MSc Psychology Modules

Disclaimer: The information contained in this document provides general guidance only. While every care has been taken to provide correct information at the date of authoring (September 2017), information may be subject to revision from time to time.

| Credits | Term 1 | Term 2 | Term 3 |
|---------|--|------------------------|----------------------|
| | Foundations in Critical Thinking | | |
| | Research Practical | Current Research in | |
| | Introduction to Neuroscientific | Psychology | |
| 10 | Methods | | |
| | Choose TWO of the following 10 cred | lit modules: | |
| | MatLab Programming | Design & Analysis 2 | |
| | Design & Analysis 1 | | |
| | Choose ONE of the following 20 credit modules: | | |
| | Research Reviews | Public Engagement with | |
| | Research Reviews | Psychological Research | MSc Research Project |
| | You will also choose ONE 20-credit | | |
| | Psychology Option (to study in | | |
| 20 | Term 1 OR Term 2) | | |
| 20 | For an example module list, please | | |
| | refer to the list of Year 3 option | Proposing Research in | |
| | modules available here: | Psychology | |
| | http://www.birmingham.ac.uk/un | | |
| | dergraduate/courses/psychology/ | | |
| | psychology.aspx#CourseDetailsTab | | |
| Total | Minimum 60 | Minimum 30 | 60 |

Course Structure (Full-time)

Typically, part-time students take the some taught modules in Year 1 and complete the research modules (Proposing Research in Psychology and MSc Research Project) in Year 2. There are some restrictions to how the modules are organised (e.g., Proposing Research must be studied before or at the same time as the MSc Research Project). At the beginning of the academic year, part-time students meet with their Course Director to discuss their study plan.

Compulsory Modules

| Module title: | Foundations in Critical Thinking |
|-------------------------|---|
| Module code: | 03 14418 |
| Module Lead: | Dr Natalie Kelly |
| Term: | 1 and 2 |
| Credit value: | 10 |
| Delivery method: | Tutor/student-led discussion seminars |
| Assessment method | l: Critical analysis of selected journal articles (60%), group oral |
| presentation of a crit | ique of a published research report (30%), attendance at each group |
| presentation session | (10%). |
| Marks required to p | bass module: 50% |
| Aims and learning o | bjectives of this module: Lectures discuss current research techniques |
| and develop critical a | approaches to reading and evaluating research articles. The module |
| includes small group | discussions where students target critique of specific research approaches. |
| Learning outcomes | By the end of the module students should be able to: discuss and identify |
| different research ap | proaches; identify current and emerging research topics and techniques, |
| and critically assess a | and review journal articles. |
| Recommended read | ling list: Bell, P., Staines, P. & Mitchell, J. (2001). Evaluating, doing and |
| writing research in Ps | <i>sychology.</i> London: Sage. |

| Module title: | Research Practical |
|---------------------------|---|
| Module code: | tbc |
| Module Lead: | tbc |
| Term: | 2 |
| Credit value: | 10 |
| Delivery method: | Lectures, practical classes, project supervision, and computer- |
| based exercises | |
| Assessment method | : 2,000-word research report (80%) and online assessment of key skills |
| and issues (20%) | |
| Marks required to p | ass module: 50% |
| Aims and learning o | bjectives of this module: This module will cover how to systematically |
| approach conducting | research. Topics will include methods and analysis techniques; reporting |
| research effectively in | n writing; training in IT and administrative skills useful for research |
| activities (e.g., file ma | nagement); and key ethical, legal, health and safety issues in psychology |
| and neuroscience rese | earch |
| Learning outcomes: | By the end of the module, students should be able to: Design a research |
| project(s) using meth | ods relevant to specific research area(s); write a research report using |
| professionally accepted | ed formats; demonstrate a working knowledge of IT and administrative |
| skills and ethical, lega | l, and health and safety issues when conducting psychology and |
| neuroscience researcl | h |
| Recommended read | ing list: A reading list will be provided at the start of the module. |

