



## MODULE SPECIFICATION

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| <b>Academic Year (student cohort covered by specification)</b>     | 2026-27                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Module Code</b>                                                 | 2056                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Module Title</b>                                                | Epidemiology in Practice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Module Organiser(s)</b>                                         | Professor Rashida Ferrand, Dr Leyla Larsson, Dr Kevin Tang                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Faculty</b>                                                     | Epidemiology & Population Health                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>FHEQ Level</b>                                                  | Level 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Credit Value</b>                                                | <b>CATS:</b> 15<br><b>ECTS:</b> 7.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Term of Delivery</b>                                            | Term 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Mode of Delivery</b>                                            | <p>For 2026-27 this module will be delivered predominantly by face-to-face teaching modes.</p> <p>Where specific teaching methods (lectures, seminars, discussion groups) are noted in this module specification these will be delivered by predominantly face-to-face sessions unless the speakers are not based at LSHTM in which case there may be a remote speaker. There will be a combination of live and interactive activities (synchronous learning) as well as recorded or self-directed study (asynchronous learning).</p> |
| <b>Mode of Study</b>                                               | Full-time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Language of Study</b>                                           | English                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Pre-Requisites</b>                                              | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Accreditation by Professional Statutory and Regulatory Body</b> | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Module Cap (indicative number of students)</b>                  | Indicative number 60-90; numbers above this may be capped due to limitations in facilities or staffing.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Target Audience</b>                                             | This module is compulsory for the MSc in Epidemiology, and an optional module for PhD students. It is also available as a stand-alone short course.                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Module Description</b>                                          | This module will provide students with essential practical skills required when working as an epidemiologist, an understanding of the ways in which epidemiological research links into wider public health and policy issues, and an ability to effectively engage in discussions concerning this. This                                                                                                                                                                                                                              |



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|                                                                            | module will go through the process from setting up a research question through research conduct (including ethics and fieldwork), to dissemination and translation to policy. |  |
| <b>Duration</b>                                                            | 10 weeks: 20 half-day sessions (Monday & Wednesday afternoons)                                                                                                                |  |
| <b>Timetabling slot</b>                                                    | Term 1                                                                                                                                                                        |  |
| <b>Last Revised (e.g. year changes approved)</b>                           | August 2025                                                                                                                                                                   |  |
| <b>Programme(s)</b><br>This module is linked to the following programme(s) | <b>Status</b>                                                                                                                                                                 |  |
| MSc Epidemiology                                                           | Compulsory                                                                                                                                                                    |  |

## Module Aim and Intended Learning Outcomes

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| <b>Overall aim of the module</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p>The overall module aim is to:</p> <ul style="list-style-type: none"> <li>• Provide students with essential practical skills required when working as an epidemiologist, an understanding of the ways in which epidemiological research links into wider public health and policy issues, and an ability to effectively engage in discussions concerning this. This module will go through the process from setting up a research question through research conduct (including ethics and fieldwork), to dissemination and translation to policy.</li> </ul> |

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| <b>Module Intended Learning Outcomes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p>Upon successful completion of the module a student will be able to:</p> <ol style="list-style-type: none"> <li>1. Unpack public health issues &amp; interventions in diverse contexts to formulate appropriate research questions and recommendations/strategies, including dealing with uncertainty.</li> <li>2. Critically appraise current state of knowledge to identify gaps in research evidence.</li> <li>3. Identify ethical issues in the conduct of epidemiologic research and understand how key ethical principles can be applied to respect the rights and ensure the safety of research participants/populations.</li> <li>4. Identify and address issues in conduct of fieldwork including questionnaire design, epidemiological data collection in diverse contexts, evaluation of programmes, and how to leverage emerging technologies in research.</li> <li>5. Understand approaches to disseminate research evidence and what it takes to translate research evidence into policy and practice.</li> </ol> |

