



<h1>Module Specification</h1>	 <p>UNIVERSITY OF LONDON INTERNATIONAL PROGRAMMES</p>	<p>LONDON SCHOOL of HYGIENE & TROPICAL MEDICINE</p> 
<h2>GENERAL INFORMATION</h2>		
Module name	Nutrition and Infection	
Module code	IDM202	
Module Organiser(s)	Lucy Reynolds	
Contact email	<p>The LSHTM distance learning courses and modules are run in collaboration with the University of London International Programmes. Enquiries may be made via their Student Advice Centre at: http://www.londoninternational.ac.uk/contact-us. (Enquiries from face-to-face i.e. London-based LSHTM MSc or research students regarding study of DL modules should be emailed to distance@lshtm.ac.uk.)</p>	
Home Faculty	<p>Faculty of Infectious and Tropical Diseases London School of Hygiene & Tropical Medicine http://www.lshtm.ac.uk/itd/</p>	
Level	<p>This module is at Level 7 (postgraduate Masters 'M' level) of the QAA Framework for Higher Education Qualifications in England, Wales & Northern Ireland (FHEQ)</p>	
Credit	LSHTM award 15 credits on successful completion of this module	
Accreditation	Not currently accredited by any other body	
Keywords	Nutrition, infection, diet, food, malnutrition, undernutrition, immunity, nutrients, inflammation, supplementation, vulnerable groups.	
<h2>AIMS, OBJECTIVES AND AUDIENCE</h2>		
Overall aim	<p>This module aims to provide students with a basic understanding of the interactions between nutrition and infections, and will better place students to deal with the practical and operational management of infectious disease or under-nutrition at either the individual or population level.</p>	
Intended learning outcomes	<p>By the end of this module, students should be able to:</p> <ul style="list-style-type: none"> • contextualise discussions of nutrition and infection within historic and methodological frameworks, • review the basic knowledge and understanding of immunological mechanisms of the human body and the role nutrients play in immune mechanisms, • describe the role infection plays in the aetiology and pathogenesis of under-nutrition, • explain how and why under-nutrition affects the host defence mechanisms and influences resistance to infection, • identify the specific nutrients that influence the risk of infection, and review the evidence for this interaction between specific micronutrients and infections, 	

	<ul style="list-style-type: none"> describe the consequences of the vicious cycle of the relationship between infection and nutrition. understand that the field is positioned in between nutrition and immunology, and appreciate that knowledge, insights and concepts are rapidly developing and changing. Critical appraisal of literature and a good understanding of the basic principles of several disciplines need to be combined to understand the current concepts in this field, rather than just acquiring textbook knowledge.
Target audience	This module is intended for those who wish to understand the principles of nutrition and infection. This can be applied in the field such as feeding programmes, community nutrition programmes, nutrition and infection education and programme planning. It is also relevant for those who work in clinical based settings.
CONTENT	
Session content	<p>The module includes sections addressing the following topics:</p> <p>Section 1 The study of nutrition and infection Section 2 Basics of immunology and nutrition Section 3 Inter-relationship between undernutrition and infection Section 4 The role of micronutrients in the risk of infection Section 5 Key infections Section 6 Vulnerable groups Section 7 Emerging associations in nutrition and infection</p>
TEACHING, LEARNING AND ASSESSMENT	
Study resources provided or required	<p>The following materials are provided to students after registration for this module once a year in September:</p> <p>Study Guide: Paper version. Reader: Reprints of associated journal articles</p> <p>In addition to the materials above, students are given access to the LSHTM Virtual Learning Environment, Moodle (for web-based discussion forums etc.) and the LSHTM online library resources.</p> <p>Audio-recordings of on-campus lectures are not available for this module.</p>
Teaching and learning methods	Learning is self-directed against a detailed set of learning objectives using the materials provided. Students are strongly encouraged to participate in the module-specific discussion forums available on Moodle to obtain tutor support, and to make use of LSHTM online library resources. In addition, written feedback is provided on submitted assignments.
Assessment details	<p>Formal assessment of this module includes a two-hour unseen written paper examination with 15 minutes' additional reading/planning time (70%) and an assessed assignment comprising a 2500 word essay (30%).</p> <p>If students fail the module overall, they are allowed one further attempt at the failed element (examination and/or assignment).</p>
Assessment dates	<p>Assignments for this module can be submitted only once annually, no later than 31 March and must be submitted via the online Assignment Management System.</p> <p>Unseen written examinations for DL modules are held once a year, in June (including resits).</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 list of examination centres can be found at http://www.londoninternational.ac.uk/community-support-resources/current-students/examinations/examination-centres.</p> <p>A local fee will be payable direct to the examination centre. This fee is in addition to the course/module fee and is set by, and paid directly to, the individual examination centres. The level of local examination centre fees varies across the world and neither the University of London International Programmes nor the LSHTM have any control over the fee amount.</p>
Language of study and assessment	English (please see 'English language requirements' below regarding the standard required for entry).
TIMING AND MODE OF STUDY	
Duration	Distance learning module studies begin in early October. Students may start their studies at any time from receipt of study materials and work through the material until the start of the June examinations (although assessment submission deadlines which are earlier than this must be observed).
Dates	Tutorial support for distance learning modules is available from the beginning of October through to the end of May.
Mode of study	By distance learning.
Learning time	<p>The notional learning time for the module totals 150 hours, consisting of:</p> <ul style="list-style-type: none"> • Directed learning (reading and working through the provided module material) ≈ 77 hours • Self-directed learning (general reading around the subject, library, Moodle) ≈ 23 hours • Assessment, review and revision ≈ 50 hours
APPLICATION, ADMISSION AND FEES	
Pre-requisites	<p>Those who wish to study this module as an Individual Module or as part of another course 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. It is useful, but certainly not essential for students to have a pre-existing knowledge of nutrition.</p> <p>Those wishing to study this module must have regular access to the internet to participate in module-specific discussions on Moodle, benefit from online library facilities and submit assignments.</p>
English language requirements	A strong command of the English language is necessary to benefit from studying the module. Applicants whose first language is not English or whose prior university studies have not been conducted wholly in English must fulfil LSHTM's English language requirements , with an acceptable score in an approved test taken in the two years prior to entry. Applicants may be asked to take a test even if the standard conditions have been met.
Student numbers	There is no cap on the number of students who can register for this distance learning module. The number of students actively studying this module varies, but typically approx. 65 students register for the module per year.