| Module title: | Introduction to Neuroscientific Methods |
|-----------------------|---|
| Module code: | tbc |
| Module Lead: | tbc |
| | |
| Term: | 1 |
| Credit value: | 10 |
| Delivery method: | Lectures, workshops, and computer-based exercises |
| Assessment method | : Time-limited assignment (120-minutes) (50%) and workshop-based |
| exam (60-minutes) (5 | 50%) |
| | |
| Marks required to p | ass module: 50% |
| Aims and learning o | bjectives of this module: This module will cover the main techniques of |
| brain mapping used i | n cognitive neuroscience (e.g., MRI, fMRI, DTI, EEG, TMS, MEG). Topics will |
| also include the phys | ics of NMR and MRI, introduction to fMRI experimental design and |
| analysis. Students wi | ll have computer based training in data analysis and seminar-based |
| workshop sessions di | scussion imaging methods |
| Learning outcomes: | By the end of the module the student should be able to: demonstrate a |
| broad knowledge of t | he main methods used for mapping brain functions in cognitive |
| neuroscience; show a | n appreciation of the design and analysis of fMRI experiments; and, |
| understand the meth | ods used in published imaging papers, and be able to design simple |
| imaging experiments | |
| Recommended read | ling list: A reading list will be provided at the start of the module |

| Module title: | Current Research in Psychology |
|-------------------|---|
| Module code: | 03 25728 |
| Module Lead: | Dr Natalie Kelly |
| Term: | 2 |
| Credit value: | 10 |
| Delivery method: | Lectures and Seminars |
| Assessment method | d: Two 500-word diary entries of seminars attended (each contributes 35% |

towards module mark); one 500-word press release (contributes 30%); seminar attendance log (contributes 0%, but must be submitted)

Marks required to pass module: 50%

Aims and learning objectives of this module: Lectures will provide an overview of current research in psychology. The lectures will an overview on <u>and</u> current theoretical debates and methodologies in a variety of Psychology areas. Guidance will be provided on writing for different audiences, including the broader public

Learning outcomes: By the end of the module the student should be able to: demonstrate a broad knowledge of current research in psychology; understand the current theoretical debates; understand the methodologies employed in current research; and, write a summary of current research in a style for public understanding.

Recommended reading list: For this module, there is no set reading list. Instead, students are advised to engage in general study of the key scientific thinking, writing, and presentation skills (see above), and to engage in critical reading of academic sources for the subject-specific content. Some academic sources will be recommended by the module Lead:s.

| Module title: | Proposing Research in Psychology |
|----------------------|---|
| Module code: | 03 26539 |
| Module Lead: | Dr Fay Julal |
| Term: | 1 |
| Credit value: | 20 |
| Delivery method: | Lectures, tutorials |
| Assessment method | I: A written research proposal of 3000 words in two parts. Part 1 will be |
| formative and Part 2 | summative (contributes 100% to module mark) |

Marks required to pass module: 50%

Aims and learning objectives of this module: Lectures will provide an overview of the process of planning and proposing research projects (e.g., grant writing) and ways in which research can be reported (e.g., oral and poster presentations). Students will also develop relevant IT, administrative, and research skills. Students will work in small groups or one-to-one with a staff member to develop and write a research proposal. The proposal will typically involve pilot studies and require a lab placement with a staff member.

Learning outcomes: By the end of the module students should be able to: write a research proposal; demonstrate a working knowledge of the key skills and issues useful for research; visually present research in a concise and clear manner, in the form of a professional conference-style poster presentation; and understand the methodologies and background knowledge relevant to specific research area.

Recommended reading list: For this module, there is no set reading list. Instead, students are advised to engage in general study of the key scientific thinking, writing, and presentation skills (see above), and to engage in critical reading of academic sources for the subject-specific content. Some academic sources will be recommended by the module Lead:s.

