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SCHOOL of
HYGIENE
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MEDICINE



MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2020-21
Module Code	IDM201
Module Title	Bacterial Infections
Module Organiser(s)	Ian Passmore and Jen Dow
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 examinations (although assessment submission deadlines which are earlier than this must be observed).
Last Revised (e.g. year changes approved)	May/2020

Programme(s)	Status
This module is linked to the following programme(s)	
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. develop a strategy to deal with the study of bacterial infection,
2. if presented with infected patients, know which clinical samples might be collected,
3. if presented with clinical samples, know which laboratory investigations might be appropriate,
4. if presented with bacterial cultures from clinical samples, know what investigations to carry out and why.

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 two-hour unseen written paper examination with 15 minutes additional reading/planning time (70%) and an assessed assignment comprising a 2500 word essay on a choice of two topics (30%).

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, 4
Exam	2 hours 15 minutes	70	1, 2, 3, 4

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

Unseen written examinations for DL modules are held once a year, in June (including resits). 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 <https://london.ac.uk/current-students/examinations/examination-centres>

A local fee will be payable direct to the examination centre. This fee is in addition to the programme/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 nor the LSHTM have any control over the fee amount.

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).

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., (2018) *Mims' Medical Microbiology and Immunology*. 6th Ed. ISBN: 978-0702071560.

Other resources

Study Guide: Paper version

Reader: Reprints of associated journal articles.

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



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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) and online reading list (containing essential readings, and textbooks if available), 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.