

Module Specification (Distance Learning)

In collaboration with University of London International Programmes



1. Title:	Practical Epidemiology						
2. Module code:	EPM103						
3. Institution:	Faculty of Epidemiology and Population Health London School of Hygiene & Tropical Medicine Keppel Street London WC1E 7HT http://www.lshtm.ac.uk/eph/						
4. Module Organisers:	Tanya Marchant, Lisa Hurt						
5. Mode of study:	Distance learning						
6. Type:	Core module						
7. Duration and dates:	<p>Deadlines if taken as part of a formal award:</p> <p>Application deadline: 30 June each year Registration deadline: 31 August each year Course registration duration: Up to 5 years Course starts: 1 October each year Examination takes place: Usually June each year (date to be confirmed)</p> <p>Deadlines if taken as an individual module (i.e. not registered for formal award):</p> <p>Application deadline: 31 August each year Registration deadline: 30 November each year Registration duration: 2 years Module study starts: 1 October each year Examination takes place: Usually June each year (date to be confirmed)</p>						
8. Credit points:	15 credit points will be awarded on successful completion of this module at Masters level (Level 7).						
9. Notional Learning Hours (NLH):	<p>The module should take about 150 hours to complete. On average students will divide these learning hours as follows:</p> <table border="0"> <tr> <td>Directed self-study</td> <td>90 hours</td> </tr> <tr> <td>Self-directed learning</td> <td>35 hours</td> </tr> <tr> <td>Assessment, review and revision</td> <td>25 hours.</td> </tr> </table>	Directed self-study	90 hours	Self-directed learning	35 hours	Assessment, review and revision	25 hours.
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10. Aim:	The aim of this module is to provide students with a step-by-step guide to the practical stages involved in the planning and conduct of an epidemiological study.						
11. Learning objectives:	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> • develop a research question for a health-related problem; • write an outline protocol for a given study question; • identify relevant ethical issues in a given study outline; • explain sampling procedures and be able to undertake calculations for sample size and power requirements; • identify methods of data collection appropriate to the study design and population; • design efficient data collection and data management procedures; • perform data cleaning and data management operations to prepare for 						

	<p>data analysis;</p> <ul style="list-style-type: none"> summarise and present data in graphs and tables. <p>In addition, through its optional sessions, the module offers the opportunity to (1) revise key concepts taught in EPM101 - EPM103, including, but not limited to, confounding and statistical inference, and (2) an introduction to geographic information systems and mapping.</p>																																		
12. Content:	<p>Module content is structured around the self-study sessions listed below:</p> <table border="1"> <thead> <tr> <th>Session</th> <th>Title</th> </tr> </thead> <tbody> <tr><td>PE00</td><td>Module introduction and overview</td></tr> <tr><td>PE01</td><td>Choosing an appropriate study design and site</td></tr> <tr><td>PE02</td><td>Writing a study protocol</td></tr> <tr><td>PE03</td><td>Ethical issues in epidemiological research</td></tr> <tr><td>PE04</td><td>Introduction to sampling methods</td></tr> <tr><td>PE05</td><td>More complex sampling methods</td></tr> <tr><td>PE06</td><td>Size of a study</td></tr> <tr><td>PE07</td><td>Randomisation</td></tr> <tr><td>PE08</td><td>Quantitative data collection 1: Questionnaires</td></tr> <tr><td>PE09</td><td>Quantitative data collection 2: Other methods</td></tr> <tr><td>PE10</td><td>Qualitative data collection</td></tr> <tr><td>PE11</td><td>Field organisation and quality control</td></tr> <tr><td>PE12</td><td>Data entry, validation and transfer</td></tr> <tr><td>PE13</td><td>Data management 1: Basic principles</td></tr> <tr><td>PE14</td><td>Data management 2: Advanced applications</td></tr> <tr><td>PE15</td><td>Summarising and presenting data</td></tr> </tbody> </table> <p>There are also three optional sessions.</p> <p>PE16 offers an introduction to geographic information systems and mapping. Its content will not be examined.</p> <p>PE17-18 offer an opportunity to revise key concepts in epidemiology and statistics that have been taught in EPM101 - 103. While sessions PE17-18 are optional, the key concepts they cover are considered to be fundamental to epidemiology, so that they may be assessed in the EPM103 exam.</p>	Session	Title	PE00	Module introduction and overview	PE01	Choosing an appropriate study design and site	PE02	Writing a study protocol	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 1: Basic principles	PE14	Data management 2: Advanced applications	PE15	Summarising and presenting data
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13. Learning methods:	<p>Learning is self-directed against a detailed set of learning objectives using the materials provided. The key learning methods are:</p> <ul style="list-style-type: none"> 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 paper-based materials 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 web-based discussion forum in which students are encouraged to participate. Completing formative assignment(s) and reflecting on written feedback from module tutors. 																																		
14. Study resources provided:	<p>Epidemiology Core Module CD-Rom (EPM101/102/103) EPM103 Data Management for Epidemiological Studies Course Manual Booklet</p> <p><u>Software:</u></p>																																		

	<p>Stata EpiData MapInfo</p> <p><u>Textbooks:</u> Ethics & Epidemiology: International Guidelines (Bankowski, Bryant, Last) Guide To Questionnaire Construction & Question Writing (Woodward, Chambers) Principles of Exposure Measurement in Epidemiology (White, Armstrong, Saracci) Field Trials of Health Interventions in Developing Countries - A Toolbox (Smith, Morrow) Essential Medical Statistics (Kirkwood, Sterne).</p> <p>Registered students have access to the School's online library resources.</p>
15. Assessment procedures:	<p>Formal assessment of the module consists of a two-hour unseen written examination.</p> <p>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 local fee will be payable. A list of examination centres can be found at http://www.londoninternational.ac.uk/current_students/general_resources/exams/exam_centres/index.shtml.</p> <p>If students fail an examination at the first entry they will be allowed one further attempt, the following year.</p>
16. Prerequisites:	<p>Note for Epidemiology course students: Students should have completed both EPM101 and EPM102.</p> <p>Those wishing to study this module must have regular access to the internet to benefit from library facilities, participate in web-based conference discussions and submit assignments.</p> <p>Students must meet the standard of English required to study this course. See http://www.lshtm.ac.uk/prospectus/english.html.</p>
17. Attendance:	No maximum number
18. Selection, if applicable:	This module is compulsory for students registered on the <u>PG Certificate/PG Diploma/MSc Epidemiology</u> courses; alternatively, it can be taken as an Individual Module.
19. Fees:	For current schedule of fees see http://www.londoninternational.ac.uk/fees/schedules/lshtm.pdf .
20. Scholarships:	None available
21. External accreditation:	None
22. Application process:	Applications are managed by the University of London International Programmes (website: http://www.londoninternational.ac.uk/).
23. Further enquiries:	Enquiries may be emailed to distance@lshtm.ac.uk .