



MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2020-21
Module Code	3130
Module Title	Mycology
Module Organiser(s)	Dr Susan Howell
Faculty	Infectious & Tropical Diseases
FHEQ Level	Level 7
Credit Value	CATS: 15 ECTS: 7.5
HECoS Code	100265:100345 (1:1)
Term of Delivery	Term 3
Mode of Delivery	<p>For 2020-21 this module is delivered online but with practical sessions on-campus at LSHTM.</p> <p>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).</p> <p>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.</p> <p>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.</p>
Mode of Study	Full-time
Language of Study	English
Pre-Requisites	None



Accreditation by Professional Statutory and Regulatory Body	None
Module Cap (Maximum number of students)	20-24 (numbers may be capped due to limitations in facilities or staffing)
Target Audience	This module is intended for microbiologists, parasitologists, immunologists and clinicians. No prior knowledge of mycology is required.
Module Description	This module explores superficial / cutaneous, subcutaneous and systemic fungal infections of humans. The identification of causative organisms is covered in lectures and forms the content of the practical classes. Lectures also cover epidemiology, diseases, diagnosis and treatment aspects. Approximately 50 fungi are covered in the module, including moulds and yeast species.
Duration	5 weeks at 2.5 days per week
Timetabling slot	Slot E
Last Revised (e.g. year changes approved)	October 2020

Programme(s)	Status
This module is linked to the following programme(s)	
MSc Medical Microbiology	Recommended Option
MSc Immunology of Infectious Diseases	Recommended Option
MSc Tropical Medicine & International Health	Recommended Option

Module Aim and Intended Learning Outcomes

Overall aim of the module
The overall module aim is to: <ul style="list-style-type: none"> examine the major aspects of human fungal infections and how to identify the pathogens.

Module Intended Learning Outcomes
Upon successful completion of the module a student will be able to: <ol style="list-style-type: none"> Describe the basic structure and classification of pathogenic fungi; Demonstrate knowledge and understanding of the pathogenesis of the various mycoses, their clinical manifestations, diagnosis and management; Apply relevant identification techniques and skills in any laboratory settings using moulds or yeasts.



Indicative Syllabus

Session Content

The module is expected to cover the following topics:

- The morphology and taxonomy of pathogenic fungi;
- The mycoses - superficial and cutaneous, subcutaneous, and systemic;
- Virulence factors, immunology, aspects of treatment.

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Contact time	62	41
Directed self-study	0	0
Self-directed learning	43	29
Assessment, review and revision	45	30
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

Lectures and tutorials provide background information on each type of fungal infection / disease and introduce the fungal identification methods. The practical classes enable students to develop the skills to identify fungi and learn how to use their knowledge of the diseases and fungi to aid on the interpretation the laboratory tests. The practicals are considered essential to develop the skills needed to take the practical based exam.



Assessment

Assessment Strategy

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.

The practical assessment for this module will be on-campus at LSHTM. Other assessments will be online.

This course provides theoretical knowledge of fungal infections and practical skills to identify fungi in a laboratory, therefore the assessment tests both aspects.

- The coursework essay tests the understanding of one species of fungus in terms of what type of fungus it is, how it is identified, epidemiology, what diseases it causes, what pathogenicity features it has, how infections are managed and treated. It is representative of the lectures that would have covered for a range of medically important fungi, but provides an opportunity for the individual to demonstrate their in-depth knowledge and understanding of just one species.
It also enables the student to demonstrate their ability to research a topic and prepare a concise report in the style of a review article from the Journal of Clinical Microbiology.
- The practical assessment tests the practical skills and understanding of identification keys and methods, which when combined lead to an identification result. However, it also requires knowledge and understanding of the clinical aspects of fungal infection which might be characteristic of a particular fungus or disease type. Many of the exam questions include clinical information.

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
Coursework	2000-2500 words	50	1,2
Practical	1.5 hours / 15 questions	50	1,2,3



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). The essay will be in exactly the same format, but on a new topic. The practical exam will follow the same format but consist of different questions.

Resources

Indicative reading list

Course text book: Identification of Pathogenic Fungi by CK Campbell *et al.*

Mycology textbooks available in the LSHTM library

Journals: Medical Mycology, Journal of Clinical Microbiology, Clinical Microbiology Reviews, etc.

Other resources

The Mycology online website is excellent and is curated by expert mycologists :_

<https://mycology.adelaide.edu.au/>

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](#).