| Module title: | MSc Research Project |
|------------------------|---|
| Module code: | 03 28503 |
| Module Lead: | Dr Fay Julal |
| Term: | 3 |
| Credit value: | 60 |
| Delivery method: | Student-centred research dissertation |
| Assessment metho | d: Written dissertation (6,000 words max) (contributes 80% to module |
| mark); poster preser | ntation, with oral walk-through (contributes 20%) |
| Marks required to | pass module: 50% |
| Aims and learning | objectives of this module: Students will conduct a substantial empirical |
| inquiry, with some a | spect of originality, into a topic under supervision. Students will be |
| assigned to a researc | ch supervisor, with whom the student will negotiate a contract setting out |
| the project's aims, th | ne relevant knowledge and skills, and milestones for conducting the |
| research. | |
| Learning outcomes | By the end of the module students should be able to: systematically |
| conduct a substantia | ll empirical inquiry using research methods and analysis techniques |
| appropriate to the fi | eld of research and level of study; communicate effectively in writing, using |
| professionally accep | ted protocols, to a standard that would be suitable for publication in a |
| research journal; vis | ually and orally present research in a concise and clear manner; develop a |
| research project that | t entails some aspect of originality, and show independence in managing the |
| research project. | |
| Recommended rea | ding list: |
| Beins, B. C., & Beins, | A. M. (2008). Effective writing in psychology: Papers, posters, and |
| presentations. Black | well: Oxford. |
| Wood, C., Giles, D., & | Percy, C. (2012). Your psychology project handbook: Becoming a |
| researcher (2nd ed.) | Essex: Pearson Education Limited. |
| * For this module, yo | ou will also be expected to engage in extensive, critical reading of the |
| academic sources ur | nderpinning your research. Your research supervisors will often provide you |
| with some seed refe | rences to get you started. |

Optional Modules

Choose **TWO** from the following: Design and Analysis 1, Design and Analysis 2, MatLab Programming

| Module title: | Matlab Programming |
|------------------------|---|
| Module code: | 03 20516 |
| Module Lead:: | Dr Peter Hansen |
| Term: | 1 |
| Credit value: | 10 |
| Delivery method: | Computer-based seminar/workshops |
| Assessment metho | d: Structured programming exercise (100%) |
| Marks required to | pass module: 50% |
| Aims and learning | objectives of this module: The module will provide an introduction to the |
| Matlab package. Top | ics covered will include: what exactly is Matlab, and why it is so useful; |
| interacting with the | Matlab IDE and command line environment; basic Matlab concepts |
| (commands, data str | ructures including vectors and matrices, calculations, programming); Matlab |
| programming techni | ques (flow control, modules, functions and .m files, file input/output, |
| graphics), and finally | y, students will complete a structured programming exercise, aimed at |
| producing a simple v | risual experiment in Matlab. This will form the basis of the course |
| assessment. | |
| Learning outcomes | By the end of the module the student should be able to: demonstrate a |
| working knowledge | of Matlab, including the ability to build and use simple functions to |
| manipulate and disp | lay data. |
| Recommended read | ding list: A reading list will be available at beginning of module. |

| Module title: | Design & Analysis 1 |
|-------------------------|--|
| Module code: | 03 14416 |
| Module Lead: | Dr Dietmar Heinke |
| Term: | 1 |
| Credit value: | 10 |
| Delivery method: | Lectures |
| Assessment method | l: Workshop-based exam (100%) |
| Marks required to p | bass module: 50% |
| Aims and learning o | bjectives of this module: Topics typically include: questionnaire design |
| and analysis; discrim | inant function analysis; descriptive statistics; hypothesis testing: z-scores; |
| t-tests and ANOVAs w | with factorial, repeated measures and mixed designs; planned and post-hot |
| comparisons; correla | ation, linear and non-linear regression; multiple regression; tuition in SPSS. |
| Learning outcomes | : Students should be able to: choose an appropriate statistical test for a |
| given type of data an | d research question; to enter data into SPSS in an appropriate format; to |
| carry out the statistic | cal tests covered in the course using calculators and statistical, or SPSS as |
| appropriate, and to in | nterpret the results of the statistical tests covered in the course. |
| Recommended read | ding list: Dancey, C. & Reidy, J. (2014). Statistics without Maths for |
| Psychology. Pearson. | |

