# Module Specification

## ABOUT THIS DOCUMENT

This module specification applies for the academic year 2019-20

**Last revised:** 2 September 2019

London School of Hygiene & Tropical Medicine, Keppel St., London WC1E 7HT. [www.lshtm.ac.uk](http://www.lshtm.ac.uk)

## GENERAL INFORMATION

<table>
<thead>
<tr>
<th>Module name</th>
<th>Immunology of Infectious Diseases</th>
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<tbody>
<tr>
<td>Module code</td>
<td>3120</td>
</tr>
<tr>
<td>Module Organiser</td>
<td>Professor Greg Bancroft</td>
</tr>
<tr>
<td>Contact email</td>
<td><a href="mailto:Gregory.Bancroft@lshtm.ac.uk">Gregory.Bancroft@lshtm.ac.uk</a></td>
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<tr>
<td>Home Faculty</td>
<td>Faculty of Infectious &amp; Tropical Diseases</td>
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<tr>
<td>Level</td>
<td>Level 7 (postgraduate Masters ‘M’ level) of the QAA <a href="http://www.qaa.ac.uk">Framework for Higher Education Qualifications</a> in England, Wales &amp; Northern Ireland (FHEQ).</td>
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<tr>
<td>Credit</td>
<td>50 credits, within the larger 60-credit Term 1 super-module for each MSc course. Credits are not awarded for this module individually, but only for successful completion of the Term 1 super-module.</td>
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<tr>
<td>Accreditation</td>
<td>Not currently accredited by any other body.</td>
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<tr>
<td>Keywords</td>
<td>Communicable diseases (in general), Viral, HIV/AIDS, Bacterial, TB, Parasitic, Malaria, Worm infections, Zoonotic diseases, Laboratory science (incl. quality assurance), Teaching, Learning, Communication (oral, written), Team-work (incl. interdisciplinary, inter-professional), Tropical medicine, Pathogens, Immunology.</td>
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## AIMS, OBJECTIVES AND AUDIENCE

<table>
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<th>Overall aim</th>
<th>To provide students with a thorough grounding in basic immunology at both the theoretical and practical level.</th>
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<td>Intended learning outcomes</td>
<td>By the end of this module, students should be able to:</td>
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<td>- Demonstrate understanding of basic concepts of modern molecular immunology and immunity to infection</td>
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<td>- Understand immunological components of other relevant modules provided by the School</td>
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<td>- Carry out basic laboratory work illustrating relevant experimental principles and immunological techniques</td>
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<td>- Apply basic statistical methods to the gathering and analysis of immunological data</td>
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<td>Target audience</td>
<td>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</td>
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experience in modern immunology who wish to pursue the Advanced Immunology modules.

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<th>CONTENT</th>
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| Session content | The module is expected to address the following topics (though please note that these may be subject to change):
| • 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
| • T-cell receptors and activation
| • Cytokines
| • Cell cooperation
| • Cytotoxicity
| • Inflammation
| • Tolerance
| • Autoimmunity
| • Hypersensitivity
| • Immunodeficiency
| • Immunogenetics
| • Mucosal immunity
| • Immune responses to infections
| • Nutrition and immunity
| • Vaccines |

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