Module Specification

Module Title | Cells | Module Code | BMD116

Credit Value | 15 | Level | 4 | Mode of Delivery | On Campus | Semester A

Pre-requisite modules	Co-requisite modules	Overlapping modules
Module restricted to B990 students		

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 provides an introduction to cell biology. Specifically, we consider cell structure and the microscopy techniques that enable visualisation of cell structures. The structure and function of the cell membrane, organelles, nucleus and cytoskeleton will be explored. Finally, normal cell cycle, cell division and differentiation processes are examined alongside their dysregulation leading to cancer.

2) Module Aims
Specify the aims of the module, i.e. the broad educational purposes for offering this module.

The aim of this module is to ensure that all first year students can describe and explain essential facts, theories and major principles of cell biology, which is a central subject for the whole of the life sciences.

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:	
A 1	Describe and explain the structure and function of the cell, organelles, membranes (both cell and nuclear) and the cytoskeleton.
A 2	Describe and explain the normal cell cycle, cell division and differentiation and mechanisms which lead to cancer development.
A 3	Plan and evaluate simple experiments in cell biology.
A 4	Identify cell structures via microscopic techniques.

Disciplinary skills - able to:	
B1	Apply subject knowledge and understanding to address problems and make evidence-based decisions.
B2	Identify, collate, process, analyse, interpret and present data generated locally or published globally
B3	Demonstrate how laboratory procedures are used to discover the functions of cell components

Attributes:	
C1	Identify study goals and perform in a manner appropriate to achieving those goals
C2	Evaluate individual performance
C3	Recognise and respect the views and opinions of others
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.

Most cell biology textbooks are appropriate for this module, especially:

• Alberts, B. et al (2015) Molecular biology of the cell 6th edition. New York, NY: Garland Science [QH581.2 ALB] - available as an ebook via the library

• Hardin, J., Bertoni, G., (2012) Becker's world of the cell 9th edition. Harlow, England: Pearson [ebook] or Hardin, J., Bertoni, G., Kleinsmith, L.J., Becker, W.M. (2012) Becker's world of the cell 8th edition. Boston, MA: Benjamin Cummings [QH581.2 HAR]

• Alberts, B. (2014) Essential Cell Biology 4th edition. New York, NY: Garland Science [QH581.2 ESS]

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)
Lecture	Scheduled	11
Practical & Work shop	Scheduled	11
Total		22

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	22	15
Placement	0	0
Independent Study	128	85
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
Examination	Exam	Exam	2 hours	50%	Yes	
Short written work	Coursework	Coursework		25%		
In class test	In class test	In class test	1 hour	12.5%		
In class test	In class test	In class test	1 hour	12.5%		

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 | 2 Hours |