University of Pretoria Yearbook 2019

PGDip State Veterinary Medicine (08220064)

Minimum duration of study	1 year
Total credits	120

Programme information

This programme is offered by the Faculty of Veterinary Science.
The following persons may benefit from enrolling for the PGDip:
The Department of Agriculture, Forestry and Fisheries (DAFF) identified a need for further theoretical training for their staff in veterinary public health, veterinary epidemiology and animal disease management. This one-year diploma provides for their training needs.
BTech (or National Higher Diploma) graduates in Animal Health may apply for the diploma programme in order to prepare for masters' study.
Veterinarians, who are undertaking or have completed their compulsory community service and require refreshment training in preparation for private practice, may benefit from enrolling for the diploma programme.
Registered veterinarians who require further education towards their continued registration as professionals with the South African Veterinary Council (Continual Professional Development) will benefit by obtaining a PGDip as another means to obtaining their CPD requirements.
Veterinarians who are in single person practices, who do not have the intention of being specialists due to the time commitments of specialist training, will gain advanced veterinary knowledge at level above that of an undergraduate while they are still resident at their practices.
Staff members of veterinary schools in Africa may enrol for the PGDip. As online modules are available to people who have the need for training, but do not necessarily have the funding for contact study in South Africa.
The curriculum consists of four compulsory core and elective theoretical modules of 30 credits each to the value of 120 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.

Additional requirements

In cases where web-based/online modules are offered, basic computer skills are required in order to successfully participate in the diploma 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. A student may also be required to pass a proficiency test in English (TOEFL).

Examinations and pass requirements

The PGDip is conferred by virtue of the successful completion of tests/assignments and an examination on four 30 credit coursework modules.
Every module will be evaluated by a written or oral test or assignment or practical work (a year mark will be determined) and an examination. The year mark and examination mark will each 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 year or examination marks are published in the study guides.
If a student fails a module, he/she will have to repeat the module the following year. A candidate has two chances to pass a module.

Pass with distinction

The diploma is conferred with distinction on a student who has obtained an average of at least 75%, provided that a minimum final mark of 60% in each of the modules have been obtained.

Curriculum: Final year

Minimum credits: 120

Core modules

Controlled and notifiable diseases 701 (CND 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

Advanced training in diseases with implications on trade and/or human health/wellbeing. The module will covey advanced knowledge in the specific disease, their management and basic monitoring epidemiological tools. Attention will also be given to emerging diseases as well as diseases associated with wildlife ranching.

Veterinary legislation and policy 702 (VLP 702)

Module credits	30.00
Prerequisites	No prerequisites.
Contact time	70 contact hours
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Broad-based training in understanding, interrogating and critically applying veterinary policy (including applicable South African legislation), and international phytosanitary and sanitary policy and trade.

Elective modules

Clinical Anatomy 701 (ANG 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Module content

(BVSc graduates only)
An in-depth study of the osteology, arthrology, myology, angiology, neurology, splanchnology and topographical anatomy of a species of interest. Special attention to clinically important sections of the anatomy. The course will allow for further studies in anatomy for intercalation with subjects such as diagnostic imaging and surgery.

Anaesthesiology 701 (ANV 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical training on canine and feline anaesthesia and analgesia.The module covers the latest techniques in anaesthetising compromised animals and the use of total intravenous anaesthetic techniques, positive pressure ventilation, peripheral muscle relaxants and monitor apparatus.

Small animal behaviour and welfare 702 (ANW 702)

Module credits	30.00
Prerequisites	No prerequisites.
Contact time	70 contact hours
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Theoretical and practical training in assessment of welfare of dogs and cats in various contexts including shelters and dog population control. Formulation and implementation of appropriate strategies to comply with relevant standards.

African wildlife disease management 701 (AWD 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Advanced training in infectious, parasitic and nutritional diseases of wildlife and their management in African wildlife species under ranching conditions. Also included are ostrich and crocodile farming.

Clinical reproduction 701 (CLR 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Causes, pathogenesis, control, treatment and prevention of diseases and malfunctions of reproduction in cattle, as well as the evaluation of males and females for breeding soundness. Also included are certain aspects of assisted reproduction and reproductive biotechnology, such as control of the oestrous cycle and parturition. A veterinary perspective (indications, limitations, current and future possibilities, and methods) on reproductive biotechnologies.

