



MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2021-22
Module Code	EPM103
Module Title	Practical Epidemiology
Module Organiser(s)	Rosemary Green, Alison Price, Suzanna Francis
Contact	<p>The LSHTM distance learning programmes and modules are run in collaboration with the University of London. Enquiries may be made via their Student Advice Centre at: https://london.ac.uk/contact-us</p> <p>(Enquiries from London-based LSHTM MSc or research students regarding study of DL modules should be emailed to distance@lshtm.ac.uk)</p>
Faculty	Faculty of Epidemiology and Population Health London School of Hygiene & Tropical Medicine http://www.lshtm.ac.uk/eph/
FHEQ Level	Level 7
Credit Value	CATS 15 ECTS 7.5
HECoS Code	101335 : 100755 : 100793
Mode of Delivery	Distance Learning
Mode of Study	Directed self-study, through online materials via the Virtual Learning Environment
Language of Study	English
Pre-Requisites	<p>Epidemiology and Demography & Health students should have studied and have an understanding of both EPM101 <i>Fundamentals of Epidemiology</i> and EPM102 <i>Statistics for Epidemiology [previously entitled Statistics with Computing]</i> prior to studying this module. Students can register for all EPM1 modules in the same year but should first study the material for EPM101 and EPM102 as explained above.</p> <p>Students studying this module as an individual module must have basic epidemiological knowledge and skills equivalent to EPM101 <i>Fundamentals of Epidemiology</i> and EPM102 <i>Statistics for Epidemiology [previously entitled Statistics with Computing]</i>.</p>

Accreditation by Professional Statutory and Regulatory Body	Not currently accredited by any other body.
Module Cap (Maximum number of students)	There is no cap on the number of students who can register for this distance learning module.
Target Audience	Practical Epidemiology is a core module for all students on the DL PG Certificate/PG Diploma/MSc Epidemiology programmes and an elective module for students on the DL PG Diploma/MSc Demography & Health programmes.
Module Description	This module takes students step by step through the process of designing and conducting an epidemiological study, and covers many of the key practical elements necessary for planning and carrying out epidemiological research.
Duration	<p>Students may start their studies at any time from access/receipt of study materials (made available annually usually in October, depending on date of registration) and work through the material until the start of the June examinations (although assessment submission deadlines which are earlier than this must be observed). The “Virtual Ethics Committee” sessions are run three times a year, in November, January and February. Please note the textbook will be available in e-format or hard copy.</p> <p>Students registering after September (continuing and individual module students only) should note that introductory messages, and some online activities (for example discussion forums and/or real-time welcome sessions) may have already taken place before they get access to the Virtual Learning Environment (Moodle). All such messages and recordings (where applicable) will be available to access throughout the study year.</p>
Last Revised (e.g. year changes approved)	March 2021

Programme(s)	Status
This module is linked to the following programme(s)	
PGCert/PGDip/MSc Epidemiology (Distance Learning - University of London Worldwide)	Compulsory
MSc Demography and Health (Distance Learning - University of London Worldwide)	Elective

Module Aim and Intended Learning Outcomes

Overall aim of the module

The overall module aim is to:

- provide students with a step-by-step guide to the practical stages involved in the planning and conduct of an epidemiological study.

Module Intended Learning Outcomes

Upon successful completion of the module a student will be able to:

1. Apply basic concepts of epidemiology and statistics to practical situations;
2. Design procedures for identifying and selecting study participants;
3. Identify and employ appropriate methods for the collection and/or management of relevant data
4. Identify relevant ethical issues in a given study outline.

In addition, through its optional sessions, the module offers the opportunity to revise key concepts taught in EPM101 and EPM102, including, but not limited to, confounding and statistical inference.

Indicative Syllabus

Session Content

Session	Title
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PE01	Module introduction and overview
PE02	Planning your study
PE03	Ethical issues in epidemiological research
PE04	Introduction to sampling methods
PE05	More complex sampling methods
PE06	Size of a study
PE07	Randomisation
PE08	Quantitative data collection 1: Questionnaires
PE09	Quantitative data collection 2: Other methods
PE10	Qualitative data collection
PE11	Field organisation and quality control
PE12	Data entry, validation and transfer
PE13	Data management

There are also two optional sessions:

PE14-15 offer an opportunity to revise key concepts in epidemiology and statistics that have been taught in EPM101 - EPM103. While sessions PE14-15 are optional, the key concepts they cover are considered to be fundamental to epidemiology, so that they may be assessed in the EPM103 exam.

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Directed self-study	110	73
Self-directed learning	10	7
Assessment, review and revision	30	20
Total	150	100

Teaching and Learning Strategy

Learning is self-directed against a detailed set of learning objectives using the materials provided. In this module, our teaching methods differ somewhat to those used in EPM101 and EPM102, in that we expect students to do more reading around the topics that we teach, and to apply their epidemiological knowledge in a critical way. The key learning methods are:

- Reading and reflecting on CAL (computer-assisted learning) materials which introduce, explain and apply the principles and methods covered in the module.
- Reading and reflecting on other resources which support the learning in the CAL sessions.
- Participation in a group-based learning activity: the “Virtual Ethics Committee”.
- Accessing academic support, which is available from the module tutors through the online discussion forums and occasional real-time sessions (using Collaborate Ultra) in which students are encouraged to participate.
- Completing formative assignment(s) and reflecting on written feedback from module tutors.
- Completing self-assessed exercises and reflecting on performance against model answers.

Assessment

Assessment Strategy

Formal assessment of this module includes a two-hour unseen written examination with 15 minutes' additional reading/planning time (100%).

If students fail the module overall, they are allowed one further attempt at the examination.

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
Exam	2hrs 15mins	100	1 - 4

Timed examinations for DL modules are held once a year, in June (including resits). Examinations in 2021/22 will either be taken in a student's country of residence in one of over 650 [examination centres worldwide](#) or will be held online. If the June 2022 module exam is held at a local examination centre, a local fee will be payable direct to the exam centre. This fee will be in addition to the module fee and is set by, and paid directly to, the individual examination centre. 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. If the June 2022 module exam is held online, no additional exam entry fee will be payable. (Note that for those resitting module assessments, a fee will be payable.)

Resitting assessment

Resits will accord with the LSHTM's [Resits Policy](#).

Resources

Indicative reading list

Textbooks

- *Essential Medical Statistics* (Kirkwood, Sterne) – provided as e-book
- *Principles of Exposure Measurement in Epidemiology* (White, Armstrong, Saracci) – provided as e-book
- *Field Trials of Health Interventions in Developing Countries - A Toolbox* (Smith, Morrow and Ross) – provided as e-book.

Other resources

The Moodle Virtual Learning Environment (VLE) contains the key materials and resources for EPM103 as follows:

- Interactive study material, referred to as Computer Assisted Learning (CAL), which is the key learning material for the module. The CAL sessions are accessible online and available to download also.
- Readings (via the LSHTM online library)
- Discussion forums
- Assignments and Exercises
- Past examination papers and examiner reports.

The following resources are also provided:

Software

- Stata software (if not already provided for EPM102)
- ODK Installation Instructions (online download).

Moodle can be accessed from the first week of October, after module registration.

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 and online reading list (containing both essential and recommended readings), and additional resources including supplementary exercises and optional lecture recordings. All materials posted up on Moodle areas, including computer-based sessions, have been made accessible where possible (this includes an accessible printable version of each session). 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 with special needs, reasonable adjustments and support can be arranged – details and how to request support can be found on the University of London Worldwide website at <https://london.ac.uk/applications/how-it-works/inclusive-practice-access-arrangements>