

## Module Specification

Module Title  Module Code   
Credit Value  Level  Mode of Delivery  Semester A

Pre-requisite modules	Co-requisite modules	Overlapping modules
BMD115		

### 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).

This module will use innovative teaching to equip you with an understanding of the workings of the nervous system and how it goes wrong in disease. You will also learn how to investigate problems with the nervous system and to form your own, novel lines of inquiry and points of view. You will learn how the brain uses sensory information, makes decisions and produces a controlled motor output. The module integrates an understanding of basic physiology with clinical applications, with a continual emphasis on what is meant to happen, what goes wrong in disease, and how such knowledge leads to treatment. You will cover major health issues such as drug addiction, mental illness and dementia. You will learn actively through a combination of simulations, lectures, seminars and workshops. These will teach you in the same way that practicing neuroscientists learn.

### 2) Module Aims

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

Diseases affecting the mind or the brain cast a major burden on public health. Dementia, for instance, drains a significant proportion of the NHS budget, whilst mood disorders (such as depression and anxiety) and addiction have a sizeable impact on the lives of millions of people. This module will equip students with a detailed understanding of how the brain works in health and how it goes wrong in disease, and how this understanding points to a route to a cure. The module will apply innovative teaching such that not only is core content learned in a variety of ways (experientially and actively), but students will improve their skills at gaining knowledge independently as well as forming, expressing and defending informed points of view.

In the spirit of "the medium is the message", the module will be taught in a way that fosters active learning and a sense of the student making a personal contribution to scientific debates. Traditional lectures will be interleaved with active learning sessions, in which students will learn how to gather complex information and use evidence to form their own perspective. Content learning will happen in a "just in time" manner and in response to task needs, exactly as in the workplace. Thus, the act of acquiring content knowledge will also accrue higher-order skills and aptitudes.

### 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	Describe and evaluate current theories of mental and neurological disorders
A2	Propose new routes for future therapy for disorders affecting the human nervous system
A3	Describe how sensory information is processed in humans to form a percept and how this might be affected by disease
A4	Describe the human motor system produces coordinated movements
A5	Explain the actions of existing drugs or predict the actions of potential drugs in ameliorating nervous system disorders

Disciplinary skills - able to:	
B1	Apply subject knowledge and understanding to address deficiencies in current treatments for neural disorders
B2	Plan experiments in terms of hypothesis, samples, tests or observations, appropriate controls, observable outcomes and statistical analysis using both computerized simulations and laboratory
B3	Identify, collate, process, analyse, interpret and present published findings in order to craft informed views on topics in neuroscience.
B4	Communicate to a variety of audiences using a range of formats and appropriate scientific language including appropriate acknowledgment of sources and avoiding plagiarism
B5	Understand the wider context of biomedical neuroscience, including social, political, economic and commercial perspectives

Attributes:	
C1	Evaluate performance individually, within a team and of others
C2	Identify personal, study and career goals, both short and long-term, and perform in a manner appropriate to achieving those goals
C3	Recognise and respect the views and opinions of others and use skills of negotiation and influence to achieve group goals
C4	Demonstrate skills for self-managed and lifelong learning, including working independently, adaptive working, time management, organisation and motivational skills

#### 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.

Fundamental Neuroscience (Squire) - full text available online through QMUL library

Principles of Neural Science (Kandel) - full text available online through QMUL library

Nature Reviews Neuroscience articles

#### 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)
Practical Classes and workshops	Scheduled	8
Lecture	Scheduled	22
Guided independent study	Independent	120
Total		150

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	30	20
Placement		
Independent Study	120	80
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	Percentage Weighting	Final element of assessment	Qualifying Mark
Exam	Written Exam	Written		50		
Essay	Coursework	Coursework		30		
Data Activity	Coursework	Coursework		20		

**Final element of assessment:** The assessment that takes place last. **There should normally be only one element of assessment marked as final unless two assessment or submission dates occur on the same day.**

**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)		
Brief Description of Assessment	Assessment Type	Duration/Length of Examination/ Coursework
Examination	Written Exam	3 Hours

