University of Pretoria Yearbook 2016

MSc Option: Veterinary Public Health (08251013)

Duration of study	2 years
Total credits	240

Programme information

This programme is offered by the Department of Paraclinical Sciences.

Also consult the 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.

The MSc degree is conferred by virtue of the successful completion of prescribed modules in the curriculum and a mini-dissertation. Coursework: 70%; Mini-dissertation: 30%.

Admission requirements

Subject to the stipulations of the applicable General Regulations, a four-year scientific-based degree such as BScHons, BScAgric, a BVSc, BVMCh or an equivalent degree, is required.

Additional requirements

A candidate with a completed BTech degree with a minimum of 60% in the broad area of specialisation. In certain cases, it remains the prerogative of the head of department to require, in addition to the entrance requirements already mentioned, the successful completion of additional coursework and/or an admissions test before registration. A student may be required to pass a proficiency test in English (TOEFL) at an acceptable level.

Examinations and pass requirements

A minimum examination mark of 50% is required to pass each of the modules. Instructions regarding requirements for semester, year or examination marks are published in the study guides, for the specific attention of candidates.

If a student fails a module, he (she) has to repeat the module the next time it is presented. A student may not sit for an examination more than twice in the same module on postgraduate level.

Research information

Also consult the General Regulations.

Candidates must submit a mini-dissertation s, which deals with an applied field of study within veterinary public health. The topic is determined in consultation with the head of department, and the research project that follows, 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 procession, applied specialised procedures, etc. is allowed, but must be acknowledged). The candidate may use appropriate research done previously, to add to the writing of the mini-dissertation.

Previous, related publications by the candidate may be bound with the mini-dissertation, but may not substitute the complete text of the mini-dissertation. Publications, which are submitted, must be rounded off by means of an extensive introduction, materials, and information concerning methods and a discussion of the results. An external examiner, who may not necessarily attend the final examination in the special field of study, will evaluate the mini-dissertation.

Before or together with the mini-dissertation, a draft article based on the mini-dissertation must be prepared for publication in an acknowledged journal, failing which the degree will not be conferred. The draft article must be acceptable to the supervisor and must comply with the requirements for subsidy (see applicable Faculty rules).

Pass with distinction

The degree is conferred with distinction on a student that has obtained at least 75% for the mini-dissertation and an cumulative average of at least 75% for the modules.

Curriculum: Year 1

Minimum credits: 229

Core modules

Veterinary public health: Meat hygiene 881 (VPH 881)

Module credits	40.00
Prerequisites	No prerequisites.
Contact time	10 practicals per week
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to all aspects of red meat hygiene relating to prevention and control of zoonoses and other diseases transmitted by meat, welfare of livestock, pre-harvesting, harvesting and post-harvesting aspects of red meat production, practical application of HACCP relating to the specific activities, prevention and control of chemical residues in meat, including veterinary drug residues and appropriate national and international legislation. An understanding of how these relate to applied research relevant to industry or public health (including the ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Veterinary public health: Veterinary milk hygiene 883 (VPH 883)

Module credits	40.00
Prerequisites	No prerequisites.
Contact time	10 practicals per week
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to all aspects of milk hygiene relating to prevention and control of zoonoses and other diseases transmitted by milk, or other dairy products, welfare of livestock, pre-harvesting, harvesting and post-harvesting aspects of milk production or dairy products, practical application of HACCP relating to the specific activities, prevention and control of chemical residues, including veterinary drug residues and appropriate national and international legislation. An understanding of how these relate to applied research relevant to industry or public health (including the ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

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	English
Academic organisation	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

Mini-dissertation: Veterinary Public Health (VPH 890)

Module credits	80.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

Mini-dissertation

Research methodology 812 (VRM 812)

Module credits	9.00
Language of tuition	English
Academic organisation	Vet Sc Dean's Office

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.

