



University of Pretoria Yearbook 2021

MSc Veterinary Industrial Pharmacology (Coursework) (08251018)

Department Paraclinical Sciences

Minimum duration of study 2 years

Total credits 180

NQF level 09

Programme information

This programme is offered by the Department of Paraclinical Sciences.

The curriculum consists of compulsory core modules (90 credits) as well as a mini-dissertation (90 credits).

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

Fundamental modules

Research methodology 813 (VRM 813)

Module credits	0.00
NQF Level	09
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

Advanced fundamentals of pharmacology 876 (FAK 876)

Module credits	40.00
NQF Level	09
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Scope and historical development of veterinary pharmacology.
Veterinary pharmaceuticals and formulation theory.
Pharmacokinetic theory, pharmacokinetic analysis and modelling.
Bioequivalence theory and evaluation.
Physicochemical and molecular basis of drug action.
Dose response and calculation of dose response parameters.
Pharmacological modulation of organ and body functions.
Molecular basis of action and pharmacological effects of chemotherapeutic agents.
Adverse drug reactions, interactions and pharmacovigilance.
Comparative species pharmacology, pharmacogenomics and pharmacogenetics.
Background on complementary medicines.
Fundamentals of pharmacological research.

Veterinary industrial pharmacology 800 (VIP 800)

Module credits	50.00
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NQF Level	09
Prerequisites	FAK 876
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Veterinary pharmaceutical discovery and development.

Non-clinical safety and preclinical toxicology. Clinical safety and efficacy evaluation. Good laboratory and clinical practices. Drug statutory and application requirement. Drug application submission. Regulatory procedures, evaluation and veterinary drug control. Drug residue risk assessment. Product planning, production management and quality assurance. Drug marketing, pricing and promotion. Technical services, training, extension, product support and complaint investigation.



Curriculum: Final year

Core modules

Minidissertation: Veterinary industrial pharmacology 890 (VIP 890)

Module credits	90.00
NQF Level	09
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

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.