Year of entry: 2022/23

Programme Specification

1	**Awarding body**	University of London							
2	**Teaching Institution**	**Birkbeck College**							
3	**Programme Title(s)**	**MSc/MA Cognitive Neuroscience and Neuropsychology**							
4	**Programme Code(s)**	TMACOGNP, TMSCOGNP							
5	**UCAS code**	N/A							
6	**Home Department**	Psychological Sciences							
7	**Exit Award(s)**	PGDip, PGCert							
8	**Duration of Study (number of years)**	1 year full-time /2 years part-time							
9	**Mode of Study**	FT	X	PT	X	DL			
10	**Level of Award (FHEQ)**	7							
11	**Other teaching depts or institution**	N/A							
12	**Professional, Statutory Regulatory Body(PSRB) details**	N/A							
13	**QAA Benchmark Group**	N/A							

14	**Programme Rationale & Aims**
	The aim of this programme is to offer a detailed introduction to the methods and findings from modern Cognitive Neuroscience and Neuropsychology that will enable students from a variety of backgrounds to appraise these findings and carry our independent research projects appropriately. The methods include biological, experimental, neuroimaging and genetic approaches, as well as survey and large-scale assessment methods more typical of social sciences. The results cover the following broad areas: attention, memory, perception, language, development, genetics, neuroimaging, research methodology, and practical skills. The programme is designed to be accessible for graduates from a range of disciplines in the human and life sciences, and for both full-time students over 1 year and part-time students over 2 years. **Distinctive Features:** • Access to world renowned researchers and facilities with broad international appeal • Combines Birkbeck's strengths in ERP and fMRI methods • Face-to-face teaching, with a part-time (day release) option

15	**Entry Criteria**
	Candidates are normally expected to have a second-class honours degree (2:2) or above in psychology, neuroscience or a relevant discipline. (e.g., Psychology, Education, Social Science, Cognitive Science, Speech/Communication Science, Neuroscience).

	Some students complete the course as the first year training component of a four year ESRC-funded PhD (under the ESRC's 1+3 programme).

16	**Learning Outcomes**
	On successful completion of this programme a student will be expected to be able to: **Subject Specific:** 1. Knowledge of the different theoretical positions underlying a range of areas within cognitive neuroscience 2. Practical knowledge of all phases of developing, conducting and reporting a research project 3. Understanding of conventions in psychological report writing and the purpose of each section within a research report 5. Understanding and being able to evaluate the logical flow of a scientific research report 6. Understanding the relation between research questions and research methodologies 7. An understanding of a range of research designs and the conditions under which each is appropriate 9. Knowledge of a wide range of parametric and non-parametric univariate and multivariate statistical procedures, the conditions under which they may reasonably be applied, and how to interpret the results of the procedures 10. Understanding the ethical guidelines of the British Psychological Society and ramifications of ethical practice 11. An understanding of neuroimaging and neuropsychological methodologies **Intellectual:** 12. Ability to articulate some similarities and differences between neuropsychological and neuroimaging methodologies 13. A critical appreciation of contemporary research and research methodologies across a number of areas within cognitive neuroscience 14. Understanding alternative ways of addressing a research question and how to advance reported research 15. Critical thinking skills in relation to • presenting and critiquing an argument • evaluating theoretical assumptions underlying contemporary cognitive neuroscience • reviewing and assimilating existing topic-specific literature and formulating a research question 16. An ability to apply research methodologies to wider work/life situations 17. The ability to formulate and test hypotheses

