# MODULE SPECIFICATION

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| **Academic Year (student cohort covered by specification)** | 2020-21 |
| **Module Code** | 3165 |
| **Module Title** | Clinical Bacteriology 2 |
| **Module Organiser(s)** | Dr Lisa Dawson and Dr Heidi Hopkins |
| **Faculty** | Infectious & Tropical Diseases |
| **FHEQ Level** | Level 7 |
| **Credit Value** | **CATS:** 15<br>**ECTS:** 7.5 |
| **HECoS Code** | 100265:100345 (1:1) |
| **Term of Delivery** | Term 2 |
| **Mode of Delivery** | For 2020-21 this module is delivered online but with practical sessions on-campus at LSHTM.<br><br>Where specific teaching methods (lectures, seminars, discussion groups) are noted in this module specification these will be delivered using an online platform. There will be a combination of live and interactive activities (synchronous learning) as well as recorded or self-directed study (asynchronous learning).<br><br>The practical lab-based element of this module will be scheduled in over the 5-week period to give students adequate time in the laboratories and ensure any continuing social distancing guidelines are being met.<br><br>Given the need for practical on campus sessions, should the pandemic escalate in the UK and further lockdown measures be required, this module will not be available. In this case, students on lab-based programmes will have the opportunity to suspend their studies. Students should stay in contact with their Programme Director and Programme Administrative team. |
| **Mode of Study** | Full-time |
| **Language of Study** | English |
| **Pre-Requisites** | This module is intended for students who have completed Clinical Bacteriology 1 (3157) or have previous practical experience of bacteriology and wish to advance their knowledge of topics not covered in module 3157 and acquire further laboratory competence. |

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| **Accreditation by Professional Statutory and Regulatory Body** | Not currently accredited by any other body |
| **Module Cap (Maximum number of students)** | 20 to 24 (numbers may be capped due to limitations in facilities or staffing) |
| **Target Audience** | This module is intended for students who have completed the module Clinical Bacteriology 1 (3157) or have previous practical experience of bacteriology and wish to advance their knowledge of topics not covered in module 3157 and acquire further laboratory competence. It is complementary to module 3157. |
| **Module Description** | This module provides a systematic understanding of identification and diagnostics of bacterial infection in hospital settings complementary to and building on Clinical Bacteriology 1. The module provides a comprehensive understanding of the techniques used to identify and classify bacteria, which are covered in both lectures and practical classes. Key examples of bacterial infections from a variety of specimens will be analysed to determine the causative agent of infection and the antimicrobial resistance profile, which informs treatment. Including analysis of gastrointestinal, wound, respiratory, ENT specimens & infections as well as disinfection testing and infection control. The module will provide a practical understanding of how established diagnostic techniques are employed and interpreted to identify human infections. |
| **Duration** | 5 weeks at 2.5 days per week |
| **Timetabling slot** | Slot D2 |
| **Last Revised (e.g. year changes approved)** | October 2020 |

| **Programme(s)**<br>This module is linked to the following programme(s) | **Status** |
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| MSc Medical Microbiology | Recommended Option |
| MSc Control of Infectious Diseases | Recommended Option |

## Module Aim and Intended Learning Outcomes

| **Overall aim of the module** |
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| The overall module aim is to:<br>• provide a review of the aetiology, pathogenesis, epidemiology, diagnosis, control and therapy of human bacterial infections of clinical importance that were not covered in the module Clinical Bacteriology 1 (3157). |

| **Module Intended Learning Outcomes** |
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| Upon successful completion of the module a student will be able to:<br>1. Demonstrate knowledge and understanding of essential theory and practice of bacteriology in relation to infectious diseases;<br>2. Demonstrate knowledge and understanding of bacteriological investigations required for the diagnosis and treatment of the infected individual;<br>3. Perform various clinical laboratory procedures including specimen processing, isolation, identification and susceptibility testing of bacterial pathogens. |

## Indicative Syllabus

| **Session Content** |
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| The module is expected to cover the following topics:<br>• Infectious bacterial diseases;<br>• Laboratory investigations necessary for the diagnosis and treatment of the infected individual;<br>• Processing of clinical specimens, including isolation, identification and susceptibility testing of bacterial pathogens. |

## Teaching and Learning

**Notional Learning Hours**

| **Type of Learning Time** | **Number of Hours** | **Expressed as Percentage (%)** |
|---|---|---|
| Contact time | 52 | 34.7 |
| Directed self-study | 0 | 0 |
| Self-directed learning | 48 | 32 |
| Assessment, review and revision | 50 | 33.3 |
| **Total** | 150 | 100 |

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. 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).

The division of notional learning hours listed above is indicative and is designed to inform students as to the relative split between interactive (online or on-campus) and self-directed study.

| **Teaching and Learning Strategy** |
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| This module consists of online lectures and where possible on-campus practical sessions. The practical focus is of particular importance. |

## Assessment

| **Assessment Strategy** |
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| 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.<br><br>Where possible the assessment for this module will be on-campus at LSHTM.<br><br>The written examination will consist of short notes questions (50% of marks) and there will also be practical spot tests (50% of marks) to determine students' ability to apply acquired knowledge in the identification of bacterial pathogens. |

**Summative Assessment**

| **Assessment Type** | **Assessment Length (i.e. Word Count, Length of presentation in minutes)** | **Weighting** (%) | **Intended Module Learning Outcomes Tested** |
|---|---|---|---|
| Timed Test (in-module test) | 2 hours | 100 | 1, 2, 3 |

| **Resitting assessment** |
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| Resits will accord with the LSHTM's Resits Policy |

| **Resitting assessment** |
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| For individual students resitting there will be an approved alternative assessment as detailed below. |

| **Assessment being replaced** | **Approved Alternative Assessment Type** | **Approved Alternative Assessment Length** (i.e. Word Count, Length of presentation in minutes) |
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| Timed Test | Coursework | The task will be a coursework assessment consisting of 4 short essay questions. |

## Resources

| **Other resources** |
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| https://www.gov.uk/government/collections/standards-for-microbiology-investigations-smi |

## 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.