Controlled and notifiable diseases 701 (CND 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

Advanced training in diseases with implications on trade and/or human health/wellbeing. The module will covey advanced knowledge in the specific disease, their management and basic monitoring epidemiological tools. Attention will also be given to emerging diseases as well as diseases associated with wildlife ranching.

Non-radiological diagnostic imaging of dogs and cats 701 (DIM 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study in non-radiological diagnostic imaging of dogs and cats. Approximately 76% is allocated to diagnostic ultrasound; 8% to MRI, CT and Scintigraphy each respectively. The pathophysiology, diagnosis and prognosis of pathological conditions are also discussed, as well as ways in which this field of study is linked to other diagnostic methods in order to confirm a diagnosis.

Non-radiological diagnostic imaging of horses 702 (DIM 702)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced study in non-radiological diagnostic imaging of horses. Approximately 80% is allocated to diagnostic ultrasound; 5% to MRI, 5% to CT and 10% to Scintigraphy. The pathophysiology, diagnosis and prognosis of pathological conditions are also discussed.

Non-radiological diagnostic imaging of ruminants 703 (DIM 703)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study in non-radiological diagnostic imaging of ruminants. Approximately 85% is allocated to diagnostic ultrasound; 5% to MRI, CT and Scintigraphy each respectively. The pathophysiology, diagnosis and prognosis of pathological conditions are also discussed, as well as ways in which this field of study is linked to other diagnostic methods in order to confirm a diagnosis.

Radiology: Dogs and cats 705 (DIM 705)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study of radiology of dogs and cats, including discussion on the pathophysiology, diagnosis and prognosis of pathological conditions.

Radiology: Horses 706 (DIM 706)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study of radiology of horses, including discussion on the pathophysiology, diagnosis and prognosis of pathological conditions.

Radiology: Ruminants 707 (DIM 707)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study of radiology of ruminants.
The pathophysiology, diagnosis and prognosis of pathological conditions are also discussed as well as ways in which this field of study relates to other diagnostic methods in order to confirm a diagnosis.

Diagnostic pathology 701 (DPA 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

(BVSc graduates only)
Diagnostic pathology of the diseases in various animal species.

Veterinary epidemiology 701 (EPL 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
An introductory module in veterinary epidemiology designed to provide a foundation in epidemiology to allow for a better understanding of epidemiological reports.

Clinical pharmacology 701 (FAK 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced studies in veterinary clinical pharmacology studies pharmacotherapeutic features related to veterinary medicine and species-specific therapeutic objectives.

Mechanisms of drug action 702 (FAK 702)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Fundamentals of the pharmacokinetics and pharmacodynamics of veterinary drugs.

Physiology 701 (FSL 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Module content

Advanced level, with the emphasis on applied and pathophysiology of disease.

Small animal clinical behaviour 710 (GEN 710)

Module credits	30.00
Prerequisites	No prerequisites.
Contact time	70 contact hours
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced study of the clinical approach to assessment, diagnosis and management of behaviour disorders in dogs and cats, including the role of behaviour in small animal welfare assessment in various contexts, such as shelters and dog population management.

Herd and primary animal health 701 (HAH 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

The module will enable students to integrate and apply knowledge so that health and production problems can be identified and solved on a herd basis, while health status and production effectiveness can be improved from a holistic and cost effective viewpoint. The module will also include aspects of primary animal health care that will be applicable to needs of the emerging farming sector.

Histology 701 (HTY 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Module content

An in-depth comparative study of light and electron microscopic histology of domestic animals, birds and selected wildlife species.

Clinical pathology 704 (KPA 704)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study in clinical pathology including enzymology, cytology, haematology as well as clinical pathology of the kidney in domestic animals.

Clinical pathology 705 (KPA 705)

Module credits	30.00
Prerequisites	No prerequisites.

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

Module content

(BVSc graduates only)
Advanced study in clinical pathology including blood-gas and acid-base balance, gastro-enterology, haemostasis, diagnostic indices and principles of domestic animals.

Laboratory animal science 702 (LAS 702)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Section 1: (10 credits)
Application of procedures within an accredited laboratory animal facility, with focus on laboratory animal management (rats and mice), including housing and care; enrichment; breeding; methods of dosing and methods of sample collection.

Section 2: (20 credits)
The biology of laboratory animals, their management and use as models in biomedical research.
The aim is to extend the activities concerning the care and use of laboratory animals for research, training and testing. Further to affirm the concept on which the modern practice of experimenting with animals is based, to take into consideration the controversy evoked in the climate of animal rights. The special professional role required of the veterinary and paraveterinary professions to enhance humane practice with regard to animal experiments as well as the promotion of a productive scientific effort in the biomedical sciences.

