Programme Specification
2019–2020

Epidemiology

MSc
PGDip
PGCert
Individual courses

Important document – please read
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Important information regarding the Programme Specification

About this document

Last revised: 10 April 2019

The Programme Specification gives a broad outline of the structure and content of the programme, the entry level qualifications, as well as the learning outcomes students will achieve as they progress. Some of the information referred to in this programme specification is included in more detail on the University of London website. Where this is the case, links to the relevant webpage are included.

Where links to external organisations are provided, the University of London is not responsible for their content and does not recommend nor necessarily agree with opinions expressed and services provided at those sites.

If you have a query about any of the programme information provided, whether here or on the website, registered students should use the ‘ask a question’ tab in the student portal otherwise the Contact Us button on each webpage should be used.

Terminology

The following language is specific to the Epidemiology programmes:

Individual units of a programme are called modules. Each module is a self-contained, formally structured learning experience with a coherent and explicit set of learning outcomes and assessment criteria.

Key revisions made

Programme specifications are revised annually. The Senate Postgraduate Teaching Committee of the London School of Hygiene & Tropical Medicine, as part of its annual review of standards, confirms the programme structure and the educational aims and learning outcomes, and advises on any development in student support.

Where changes have been made which may impact on continuing students, these are listed below. For all new students, the programme and general information provided in this document is correct and accurate and will be applicable for the current year.

Significant changes made to the programme specification 2019-2020:

- From 2019-20, PG Diploma Epidemiology students must complete the four core EPM1 modules, followed by the two EPM2 modules and then either two EPM3 modules selected from a list of options, or one elective EPM3 module and one further module selected from the option list.

- From 2019-20, modules EPM202 Statistical Methods in Epidemiology and EPM304 Advanced Statistical Methods in Epidemiology will be assessed solely by assessed assignment.

- The GPA range for consider distinctions for final awards has changed from 4.0 – 4.29 to 4.15 – 4.29 from 2019/20.
Programme title and qualifications

Postgraduate Degrees of the University of London may be classified. The award certificate will indicate the level of the academic performance achieved by classifying the award. The classification of the degree will be based on the ratified marks from the completed assessments.

The classification system for the Epidemiology programmes is as follows:

- Distinction
- Merit
- Pass

Specific rules for the classification of awards are given in the Programme Regulations, under the Assessment and Award Scheme.

Programme name

Epidemiology

Qualification titles

Master of Science Epidemiology
Postgraduate Diploma Epidemiology
Postgraduate Certificate Epidemiology

Exit qualifications

Postgraduate Diploma Epidemiology
Postgraduate Certificate Epidemiology

An exit qualification is an intermediate qualification for which the student may not have registered at the outset but which may be awarded on completion of specific modules (or credit accumulated) in a longer programme of study, if the student leaves the programme.

Exit qualifications are awarded at the discretion of the Board of Examiners and once a student has accepted an exit qualification they will not normally be permitted to continue their study of the same qualification with the University of London.

Individual modules

There is also provision for individual modules to be studied on a stand-alone basis.

Qualification titles may be abbreviated as follows:

- Master of Science Epidemiology - MSc
- Postgraduate Diploma Epidemiology - PGDip
- Postgraduate Certificate Epidemiology - PGCert

Level of the programmes

The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (FHEQ) forms part of the UK Quality Code for Higher Education of the Quality Assurance Agency for Higher Education (QAA).
The qualifications (including exit qualifications) are placed at the following Levels of the FHEQ:

- MSc Level 7
- PGDip Level 7
- PGCert Level 7

Individual modules are offered at Level 7.

**Relevant QAA subject benchmarks**

Not applicable

**Awarding body**

University of London

**Registering bodies**

University of London and London School of Hygiene & Tropical Medicine.

