

MSc and Postgraduate Diploma in Veterinary Epidemiology Programme Specification

Applies to the cohort commencing 2014

1. Awarding institution	The Royal Veterinary College and the London School of Hygiene and Tropical Medicine
2. Teaching institution	The Royal Veterinary College (University of London) in partnership with the London School of Hygiene and Tropical Medicine (University of London)
3. Programme accredited by	N/A
4. Final award	Master of Science and Postgraduate Diploma
5. Programme Title	Veterinary Epidemiology
6. Date of First Intake	September 2000 (MSc) September 2013 (Postgraduate Diploma)
7. Frequency of Intake	Annually in September
8. Duration and Mode(s) of Study	Full time; one academic year. Part time; two academic years or part time; three academic years in exceptional circumstances. Mixed mode study options are available and any student wishing to select this mode of study needs to discuss their interest with the course directors first.
9. Timing of Examination Board meetings	Annually in July and September
10. Date of Last Periodic Review	2009/2010
11. Date of Next Periodic Review	2016/2017
12. Entry Requirements	<p><i>Academic Requirements</i></p> <p>Applicants should have a first- or second-class university honours degree or equivalent. Individuals with degrees in biological sciences, veterinary or human medicine, mathematics or statistics, and relevant postgraduate experience, are all encouraged to apply. Applicants are expected to have a high level of numeracy skills (e.g. A level Mathematics or Statistics or a module with a good mark in their university degree).</p> <p><i>Other Requirements</i></p> <p>Applicants from overseas will be required to provide evidence of proficiency in spoken and written English, including scientific usage and comprehension.</p>
13. UCAS code	N/A
14. JACS Code	D200

15. Relevant QAA subject benchmark group(s)	N/A
16. Reference points	
N/A	
17. Educational aims of programme	
<p>Consistent with the Framework for Higher Education Qualifications (http://www.qaa.ac.uk/Publications/InformationandGuidance/Documents/FHEQ08.pdf) at Masters level (level 7) , this course will provide students with an understanding of the conceptual basis of epidemiology and with training in essential methodological skills for the design, conduct, analysis, interpretation and communication of epidemiological studies, surveillance and disease control in animal and human populations.</p> <p>On completion of the MSc and PG Diploma course, students will be able to:</p> <ul style="list-style-type: none"> • demonstrate a profound understanding of epidemiology as the study of patterns and factors that affect health and welfare in animal and human populations; • recognise the importance of related disciplines and methods such as economics and mathematical modelling and how they contribute to epidemiology, with the opportunity to learn and apply these; • demonstrate advanced knowledge and understanding of the role of epidemiology, the major health issues in both human and animal populations and the contribution of epidemiology to other health related disciplines; • select an appropriate study design when confronted with an epidemiological research question and develop a study protocol capable of answering the research question; • enter and manage computerised epidemiological data and carry out appropriate statistical analyses; • assess the results of epidemiological studies (their own or other investigators'), including critical appraisal of study question, study design, methods and conduct, statistical analysis and interpretation; • apply epidemiological principles to surveillance and infection and disease control within animal and human populations; • communicate effectively with researchers from different disciplinary backgrounds, and with people who have an interest in human and animal health, including the general public and key policy makers; • demonstrate advanced integration and problem solving skills; • continue to develop independent and lifelong learning skills to promote their own personal and professional development as veterinary epidemiologists and leaders <p>On completion of the MSc course, students will additionally be able to:</p> <ul style="list-style-type: none"> • Carry out an independent research project, write the results in the form of a journal article and defend their project orally 	

18. Programme outcomes - the programme offers opportunities for students to achieve and demonstrate the following learning outcomes.

A. Knowledge and understanding of:

- Demonstrate a profound understanding of epidemiology as the study of patterns and factors that affect health and welfare in animal and human populations
- the role of epidemiology, the major health issues in both human and animal populations and the contribution of epidemiology to other health related disciplines
- design and implementation of epidemiological studies
- how to assess the results of epidemiological studies (their own or other investigators'), including critical appraisal of study question, study design, methods and conduct, statistical analysis and interpretation
- application of epidemiological principles to disease control.
- carrying out appropriate statistical analysis of epidemiological data
- carrying out an independent research project, writing the results in the form of a journal article and defending project orally
- communicating effectively with researchers from different disciplinary backgrounds, and with people who have an interest in human and animal health, including the general public and key policy makers

Teaching/learning methods:

Students acquire knowledge and understanding through participation in:

- lectures
- practical classes
- multidisciplinary group work
- assignments
- problem-solving sessions
- organised visits to sites of special interest off campus

Assessment by:

- coursework
- written examinations
- research project report**
- oral examination**

B. Cognitive (thinking) skills:

- Planning
- Logic and reasoning
- Comprehension
- Visual and auditory processing
- Long-term memory

Teaching/learning methods:

Students' cognitive skills are developed / reinforced through active participation in:

- lectures
- practical classes
- assignments
- problem-solving exercises

Assessment by:

