

## Module Specification

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

Pre-requisite modules	Co-requisite modules	Overlapping modules
BMD117 The Microbial World and Humans		

### 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 is only available to students who enter under the B990 programme. Prerequisites: The Microbial World and Humans (BMD117). In this module you will acquire a basic understanding of modern medical microbiology. You will study the processes by which microorganisms cause human disease, how the pathogens can be identified, and what steps can be taken for the prevention and treatment of infections. There will be a particular emphasis on the development of observational, practical and analytical skills through laboratory work and demonstrations. Your topics will include: pathogens and their interaction with the human host, covering bacteria, protists and viruses and including mechanisms of infection, mechanisms of defense, antibiotic action and antibiotic resistance, the transmission of disease, including public health microbiology, the prevention of infection in hospitals and in the community, and a review of newly emerging diseases. You will be provided with a catalogue of microbial diseases, including infections of the gastrointestinal and respiratory tracts, the nervous system and wounds.

### 2) Module Aims

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

The aim of this course is to provide Biomedical Science students with a basic understanding of modern medical microbiology. The course will be a second year core course taken only by Biomedical Science students. It will provide an intensive study of the processes by which microorganisms cause human disease, how the pathogens can be recognised (identified) and what steps can be taken for the prevention and treatment of infections. There will be a particular emphasis on the development of observational, practical and analytical skills through supervised laboratory work and demonstrations and will compliment and extend the material delivered in the first year core course "The microbial world and humans" (BMD117).

### 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	Catalogue and describe the major microbial infections of the human body, specifying routes of acquisition and basic pathologies
A2	Discuss host defenses and counter-measures by potential pathogens and explain strategies to prevent, control and treat infectious diseases
A3	Nominate and interpret presumptive and confirmatory tests for specified pathogens
A4	Acquire knowledge of the principles of general, selective and enrichment growth media
A5	Evaluate levels of risk from newly-emerging infectious diseases and use case-studies to inform their knowledge of the diagnostic process

Disciplinary skills - able to:	
B1	Have knowledge of and practice laboratory safety procedures in relation to the handling of pathogenic and potentially pathogenic microorganisms;
B2	Gain confidence in the aseptic procedures for the handling and sub-culturing of microorganisms, including a variety of standard dilution and plating procedures

#### 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.

Ford, M (2014) Medical Microbiology Fundamentals of Biomedical Science (OUP)
------------------------------------------------------------------------------

#### 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	30
Practical Classes and workshops	Scheduled	24
Total		54

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	100	100 %

Placement		
Independent Study	50	
Total	150	

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	Examination	Examination	2h	50%		N/A
In class test	In class assignment	In class assignment	1h	25%		N/A
Poster	Coursework	Coursework		25%		

**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
Exam	Written Exam	2 Hours