**Academic direction**

London School of Hygiene & Tropical Medicine (LSHTM)

**Accreditation by professional or statutory body**

Not applicable

**Language of study and assessment**

English

**Mode of study**

Flexible and online study

**Blended learning**

Students may also be permitted to study up to two elective modules by blended learning in place of distance learning modules. Blended learning enables a student to combine distance learning with a period of part-time study at the London School of Hygiene & Tropical Medicine. An additional fee will be payable.

**Programme structures**

The MSc Epidemiology consists of:

- Four compulsory EPM1 modules
- Two compulsory EPM2 modules

And either

- Three EPM3 modules selected from a list of options
  
or

- One EPM3 module and one further elective module selected from a list of options
- A compulsory Project Report
Programme Specification 2019-2020 Epidemiology (MSc/PGDip/PGCert/Individual modules)

- A final qualifying examination paper (drawing on material from the compulsory modules)

The PGDip Epidemiology consists of:
- Four compulsory EPM1 modules
- Two compulsory EPM2 modules
And either
- Two EPM3 modules selected from a list of options
  or
- One EPM3 module selected from a list of options and one further module selected from a list of options.

The PGCert Epidemiology consists of:
- Four compulsory EPM1 modules

Full details of the Scheme of Award are included in the Programme Regulations.

Maximum and minimum periods of registration

The maximum and minimum period of registration, from a student's effective date of registration, are:

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSc</td>
<td>Two years</td>
<td>Five years</td>
</tr>
<tr>
<td>PGDip</td>
<td>Two years</td>
<td>Five years</td>
</tr>
<tr>
<td>PGCert</td>
<td>One year</td>
<td>Five years</td>
</tr>
<tr>
<td>Credit bearing individual modules</td>
<td>One year</td>
<td>Two years</td>
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Study materials are made available at the start of the academic year after registration and on payment of the applicable fee.

Credit value of modules

Further information about the credit systems used by universities in the UK and Europe is provided by the Quality Assurance Agency and the European Credit Transfer and Accumulation System.

Where credits are assigned to modules of a programme, credit indicates the amount of learning carried out in terms of the notional number of study hours needed, and the specified FHEQ credit level indicates the depth, complexity and intellectual demand of learning involved. The details below indicate the UK credits and the European Credit Transfer and Accumulation System (ECTS) values.

For the Epidemiology programme, credits are assigned to the modules as follows:
- 15 UK credits or 7.5 ECTS credits for each module at FHEQ level 7
- 45 UK credits or 22.5 ECTS credits for the project at FHEQ level 7.
Each qualification equates to the following number of credits:

- MSc Epidemiology - 180 UK credits or 90 ECTS credits
- PGDip Epidemiology - 120 UK credits or 60 ECTS credits
- PGCert Epidemiology - 60 UK credits or 30 ECTS credits

One UK credit equates to a notional ten hours of study.

Recognition of Prior Learning

Recognition of prior learning is a generic term for the process by which we recognise and, where appropriate, award credit for learning that has taken place at an institution other than the University of London. See the General Regulations (Section 3) and Programme Regulations for more rules relating to prior learning.

For the Epidemiology programmes the University of London may recognise your prior learning and allow you exemption from a compulsory module towards the qualification. This can only be considered at the point of application for the programme.

Further information on recognition of prior learning is on the website.

Entrance requirements

Applicants must submit an application in line with the procedures and deadlines set out on the website.

All details of the programme specific entry requirements are given on the programme page, under the Requirements tab.

English language requirements

All applicants must satisfy the English language requirements for the programme. These are set out in detail on the programme page under the Requirements tab.

Where an applicant does not meet the prescribed English language proficiency requirements but believes that they can demonstrate the requisite proficiency for admission the University may, at its discretion, consider the application.

Internet access and computer specification

Students will require regular access to a computer with an internet connection to use the University of London’s online resources and systems.

The computer should have at least the following minimum specification:

- a web browser with Cookies and JavaScript enabled (a latest version of Firefox or Chrome is recommended);
- a good internet connection;
- a CD/DVD-ROM drive (some non EPM modules only);
- screen resolution of 1024 x 768 or greater;
sufficient internet bandwidth to enable downloading of essential learning materials that are up to approximately 50MB in size.