- coursework
- written examinations
- research project report**
- oral examination**

<p>C. Practical skills:</p> <ul style="list-style-type: none"> • Entering and managing computerised epidemiological data • carrying out an independent research project, writing the results in the form of a journal article and defending a project orally** • Adapting locally available raw materials, conditions, rules and management structure to optimise animal health and production • Scientific skills, including critical review of the scientific literature • Decision making skills to analyse animal health problems at farm and national level. 	<p>Teaching/learning methods: Students learn practical skills through active participation in:</p> <ul style="list-style-type: none"> • practical classes • individual research project** <p>Assessment:</p> <ul style="list-style-type: none"> • coursework • research project report** • oral examination**
<p>D.4. Key skills:</p> <ul style="list-style-type: none"> • integration skills • communication skills • group work skills • personal skills • interpersonal skills • organisational skills • learning skills • information gathering and analytical skills • problem solving skills • language skills • information technology skills 	<p>Teaching/learning methods:</p> <ul style="list-style-type: none"> • regular interaction with course directors, tutors, lecturers and peers from their own and other health-related courses • practical classes • use of computer software in the preparation of assessment write-up and research project report (literature searching, MS Word), analysis of field and experimental data (Stata, ArcGIS, MS Excel, Berkeley Madonna* and @risk) • assignments • planning and carrying out an individual research project** <p>Assessment:</p> <ul style="list-style-type: none"> • course work • written examinations • research project report** • oral examination**

* Optional for PG Diploma course

** MSc course only

19. Programme structures and requirements, levels, modules, credits and awards

Term 1	Term 2	Term 3
<p>This term has to be taken full-time during the first year of enrolment. Term one comprises the Fundamentals, Principles and Practice of Veterinary Epidemiology module, consisting of the following compulsory components:</p> <p>Compulsory units for MSc & PG Diploma (stand-alone and exit award): Epidemiology in Practice Extended Epidemiology,</p>	<p>Term two comprises four modules, all of which are compulsory for MSc students. Diploma students have two compulsory modules during this term, and can choose to take either or both other modules. Each module is taught for 2.5 days per week. It is important to consider that some of these modules are pre-requisites for modules taught later on, whether in the same or the following term. If you are a part-time student, you should discuss your pattern of study with the</p>	<p>Term three consists of one module, which is taught for 2.5 days per week. You will dedicate the remaining part of the week to examination revision and, if you are an MSc student, project preparation.</p> <p>Compulsory Units for MSc but Optional for PG Diploma (stand-alone and exit award): Applied Veterinary Epidemiology.</p>

<p>Statistics for Epidemiology and Population Health, Epidemiological Aspects of Laboratory Investigation, Surveillance of Animal Health and Production. The compulsory term one units collectively form the Fundamentals, Principles and Practice of Veterinary Epidemiology super module which is worth a total of 60 credits.</p> <p>Optional units for MSc & PG Diploma (stand-alone and exit award). These units are not assessed and do not carry credits: Molecular Epidemiology of Infectious Diseases, Global Health Lecture Series(recommended)</p> <p>The term one study units are assessed in the first written examination paper in June, and are worth a total of 60 credits.</p>	<p>course directors to ensure you follow an appropriate route.</p> <p>Compulsory units for MSc & stand-alone PG Diploma but optional for exit award PG Diploma: Statistical Methods in Epidemiology, Epidemiology and Control of Communicable Diseases</p> <p>Compulsory units for MSc but Optional for PG Diploma (stand-alone and exit award): Modelling and the Dynamics of Infectious Diseases, Economics of One Health</p> <p>Each of the term 2 modules will be worth 15 credits.</p> <p>Optional units for MSc & PG Diploma (stand-alone and exit award). These units are not assessed and do not carry credits: Global Health Lecture Series (recommended)</p>	<p>The term 3 module is worth 15 credits.</p> <p>Compulsory Research project for MSc only: MSc Students spend half of Term 3 and full time for the following three months of the course working on an individual research project, with the guidance of a member of staff. The project will give you the opportunity to apply knowledge and skills gained during the course to a substantial individual piece of work. The research project is worth 45 credits.</p> <p>If you are sponsored by an employer you may undertake a project related to your work. Students from overseas are encouraged to bring data to London for this purpose where possible.</p> <p>Following this module there are two weeks allocated for examination revision and then the exams (two papers) take place in early June.</p>
20. Work Placement Requirements		N/A

ASSESSMENT

See Modular Assessment and Award Regulations Annex A

The MSc/Diploma in Veterinary Epidemiology assessment consists of three components:

In-course assessment:

You will complete one or more in-course assessments for each study unit in the second and third terms of the programme. The marks from the five study units are then averaged to give an overall mark.

Two three-hour written exam papers in June:

- Paper One examines the content of Term One teaching
- Paper Two is a synthesis of the whole year, examining skills, concepts and methods related to course objectives.

Project report Assessment with oral examination in September (MSc only)