Elective modules

Basis in environmental health 870 (EHM 870)

Module credits	5.00
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	1 lecture per week, 1 other contact session per week, 1 discussion class per week, 1 practical per week, 1 seminar per week
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Health risk assessment 871 (EHM 871)

Module credits	10.00
Service modules	Faculty of Veterinary Science
Prerequisites	EOH 871
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Project management in health 870 (HCS 870)

Module credits	10.00
Service modules	Faculty of Veterinary Science
Prerequisites	HME 870
Contact time	1 discussion class per week, 1 practical per week, 1 other contact session per week, 1 lecture per week, 1 seminar per week
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Monitoring and evaluation 873 (HME 873)

Module credits	15.00

Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week, 1 practical per week
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Qualitative research methods 870 (QHR 870)

Module credits	10.00
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Communication in health 871 (SCC 871)

Module credits	10.00
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	1 practical per week, 16 lectures per week
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Veterinary public health: Poultry food hygiene 882 (VPH 882)

Module credits	40.00
Prerequisites	No prerequisites.
Contact time	10 practicals per week
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to all aspects of poultry hygiene relating to prevention and control of zoonoses and other diseases transmitted by meat, eggs or other poultry products, welfare of poultry, pre-harvesting, harvesting and post-harvesting aspects of poultry meat or egg production, practical application of HACCP relating to the specific activities, prevention and control of chemical residues, including veterinary drug residues and appropriate national and international legislation. An understanding of how these relate to applied research relevant to industry or public health (including the ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Veterinary public health: Environmental health and biosecurity 884 (VPH 884)

Module credits	40.00
Prerequisites	No prerequisites.
Contact time	10 practicals per week
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to control of zoonoses of environmental origin, biosecurity relating to food of animal origin and management of disasters and emergencies involving animals and animal products, safe collection and disposal of animal carcases, condemned meat or other animal products and animal wastes. The prevention, control and impact assessment of pollution by livestock production or industries, population control of animals in rural and urban environments to prevent zoonoses, occupational health of veterinary staff, management of the veterinary public health aspects of disasters and emergencies, evaluation of human-animal interactions and their impact on human health including animal facilitated therapy. An understanding of appropriate national and international legislation and how these relate to industry or public health (including ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Animal/Human/Ecosystem Health 801 (AHE 801)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content
The objective of this module is to give the learner a multidisciplinary view (One Health) of the concepts and principles of integrated livestock and wildlife health and management in the tropics. There will be a special focus on understanding the relationship between ecosystem health and infectious/parasitic diseases of animals and humans (zoonoses) and ecosystem health in order to improve disease control policies, ecosystem sustainability, food security and rural development.

Zoonoses 805 (AHE 805)

Module credits	20.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

This module deals with basic concepts and principles of zoonoses with a clear focus on wildlife/livestock/human interactions. Key drivers, contributing underlying factors as well as impacts of zoonoses will be investigated against the background of socio-economic determinants, the environment, animal husbandry practices; integrated intervention tools and strategies; integrated medical and veterinary data collection, cultural perceptions and advocacy and policy development.

Policy, planning and legislation 809 (AHE 809)

Module credits	20.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

This module deals briefly with the concepts and principles of animal health policy formulation in the context of livestock/wildlife/human interactions; trade in animals and their products; food safety and zoonotic diseases; and the management alternatives for African transboundary (high impact) diseases.

Communication and management 810 (AHE 810)

Module credits	20.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content
The primary objective of this module is to equip managers/decision-makers in particular with the necessary communication skills to address not only the public but also international audiences or panels. It will also deal with basic principles of project management (eg scope, stakeholders, time management, budgets and risk analysis) as well as basic principles of financial management (eg statements, financing decisions, capital budgeting, working capital management).

Curriculum: Final year

Minimum credits: 229

Core modules

Veterinary public health: Meat hygiene 881 (VPH 881)

Module credits	40.00
Prerequisites	No prerequisites.
Contact time	10 practicals per week
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to all aspects of red meat hygiene relating to prevention and control of zoonoses and other diseases transmitted by meat, welfare of livestock, pre-harvesting, harvesting and post-harvesting aspects of red meat production, practical application of HACCP relating to the specific activities, prevention and control of chemical residues in meat, including veterinary drug residues and appropriate national and international legislation. An understanding of how these relate to applied research relevant to industry or public health (including the ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Veterinary public health: Veterinary milk hygiene 883 (VPH 883)