And the following applications installed:
- Microsoft Word (.doc and .docx);
- Microsoft Excel;
- a pdf reader.

Additional requirements
- Students may need to use a calculator.
- A headset/microphone may be required to participate in live webinar sessions online.

Students with access requirements
The University of London welcomes applications from disabled students and/or those who have access requirements. The University will make every effort to provide reasonable adjustments to enable those with a disability, learning difficulty or access requirements to have the same opportunity as all other students to successfully complete their studies.

The University is committed to managing the application procedure and the programme itself to ensure that services are accessible for all students and that an inclusive environment is created. Students with a disability, or others who may need access arrangements to assist in taking examinations, should complete the relevant section of the application form, or contact the Inclusive Practice Manager. A separate room or other arrangements may be considered.

Requests are considered by a University panel, whose purpose is to ensure that students with disabilities and/or specific access requirements are neither advantaged nor disadvantaged by such arrangements when compared with other students. These considerations remain separate from the academic selection processes.

For further information, see Inclusive Practice Policy

Sources of funding and scholarships
Information about potential sources of funding and scholarships is updated annually and where available is included in the prospectus web pages.

For further information see the website

Educational aims and learning outcomes of the programmes
These programmes aim to prepare students with the knowledge and skills to make valuable contributions to both epidemiological research and public health. Epidemiological methods are used increasingly in medical research, public health practice and health care evaluation to investigate the causes of disease, and to evaluate interventions to prevent or control disease. These programmes are mainly designed for those planning careers in epidemiological research, as well as academics in other health areas and other health professionals. They are also suitable for those who need an understanding of epidemiology, such as medical journalists and scientific officers in government and industry. Successful completion of the MSc may allow students to progress to a higher research degree.
The main educational aims of these programmes are to offer a challenging scheme of study invigorated by research, which advances students' ability to develop the academic and practical skills needed as an epidemiologist. Students will be encouraged to develop a range of transferable and subject specific expertise using their initiative and working out problems for themselves.

The programmes aim to:

- develop knowledge and understanding of the fundamental skills needed to become competent in epidemiology;
- enable students to understand developments in the field of epidemiology;
- encourage independent critical and evaluative skills that can be used to apply independent scientific judgment;
- teach students how to apply the conceptual and practical tools needed to initiate research;
- facilitate self-development into professionally organised and interactive individuals by practicing skills of selection, assimilation and communication.

The learning outcomes of the programmes are as follows:

**Knowledge, understanding, intellectual and cognitive**

Students will be able to:

- demonstrate knowledge and understanding of epidemiological methods, and their application in a range of health-related issues;
- demonstrate knowledge of the main types of epidemiological study and recognise key issues with their use;
- identify the sources of error and bias in epidemiological studies and suggest strategies to deal with them;
- demonstrate skills in handling data and presenting quantitative results;
- manage computerised epidemiological data;
- evaluate critically studies conducted by others (in terms of the question, the design, the method, how it was conducted and how it was analysed);
- choose appropriate designs for epidemiological studies (to a limited extent only for PGCert students);
- develop detailed protocols for epidemiological studies (to a limited extent only for PGCert students);
- carry out appropriate statistical analysis of epidemiological data and interpret results (to a limited extent only for PGCert students);
- acquire and apply more advanced epidemiological skills relating to specific fields of interest (e.g. non-communicable / communicable diseases, human genetic epidemiology, advanced statistical skills) and depending on student choice (PGDip and MSc students only);
- carry out and write up a substantial independent piece of epidemiological work (MSc students only).
Transferable skills

Students will be able to:

- use problem solving skills in a range of situations;
- use fluent and effective communication and discussion skills in a written context;
- have a capacity to handle ideas and scrutinise information in critical, evaluative and analytical ways;
- manage their own learning, including working effectively to deadlines.

