

## Module Specification

Module Title  Module Code

Credit Value  Level  Mode of Delivery  Semester A

| Pre-requisite modules | Co-requisite modules | Overlapping modules |
|-----------------------|----------------------|---------------------|
|                       |                      |                     |
|                       |                      |                     |
|                       |                      |                     |

### 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. At the cellular level it covers eukaryotic cell structure, the structure and function of the cell membrane, the organelles, the nucleus and the cytoskeleton. The cell cycle and cell division are examined in detail alongside DNA replication and repair, and 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 have a clear understanding of the essentials of cell biology; 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: |   |
|-------------------|---|
| A1                | Understand the structure and function of the cell, organelles, the cell and nuclear membranes and the cytoskeleton. |
| A2                | Understand the cell cycle and the process of cell differentiation.  |
| A3                | Understand DNA replication and the mechanism leading to cancer development  |

Disciplinary skills - able to:

|    |  |
|----|--|
| B1 | Interpret light and electron micrograph images to understand the structure of cells and tissues. |
| B2 | Present and interpret data effectively.  |

|             |   |
|-------------|---|
| Attributes: |   |
| C1          | Engage critically with knowledge - acquire and apply knowledge in a rigorous way. |

|    |   |
|----|---|
| C2 | Engage critically with knowledge - connect information and ideas within their field of study. |
| C3 | Research capacity - produce analyses which are grounded in evidence.                          |
| C4 | Learn continuously in a changing world - use quantitative data confidently and competently.   |
| C5 | Research capacity - work individually and in collaboration with others.                       |
| C6 | Present data and communicate ideas effectively.   |

#### 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.

|  |
|--|
| MOLECULAR BIOLOGY OF THE CELL by Alberts et al |
| MOLECULAR CELL BIOLOGY by Lodish et al         |
| ESSENTIAL CELL BIOLOGY by Alberts et al        |
| THE WORLD OF THE CELL by Becker et al          |

#### 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) |
|-------------------------------|--------------|-----------------------|
| In course summative assesment | Scheduled    | 4                     |
| Lecture                       | Scheduled    | 20                    |
| 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  | 17  |
| Placement                       | 0   | 0   |
| Independent Study               | 125 | 83  |
| Total                           | 148 | 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.

### 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 |
|---------------------------|---|--------------|-------------------|----------------------|------------------------------|-----------------|
| Coursework                | 2 x Clicker quizzes                         | Coursework   |                   | 25                   | No                           |                 |
| Examination               | Written Exam<br>30 MCQs plus SAQ (1 from 2) | Written      | 1.5 hours         | 75                   | Yes                          |                 |

**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 |
| August Exam; 30 MCQs plus SAQ (1 from 2)   | Written Exam    | 1.5 hours                                     |