

Module Specification (Distance Learning)

In collaboration with University of London International Programmes



1. Title:	Immunology of Infection and Vaccines
2. Module code:	IDM213
3. Institution:	Faculty of Infectious and Tropical Diseases London School of Hygiene & Tropical Medicine Keppel Street London WC1E 7HT http://www.lshtm.ac.uk/itd/
4. Module Organiser:	Dr John Raynes
5. Mode of study:	Distance Learning
6. Type:	Elective module
7. Duration and dates:	<p>Deadlines if taken as part of a formal award:</p> <p>Application deadline: 30 June each year Registration deadline: 31 August each year Course registration duration: Up to 5 years Course starts: 1 October each year Examination takes place: Usually June each year (date to be confirmed)</p> <p>Deadlines if taken as an individual module (i.e. not registered for formal award):</p> <p>Application deadline: 31 August each year Registration deadline: 30 November each year Registration duration: 2 years Module study starts: 1 October each year Examination takes place: Usually June each year (date to be confirmed)</p>
8. Credit points:	15 credit points will be awarded on successful completion of this module at Masters level (Level 7)
9. Notional Learning Hours (NLH):	On average the module should take about 150 hours to complete, consisting of the following: Directed self-study: 80 hours Self-directed Learning: 20 hours Assessment, review and revision: 50 hours.
10. Aim:	This module aims to provide an overview of modern molecular immunology methods and immunity to infection. Although not all aspects of immunology can be covered in depth, more detailed insight will be provided into selected aspects of current research of particular relevance to vaccine design.
11. Learning objectives:	On completing this module students should be able to: <ul style="list-style-type: none"> describe the main immunological responses responsible for immunity to the selected pathogens and how these influence vaccine design, discuss evasion strategies of pathogens and problems they cause for vaccine design, understand the principles and uses of a range of immunological techniques in current use, read a scientific paper on the immunology of infection and understand how the findings support or contradict previously held theories.

12. Content:	<p>This module consists of three sections:</p> <p>Section 1 <i>The immune system and vaccine design</i> This section aims to provide a basic understanding of immunology. The sessions cover innate immunity, acquired immunity, the various forms of immunodeficiency that affect these immune systems and then a consideration of vaccines and how they work.</p> <p>Section 2 <i>Immunity to infection and vaccines</i> These sessions are arranged in four blocks each deal with the immunology of particular bacterial, fungal, viral, and parasitic infections.</p> <p>Section 3 <i>Methodology and research papers</i> This section is arranged into two blocks. Firstly, three sessions on some really important methods which are central to the investigation of immune responses. Second, three research papers have been chosen for students to interpret, where each paper deals with one of the infections covered in Section 2.</p>
13. Learning methods:	<p>Learning is self-directed against a set of learning objectives, using the materials provided.</p> <p>Student support is available from the module tutors via a web-based discussion forum in which students are encouraged to participate. In addition, module tutors provide written feedback on the submitted assessed assignment.</p>
14. Study resources provided:	<p>Study Guide: Paper version.</p> <p>Reader (folder containing associated journal articles).</p> <p>Textbooks: Goering, R., et al (2007) <i>Mims' Medical Microbiology</i>.4th Ed. Mosby. ISBN: 9780323044752. Playfair, J., & Bancroft, G., (2008). <i>Infection & Immunity</i>.3rd Ed. Oxford University Press. ISBN: 9780199206735.</p> <p>Registered students have access to the School's online library resources. Students who are taking this as an individual module, or as part of MSc PH or MSc GHP, will also have online access to the MSc ID core study materials (this access will exclude tutor support and associated textbooks).</p>
15. Assessment procedures:	<p>Formal assessment of this module includes an assessed assignment (30% of the total grade for the module) and a 2-hour unseen written examination (70% of the total grade for the module). The examination paper may consist of a choice of essay and short answer questions.</p> <p>Examinations are normally held in a student's country of residence, in one of over 650 examination centres worldwide. They are arranged mainly through Ministries of Education or the British Council. A local fee will be payable. A list of examination centres can be found at http://www.londoninternational.ac.uk/current_students/general_resources/exams/exam_centres/index.shtml.</p> <p>If students fail an examination at the first entry they will be allowed one further attempt, the following year.</p>
16. Prerequisites:	<p>Those wishing to study this module must have regular access to the internet to benefit from library facilities, participate in web-based conference discussions and submit assignments.</p>

	Students must meet the standard of English required to study this course. See http://www.lshtm.ac.uk/prospectus/english.html .
17. Attendance:	No maximum number
18. Selection, if applicable:	<p>This module is available only to those registered for the <u>MSc Infectious Diseases</u> (ID), <u>Epidemiology</u> (EP), <u>Public Health</u> (PH) or <u>Global Health Policy</u> (GHP) courses, or can be taken as an Individual Module. Those studying for the PG Diploma ID, GHP or PH courses under the credit framework scheme may also study this module.</p> <p>Those who wish to study this module as an Individual Module or as part of an EP, PH or GHP course should note that the study material may refer to ID core modules (IDM101, IDM102, IDM103 and IDM104) which they may not have studied. In particular, students should have a prior knowledge of basic biochemistry, cell biology, genetics and immunology in order to be able to work through and benefit fully from this module. (See section 14 above.)</p> <p>An introduction to immunology is provided in the first section but students with little or no prior knowledge of immunology will probably need to take longer to work through this.</p>
19. Fees:	For current schedule of fees see http://www.londoninternational.ac.uk/fees/schedules/lshtm.pdf .
20. Scholarships:	None available
21. External accreditation:	None
22. Application process:	Applications are managed by University of London International Programmes (website: http://www.londoninternational.ac.uk/).
23. Further enquiries:	Enquiries may be emailed to distance@lshtm.ac.uk .