University of Pretoria Yearbook 2020

MSc Veterinary Epidemiology (Coursework) (08251022)

Minimum duration of study	2 years
Total credits	180
NQF level	09

Programme information

This programme if offered by the Department of Production Animal Studies.

This degree programme provides training in the principles of and methods used in veterinary epidemiology, including training in selected more specialised tools used in the discipline. It caters for the needs of candidates who wish to be trained as epidemiologists, health officers or researchers involved in the investigation and control of diseases in animal populations and who would like to gain relevant knowledge and develop specific technical skills.

The curriculum consists of compulsory core and elective theoretical modules (90 credits) as well as a mini-dissertation (90 credits). It is primarily a web-based modular degree programme.

Also consult General Regulations.
Students are required to confirm whether a module will be presented in any particular year. This enquiry should be directed to the relevant head of department according to the syllabi information provided in the list of modules in this publication.

Admission requirements

- Subject to the stipulations of the applicable General Regulations, a BScHons, a four-year BScAgric, BVSc or equivalent degree or a relevant postgraduate diploma (on NQF level 8) is required.
- Two years of professional experience might be required in certain cases.

Additional Requirements

- In cases where web-based/online modules are offered, basic computer skills are required in order to successfully participate in the degree programme.
- In certain cases, it remains the prerogative of the head of department to require, in addition to the entrance requirements, the successful completion of an admissions test before registration.
- All international applicants whose first language is not English, may be required to pass a proficiency test in English (TOEFL). Application and more information: www.ets.org/toefl/
- Postgraduate applicants who have completed any foreign qualifications must have all their previous post-school qualifications evaluated by the South African Qualifications Authority (SAQA) before applying for postgraduate studies at the University of Pretoria: www.saqa.org.za

Examinations and pass requirements

A minimum examination mark of 50% is required in each of the modules where a semester or year mark is not required. However, where a semester or year mark is required, the latter will contribute 50% to the final mark. A subminimum of 40% is required in the examination and a final mark of at least 50 % to pass the module. Instructions regarding requirements for semester, year or examination marks are published in the study guides, for the specific attention of candidates.

The MSc coursework degree is conferred by virtue of the successful completion of examinations on the coursework modules and a mini-dissertation.

If a student fails a module, he/she will have to repeat the module the following year. A module cannot be repeated more than twice.

Research information

Also consult the General Regulations.

Candidates must submit a mini-dissertation which deals with an applied field of study. The topic is determined in consultation with the supervisor and the relevant head of department, and must be approved according to Faculty guidelines. The mini-dissertation is based on an applied research project or related research projects (which need not be original), planned and reported by the candidate. (Assistance with statistical processing, applied specialised procedures, etc. is allowed, but must be acknowledged.)

An internal as well as external examiner will evaluate the mini-dissertation. The supervisor may not be an examiner.

The average mark of the separate marks awarded by all examiners constitutes the final mark for the mini-dissertation. The minimum pass mark is 50%. The Dean, on the recommendation of the relevant head of the department, may permit a candidate who has failed, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

The degree is conferred with distinction on a student who has obtained at least 75% for the mini-dissertation and a weighted average of at least 75% in the other modules needed to comply with degree requirements, provided that a minimum pass mark of 60% in all the other modules have been obtained.

Curriculum: Year 1

Minimum credits: 90

In addition to the core modules please select relevant elective module(s), in consultation with the HoD and supervisor, to the credit value of at least 15 credits.

Fundamental modules

Research methodology 813 (VRM 813)

Module credits	0.00
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1 and Semester 2

Module content

A web-based introductory module in research methodology that includes planning and undertaking a research project or clinical trial, collecting and analysing data, scientific writing, and enabling preparation and presenting of a research protocol.

Core modules

Basic veterinary epidemiology 851 (EPL 851)

Module credits	10.00
Prerequisites	A BVSc or equivalent qualification. Non-veterinary graduates will be considered under exceptional circumstances. Recommended: Grade 12 Mathematics.
Contact time	1 other contact session per week, 1 web-based period per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

An introductory module in veterinary epidemiology designed to provide a sound foundation in epidemiology that can be applied in practice and upon which further studies can be built. The module covers aspects of population medicine, disease outbreak investigation, clinical epidemiology, experimental studies, observational studies, surveys, basic analytical tools and diagnostic tests

Biostatistics in veterinary science 852 (EPL 852)

Module credits	20.00
Prerequisites	BVSc or equivalent qualification and Grade 12 Mathematics.
Contact time	2 seminars per week
Language of tuition	Module is presented in English

Department	Production Animal Studies
Period of presentation	Semester 1

Module content

This module provides the student with a foundation in basic statistical methods commonly used by postgraduate students in veterinary science. It covers statistical building blocks, confidence intervals, hypothesis testing, chi-square procedures, regression and correlation, paired and pooled t-tests, analysis of variance and non-parametric tests.

Analytical veterinary epidemiology 853 (EPL 853)

Module credits	20.00
Prerequisites	EPL 851 and EPL 852
Contact time	2 seminars per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 2

Module content

This module provides the student with further knowledge and skills in veterinary epidemiology and an introduction to certain more advanced statistical methods commonly used in veterinary science, including adjustment for confounding, multiple linear regression, logistic regression and survival analysis, and will provide the basis for further studies and research involving these techniques.

Animal health information management 855 (EPL 855)

Module credits	5.00
Prerequisites	No prerequisites.
Contact time	1 web-based period per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1 or Semester 2

Module content

This module covers the principles and practice of the collection, entry, storage, management and processing of animal health-related data. It provides the knowledge necessary to be able to effectively work with data in veterinary epidemiology and animal health research.

Scientific reasoning in veterinary epidemiology 856 (EPL 856)

Module credits	5.00
Prerequisites	No prerequisites.
Contact time	1 web-based period per week

Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

This module covers, using practical examples, the processes of scientific reasoning and critical thinking applicable to veterinary epidemiology, and equips the student to use clear lines of reasoning in developing and testing hypotheses and making inferences, and to be able to critically evaluate information presented in the literature.

Advanced topics in veterinary epidemiology 859 (EPL 859)

Module credits	15.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

This module consists of assignments, seminars, discussions, required reading and/or attendance of short courses on various specialised or advanced topics in veterinary epidemiology of interest to the student and relevant to the chosen research project. Activities are decided upon by the student, in consultation with and subject to approval by the supervisor

Curriculum: Final year

Minimum credits: 90

Core modules

Mini-dissertation: Veterinary epidemiology 891 (EPL 891)

Module credits	90.00
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Mini-dissertation

The information published here is subject to change and may be amended after the publication of this information. The General Regulations (G Regulations) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the General Rules section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.