Laboratory diagnostics procedures 703 (LAS 703)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

The module will focus on basic tests available in laboratory diagnostics for infectious and parasitic diseases. Focus will be placed on the interpretation of tests, issuing of certificates, validation of test procedures, quality assurance and laboratory safety. The course will include basic within the laboratory of the department.

Research ethics for laboratory animal science 704 (LAS 704)

Module credits	30.00

Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

An advanced module in research methodology for veterinarians involved in laboratory animals and/or laboratory work. The study will focus on animal ethics, animal ethics committee, evaluation of protocols and study design. Focus will also be placed on legislation for the use and protection of animals.

Necropsy technique and interpretation 701 (NTI 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

(BVSc graduates only)

An advanced module in necropsy techniques, interpretation and specimen collection.

Ophthalmology 701 (OFM 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
The module covers the anatomy and physiology of the eye and its adnexa, examination techniques and aids, ocular therapeutics and treatment techniques, surgical and non-surgical conditions of the orbit, eyelids, third eyelid, conjunctiva, lachrymal system, cornea, sclera, anterior chamber, uvea lens, vitreous and retina, and hereditary diseases. Practical work includes the use of instrumentation and accessories during examination and surgical procedures. page

Production animal management 701 (PAM 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English

Department	Production Animal Studies
Period of presentation	Year

Module content

The module content includes the study of animal genetics, nutrition, management, housing, keeping of records, hygiene, welfare and behaviour, with special emphasis on nutrition. The species concerned are dairy cattle, beef cattle, small stock and pigs.

Mechanisms of disease 711 (PAT 711)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

An advanced module covering the mechanisms behind disease processes.

Poultry health and nutrition 701 (PVT 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Advanced training in poultry health, production systems and nutrition.

Reproductive biology 701 (RPT 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Includes the physiology and endocrinology of puberty, the oestrous cycle, pregnancy, parturition, the puerperium, as well as that of the foetus and the neonate. Also included are the physiology and endocrinology of the bull, more specifically that of puberty, spermatogenesis, the scrotum, the accessory sex glands, libido, erection, coitus, sperm and semen. Also included are certain aspects of reproductive biotechnology, namely the biotechnical aspects of collection, examination and freezing of semen and embryos, embryo transfer and in vitro fertilisation.

Reproductive physiology of animals 702 (RPT 702)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Students will gain advanced theoretical knowledge of general reproductive endocrinology and physiology of animals. It includes detailed knowledge and application of the structures of different hormone groups, forms of storage, transportation, methods of action and secretion control mechanisms: hormonal control of female reproductive cycles; fertilisation, sexing, gestation, pathogenesis of teratogenic deviations and partus, the puerperal period and re-implantation; male reproductive endocrinology and physiology; examining of fresh and frozen semen, including advanced methods; the use of hormone profiles to monitor gestation and cycles, and artificial breeding.

Ruminant health and medicine 701 (RUM 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical study in ruminant medicine specifically applicable to conditions of the gastrointestinal tract, liver and production diseases, liver, cardiovascular, respiratory and urinary system, skin, nervous system and musculo-skeletal system, skin and appendages.

Organic and inorganic toxicology 705 (TOK 705)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Advanced training on the most important and well-known plant, mycotoxins, zootoxicoses and organic and inorganic poisons.

Basic veterinary toxicology 706 (TOK 706)

Module credits	30.00

Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Introduction to the underlying principles of toxicology. Includes training in laboratory based toxicity testing and methodology

Porcine health, production and nutrition 701 (VKH 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Advanced theoretical study in pig housing, nutrition and disease for animal housed both outdoor and intensive, specifically applicable to conditions of Southern Africa.

Veterinary principles of auditing 701 (VLP 701)

Module credits	30.00
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
The following module will focus on auditing and compliance at the farm, abattoir and processing plant level.

Veterinary risk assessment 703 (VLP 703)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
The module will introduce concepts in risk assessment, risk management and risk communication.

Veterinary milk and meat hygiene 701 (VPH 701)

Module credits	30.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Advanced knowledge and application of veterinary meat (Red meat, Poultry, Ostrich, Wild Game, Crocodiles and fish) and milk (Raw milk and milk products) hygiene and food safety (including Zoonotic / food borne diseases). Also includes auditing, certification for export and the applicable interpretation of laboratory results. Emerging and re-emerging diseases.

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.