MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2024-25
Module Code	IDM201
Module Title	Bacterial Infections
Module Organiser(s)	Ian Passmore and Catherine Hall
Contact email	The LSHTM distance learning programmes and modules are run in collaboration with University of London Worldwide. Enquiries may be made via the Student Advice Centre. (Enquiries from face-to-face i.e. London-based the LSHTM MSc or research students regarding study of DL modules should be emailed to distance@lshtm.ac.uk.)
Faculty	Infectious & Tropical Diseases: The London School of Hygiene & Tropical Medicine https://www.lshtm.ac.uk/research/faculties/itd
FHEQ Level	Level 7
Credit Value	**CATS:** 15 **ECTS:** 7.5
HECoS Code	100265:100345 (1:1)
Mode of Delivery	Distance Learning
Mode of Study	Directed self-study, through provided and online materials
Language of Study	English
Pre-Requisites	Those who wish to study this module as an individual module or as part of another programme should note they should have prior knowledge of basic biochemistry, cell biology, genetics, immunology and parasitology in order to be able to work through and benefit fully from this module.
Accreditation by Professional Statutory and Regulatory Body	None
Module Cap (Maximum number of students)	None
Target Audience	This module is an optional module for those studying for an MSc in Infectious Diseases. This module is intended for those who wish to understand the principles of bacteriology with a focus on human bacterial pathogens and the procedures used to investigate infection from clinical materials.

Module Description	The module deals with biology of bacteria as pathogens. It focuses on the ways in which the procedures that are used to investigate bacteria from clinical materials (specimens collected from ill people) reflect current understanding of the pathogenesis of bacterial infections and how infections can be controlled.
Duration	Distance learning module studies begin in early October. Students start their studies at any time from receipt of study materials and work through the material until the start of the June assessments (although assessment submission deadlines which are earlier than this must be observed).
Last Revised (e.g. year changes approved)	March 2024

Programme(s) This module is linked to the following programme(s)	**Status**
PGDip/MSc Infectious Diseases (Distance Learning - University of London Worldwide)	Elective option
PGDip/MSc Clinical Trials (Distance Learning - University of London Worldwide)	Elective option
PGDip/MSc Epidemiology (Distance Learning - University of London Worldwide)	Elective option
PGDip Public Health (Distance Learning - University of London Worldwide)	Elective Option
MSc Public Health (General Stream) (Distance Learning - University of London Worldwide)	Elective Option
MSc Public Health: Environment and Health (Distance Learning - University of London Worldwide)	Elective Option
MSc Public Health: Health and Promotion (Distance Learning - University of London Worldwide)	Elective Option
MSc Public Health: Health Services Management (Distance Learning - University of London Worldwide)	Elective Option

Module Aim and Intended Learning Outcomes

Overall aim of the module
The overall module aims are to: • give students an understanding of the biology of bacteria as pathogens. • give students an understanding of how samples are collected and analysed and how procedures used to investigate bacteria from clinical materials reflect current understanding of the pathogenesis of bacterial infections. • give students an understanding of how bacterial infections can be prevented and treated.

Module Intended Learning Outcomes
Upon successful completion of the module a student will be able to: 1. Demonstrate a systematic understanding of the pathogenesis of bacterial infections in humans by explaining and comparing their microbiology and epidemiology; 2. Apply specialist theoretical knowledge and demonstrate a practical understanding of relevant clinical samples to be collected, if presented with infected patients, and associated appropriate laboratory investigations; 3. Apply specialist theoretical knowledge to determine appropriate investigations on clinical samples of bacterial infections, and to interpret and evaluate the results from diagnostic techniques.

Indicative Syllabus

Session Content
The module is expected to cover the following topics: • **Section 1**. Introduction to bacterial infections e.g. specimen processing, laboratory diagnosis, identification, pathogenesis, antibiotic resistance. • **Section 2**. Urinary tract infections e.g. laboratory diagnosis, common bacteria, pathogenesis • **Section 3**. Meningitis e.g. Meningococcal, *Haemophilus*, Pneumococcal, neonatal • **Section 4**. Wound and perinatal infections e.g. neonatal tetanus, puerperal sepsis, surgical wound infection • **Section 5**. Gastrointestinal infections e.g. *Helicobacter pylori,* diarrhoea, dysentery, food poisoning, enteric fever • **Section 6**. Lower respiratory tract infections e.g. Whooping cough, Legionnaires' disease, pneumonia • **Section 7**. Choice of methods e.g. investigation of urine • **Section 8**. Thinking numbers e.g. the scope of bacterial infections.

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Directed self-study	75	50
Self-directed learning	25	17
Assessment, review and revision	50	33
Total	**150**	**100**

Teaching and Learning Strategy
The learning strategy 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 the LSHTM online library resources. In addition, written feedback is provided on submitted assignments.

Assessment

Assessment Strategy
Formal assessment of this module includes a Time -Limited Assessment (70%) and an assessed assignment comprising a 2500 word essay (30%).

Assessment submission deadlines

Assessed assignment submission deadline **31st March**

Time Limited Assessment takes place in **June**

Summative assessment

Assessment Type	**Assessment Length (i.e. Word Count, Length of presentation in minutes)**	**Weighting** (%)	**Intended Module Learning Outcomes Tested**
Assessed Assignment	2500 words	30	1, 2, 3,
Time-Limited Assessment	3600 words	70	1, 2, 3,

Assignments for this module can be submitted once annually, before **31st March** via the online Assignment Management System.

Time-limited assessments for DL modules are held once a year, in **June** (including resits).

Time-limited assessments are held in accordance with annual UoL guidance.

Please note that a separate assessment fee may be payable in addition to the module fee.

Resitting assessment
Resits will accord with the LSHTM's Resits Policy. The Resit assessment will be the same assessment type as the first attempt (see previous table). (Note that for those resitting module assessments, a fee will be payable.)

Resources

Indicative reading list

- Heymann, D.L., (2014) *Control of Communicable Diseases Manual*. Revised 20th Edition. American Public Health Association, ISBN: 978-0875530185.
- Goering, R.V., Dockrell, H.M., Zuckerman, M. and Chiodini, P.L., (2024) *Mims' Medical Microbiology and Immunology.* 7th Ed. ISBN: 9780702071546.

Textbooks will be made available in e-format or hard copy to registered students in early autumn.

Other resources

Study Guide: Paper version

Reader: On-line reading list via the Virtual Learning Environment

In addition to the materials above, students are given access to the **LSHTM Virtual Learning Environment, (VLE; Moodle** where they can access the study guide, reading list, web-based discussion forums, assignments, supplementary materials and the **LSHTM online library resources**.

Teaching for Disabilities and Learning Differences

The module-specific site on Moodle provides students with access to the module learning materials, including a study guide (with accessible printable versions of sessions), an online reading list (containing essential readings), textbooks in e-format and additional resources including supplementary exercises.

All materials posted up on Moodle areas, including computer-based sessions, have been made accessible where possible. The LSHTM Moodle has been made accessible to the widest possible audience, using a VLE that allows for up to 300% zoom, permits navigation via keyboard and use of speech recognition software, and that allows listening through a screen reader. All students have access to "SensusAccess" software which allows conversion of files into alternative formats.

If you have specific, access requirements please contact the Inclusive Practice Manager via special.arrangements@london.ac.uk to request an alternative format of the study guide and for special exam arrangements.