## Indicative Syllabus

| Session Content                                                                                                                                                     |             |                       |          |        |                 |
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| The module adopts a problem-based approach to achieve its ILOs. See the table below for links between topics and ILOs and the key skills covered during the module. |             |                       |          |        |                 |
|                                                                                                                                                                     | 1.Unpacking | 2. Critical Appraisal | 3.Ethics | 4.GRIP | 5.Dissemination |
| <b>Module Organisation</b>                                                                                                                                          |             |                       |          |        |                 |
| Module overview and what is an epidemiologist                                                                                                                       | *           |                       |          |        |                 |
| End of module overview, assessment, and feedback                                                                                                                    | *           | *                     | *        | *      | *               |
| <b>ILO1: Unpacking</b>                                                                                                                                              |             |                       |          |        |                 |
| Introduction to unpacking                                                                                                                                           | *           |                       |          |        |                 |
| Unpacking: defining public health issues                                                                                                                            | *           | *                     |          |        |                 |
| <b>ILO2: Critical Appraisal</b>                                                                                                                                     |             |                       |          |        |                 |
| Critical appraisal                                                                                                                                                  |             | *                     |          |        |                 |
| Systematic reviews I and II                                                                                                                                         |             | *                     |          |        |                 |
| <b>ILO3: Ethics</b>                                                                                                                                                 |             |                       |          |        |                 |
| Research Ethics Online Course                                                                                                                                       |             |                       | *        |        |                 |
| Applying decolonising global health principles                                                                                                                      |             | *                     | *        |        | *               |
| <b>ILO4: GRIP</b>                                                                                                                                                   |             |                       |          |        |                 |
| Community engagement                                                                                                                                                |             | *                     | *        | *      |                 |
| Co-design and participatory approaches                                                                                                                              |             | *                     | *        | *      |                 |
| Emerging technologies in research                                                                                                                                   |             |                       |          | *      | *               |
| Conduct of fieldwork I: questionnaire design                                                                                                                        |             |                       |          | *      |                 |
| Conduct of fieldwork II: field implementation                                                                                                                       |             |                       | *        | *      |                 |
| Conduct of fieldwork III: epidemiological data collection in diverse settings                                                                                       |             | *                     | *        | *      |                 |
| Conduct of fieldwork IV: evaluation of programmes                                                                                                                   | *           | *                     |          | *      | *               |
| <b>ILO5: Evidence Dissemination</b>                                                                                                                                 |             |                       |          |        |                 |



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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| Multisectoral Stakeholders in Developing Policy                                                                                                                                                                            | * |   |   | * | * |
| Global guidelines: from evidence to policy                                                                                                                                                                                 | * | * |   | * | * |
| Capstone: putting it all together - a real-world public health challenge                                                                                                                                                   | * | * | * | * | * |
| ‡ Unpacking essentially means identifying all the questions that need to be answered to formulate recommendations/strategies/proposals and deciding what is known, what is not known, and how to gather relevant evidence. |   |   |   |   |   |

## Teaching and Learning

### Notional Learning Hours

| Type of Learning Time           | Number of Hours | Expressed as Percentage (%) |
|---------------------------------|-----------------|-----------------------------|
| Contact time                    | 57              | 38                          |
| Directed self-study             | 36              | 24                          |
| Self-directed learning          | 27              | 18                          |
| Assessment, review and revision | 30              | 20                          |
| <b>Total</b>                    | <b>150</b>      | <b>100</b>                  |

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                                                                                                                                                                                                                                                                                                                                 |
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| This 10-week module consists of two sessions/week and an average of 3-4 hours directed self-study/week. It employs a problem-based learning strategy and mixed methods: lectures, staff demonstration, panel discussions, group work sessions followed by group presentations with discussion or groupwork aimed at providing questions for panel discussions. |

## 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. It will comprise two tasks:

1. Certificate showing successful completion of the LSHTM research ethics online course to be submitted by end November 2026 (ILO 4). This course is timetabled in week 4 of Term 1. There are no limits to the number of attempts to pass the research ethics online course; a different set of 20 questions is tested in each attempt. A score of 80% or more is required to pass.
2. The module will also be assessed by a written assignment distributed during the last week of term. This will be related to one of the public health issues discussed with a series of 5 or so linked questions covering ILOs 1-3 & 5. The answers to be submitted by the end of the week before the start of term 2 teaching (ILOs 1-3 & 5).

