



PROGRAMME SPECIFICATION

1. Overview

Academic Year (student cohorts covered by specification)	2020-21
Programme Title	Medical Microbiology
Programme Director	Richard Stabler
Awarding Body	University of London
Teaching Institution	London School of Hygiene & Tropical Medicine
Faculty	Infectious and Tropical Diseases
Length of Programme (months)	MSc - Full time = 12 months, Split Study = 24 months
Entry Routes	MSc
Exit Routes	MSc/PGDip/PGCert
Award Titles	MSc Medical Microbiology (180 credits) Exit awards: PGDip Medical Microbiology (120 credits) PGCert Bacteriology & Virology (60 credits)
Accreditation by Professional Statutory and Regulatory Body	Not accredited by any other body.
Relevant PGT QAA Benchmark Statement and/or other external/internal reference points	No relevant PGT QAA benchmark for this MSc Programme.

Level of programme within the Framework for Higher Education Qualifications (FHEQ)	Masters (MSc) Level 7			
Total Credits	CATS:	180	ECTS:	90
HECoS Code(s)	100345:100265:100948 (1:1:1)			
Mode of Delivery	<p>For 2020-21, the delivery of LSHTM teaching has been adjusted in response to the COVID-19 pandemic.</p> <p>For MSc Medical Microbiology:</p> <p>Term 1 core module teaching will be taught via a blended learning approach. Lectures will be delivered using a combination of asynchronous (recorded) and synchronous (live and interactive) activities. The practical element of the module will be delivered on campus in a 3 week block (from 5 October 2020).</p> <p>Terms 2 and 3 modules will be taught via a blended learning approach. Teaching will be a delivered through a combination of on-campus practicals and online lectures.</p> <p>As MSc Medical Microbiology uses a primarily practical teaching method, if the UK is forced to go into another period of lockdown this programme will have to be suspended until it is safe and reasonable to continue. In this scenario, students will be able to defer their studies until the next academic year.</p> <p>Throughout the year there will be programme- and LSHTM-level activities, such as group seminars and a themed lecture series and discussion forums. These will allow students to study the programme safely at a distance but remain together as a community.</p>			

Mode and Period of Study	Full time (12 months) or part time/split time (max 24 months)
Cohort Entry Points	Annually in September
Language of Study	English
Re-sit Policy	https://www.lshtm.ac.uk/sites/default/files/academic-manual-chapter-08a.pdf
Extenuating Circumstances Policy	https://www.lshtm.ac.uk/sites/default/files/academic-manual-chapter-07.pdf
Programme Description	This programme provides comprehensive knowledge and practical training in the spread of microorganisms (predominantly bacterial and viral pathogens), disease causation and diagnosis and treatment of pathogens significant to public health. The increasing incidence of microbial infections worldwide is being compounded by the rapid evolution of drug-resistant variants and opportunistic infections by other organisms. The programme content reflects the increasing importance of genomics and molecular techniques in both diagnostics and the study of pathogenesis.
Date of Introduction of Programme (month/year)	1975-76
Date of production / revision of this programme specification (month/year)	Extraordinary revisions made in August 2020 in response to Covid-19 mitigation planning

2. Programme Aims & Learning Outcomes

Educational aims of the programme

The aim of the programme – consistent with the LSHTM’s mission to improve health worldwide – is to provide a comprehensive theoretical knowledge of medical microbiology including the spread of microorganisms, disease causation, diagnosis and/or treatment of pathogens of major significance to public health and advanced practical training in this diverse field. The increasing incidence of microbial infections worldwide is being compounded by the rapid evolution of drug-resistant variants and opportunistic infections by other organisms. The programme places particular emphasis on practical aspects of the subjects most relevant to current clinical laboratory practice and research.

Programme Learning Outcomes

By the end of the programme, students will be expected to achieve the following learning outcomes – drawing on material taught across different elements and assessed in a variety of ways.

- (i) demonstrate advanced knowledge and understanding of the nature of pathogenic microorganisms (predominantly viruses and bacteria) and basic criteria used in the classification/taxonomy of these microorganisms;
- (ii) explain the modes of transmission of pathogenic microorganisms;
- (iii) demonstrate knowledge and understanding of the mechanisms of microbial pathogenesis and the outcomes of infections, including chronic microbial infections;
- (iv) distinguish between and critically assess the classical and modern approaches to the development of therapeutic agents and vaccines for the prevention of human microbial diseases;
- (v) demonstrate knowledge of the laboratory diagnosis of microbial diseases and practical skills, including the isolation and characterisation of specific microbes in clinical specimens;
- (vi) carry out a range of advanced skills and laboratory techniques, for example the purification of isolated microbial pathogens and analyses of their proteins and nucleic acids for downstream applications such as gene cloning and sequencing studies; and
- (vii) demonstrate research skills, including designing experiments, analysing results and troubleshooting and critically assessing the scientific literature.

Teaching and Learning Strategy

The programme is taught using a blended approach of online and on-campus, using a variety of synchronous (live and interactive) and asynchronous (recordings, independent study, individual exercises, etc) teaching methods including: lectures, small group seminars, practical and groupwork with peers. All elements of the programme have specific learning objectives, with content designed to help students achieve these outcomes. Students are expected to learn through both directed and self-directed study.