Student selection	<p>This module is available to be studied by students on the following distance learning courses:</p> <p>MSc or PG Dip Global Health Policy (GHP), Infectious Diseases (ID), Clinical Trials (CT), Public Health (PH) or MSc Epidemiology (EP) courses.</p> <p>Alternatively, students may register for this as an “individual module”.</p> <p>This module is also open to students registered on LSHTM face-to-face (i.e. London-based) MSc courses (subject to course-specific limitations) and research degree students.</p>
Fees	<p>For the current schedule of fees click on the LSHTM course link.</p>
Scholarships	<p>Scholarships are not available for individual modules. Some potential sources of funding are detailed on the LSHTM website.</p>
Admission deadlines	<p>Applications for LSHTM distance learning courses and modules are managed by the University of London International Programmes. To apply to take either a formal award (i.e. PG Certificate, PG Diploma or MSc) or an individual module, click the relevant link on the right hand side of the page at http://www.londoninternational.ac.uk/courses/postgraduate/lshtm/infectious-diseases-msc-postgraduate-diploma-postgraduate-certificate</p> <p>Key deadlines are as follows:</p> <ul style="list-style-type: none"> ➤ Application deadline: 31 August each year <p>(Note: applicants who submit applications on or after 1 June 2017 will be required to pay an application fee of £100 at the point of submission, which will be deducted from the balance of fees payable upon registration. If the application does not result in registration, the application fee will not be refunded. No application fee will apply to applications submitted on or before 31 May 2017.)</p> <ul style="list-style-type: none"> ➤ Registration deadline (new students and those registering for the project module, IDM600): 30 September each year ➤ Registration deadline (continuing students, with the exception of those registering for the project module IDM600, and those taking individual modules): 31 October. <p>Please note: <i>The academic year starts 1 October. Students who register after 1 October should note that module welcome and Collaborate sessions held in October are recorded, but they cannot request an extension to assignment submission deadlines or apply for an examination extenuating circumstance as a result of registering later than 1 October.</i></p> <p>(LSHTM research students wishing to study this module should note information given in the mixed mode study option document.</p>
ABOUT THIS DOCUMENT	
<p>This module specification applies for the academic year 2017/18.</p> <p>Last revised/approved, by Patricia Gorak-Stolinska on 6th April 2017</p> <p>Further revisions revised by</p>	
<p>London School of Hygiene & Tropical Medicine, Keppel St., London WC1E 7HT. www.lshtm.ac.uk</p>	