	18. An ability to study a problem in-depth 19. Logical thinking (e.g., in relation to hypothesis testing) 20. Evaluation skills **Practical:** 21. Enhanced essay and report writing 22. Enhanced numeracy in relation to understanding numerical data 23. General IT skills (use of web browsers, email, Word, PowerPoint, EndNote) 24. Subject specific IT skills (familiarity with SPSS) 25. Ability to conduct literature reviews using electronic search tools, electronic journals and databases (PsycInfo) 26. Ability to summarise and assess contemporary research succinctly 27. An ability to apply a range of research methods to specific research questions 28. Data collection and analysis skills 29. Ability to present data in a meaningful way, and to transform it into different presentational formats 30. Planning and organizational skills **Personal and Social:** 31. Ability to work with others in small groups on practical research tasks 32. Ability to work independently 33. To effectively plan and organize substantive, medium-term, projects 34. Time management skills 35. To communicate effectively through both written reports and verbal presentations 36. An enhanced ability to appreciate (and formulate) a structured argument and to appreciate the theoretical assumptions underpinning such arguments 37. An understanding of the relevance of scientific research as reported in the media to everyday questions 38. An increased awareness of ethical issues and ethical practice

17	**Learning, teaching and assessment methods**
	The course includes lecture-based theory modules, practical laboratory modules, and a supervised project. The teaching styles are matched to the content, and class sizes are kept small or moderate (10–40) to encourage student participation, even in lecture-based modules.

	Two modules (*Advanced Quantitative Methods* and *Neuroimaging Methods*) feature lectures with laboratory/practical session. These provide students with hands-on experience of using statistical software and neuroimaging analysis software. One module (*Generic Research Skills*) will involve small group collaborative learning. The class is split into smaller groups and each group will under the direction of the instructor explore solutions to generic organisational issues such as time management, IPR, organising large amounts of literature. It involves presenting orally an outline of their possible research topic. Five modules (*Structure and Measurement of the Human Brain*; *Neurocases and Clinical Assessment*; *Sensorimotor Processes and Attention*; *Cognitive, Affective, and Social Neuroscience*; *Developmental Cognitive Neuroscience*) feature lecturing as well as guided discussion led by one member of academic staff. Students are encouraged to also contribute to the discussion. This provides students with opportunities to question and understand the motivation for different methods when addressing different questions. All modules involve self-directed learning in the form of self-paced reading and preparation for each of the sessions. The supervised research project is carried out under the supervision of a member of academic staff with research interests in the area of the project. This provides students with access to a specialist in their project area who can provide expert advice on all aspects of the research. The project also ensures that taught skills are exercised within a constructive environment during the course. Assessment procedures ensure that students develop a portfolio of work over the duration of the programme, and feedback on coursework required for some of the modules will encourage personal development. The component modules employ a variety of assessment methods depending on the intended learning outcomes. Assessment will be as follows: *Generic Research Skills:* One 10 minute presentation of dissertation background (literature review) and research question; The presentation will be assessed jointly by the course coordinator and each student's supervisor. The presentation will give students the opportunity to demonstrate their ability to conduct a literature review and develop a research question. The module will be marked on a pass/fail basis. If the presentation is judged to be inadequate, students will be asked to submit a written report. *Structure and measurement of the human brain* Two 2 hour unseen written exams, marked according to the standard marking criteria outlined below. *Advanced Quantitative Methods:* Four worksheets to be completed throughout the course. Worksheets will be issued throughout the course at two weekly intervals. Each worksheet will consist of a series of

	marked according to the standard marking scheme outlined below. *Supervised Dissertation* 10,000 word research dissertation demonstrating initiative and creativity due during the first week of August in the year of registration (FT) or the first week of August in the second year of registration (PT). The dissertation will be marked according to the standard marking scheme outlined below. *Marking scheme for essays, lab reports and dissertation (based on that currently used with MScs & MRes delivered by the Department))* 0–49% (fail): The submitted work is only tangentially related to the question or research issue; The material presented is very basic or irrelevant; The work relies heavily on superficial or subjective statements without supporting evidence; Analyses presented are inadequate; The conclusions drawn are sketchy and reveal a failure to understand core concepts. 50–59% (pass): The submitted work address the question or research issue but lacks depth and/or evidence of an analytic approach; There is some coherence of structure; The work demonstrates basic familiarity with a range of relevant material or a good level of understanding of some material with important omissions; Analyses are appropriate and competent but limited; The conclusions drawn are appropriate but lack insight. 60–69% (merit): The submitted work addresses the question or research issue in detail and shows evidence of a questioning and analytic approach; The structure is coherent and easy to follow; The work shows an ability to appreciate an extensive body of relevant knowledge and articulate key theories or concepts; The work demonstrates reading beyond the core material presented in lectures; The conclusions drawn are balanced and appropriate and reveal evidence of independent thought. 70–100% (distinction): The submitted work fully explores the question or research issue and goes beyond what would be expected of something in the 60-69% range; The works shows substantial evidence of the students own insight and analysis and/or convincingly integrates material going beyond the core assigned reading; In the case of the research dissertation, the dissertation requires few modifications to be of a publishable standard in a peer reviewed journal. All submitted work (except for work sheets in the quantitative methods module which will only be moderated) will be double marked and moderated by the visiting examiner. Students will be issued with a candidate number for use with essays, lab reports and dissertations so that marking will, as far as possible, be blind. Assessment procedures will ensure that students develop a portfolio of work over the duration of the programme, and feedback on coursework required for some of the modules will encourage personal development.

