken must be passed with at least 40%. Subject to those constraints, students may choose up to 20 credits from those available across the University including those below, where relevant pre-requisites from Part 1 have been met.

SE2MI11	Machine Intelligence	10	5
SE2NE11	Neuroscience	10	5
SE2NN11	Neural Networks	10	5

Part 3 (three terms)

Compulsory modules:

PY3P Project 40 6

To qualify for BPS accreditation, the Project must be passed with at least 40%. A further requirement is that the project must be conducted in the general area of biological psychology or neuroscience. Students who do not follow this requirement will be transferred to BSc Psychology.

A minimum of 40 credits from modules such as the following:

PY3C*	Contemporary Issues	10	6
PL3EL	Electrophysiology of Language	10	6
PL3PM	Psychology & Neuroscience of Meaning	10	6
PY3AV	Active Vision	10	6
PY3CAN	Cognitive & Affective Neuroscience	10	6
PY3CA	Cognitive Neuropsychology of Ageing	10	6
PY3CCN	Controversies in Cognitive Neuroscience	10	6
PY3DN	Developmental Neuroscience	10	6
SE3CM14**	Computational Methods for Neuroscience	10	6
SE3SL11	Social, Legal and Ethical Aspects of Engineering	10	6
SE3NE15**	Neuroscience	10	6

Other optional modules available from within the broader Psychology provision may be taken to ensure a total of 120 credits overall.

^{*}Recommended option

^{**}Where relevant Part 2 pre-requisites have been met.

Progression requirements

In order to progress from Part 1 to Part 2 in BSc Psychology with Neuroscience a student shall normally be required to achieve a threshold performance at Part 1 and to have obtained at least 40% in the Psychology modules PY1PR, PY1PC, PY1IN, PY1CG and PY1DV averaged together, with at least 30% in each of these 5 modules

To gain a threshold performance at Part 2, a student shall normally be required to achieve:

- (i) a weighted average of 40% over 120 credits taken at Part 2;
- (ii) marks of at least 40% in individual modules amounting to not less than 80 credits; and
- (iii) marks of at least 30% in individual modules amounting to not less than 120 credits.

In order to progress from Part 2 to Part 3, a student must achieve a threshold performance

In order to progress from Part 2 to Part 3 in BSc Psychology with Neuroscience, a student should normally be required to achieve a threshold performance at Part 2. In addition, all modules that are taken from the list above under British Psychological Society Graduate Basis for Chartered Membership (GBC) must be passed with at least 40%.

To be eligible for Honours students must pass the Project module.

Summary of teaching assessment

The University's honours classification scheme is:

Mark Interpretation

70% - 100% First class

60% - 69% Upper Second class

50% - 59% Lower Second class

40% - 49% Third class

35% - 39% Below Honours Standard

0% - 34% Fail

The weighting of the Parts/Years in the calculation of the degree classification is Part 2 one-third Part 3 two-thirds.

Assessment and classification

Part 1 and Part 2 modules are principally taught by lectures. Part 2 lectures and Part 3 options are supported by seminars. Some modules include practical work, either in large groups (Part 1) or in small groups or individually (Part 2 and Part 3 project). Modules are typically assessed by a mixture of coursework and formal examination; some modules are assessed 100% by coursework. At Part 1 the coursework principally constitutes essays and summaries, presentations and practical reports; at Part 2, essays and project reports; at Part 3, essays, presentations (e.g. oral presentations, poster) and the Project report. The proportion of credit for coursework relative to examinations increases from Part 1 to Part 3 as students become more independent.

Admission requirements

Entrants to this programme are normally required to have obtained:

Grade B in Mathematics, Sciences, English in GCSE; and to have achieved: A Levels: AAA / AAB; International Baccalaureat Diploma: 6,6,6/6,6,7 at higher level plus at least 5 in Ordinary Mathematics; Irish Leaving Certificate: AAAAB; Access Course: Level 3 Distinctions and Merits.

Admissions Tutor: Dr Carien van Reekum

Support for students and their learning

University support for students and their learning falls into two categories. Learning support is provided by a wide array of services across the University, including: the University Library, the Careers, Placement and Experience Centre (CPEC), In-sessional English Support Programme, the Study Advice and Mathematics

Support Centre teams, IT Services and 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 advisers in the Student Services Centre. The Student Services Centre is housed in the Carrington Building and offers advice on accommodation, careers, disability, finance, and wellbeing, academic issues (eg problems with module selection) and exam related queries. 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 and runs workshops and seminars on a range of topics. For more information see www.reading.ac.uk/student

Career learning

Career prospects

Because the degree is accredited by the British Psychological Society, graduates are qualified to enter professional training as, for example, clinical or educational psychologists. Graduates of this programme will have studied the psychology of human development both broadly and in depth, and will be particularly well prepared for employment or further training in fields such as education, the care and treatment of children, or work with families. Psychology graduates generally move into an extremely wide range of careers with some bias towards health and education, but extending to many other professional roles. As numerate scientists they also enter a wide variety of other commercial and business occupations. Many go on to postgraduate training.

