

## Module Specification

Module Title  Module Code   
Credit Value  Level  Mode of Delivery  Semester

Pre-requisite modules	Co-requisite modules	Overlapping modules
BIO163 or BIO161 AND BIO113 or BIO123		

### 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 divides into two sections.

- Biology of parasites, both multi- and unicellular, as viewed from a whole-organism perspective. There is a particular emphasis on recent advances in our understanding of the evolution/ ecology of parasites, of the importance of parasites in the ecology/evolution of their hosts.
- Understanding the importance and pathologies associated with named parasitic infections and the mechanisms used by these pathogens to complete their life cycles. There will be an emphasis on the drugs used against these organisms from a molecular, biochemical and pharmacokinetic perspective with consideration given to the problems associated with these treatments (side effects, resistance etc).

This module can be taken by Associate Students subject to prerequisites

### 2) Module Aims

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

This module aims to give students an understanding of the diversity, evolution and ecology of parasites, how these can be controlled and, for named pathogens, the molecular mechanisms involved in host cell invasion and immune evasion. A student who has taken this module will:

- Understand the diversity of parasitic organisms and how that diversity has evolved.
- Appreciate how parasites can be selected to harm their hosts, and the factors that determine the extent to which they do so.
- Recognize the extent to which parasites may affect the evolution of their host organisms.
- Be able to critically evaluate parasite control strategies at whole organism, molecular, biochemical and pharmacokinetic levels.
- Understand the problems caused by named tropical diseases, the pathologies associated with these infections and the molecular mechanisms used by the causative agent to complete their life cycles.

### 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	Appreciate the diversity of macro- and micro-parasites throughout the biological world
A 2	Understand key aspects of the evolution of parasites
A 3	Understand the basics of the ecology and epidemiology of micro- and macro-parasites
A 4	Know the problems & pathologies of several tropical diseases and how the causative agents are able to complete their life cycles
A 5	Understand how clinically prescribed anti-parasitic drugs work and the problems associated with their usage

Disciplinary skills - able to:	
B1	Prepare and present a poster on a named infectious disease
B2	Independent study and research on specified case studies and report findings to the rest of the class

Attributes:	
C1	Work in teams to present information in student-led workshops
C2	Research and present information on new topics

### 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.

Wiser, M. F. 2011 Protozoa and Human Disease. 1<sup>st</sup> Ed. Garland Science

## 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	23
Problem Based Learning Classes	Scheduled	6
Computer marked in test	Scheduled	3
Total		32

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	32	21.3
Placement	0	0
Independent Study	118	78.7
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	Coursework	3 Hours	80%	Yes	
Coursework	Written Assessment	Coursework		20%	No	

**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