

# University of Pretoria Yearbook 2021

## MSc Veterinary Epidemiology (Coursework) (08251022)

**Department** Production Animal Studies

**Minimum duration of study** 2 years

**Total credits** 180

**NQF level** 09

### Programme information

This programme is 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

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

### 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

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)

<b>Module credits</b>	0.00
<b>NQF Level</b>	09
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Veterinary Tropical Diseases
<b>Period of presentation</b>	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)

<b>Module credits</b>	10.00
<b>NQF Level</b>	09
<b>Prerequisites</b>	A BVSc or equivalent qualification. Non-veterinary graduates will be considered under exceptional circumstances. Recommended: Grade 12 Mathematics.
<b>Contact time</b>	1 other contact session per week, 1 web-based period per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Production Animal Studies
<b>Period of presentation</b>	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)

<b>Module credits</b>	20.00
<b>NQF Level</b>	09
<b>Prerequisites</b>	BVSc or equivalent qualification and Grade 12 Mathematics.

<b>Contact time</b>	2 seminars per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Production Animal Studies
<b>Period of presentation</b>	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)

<b>Module credits</b>	20.00
<b>NQF Level</b>	09
<b>Prerequisites</b>	EPL 851 and EPL 852
<b>Contact time</b>	2 seminars per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Production Animal Studies
<b>Period of presentation</b>	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)

<b>Module credits</b>	5.00
<b>NQF Level</b>	09
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	1 web-based period per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Production Animal Studies
<b>Period of presentation</b>	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)

<b>Module credits</b>	5.00
<b>NQF Level</b>	09
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	1 web-based period per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Production Animal Studies
<b>Period of presentation</b>	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)

<b>Module credits</b>	15.00
<b>NQF Level</b>	09
<b>Prerequisites</b>	No prerequisites.
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Production Animal Studies
<b>Period of presentation</b>	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

### Core modules

#### Mini-dissertation: Veterinary epidemiology 891 (EPL 891)

<b>Module credits</b>	90.00
<b>NQF Level</b>	09
<b>Prerequisites</b>	VRM 813
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Production Animal Studies
<b>Period of presentation</b>	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.