MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2025-26
Module Code	3143
Module Title	Advanced Diagnostic Parasitology
Module Organiser(s)	Claire Rogers and Debbie Nolder
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 2
Mode of Delivery	For 2025-26 this module will be delivered by predominantly face-to-face teaching modes. Where specific teaching methods (lectures, seminars, discussion groups) are noted in this module specification these will be delivered by predominantly face-to-face sessions. There will be a combination of live and interactive activities (synchronous learning) as well as self-directed study (asynchronous learning), plus face-to-face laboratory classes.
Mode of Study	Full-time
Language of Study	English
Pre-Requisites	Students must have already either taken the Parasitology & Entomology (3122) module in Term 1; or have extensive practical experience in the laboratory diagnosis of parasitic infections; or have proof of having taken a course or study unit in medical parasitology at undergraduate level or above.
Accreditation by Professional Statutory and Regulatory Body	None
Module Cap (Indicative number of students)	16 – 20 (numbers may be capped due to limitations in facilities or staffing)

Target Audience	This module is designed for those who have either taken the Parasitology & Entomology (3122) module in Term 1 or have extensive practical experience in diagnostic parasitology. This module is intended for those expecting to specialise in diagnostic parasitology, monitoring control programmes or in the development of novel diagnostic techniques.
Module Description	Building on previous experience, this is an advanced-level laboratory-based course on the diagnosis and detection of parasites.
Duration	5 weeks at 2.5 days per week
Timetabling slot	Slot C2
Last Revised (e.g. year changes approved)	July 2025

Programme(s) This module is linked to the following programme(s)	**Status**
MSc Medical Parasitology & Entomology	Recommended

Module Aim and Intended Learning Outcomes

Overall aim of the module
The overall module aims are to: • i) improve and refine diagnosis by microscopical methods and ii) introduce modern methods (in use and under development) for the laboratory diagnosis of the important parasitic diseases of man for clinical and epidemiological purposes. • The module also provides opportunities to evaluate the potential applications of these methods in developing and developed countries.

Module Intended Learning Outcomes
Upon successful completion of the module a student will be able to: 1. Demonstrate detailed knowledge and understanding of the application and evaluation of advanced diagnostic techniques; 2. Compare the organisation and management of laboratories in resource rich and resource poor settings; 3. Demonstrate increased ability to diagnose parasites by microscopy.

Indicative Syllabus

Session Content
The module is expected to cover the following topics: • Microscopy; • Nucleic acid techniques in diagnosis including conventional PCR, real-time & quantitative PCR, LAMP and gel electrophoresis; • Rapid Diagnostic Tests; • Immunoassays for detecting antibody and antigen including ELISA; • Culture-based diagnosis; • Principles of test development; • Applicability of tests and test evaluation; • Laboratory management and good practice including Quality Management; • Economic considerations.

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Contact time	48	32
Directed self-study	24	16
Self-directed learning	40	27
Assessment, review and revision	38	25
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.

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

Teaching and Learning Strategy
The module is designed to encourage maximum participation by students, who will be able to share their own specialised knowledge with the rest of the class. Each student will make one small group presentation (online) with other members of the class in a journal club format. This will not be assessed, but will be part of the learning process for all members of the class. The time balance is 30% lectures/discussions, 20% presentations, 50% practical work.

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. Assessment will be by practical examination comprising of the diagnosis of clinical specimens and answering questions related to the diagnosis made

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
Practical	2 ½ hours	100	1-3

Resitting assessment
Resits will accord with Chapter 8a of the LSHTM Academic Manual The Resit assessment will be the same assessment type as the first attempt

Resources

n/a

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.