	Grade of award and assessment procedures will be regulated in accordance with the College Common Awards Scheme.

18	**Programme Description**
	Full-Time Students Programme Description: **Year 1** ***Term 1*** Advanced Quantitative Methods Neuroimaging Methods Neurocases and Clinical Assessment Generic Research Skills Cognitive, Affective, and Social Neuroscience ***Term 2*** Developmental Cognitive Neuroscience Sensorimotor Processes and Attention Neurocases and Clinical Assessment Structure and Measurement of the Human Brain **Part-Time Students Programme Description:** **Year 1** ***Term 1*** Advanced Quantitative Methods Neuroimaging Methods ***Term 2*** Developmental Cognitive Neuroscience Sensorimotor Processes and Attention **Year 2** ***Term 1*** Neurocases and Clinical Assessment Generic Research Skills Cognitive, Affective, and Social Neuroscience ***Term 2*** Neurocases and Clinical Assessment Structure and Measurement of the Human Brain

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19	**Programme Structure**

Full-Time programme – 1 year

Year 1

Level	Module Code	Module Title	Credits	Status*
7	PSYC077H7	Advanced Quantitative Methods	15	Core MSc /Compulsory MA
7	PSYC007H7	Neuroimaging Methods	15	Compulsory
7	PSYC003H7	Sensorimotor Processes and Attention	15	Compulsory
7	SCPS149H7	Developmental Cognitive Neuroscience	15	Compulsory
7	PSYC062H7	Generic Research Skills	15	Compulsory
7	PSYC006H7	Neurocases and Clinical Assessments	15	Compulsory
7	PSYC004H7	Cognitive, Affective and Social Neuroscience	15	Compulsory
7	PSYC026H7	Structure and Measurement of the Human Brain	15	Compulsory
7	PSYC078H7	MSc Dissertation (MSc only)	60	Core
7	SCPS008D7	MA Dissertation (MA only)	60	Core

Part-Time programme – 2 years

Year 1

Level	Module Code	Module Title	Credits	Status*
7	PSYC077H7	Advanced Quantitative Methods	15	Core MSc /Compulsory MA
7	PSYC007H7	Neuroimaging Methods	15	Compulsory
7	PSYC003H7	Sensorimotor Processes and Attention	15	Compulsory
7	SCPS149H7	Developmental Cognitive Neuroscience	15	Compulsory

Year 2

Level	Module Code	Module Title	Credits	Status*
7	PSYC062H7	Generic Research Skills	15	Compulsory
7	PSYC006H7	Neurocases and Clinical Assessments	15	Compulsory
7	PSYC004H7	Cognitive, Affective and Social Neuroscience	15	Compulsory
7	PSYC026H7	Structure and Measurement of the Human Brain	15	Compulsory
7	PSYC078H7	MSc Dissertation (MSc only)	60	Core
7	SCPS008D7	MA Dissertation (MA only)	60	Core

Status*

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module

20	**Programme Director**	Matthew Longo
21	**Start Date *(term/year)***	Autumn term 2010
22	**Date approved by TQEC**	Spring 2010
23	**Date approved by Academic Board**	Summer 2010
24	**Date(s) updated/amended**	9 May 2022