

MODULE SPECIFICATION

	2022.22		
Academic Year (student	2022-23		
cohort covered by			
specification)	2122		
Module Code	3120		
Module Title	Immunology of Infectious Diseases		
Module Organiser(s)	Professor Greg Bancroft		
Faculty	Infectious & Tropical Diseases		
FHEQ Level	Level 7		
Credit Value	CATS: 50		
	ECTS: 25		
HECoS Code	100265:100345 (1:1)		
Term of Delivery	Term 1		
Mode of Delivery	For 2022-23 this module will be delivered by predominantly		
_	face-to-face teaching modes.		
	Where specific teaching methods (lectures, seminars, discus-		
	sion groups) are noted in this module specification these will		
	be delivered by predominantly face-to-face sessions. There		
	will be a combination of live and interactive activities (syn-		
	chronous learning) as well as recorded or self-directed study		
	(asynchronous learning), plus face-to-face laboratory classes.		
	(45)		
Mode of Study	Full-time		
Language of Study	English		
Pre-Requisites	None		
Accreditation by	None		
Professional Statutory			
and Regulatory Body			
Module Cap (Indicative	Approximately 20 (numbers may be capped due to		
number of students)	limitations in facilities or staffing)		
Target Audience	General Immunology will be appropriate for those students		
	with little or no prior experience in the subject. It will be		
	essential for those with no experience in modern		
	immunology who wish to pursue the Advanced Immunology		
	modules.		
Module Description	This module provides an overview of the immune system and		
Module Description	its response to infection. It covers all major subject areas		
	within this theme and prepares students for later		
	· ·		
	immunology-based modules in Terms 2 and 3.		



Duration	10 weeks at 4 days per week	
Timetabling slot	Term 1	
Last Revised (e.g. year	June 2022	
changes approved)		

Programme(s) This module is linked to the following programme(s)	Status
MSc Immunology of Infectious Diseases	Compulsory

Module Aim and Intended Learning Outcomes

Overall aim of the module

The overall module aim is to:

 provide students with a thorough grounding in basic immunology at the theoretical level. Additional skills in data analysis and in immunological laboratory methods will be developed by face to face laboratory sessions.

Module Intended Learning Outcomes

Upon successful completion of the module a student will be able to:

- 1. Demonstrate understanding of basic concepts of modern molecular immunology and immunity to infection
- 2. Understand immunological components of other relevant modules provided by the School
- Understand the relevant experimental principles and practical skills underlying commonly used immunological techniques

Indicative Syllabus

Session Content

The module is expected to cover the following topics:

- Innate immunity mechanisms
- The lymphoid system
- Cells of the immune response
- Leucocyte migration
- Phagocytes
- Antibody structure and function; B cell biology
- The major histo-compatibility complex
- Antigen processing and presentation



Session Content

- T-cell receptors and activation
- Cytokines
- Cell cooperation
- Cytotoxicity
- Inflammation
- Hypersensitivity
- Immunodeficiency
- Immunogenetics
- Mucosal immunity
- Immune responses to infections
- Vaccines

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)	
Contact time	201	40.2	
Directed self-study	200	40	
Self-directed learning	49	9.8	
Assessment, review and revision	50	10	
Total	500	100	

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.

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

Teaching and Learning Strategy

There will be face to face lectures, live webinars and online recorded lectures as well as time-tabled discussions/journal club sessions/problem solving sessions (both on-line and face to face) and face to face laboratory practical sessions.



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 in term 1 will be online.

The summative assessment will be by

- i) An MCQ assessment held during Week 6 of the Module online (30% of Module GPA) and,
- ii) An unseen online written assessment held during the week before the start of Term 2 (70% of Module GPA)

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
MCQ	1 hour	30	1, 2 & 3
Online written assessment	3 hours	70	1, 2 & 3

Resitting assessment

Resits will accord with the LSHTM's Resits Policy

The MCQ Resit assessment will be a short answer online assessment (see previous table). The Online written assessment Resit will be the same assessment type as the first attempt (see previous table).



Resources

Indicative reading list

Any recently published immunology textbook

Other resources

Key references are listed in online resources for each session.

Teaching for Disabilities and Learning Differences

The module-specific site on Moodle provides students with access to lecture notes and copies of the slides used during the lecture prior to the lecture (in pdf format). All lectures are recorded and made available on Moodle as quickly as possible. All materials posted up on Moodle areas, including computer-based sessions, have been made accessible where possible.

The LSHTM Moodle has been made accessible to the widest possible audience, using a VLE that allows for up to 300% zoom, permits navigation via keyboard and use of speech recognition software, and that allows listening through a screen reader. All students have access to "SensusAccess" software which allows conversion of files into alternative formats.

For students who require learning or assessment adjustments and support this can be arranged through the Student Support Services – details and how to request support can be found on the <u>LSHTM Disability Support pages</u>.