Module Specification

Module Title	Molecular Clinical Microbiology	Module Code	BMD313

Credit Value	15	Level	6	Mode of Delivery	On Campus	Semester A

Pre-requisite modules	Co-requisite modules	Overlapping modules
BMD231		

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).

The module follows on from first and second year modules "The Microbial World and Humans" and "Clinical Microbiology". Selected topics will be covered in greater depth, with particular emphasis on understanding microorganisms at the molecular level. The module will include the study of bacteria, protozoan parasites and viruses. We will be considering the biology of the organisms concerned, the infections they cause, how infections are diagnosed, and how they are treated and/or prevented. Topics that are of recent and current research and public health interest will be emphasised.

2) Module Aims

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

This module provides an introduction to selected aspects of molecular medical microbiology and is intended to follow on from the second year course on clinical microbiology. General and molecular aspects of disease and the use of different molecular techniques will be described within the context of modern day clinical microbiology.

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	Specimen collection and contamination problems
A 2	Technique discrimination – demonstrate how to choose the appropriate technique
A 3	Case studies demonstrating the benefits of 'genetics' over 'culture'
A 4	Be aware as to how routine and molecular techniques can be used to understand, diagnose and treat microbial infections
A 5	Understand how an understanding of the molecular characteristics can be used to develop novel methods of treatment for specific diseases

Disciplinary skills - able to:	
B1	Understand the importance of identifying diversity at the species level and understand the importance of identifying Diversity at the subspecies level

B2	Understand the importance of Identifying the pathological diversity of different microorganisms and develop an Understanding of bacterial diversity using Bioinformatics approaches

Attributes:	
C1	Know the importance of accuracy and Good Laboratory Practice when dealing with samples intended for molecular evaluations
C2	Gain confidence in the manipulation of microorganisms and molecular techniques and obtain experience in teamwork by working in small groups on exercises

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.

- Reading material to be given in class

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	22
Workshops	Scheduled	12
	Total	34

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	34	22.7
Placement	0	0
Independent Study	116	77.3
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 of Assessment	Assessment Type	KIS Category	Duration/Length	Percentage Weighting	Final element of assessment	Qualifying Mark
Coursework	In course writing and tests	Written		20%	No	
Exam	Written Exam	Written		80%	Yes	

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