Opportunities for study abroad

Students who will wish to study abroad during Autumn Term of their Final Year, should consult the School's Study Abroad Advisor early in Part 2 to discuss current opportunities. Students can take part in the Erasmus Exchange Scheme or spend a term in Canada, the USA or Australia.

There is a work placement component in PY2CP. Throughout the course there are opportunities to engage in volunteer work. Towards the end of Part 2 students can apply for a summer vacation placement which involves working with a member of academic staff on a research project in the Department.

Placement opportunities

Programme Outcomes

Knowledge and Understanding

A. Knowledge and understanding of:

- 1. Concepts, theories and evidence in six core domains: research methods, individual differences, biological, cognitive, developmental and social psychology
- 2. A broad variety of methods and approaches used in psychological research
- 3. Practical applications of psychological theory and research
- 4. A selection of optional specialist topics, studied in depth using up-to-date research evidence
- 5. Ethical issues in research and appropriate conduct by researchers

Teaching/learning methods and strategies

1-3 are covered in lectures and seminars. 2 is further supported by practical classes and exercises, miniprojects and Part 3 projects. Part 3 options cover 4 and extend 1-3 to a more advanced level. Students learn about 5 from participating in research studies in which the principles are made explicit, from lectures, and while planning the Part 3 project.

Assessment

1-4 are assessed by unseen or open-book examinations, coursework essays and other exercises, and reports on empirical work. The Part 3 project assesses both 5 in the plan and final report, and 2 through the rationale for the choice of methods.

Skills and other attributes

B. Intellectual skills - able to:

- 1. Use evidence-based reasoning to argue or evaluate a claim
- 2. Apply multiple perspectives and levels of explanation to understand behaviour
- 3. Critically evaluate the design and conduct of psychological research
- 4. Write well-structured and well-argued essays
- 5. Integrate material from different fields of psychology and cognate areas

C. Practical skills - able to:

- 1. Search for information, using suitable sources, about a specific topic
- 2. Choose and apply appropriate data-analytic techniques
- 3. Plan and carry out empirical studies with guidance or supervision
- 4. Write reports on empirical studies

D. Transferable skills - able to:

- 1. Communicate information concisely or at length in writing
- 2. Give oral presentations
- 3. Work with a group
- 4. Plan and implement a project
- 5. Solve practical problems
- 6. Use IT to write, to present information visually, to manage and analyse numeric data, to communicate and to find information
- 7. Manage time
- 8. Start planning a career

Teaching/learning methods and strategies

1-3 are explicated in lectures and option seminars. Part 3 option seminars focus strongly on 1 and 3. The Contemporary Issues module is not formally taught but gives scope for all of 1-5, especially 4. Essays, increasing in length through the programme, provide practice in 1-5 with formative feedback.

Assessment

1-4 are assessed in examinations and coursework. 5 is a marker of high-quality work throughout, and is emphasised in the Contemporary Issues module (assessed by a pre-seen and planned examination paper).

Teaching/learning methods and strategies

Dedicated modules using lectures, practical classes and exercises cover 1, 2 and the principles underlying 3. Further learning of 3 and 4 takes place through practical classes, Part 2 miniprojects and the Part 3 project.

Assessment

2-4 are assessed in reports on practical classes. Miniproject reports, the Part 3 project plan and report assess all 4 skills. 1 is also assessed in extended essays and in the Contemporary Issues module.

Teaching/learning methods and strategies

Transferable skills are integrated in subject-based teaching. 1 is learned, with formative feedback, through essays and other exercises while 2 is included in seminars especially at Part 3. 3 is required in small-group miniprojects; these, and the Part 3 project, entail 4 and 5. Special classes cover 6, and IT resources are applied throughout the programme. Staged deadlines for coursework encourage 7. 8 forms part of a Part 2 module.

Assessment

1 is assessed in coursework and examinations, 2 within Part 3 seminars. 3 (team participation) forms part of miniproject assessment while 4 and 5 are necessary for miniprojects and the Part 3 project. 6 and 7 are required for most coursework. 8 is the subject of assignments in the relevant module.

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 process or external sources, such as professional bodies, requires a change to be made. In such circumstances, a revised specification will be issued.