Assessment Strategy

The programme is assessed through practical examinations in Term 1, written assessments before the start of Term 2, individual module assessments (which may include essays, other written coursework, short written exams, practical exams, groupwork, presentations or other methods) and a project report. Such tasks are designed to assess, via the most appropriate method, whether learning objectives have been met.

3. Programme Structure and features, modules, credit assignment and award requirements:

Full-time Masters	Term 1	Term 2/3	Term 3	Total Credits
Compulsory Modules	2			60
Recommended Modules		5		75
Project			1	45

Module information is correct at the time of publication, but minor amendments may be made subject to approval as detailed in [Chapter 3 of the LSHTM Academic Manual](#). Optional (i.e. recommended non-compulsory) modules listed are indicative and may change from year to year.

<https://www.lshtm.ac.uk/study/courses/changes-courses>

Term	Slot	Module Code	Module Title	Module Type (compulsory or recommended)	Credits (CATS)	Contact hours*
1	AB1	3196	Analysis & Design of Research Studies	Compulsory	10	30
1	AB1	3121	Bacteriology & Virology	Compulsory	50	240
1	AB1	3333	Molecular Biology	Recommended (Supplementary)	0	20
2	C1	3187	Clinical Virology	Recommended	15	48
2	C1	3131	Molecular Biology & Recombinant DNA Techniques	Recommended	15	35
2	C2	3157	Clinical Bacteriology 1	Recommended	15	52
2	C2	3140	Molecular Virology	Recommended	15	50
2	D1	3158	Advanced Training in Molecular Biology	Recommended	15	40

2	D1	3146	Basic Parasitology	Recommended	15	32
2	D2	3165	Clinical Bacteriology 2	Recommended	15	52
2	D2	3160	Molecular Research in Infectious Diseases	Recommended	15	54
3	E	3169	Antimicrobial Chemotherapy	Recommended	15	48
3	E	3130	Mycology	Recommended	15	62
3	E	3460	Pathogen Genomics	Recommended	15	70

* 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 on-campus lectures, seminars, demonstrations, tutorials, supervised laboratory workshops, practical classes, project supervision and external fieldwork or visits, 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). These contact hours reflect provision during the 2019/2020 session. We anticipate that in 2020/2021 there will be fewer hours with tutor presence at specified times and a greater emphasis on directed study such as recorded lectures, recommended readings and guided exercises. Please refer to the individual 2020/2021 module specifications for more detail. This definition is based on the one provided by the [Quality Assurance Agency for Higher Education \(QAA\) Explaining contact hours \(2011\) guidance document, page 4 available here](#). Student contact time, together with time allocated for independent study and assessment, determines the total student study hours for a module or programme. Although there are separate hours allocated for each of these activities, they should always be clearly linked together to support effective learning. The London School of Hygiene and Tropical Medicine (LSHTM) defines high quality contact time as structured, focused, purposeful and interactive.

4: Entry Requirements

Criteria for admission

Applicants must normally satisfy the LSHTM's general entrance requirements and additional programme-specific entrance requirements to be considered for admission. Applications must be submitted in accordance with the procedures and deadlines given in the web-based or printed prospectus.

In order to be admitted to a postgraduate taught degree programme of the London School of Hygiene & Tropical Medicine, an applicant must:

a) hold a first degree at Second Class Honours standard in a relevant discipline, a degree in medicine at the same standard, or another degree of equivalent awarded by an overseas institution recognised by UK Naric or Barrons.

OR

b) hold a professional qualification appropriate to the programme of study to be followed obtained by written examinations and judged by the LSHTM to be equivalent to a Second Class Honours degree or above.

OR

c) have relevant professional experience or training which is judged by the LSHTM to be equivalent to a Second Class Honours degree or above.

AND

satisfy any additional requirements where prescribed for admission to a specific programme.

For further information, please see

<https://www.lshtm.ac.uk/study/how-apply/applying-masters-degree-london/you-apply-msc>

English language entry requirements

Band B

It is essential that all students have a good command of the English language to benefit from their studies at the LSHTM.

As part of the application process, applicants are required to demonstrate how they meet the LSHTM's minimum English language requirements. This is particularly important for applicants requiring a Tier 4 Student visa, as the UK Home Office dictates that every student from outside the UK and European Union (EU) must show evidence of a minimum level of English language ability (called CEFR1 B2 level), in order for a Tier 4 Student visa to be issued for entry to the UK.

Additionally, the LSHTM asks applicants to have minimum English language proficiency levels that are necessary for our academic programmes. These levels are higher than the CEFR B2 minimum level and also apply to EU applicants, although these will not normally require a Tier 4 Student visa.

The academic English language requirements for each of the LSHTM's programmes are categorised into one of three profiles A, B or C. For information on these three profiles, please refer to the LSHTM English Language Requirement Policy:

https://www.lshtm.ac.uk/sites/default/files/english_language_requirements_policy.pdf