Last year's assignment will be shared at the beginning of term and students encouraged to attempt it during the term. They will be supported by a question and answer forum on Moodle and by discussing it with their tutors, who will have access to the marking guide. Module organisers will also organise office hours to discuss the assessment.

### Summative Assessment

| Assessment Type                                                               | Assessment Length (i.e. Word Count, Length of presentation in minutes)                           | Weighting (%) | Intended Module Learning Outcomes Tested |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------|------------------------------------------|
| Quiz (with certificate) at the end of LSHTM's research ethics training course | 20 multiple choice questions; 80% required to pass. There is no limit on the number of attempts. | 10            | 4                                        |
| Written assignment                                                            | Around two-three A4 pages with answers in bullet points, not full paragraphs.                    | 90            | 1-3, 5                                   |

### Resitting assessment

Resits will accord with [Chapter 8a](#) of the LSHTM Academic Manual.

There will be an approved alternative written assignment, which will be given to students resitting the assignment in mid-April with submission two weeks later.



### **Resitting assessment**

Students who have failed the module overall, but passed the ethics assignment do not need to repeat this but will need to resit the written assignment. Those students who failed overall and also failed the ethics assignment should repeat this and submit a certificate together with their new written assignment.

## Resources

### Indicative reading list

1. Michie S van S. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*. 2011;6(1). doi:10.1186/1748-5908-6-42.
2. Robinson TP, Bu DP, Carrique - Mas J, et al. Antibiotic resistance is the quintessential One Health issue. *Transactions of The Royal Society of Tropical Medicine and Hygiene*. 2016;110(7):377-380. doi:10.1093/trstmh/trw048.
3. Smith PG, Morrow RH, Ross DA, eds. *Field Trials of Health Interventions: a Toolbox /*. 3rd edition. Oxford University Press; 2015 (available to download free online).
4. WHO Commission on Social Determinants of Health. 2008 (available to download free online).
5. Rose G. Sick individuals and sick populations. *International Journal of Epidemiology*. 1985;14(1):32-38. doi:10.1093/ije/14.1.32
6. WHO Handbook for Guideline Development 2<sup>nd</sup> edition. 2014 (available to download free online <https://apps.who.int/iris/handle/10665/145714>).
7. Vandembroucke JP, von Elm E, Altman DG et al. for the STROBE initiative. (2007) Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): Explanation and elaboration. *PLoS Medicine*. 4(10):e297.
8. Moher D, Hopewell S, Schulz KF et al. for the CONSORT Group. (2010) CONSORT 2010 Explanation and Elaboration: updated guidelines for reporting parallel group randomised trial. *British Medical Journal*. 340: c869 or *J Clin Epi*; 63(8): e1-e37 .
9. Higgins JPT, Thomas J (senior editors). *Cochrane Handbook for Systematic Reviews of Interventions Version 6 [updated October 2019]*. The Cochrane Collaboration, 2019. Available from <https://training.cochrane.org/handbook>.
10. PRISMA Reporting Guidelines. <http://www.prisma-statement.org>.

### Other resources

DL Modules EPM103; EPM105; LSHTM Research Ethics training course. Students will be provided with access to the following resources via Moodle: session outlines (PDF), lecture slides/handouts (PDF), recorded lectures (video or PowerPoint), groupwork instructions (PDF + recorded), zoom recorded panel discussions and reading lists with all items available in accessible format and weblinks with PDFs of documents.



## Teaching for Disabilities and Learning Differences

The module-specific site on Moodle provides students with access to lecture notes and copies of the slides used during the lecture prior to the lecture (in pdf format). All lectures are recorded and made available on Moodle as quickly as possible. 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.

For students who require learning or assessment adjustments and support this can be arranged through the Student Support Services – details and how to request support can be found on the [LSHTM Disability Support pages](#).