Module credits	40.00
Prerequisites	No prerequisites.
Contact time	10 practicals per week
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to all aspects of milk hygiene relating to prevention and control of zoonoses and other diseases transmitted by milk, or other dairy products, welfare of livestock, pre-harvesting, harvesting and post-harvesting aspects of milk production or dairy products, practical application of HACCP relating to the specific activities, prevention and control of chemical residues, including veterinary drug residues and appropriate national and international legislation. An understanding of how these relate to applied research relevant to industry or public health (including the ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

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	English
Academic organisation	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

Mini-dissertation: Veterinary Public Health (VPH 890)

Module credits	80.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

Mini-dissertation

Research methodology 812 (VRM 812)

Module credits	9.00
Language of tuition	English
Academic organisation	Vet Sc Dean's Office

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.

Elective modules

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Module credits	5.00
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	1 lecture per week, 1 other contact session per week, 1 discussion class per week, 1 practical per week, 1 seminar per week
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Health risk assessment 871 (EHM 871)

Module credits	10.00
Service modules	Faculty of Veterinary Science
Prerequisites	EOH 871
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Project management in health 870 (HCS 870)

Module credits	10.00
Service modules	Faculty of Veterinary Science
Prerequisites	HME 870
Contact time	1 discussion class per week, 1 practical per week, 1 other contact session per week, 1 lecture per week, 1 seminar per week
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Monitoring and evaluation 873 (HME 873)

Module credits	15.00

Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week, 1 practical per week
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Qualitative research methods 870 (QHR 870)

Module credits	10.00
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	School of Health Syst & Public
Period of presentation	Year

Communication in health 871 (SCC 871)

Module credits	10.00
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Module credits	40.00
Prerequisites	No prerequisites.
Contact time	10 practicals per week
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

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Veterinary public health: Environmental health and biosecurity 884 (VPH 884)

Module credits	40.00
Prerequisites	No prerequisites.
Contact time	10 practicals per week
Language of tuition	English
Academic organisation	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to control of zoonoses of environmental origin, biosecurity relating to food of animal origin and management of disasters and emergencies involving animals and animal products, safe collection and disposal of animal carcases, condemned meat or other animal products and animal wastes. The prevention, control and impact assessment of pollution by livestock production or industries, population control of animals in rural and urban environments to prevent zoonoses, occupational health of veterinary staff, management of the veterinary public health aspects of disasters and emergencies, evaluation of human-animal interactions and their impact on human health including animal facilitated therapy. An understanding of appropriate national and international legislation and how these relate to industry or public health (including ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Animal/Human/Ecosystem Health 801 (AHE 801)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content
The objective of this module is to give the learner a multidisciplinary view (One Health) of the concepts and principles of integrated livestock and wildlife health and management in the tropics. There will be a special focus on understanding the relationship between ecosystem health and infectious/parasitic diseases of animals and humans (zoonoses) and ecosystem health in order to improve disease control policies, ecosystem sustainability, food security and rural development.

Zoonoses 805 (AHE 805)

Module credits	20.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content
This module deals with basic concepts and principles of zoonoses with a clear focus on wildlife/livestock/human interactions. Key drivers, contributing underlying factors as well as impacts of zoonoses will be investigated against the background of socio-economic determinants, the environment, animal husbandry practices; integrated intervention tools and strategies; integrated medical and veterinary data collection, cultural perceptions and advocacy and policy development.

Policy, planning and legislation 809 (AHE 809)

Module credits	20.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content
This module deals briefly with the concepts and principles of animal health policy formulation in the context of livestock/wildlife/human interactions; trade in animals and their products; food safety and zoonotic diseases; and the management alternatives for African transboundary (high impact) diseases.

Communication and management 810 (AHE 810)

Module credits	20.00
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content
The primary objective of this module is to equip managers/decision-makers in particular with the necessary communication skills to address not only the public but also international audiences or panels. It will also deal with basic principles of project management (eg scope, stakeholders, time management, budgets and risk analysis) as well as basic principles of financial management (eg statements, financing decisions, capital budgeting, working capital management).

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.