Students who pass the core EPM1 modules will have the essential introduction to a variety of methods, approaches and concepts in epidemiology. They will have an understanding of the fundamentals of epidemiology, including key statistical principles and will be able to demonstrate knowledge of the practical aspects needed for planning and conducting research. Core module students will also be able to show basic skills in writing research papers and searching and evaluating the scientific literature.

PGDip and MSc students who proceed to the EPM2 and elective modules will build on the foundations learnt from the core modules. These students will learn how to design their own epidemiological research study, prepare a grant application and develop further statistical knowledge and skills needed to analyse and interpret data from the common forms of epidemiological studies. Students will then choose from a range of options which further knowledge in specific areas.

MSc students will also apply the epidemiological skills they have learnt to a particular problem in an area of their own interest and produce a Project report.

Learning, teaching and assessment strategies

Learning is self-directed against a detailed set of learning objectives for each module using the materials provided. This includes reading and reflecting on computer-assisted learning (CAL) materials and/or text-based Study Guides which introduce, explain and apply the principles and methods covered in each module.

Each module is divided into sessions covering different topics. The sessions contain a number of elements designed to make learning manageable and to check on the progress they have made. Each session would usually contain:

- Aim of the session
- Learning objectives
- Activities to further students’ understanding and skills and assess what they have learnt
- Feedback which follows each activity, giving the correct or optimal answer to questions posed, or discusses issues that have been raised
- Summary containing the key learning points of the session.

The CAL material and Study Guides are supported by reading lists which give online links to relevant articles (usually via the LSHTM online library). For statistical modules, a practical workbook of exercises is provided together with statistical software. Selected textbooks (either hard copy or an e-book) are provided for some Epidemiology modules, along with recommendations for further reading.
Students are encouraged to communicate with tutors and fellow students via online discussion forums. In this way, students may ask questions, and develop and negotiate conclusions with others, which are key components in the acquisition of knowledge, understanding and transferable skills.

Most Epidemiology modules have at least one Formative Assignment (FA) for the students to complete. These do not count towards the final award but students are strongly encouraged to do these. The FAs give students an opportunity to i) apply their newly learnt knowledge and skills, thereby reviewing their progress and understanding, ii) highlight to tutors any difficulties relating to that topic, and iii) receive personal tutorial feedback on their work and their highlighted issues.

Assignments, essays, projects, reports, dissertations and other similar work must be the student's own work and must be written without the assistance of other people, except where they are expressly permitted to work as a group and submit a piece of work jointly. Where such a piece of work is submitted, all students working in the group will be required to submit a declaration for all such work, confirming their participation in completing the submitted work.

Advice and practical information on study techniques, planning and preparation for assessment is available in the LSHTM programme-specific Student Handbook (which is available online to students after registration) and Academic Writing Handbook. Students manage their own learning and study schedule, but advice can be sought from the support team at any stage of the academic year.

Formal module assessment includes an unseen written paper examination and/or assessed assignment, depending on the module:

- Where a module is assessed by unseen written examination, this will consist of questions structured to allow students to show that they have acquired appropriate knowledge and understanding. The way that students manage data, solve problems, evaluate ideas and the organisational skills they use to structure answers allows the standard of intellectual and transferable skills to be assessed.

- Some modules are assessed entirely or in part by a written assessed assignment (AA). The AA gives students an opportunity to apply the skills taught in the module in a practical way that often reflects a real-life scenario. In some assignments, group work is involved while in others there is the opportunity to explore issues in depth individually, encouraging independent thinking and judgement.

In addition, there are two other assessed components of the MSc:

- The Additional Examination Paper (MSc only) draws on the material from all the compulsory modules and should be taken at the time when students attempt the last of the written papers for the MSc. It assesses not only the knowledge and understanding of the compulsory modules but students can also draw on material they have covered in elective modules and in their professional practice, to demonstrate depth of understanding.

