



## MODULE SPECIFICATION

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| <b>Academic Year (student cohort covered by specification)</b>     | 2026-27                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Module Code</b>                                                 | 3134                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Module Title</b>                                                | Advanced Immunology 1                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Module Organiser(s)</b>                                         | Dr Julius Hafalla                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Faculty</b>                                                     | Infectious & Tropical Diseases                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>FHEQ Level</b>                                                  | Level 7                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Credit Value</b>                                                | <b>CATS:</b> 15<br><b>ECTS:</b> 7.5                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Term of Delivery</b>                                            | Term 2                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Mode of Delivery</b>                                            | <p>For 2026-27 this module will be delivered by predominantly face-to-face teaching modes.</p> <p>Where specific teaching methods (lectures, seminars, discussion 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 (synchronous learning) as well as recorded or self-directed study (asynchronous learning).</p> |
| <b>Mode of Study</b>                                               | Full-time                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Language of Study</b>                                           | English                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Pre-Requisites</b>                                              | <p>Advanced Immunology 1 (3134) and Advanced Immunology 2 (3144) are linked modules and must be taken together.</p> <p>Prior experience in immunology is essential. Students proposing to take these modules should have, as a minimum, a basic knowledge of immunology equal to that provided by the Immunology of Infectious Diseases (3120) module in Term 1.</p>                                                                           |
| <b>Accreditation by Professional Statutory and Regulatory Body</b> | None                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Module Cap (Indicative number of students)</b>                  | Approx. 25 (Numbers may be capped due to limitations in facilities or staffing)                                                                                                                                                                                                                                                                                                                                                                |
| <b>Target Audience</b>                                             | Students who wish to undertake future research in immunology of infection.                                                                                                                                                                                                                                                                                                                                                                     |



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| <b>Module Description</b>                        | This module provides the student with a critical and comprehensive appreciation of current concepts in immunology in conjunction with the linked Advanced Immunology 2 (3144) module. |
| <b>Duration</b>                                  | 5 weeks at 2.5 days per week                                                                                                                                                          |
| <b>Timetabling slot</b>                          | Slot C1                                                                                                                                                                               |
| <b>Last Revised (e.g. year changes approved)</b> | August 2023                                                                                                                                                                           |

|                                                     |               |
|-----------------------------------------------------|---------------|
| <b>Programme(s)</b>                                 | <b>Status</b> |
| This module is linked to the following programme(s) |               |
| MSc Immunology of Infectious Diseases               | Compulsory    |

## Module Aim and Intended Learning Outcomes

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| <b>Overall aim of the module</b>                                                                                                                                                                                                             |
| <p>The overall module aim is to:</p> <ul style="list-style-type: none"> <li>provide students with a critical and in-depth understanding of contemporary topics in immunology of infectious diseases, including new methodologies.</li> </ul> |

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| <b>Module Intended Learning Outcomes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>By the end of this module, students will be able to:</p> <ol style="list-style-type: none"> <li>1. Apply and integrate fundamental immunological concepts in the critical evaluation of relevant research (primary scientific data and published papers) on immunology of infectious diseases;</li> <li>2. Summarise and critique methods used in current immunological research;</li> <li>3. Communicate conclusions made from advanced scientific information in writing.</li> </ol> |

## Indicative Syllabus

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| <b>Session Content</b>                                                                                                                                                                                                                                                                                                             |
| <p>The module is expected to cover the following topics:</p> <ul style="list-style-type: none"> <li>Cellular Immunity and Immunological Memory;</li> <li>Vaccinology;</li> <li>Infectious Disease Immunology;</li> <li>Innate Immunity, Inflammation and Immunopathology.</li> <li>Advances in Immunological Techniques</li> </ul> |

## Teaching and Learning

### Notional Learning Hours

| Type of Learning Time           | Number of Hours | Expressed as Percentage (%) |
|---------------------------------|-----------------|-----------------------------|
| Contact time                    | 25              | 16%                         |
| Directed self-study             | 70              | 46%                         |
| Self-directed learning          | 10              | 6%                          |
| Assessment, review and revision | 45              | 30%                         |
| <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.

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

The teaching strategy will primarily consist of student-centred learning through interactive small group work, oral and poster presentations, and discussion sessions, with a few formal lectures. Approximately 50% of the time will be reserved for private study.

## 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.

Assessment will be in the form of a 2.5 hour unseen problem based written test on research data (100% of module mark).

The assessment for this module will take place in the classroom.



## Summative Assessment

| Assessment Type           | Assessment Length (i.e. Word Count, Length of presentation in minutes) | Weighting (%) | Intended Module Learning Outcomes Tested |
|---------------------------|------------------------------------------------------------------------|---------------|------------------------------------------|
| Unseen Timed Written Test | 2.5 hours                                                              | 100           | 1-3                                      |

### Resitting assessment

Resits will accord with [Chapter 8a](#) of the LSHTM Academic Manual

The resit task will be the same format as the original assessment.

## Resources

### Indicative reading list

Course materials and lecture notes will be provided via the LSHTM Virtual Learning Environment, Moodle.

**Recommended:** we recommend that students have access to one of the following general Immunology textbooks:

1. Janeway's Immunobiology ISBN-10: 0393884910, ISBN-13: 978-0815345510 (Norton & Company)
2. Roitt's Essential Immunology ISBN: 978-1-118-41577-1 (Wiley-Blackwell)
3. Abbas Cellular and Molecular Immunology, ISBN-10: 9780323479783, ISBN-13: 978-0323479783 (Elsevier).

### Other resources

Students are given access to the LSHTM Virtual Learning Environment, (Moodle) where they can access web-based discussion forums, assignments (where applicable), supplementary materials, Panopto recordings and the LSHTM online library resources.



## 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](#).