



## MODULE SPECIFICATION

<b>Academic Year (student cohort covered by specification)</b>	2021-22
<b>Module Code</b>	3177
<b>Module Title</b>	Immunology of Parasitic Infection
<b>Module Organiser(s)</b>	Dr Helena Helmby
<b>Faculty</b>	Infectious & Tropical Diseases
<b>FHEQ Level</b>	Level 7
<b>Credit Value</b>	<b>CATS:</b> 15 <b>ECTS:</b> 7.5
<b>HECoS Code</b>	100265:100345 (1:1)
<b>Term of Delivery</b>	Term 2
<b>Mode of Delivery</b>	For 2021-22 this module will be delivered both on campus and online.  Where specific teaching methods (lectures, seminars, discussion groups) are noted in this module specification these will be delivered using a blended learning approach using either face-to-face or through an online platform. There will be a combination of live and interactive activities (synchronous learning) as well as recorded or self-directed study (asynchronous learning).
<b>Mode of Study</b>	Full-time
<b>Language of Study</b>	English
<b>Pre-Requisites</b>	This module is designed for students with a good basic knowledge of immunology.
<b>Accreditation by Professional Statutory and Regulatory Body</b>	None
<b>Module Cap (Indicative number of students)</b>	20-30 (numbers may be capped due to limitations in facilities or staffing)
<b>Target Audience</b>	This module covers current knowledge of the immune response in parasite infection. Students must have a good basic knowledge of immunology. Sufficient introduction to the parasites themselves will be given during the module.
<b>Module Description</b>	The aim of this module is to allow students to develop an understanding of the diverse nature and consequences of the interaction between parasites and the host immune response.



	Through a diverse set of independent lectures, students will learn about the immunology of the most important human parasitic infections.
<b>Duration</b>	5 weeks at 2.5 days per week
<b>Timetabling slot</b>	Slot D2
<b>Last Revised (e.g. year changes approved)</b>	August 2021

<b>Programme(s)</b>	<b>Status</b>
This module is linked to the following programme(s)	
MSc Immunology of Infectious Diseases	Recommended Option
MSc Medical Parasitology	Recommended Option
MSc Tropical Medicine & International Health	Recommended Option

## Module Aim and Intended Learning Outcomes

<b>Overall aim of the module</b>
The overall module aim is to: <ul style="list-style-type: none"> <li>develop an understanding of the diverse nature and consequences of the interaction between parasites and the host immune response.</li> </ul>

<b>Module Intended Learning Outcomes</b>
Upon successful completion of the module a student will be able to: <ol style="list-style-type: none"> <li>Demonstrate knowledge and understanding of the various different types of immune responses elicited by parasites;</li> <li>Evaluate how such immune responses and the balance between them are, or might be, controlled;</li> <li>Compare the mechanisms used by parasites to avoid/exploit the immune response;</li> <li>Describe the outcomes of the interaction between the immune response and the parasite, for example immunopathology and immunity to infection/disease;</li> <li>Distinguish the most important immunological features relating to the major parasitic infections of man;</li> <li>Evaluate how parasitic infections can bias the nature of the immune response to concurrent infections;</li> <li>Assess the direction of current research in this field.</li> </ol>

## Indicative Syllabus

<b>Session Content</b>
The module is expected to cover the following topics:



### Session Content

- Brief review of basic immunological principles and basic parasitology;
- Immunology of trypanosomatids, Toxoplasma, gut protozoa;
- Immunology of malaria;
- Immunology of schistosomes, filarial worms and gut nematodes.

## Teaching and Learning

### Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Contact time	32	21
Directed self-study	51	34
Self-directed learning	28.5	19
Assessment, review and revision	38.5	26
<b>Total</b>	<b>150</b>	<b>100</b>

Student contact time refers to the tutor-mediated time allocated to teaching, provision of guidance and feedback to students. This time includes activities that take place in face-to-face contexts such as lectures, seminars, demonstrations, tutorials, supervised laboratory workshops, practical classes, project supervision as well as where tutors are available for one-to-one discussions and interaction by email. Student contact time also includes tutor-mediated activities that take place in online environments, which may be synchronous (using real-time digital tools such as Zoom or Blackboard Collaborate Ultra) or asynchronous (using digital tools such as tutor-moderated discussion forums or blogs often delivered through the School's virtual learning environment, Moodle).

The division of notional learning hours listed above is indicative and is designed to inform students as to the relative split between interactive (online or on-campus) and self-directed study.

### Teaching and Learning Strategy

Lectures will comprise the bulk of the teaching time but group-work, classroom discussions and student presentations are also included. Certain topics will be covered by guest visiting lecturers.

## Assessment

### Assessment Strategy

The assessment for this module has been designed to measure student learning against the module intended learning outcomes (ILOs) as listed above. Formative assessment methods may be used to measure students' progress. The grade for summative assessment(s) only will go towards the overall award GPA.

The assessment for this module will be online.

Assessment will be in the form of a 1.5-hour written test based on lecture material (100% of module mark).

### Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
Timed Test (in-module test)	1.5 hour	100	1 - 7

### Resitting assessment

Resits will accord with the LSHTM's [Resits Policy](#)

For individual students resitting there will be an approved alternative assessment as detailed below. The alternative assessment will be an essay or critical review.

Assessment being replaced	Approved Alternative Assessment Type	Approved Alternative Assessment Length (i.e. Word Count, Length of presentation in minutes)
Timed Test	Coursework	The task will be an essay or critical review (2000 words)



## Resources

### Indicative reading list

For module participants on non-immunology MSc courses or who need to refresh basic immunology topics we strongly recommend reading in advance of the course:

Appropriate immunology textbooks include:

Janeway's Immunobiology ISBN-10 : 0815345518 ▪ ISBN-13 : 978-0815345510. Garland Press.

Roitt's Essential Immunology ASIN : B01N78QW3A. Wiley Blackwell.

## Teaching for Disabilities and Learning Differences

The module-specific site on Moodle gives students access to lecture notes and copies of the slides used during the lecture. Where appropriate, lectures are recorded and made available on Moodle. All materials posted on Moodle, including computer-based sessions, have been made accessible where possible.

LSHTM Moodle is accessible to the widest possible audience, regardless of specific needs or disabilities. More detail can be found in the [Moodle Accessibility Statement](#) which can also be found within the footer of the Moodle pages. All students have access to "SensusAccess" software which allows conversion of files into alternative formats.

Student Support Services can arrange learning or assessment adjustments for students where needed. Details and how to request support can be found on the [LSHTM Disability Support pages](#).