- MSc students will also submit a Project Report. This will allow students to develop and deepen epidemiological concepts and skills learnt during the programme. Students will be able to apply epidemiological skills to a real-life issue, and to analyse data or literature in depth. It also allows students to show independent research skills and their ability to think critically and develop original ideas. It will test the
Assessment criteria for the programme take into account the level at which these skills have been achieved.

**Assessment methods**

Each core EPM1 module (PGCert, PGDip and MSc) will be assessed by one two-hour and 15 minute unseen written examination with the exception of EPM105 *Writing and reviewing epidemiological papers* which will be assessed by a written assignment.

Modules EPM201 *Study design: writing a grant application*, EPM202 *Statistical methods in epidemiology* and EPM304 *Advanced statistical methods in epidemiology* will be assessed solely by a written assignment.

All other Epidemiology modules (PGDip and MSc) (EPM301 *Epidemiology of communicable diseases*, EPM302 *Modelling and the dynamics of infectious diseases* and EPM307 *Global epidemiology of non-communicable diseases*) will be assessed by one two-hour and 15 minute unseen written examination and a written assignment. The mark awarded for each of these modules will be weighted 70:30 (examination: assignment).

The Additional Examination Paper (MSc only) will be assessed by one three-hour and 15 minute unseen written examination which draws on material from all the compulsory modules and should be taken at the time when students attempt the last of the written papers for the MSc.

The Project Report (MSc only) will be assessed by submission of one written report of up to 10,000 words. It should be submitted in the final year of the degree.

The written examinations take place on one occasion each year, normally commencing in June. These are held at established centres worldwide.

**Individual modules**

A student may choose whether or not to be formally assessed in the credit bearing individual modules for which they are registered. Students who choose to be formally assessed will be examined in the same way as students studying for a full award.

For full details of the dates of all examinations, refer to the [website](#).

**Student support and guidance**

The following summarises the support and guidance available to students:

- **University of London Student Guide:** This provides information which is common to all students and gives information about matters of importance from the start of a student's relationship with the University of London through to their graduation.

- **Programme Regulations**

- **The University of London Online Library:** This provides access to a range of full-text, multidisciplinary databases where journal articles, book reviews and reports can be found.
Programme Specification 2019-2020 Epidemiology (MSc/PGDip/PGCert/Individual modules)

- Senate House Library: Registered students may use the resources located within the University of London Senate House library
- Employability skills module – guidance on how to manage your career in the future, available through the VLE.
- A University of London email account and web area for personal information management.

Support and guidance from LSHTM

- The LSHTM Moodle Virtual Learning Environment (VLE). This gives online access to the main module materials, module discussion forums, information on assignments, links to essential and recommended readings (where available), past examination papers and examiner reports, and study skills’ resources.
- LSHTM online library resources.
- Student support staff are available to offer help and advice on administrative matters. Programme Directors can also be contacted for personal advice e.g. planning studies, advice on elective module options. Communication may either be via the online ‘Student Support Help’ discussion forum on Moodle or by email, and sometimes by Skype if needed.
- Each module has at least one Module Organiser (MO) and a team of tutors assigned to it. The tutor team provides academic support to those studying on specific modules, in the following ways:
  - assisting in interpreting and understanding the material presented by answering queries on the online discussion forums
  - grading and providing written feedback on assignments
  - offering some real-time ‘webinars’ in which students are encouraged to participate.
- The tutors are specialists in their subject area, and will change according to the module being followed at the time.
- A project supervisor works with students undertaking the project in the final year of the MSc.
- An LSHTM programme-specific Student Handbook, available on the LSHTM Moodle site, provides guidance on all aspects of the programme. It includes background information about the programme, advice on getting started, studying as a distance learner and organising study time, a description of the resources and programme materials available and how to access them, networking and support issues, procedures for assessment and examinations (including programme deadlines).
- Students are encouraged to exchange ideas with other students on the programme and to organize mutual support via email or other forms of communication. An online discussion forum ‘Student Cafe’ is available within the LSHTM Moodle site which is accessible to students only, while individual contact details can be made available through the Student Network Directory (subject to student consent). This contains
contact details of other students on the course so students can build up their own network if they wish (for example, to organise study groups).

