

## Section 2 - Module Specification

Module Title Behavioural Neuroscience Methods

Module Code PSY321

Credit Value 15

Level 6

Mode of Delivery On Campus

Semester Semester B

Pre-requisite modules	Co-requisite modules	Overlapping modules
SBC401 Biology for Psychologists, SBC141 Brain and Behaviour, SBC142 Research Methods and Statistics in Psychology I and II, SBC201 Cognitive Psychology		

### 1) Content Description

Provide a description of the module, as it will appear in the Module Directory and on the Student Information System (approx. 70-80 words).

Taking a multi-disciplinary approach, this module will draw on research from a broad range of topics within psychology. It will cover areas such as social, developmental, cognitive and sensory systems, from the perspective of Neuroscience. The aim is to consider the mechanism(s) underlying behaviour. As such, research methods including: fMRI, single(or multi) unit recording, optical imaging, TMS, EEG, eye tracking will be used. This aim of the course is to critically evaluate and discuss recent research papers, using a "pros and cons" approach. Each week a subgroup of students will present a paper to the class, and lead a discussion about it.

The course will have 3 weeks of taught lectures: weeks 1 and 2 introduction to the course material and presentation with sample presentation by lecturer. Week 12 will be a concluding lecture, recapping the different themes covered throughout the 8 weeks of presentations.

Weeks 3-11 will cover a different theme each week with 5 x 20 minute student presentations in each week (where each "presentation" comprises 15 minute oral presentation followed by 5 minutes of group discussions)

### 2) Module Aims

Specify the aims of the module, i.e. the broad educational purposes for offering this module.

- 1) To understand and critically evaluate recent findings across different fields of psychology.
- 2) To develop students' presentation (written and oral) and evaluation skills.
- 3) To develop a mechanistic approach to understanding behaviour.
- 4) Each week will be scheduled around a specific theme in psychology. The final exam will consist of 8 essay questions on each of the 8 themes covered. Students will answer 3 out of 8 questions.

### 3) Learning Outcomes

Identify the learning outcomes for this module, i.e. knowledge, skills and attributes to be developed through completion of this module. Outcomes should be referenced to the relevant [QAA benchmark statements](#) and the [Framework for Higher Education Qualifications in England, Wales and Northern Ireland \(2008\)](#). The [SEEC Credit Level Descriptors for Further and Higher Education 2003](#) and [Queen Mary Statement of Graduate Attributes](#) should also be used as a guiding framework for curriculum design.

Academic Content:	
A1	Demonstrate in-depth conceptual knowledge about psychology with a particular emphasis on understanding the mechanisms involved.
A2	Critically evaluate different methods and empirical evidence across a range of psychological domains.
Disciplinary Skills - able to:	
B1	Employ evidence-based reasoning to critically evaluate different research methodologies applied to psychology.
B2	Integrate critical analysis of the literature effectively with own ideas.
B3	Ability to apply aspects of methodological research to a new / different context where they are appropriate.
Attributes:	
C1	Ability to independently locate, read, comprehend and critically evaluate relevant literature.
C2	Ability to communicate ideas confidently, clearly and succinctly in both writing and orally.
C3	Take responsibility for own learning and academic/personal development using reflection and feedback.

#### 4) Reading List

Provide an indicative reading list for the module. This should include key texts and/or journals but **should not** be an exhaustive list of materials.

The aim of this module is evaluate the methods used to address questions in different fields of psychology. Each week will cover a different theme in psychology, such that papers will be drawn from recent, high impact, journals and will cover topics they may have informally heard about in the news. Sample papers include:

- 1) Sex differences in the structural connectome of the human brain, PNAS (2014), 111, 823-828. Ingalhaliker et al.
- 2) Optimal interacting minds, Science, (2010), 329, 1081-1085. Bahrami et al.
- 3) Navigation-related structural change in the hippocampi of taxi drivers, PNAS, (2000),97, 4398-4403, Maguire et al.

#### 5) Teaching and Learning Profile

Provide details of the method of delivery (lectures, seminars, fieldwork, practical classes, etc.) used to enable the achievement of learning outcomes and an indicative number of hours for each activity to give an overall picture of the workload a student taking the module would be expected to undertake. This information will form the Key Information Set for each undergraduate programme and will be used to populate the KIS widget found on the QMUL programme information pages. More information can be found [online](#) about KIS. You may also wish to refer to the [QAA guidance on contact hours](#) when completing this section.

Activity Type	KIS Category	Time Spent (in hours)
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Lecture	Scheduled	22
Practical Classes and workshops	Scheduled	2
Total		24

Specify the total module notional study hours. This should be a total of the hours given for each activity. The notional study hours for each academic credit point is 10. A 15 credit point module therefore represents 150 notional study hours.

Activity Type	Total Time Spent (in hours)	Percentage of Time Spent
Scheduled learning and teaching	24	16
Placement		
Independent Study	126	84
Total	150	100

Use the information provided in the box above to specify the total time spent and the percentage time spent in each category of teaching and learning activity.

## 6) Assessment Profile

Provide details of the assessment methods used to assess the achievement of learning outcomes.

Description of Assessment	Assessment Type	KIS Category	Duration / Length	% Weighting	Final element of assessment?	Qualifying Mark
1 presentation	Oral assessment & presentation	Coursework	30-40 minutes	25%	No	N/A
2 written reviews and peer assessment after each presentation	Oral assessment & presentation	Coursework		25%	No	N/A
3 essay questions (from 8 titles)	Written Exam	Written	2 hours	50%	Yes	N/A

**Qualifying mark:** A specified minimum mark that must be obtained in one or more elements of assessment in order to pass a module. This is in addition to, and distinct from, the requirement to achieve a pass in the module mark to pass the module.

## Reassessment

Provide details of the reassessment methods used, specifying whether reassessment is either standard reassessment or synoptic reassessment.

Standard Reassessment       Synoptic Reassessment

Synoptic reassessment details (if you have indicated synoptic reassessment above, please give details)



specification remain the same as indicated in Section 2 above. To add alternative assessment arrangements please click 'Add Alternative Assessment'.

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#### **Section 4a - Half Module for Associate Students (for a half module to be taught in Semester A)**

This section must be completed if the proposed module will take place over 2 semesters but will be made available to single-semester associate students in a half-credit format in [Semester A](#). Modules worth less than 30 credits taken over 2 semesters may not be made available in a half-credit format. To add details for the half module please click 'Add Half Module (Semester A)'.

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#### **Section 4b - Half Module for Associate Students (for a half module to be taught in Semester B)**

This section must be completed if the proposed module will take place over 2 semesters but will be made available to single-semester associate students in a half-credit format in [Semester B](#). Modules worth less than 30 credits taken over 2 semesters may not be made available in a half-credit format. To add details for the half module please click 'Add Half Module (Semester B)'.