# **Module Specification**

Module Title Biomedical Sc	iences Case Approach to	Problem-Solving	
Module CodeBMD301			
Credit Value 15 Level	5/6 Mode of Delivery	On Campus	Semester A & B
Pre-requisite modules	Co-requisite modules	Overlapping modules	
Restricted to Level 6 students and Level 5 on the 2 <sup>nd</sup> year of B990			

## 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 comprises 10 Biomedical Science clinical case histories at levels 5 and 6 to analyse in group tutorials and assessment of the subsequent self-directed learning in 2 30min exam session and 2 essay submission for second year and 4 one hour exam sessions and 2 essay submissions for third year. The clinical case histories studied will be chosen from a bank of histories and will embrace, over the entirety of module, the disciplines of human physiology, anatomy & development, metabolism, molecular biology & genetics and pharmacology. The case history will be released onto the module website 1 week before the tutorial to assist student preparation for the tutorial. The tutorial will comprise a 1 hour problem analysis and tutor facilitation session. Assessment of the case history will follow a 3 week period of self-directed learning founded on the learning objectives defined in the tutorials. The final examination will comprise 50% written examination and 50% coursework. 20% of the final module mark for this module come from the marks for BMD201 Biomedical Science Case Approach to Problem Solving.

#### 2) Module Aims

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

The case history session is designed to prepare students for the PBL-based medical degrees currently delivered in many UK medical schools. The aim of the course is to provide students with experience in the problem based learning (PBL) (self-directed learning) methodology of curriculum delivery and hence develop problem-solving skills. Students will be encouraged to work both independently and in teams to develop thinking and research skills through analysis of authentic clinical case histories. The assessment sessions will prepare students for medical school style examinations

# 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.

Ac	cademic Content:			

At the end of this module students will have knowledge of clinically important diseases and conditions caused by dysfunctional physiological, anatomical, developmental, metabolic, molecular biological & genetic processes

Disciplinary skills - able to:

B1

At the end of the module the students will have broadened their basic human bioscience knowledge in the disciplines of physiology, anatomy & development, metabolism, molecular biology & genetics and pharmacology

### Attributes:

C1

At the end of the module the student will have improved biological knowledge acquisition and dissemination skills, team-working skills and enhanced critical reading, comprehension, and report writing 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.

#### Physiology Reading:

Sherwood, Lauralee. (2013). Human Physiology: from cells to systems. 8th Ed.

Bruce M. Koeppen, Bruce A. Stanton. (2010). Berne & Levy Physiology. 6th Ed.

Elaine Marieb, Katja Hoehn. (2013). Human Anatomy & Physiology. 9th Ed.

Eric Widmaier, Hershel Raff, Kevin Strang. (2013). Vander's Human Physiology: The Mechanisms of Body Function. 12<sup>th</sup> Ed.

Cindy L. Stanfield. (2012). Principles of Human Physiology. 4th Ed.

Neil R. Carlson. (2010). Physiology of Behaviour. 10th Ed.

William D. McArdle, Franck I. Katch, Victor L. Katch. (2010). Exercise Physiology: Energy, Nutrition, and Human Performance. 7<sup>th</sup> Ed.

Bolsover, Steve. (2011). Cell biology: a short course.

## Clinical Reading:

Fox, Stuart Ira. (2008). Human physiology. 10th Ed.

Pocock, Gillian, Richards, Christopher D. (2006). Human Physiology: the basis of medicine. 3rd Ed

Ganong, W.F. (2005). Review of Medical Physiology. 22nd Ed.

Guyton, A.C. and Hall, J.E. (2006). Guyton and Hall Textbook of Medical Physiology. 11th Ed.

#### 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)
Tutorial	Scheduled	10
	Total	10

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	10	6.7
Placement	0	0
Independent Study	140	93.3
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	Assessment	KIS Category	Duration/Length	•	Final element	Qualifying
of	Туре			Weighting	of	Mark
Assessment					assessment	
Examination	Exam	Coursework	3 Hours	50%	Yes	
Coursework	Written	Coursework		50%	No	
	Assessment					

**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	Exam	3 Hours		