MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2021-22
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 2021-22 this module will be delivered by a combination of online and face to face teaching modes. Where specific teaching methods (lectures, seminars, discussion groups) are noted in this module specification these will be delivered using an online platform (Moodle) and face to face sessions in LSHTM. There will be a combination of live and interactive activities (synchronous learning) as well as recorded or self-directed study (asynchronous learning), plus face to face laboratory practical classes
Mode of Study	Full-time
Language of Study	English
Pre-Requisites	None
Accreditation by Professional Statutory and Regulatory Body	None
Module Cap (Indicative number of students)	Approximately 20 (numbers may be capped due to 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 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 changes approved)	July 2021

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 3. 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. 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
There will be 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 LSHTM Disability Support pages.