Quality evaluation and enhancement

The University of London delivers the majority of its flexible and distance learning programmes through a collaboration between the University of London Worldwide and member institutions of the University of London. However some of the flexible and distance learning programmes draw solely on academic input from the University of London, and are delivered without academic lead by a member institutions. The policies, partnerships (where applicable) and quality assurance mechanisms applicable for the programmes are defined in the following key documents: The Quality Framework, the Quality Assurance Schedules, Guidelines for Examinations, General Regulations and, for each programme, programme specific regulations.

Awards standards

All University of London qualifications have to align with the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies to assure appropriate standards for each qualification. In addition, every programme that is developed by a member institution of the University of London (or a consortium with representation by more than one member institution) will be developed to the same standard as would be applied within the institution concerned. Proportionate and robust approval procedures, including external scrutiny and student engagement are in place for all programmes. Learning materials are written and all assessments are set and marked by academic staff who are required to apply the University’s academic standards.

Review and evaluation mechanisms

Some of the key mechanisms in place to assure the standards of all University of London qualifications and the quality of the student experience, include:

- Annual programme reports: produced for all programmes in order to review and enhance the provision and to plan ahead;
- Independent external examiners: submit reports every year to confirm that a programme has been assessed properly and meets the appropriate academic standards;
- Annual student information statistics: prepared for all systematic reporting within the University of London;
- Periodic programme reviews: carried out every 4-6 years to review how a programme has developed over time and to make sure that it remains current and up-to-date.

Improvements are made as necessary to ensure that systems remain effective and rigorous.

Student feedback and engagement

The Student Experience Survey, carried out every two years, collects feedback from the student body on a range of topics relating to the student lifecycle. The results are considered in a number of different ways, including by the Pro-Vice Chancellor, the programme team, principal committees and departments at the University of London responsible for the different aspects of the student experience. Once the findings have been considered in detail, responses are published from both the University of London and from the individual Programme Directors.
Additional survey activity may also be conducted from time to time through the student portal, by email or from the programme team. This includes a request for module specific feedback, which subsequently feeds into the annual module review process.

VLEs also provide the opportunity for informal feedback and discussion.

An undergraduate and postgraduate student member is appointed by the University to the majority of committees through an annual appointment round. Some programmes also recruit student members at the programme level. Students are frequently invited to take part in quality review processes such as Periodic Programme Reviews, Programme approval, Thematic Reviews, MOOC review panels and ad hoc focus groups. Opportunities such as these are advertised through social media and on the website. More information can be found on the website.

### After graduation

#### Further study

Successful completion of the programme may allow students to progress to a higher level award in the subject area.

#### Graduate employment routes

The programmes will be relevant for those planning careers in epidemiological research; public health and community medicine; epidemiological field studies; disease surveillance units; drug/vaccine manufacturers; or disease control in governmental, NGO or donor institutions. It is also of interest to those who require an understanding of epidemiology, such as medical journalists and scientific officers in government and industry.

#### The Alumni Network

Upon graduation, students automatically become members of the University of London Alumni Network, a diverse worldwide community of alumni in more than 180 countries. The Alumni Network can provide past students with lifelong links to the University of London and each other. Benefits include social and networking events, access to local groups, a bi-annual magazine, social networking groups, and the opportunity to become an Alumni Ambassador for the University of London.

The London School of Hygiene & Tropical Medicine also welcomes former students to its alumni association and this is free to join.

For further information, please see [https://london.ac.uk/alumni](https://london.ac.uk/alumni), [www.facebook.com/londonualumni](http://www.facebook.com/londonualumni), [www.instagram.com/_londonualumni](http://www.instagram.com/_londonualumni) and [https://www.linkedin.com/school/university-of-london](https://www.linkedin.com/school/university-of-london) and also [https://www.lshtm.ac.uk/aboutus/alumni](https://www.lshtm.ac.uk/aboutus/alumni).