| Module title: | Design & Analysis 2 |
|-----------------------|---|
| Module code: | 03 14417 |
| Module Lead:: | Dr Dietmar Heinke |
| Term: | 2 |
| | |
| Credit value: | 10 |
| Delivery method | Lectures |
| Assessment meth | nod: Written exam (100%) |
| Marks required t | o pass module: 50% |
| Aims and learnin | g objectives of this module: Research methods and analyses will typically |
| include: advanced | regression techniques (log-linear analysis, logistic regression, simple path |
| analysis); mathem | atical models; qualitative analysis; survey methods; power calculations and |
| direct observation | of behaviour. |
| Learning outcom | es: Students should be able to: choose an appropriate statistical test or |
| analysis tool for a | given type of data (qualitative or quantitative) and a research question; to |
| carry out the quan | titative statistical tests covered in the course using SPSS; to interpret the |
| results of the statis | stical tests covered in the course, and to carry out and interpret a thematic |
| analysis of selected | d newspaper articles. |
| Recommended re | eading list: |
| Field, A. (2013). Di | iscovering Statistics Using SPSS. Sage. |
| Howell, D. (2011). | Statistical Methods for Psychology, 8th Edition. Cengage. |
| | |

Choose **ONE** from the following: Research Reviews, Public Engagement with Psychological Research

| Module title: | Public Engagement with Psychological Research |
|--------------------------|---|
| Module code: | 03 30123 |
| Module Lead: | Dr Fay Julal |
| Term: | 2 |
| Credit value: | 20 |
| Delivery method: | Lectures (3), small group or individual supervision |
| Assessment method: | 3,000 word article or report (100%) |
| Marks required to pa | ss module: 50% |
| Aims and learning ob | jectives of this module: Lectures and seminars will provide an overview |
| of approaches to engag | ging with the public and the knowledge and skills required to design |
| public engagement act | ivities (e.g. planning public events; developing a website). Working in |
| small groups or individ | dually, students will develop their own public engagement activity |
| Lectures will provide a | an overview of approaches to engaging with the public (e.g. contacting |
| groups; planning even | ts). |
| Assessment will be a r | eport of the public engagement event and the research on which it is |
| based or a journalism- | style article. |
| Learning outcomes: | By the end of the module students should be able to: plan a public |
| engagement event to p | promote scientific research; write a detailed account of the public |
| engagement project, ir | ncluding summary of the research on which it is based; write a public- |
| friendly literature revi | ew, and understand the pathways used to develop public engagement. |
| Recommended readi | ng list: For this module, there is no set reading list. Instead, you are |
| advised to engage in g | eneral study of the key scientific thinking, writing, and presentation skills |
| (see above), and to eng | gage in critical reading of academic sources for the subject-specific |
| content. Some academ | ic sources will be recommended by the module Lead:s. |

| Module title: | Research Reviews |
|---------------------------|---|
| Module code: | 03 27296 |
| Module Lead: | Dr Fay Julal |
| Term: | 1 |
| Credit value: | 20 |
| Delivery method: | Seminars, paired activities and tutorials |
| Assessment method: A | A 750 word annotated bibliography on a selected topic (10%), and a |
| 3,000 word narrative lit | terature review (90%) |
| Marks required to pas | ss module: 50% |
| Aims and learning obj | ectives of this module: Students will be taught the process for |
| conducting narrative, sy | ystematic, and meta-analytical literature reviews, will discuss existing |
| literature reviews, and | complete formative assessments. |
| Learning outcomes: | By the end of the module students should be able to: Conduct a narrative |
| systematic, or meta-ana | llysis based on a selected topic in Psychology and related disciplines; |
| communicate effectivel | y in writing, using professionally accepted protocols; and understand the |
| methodologies and back | kground knowledge relevant to a selected topic in Psychology. |
| Recommended readin | g list: |
| Baumeister, R. F., & Lea | ry, M. R. (1997). Writing narrative literature reviews. Review of General |
| Psychology, 1, 311-320 | |
| Bem, D. J. (1995). Writin | ng a review article for Psychological Bulletin. Psychological Bulletin, 118 |
| 172–177. | |
| Cooper, H., & Shoolbred | , M. (2016). Where's your argument? Pocket study skills. Palgrave |
| Macmillan. | |
| Fink, A. (2014). Conduc | ting research literature reviews: From the internet to paper (4 $_{ m th}$ |
| ed.). London: Sage. | |
| Hartley, J. (2008). Acade | emic writing and publishing: A practical handbook. Abingdon: Routledge |
| *For this module, you w | rill also be expected to engage in extensive, critical reading of the |
| academic sources under | rpinning your research. |