FACULTIES OF THE UNIVERSITY
OF PRETORIA

HUMANITIES
EDUCATION
NATURAL AND AGRICULTURAL SCIENCES
LAW
THEOLOGY
ECONOMIC AND MANAGEMENT SCIENCES
VETERINARY SCIENCE
HEALTH SCIENCES
ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

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University of Pretoria
PRETORIA
0002

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ISBN 1-86854-361-7
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FACULTY OF VETERINARY SCIENCE
ACADEMIC PERSONNEL AS ON 30 SEPTEMBER 2000

DEAN
Prof. N.P.J. Kriek – MMedVet(Path)(Pret)

DEPUTY DEAN
Prof. H.M. Terblanche – BVSc MMedVet(Phys)(Pret)

DIRECTOR OF CLINICAL SERVICES
Prof P. Bland-van den Berg, MMedVet(Med)(Pret) PhD(TAMU) Dip ACVIM

Department of Anatomy
Groenewald, H.B., BVSc PhD(Pret) ...........................................Professor (Head)
Booth, K.K., BSc(Youngstown State University) MSc
  PhD (Iowa State University) ...............................................Professor
Aire, T.A., DVM PhD(Ibadan) FCVS(Nig) ..................................Associate Professor
Ohale, L.O.C., DVM(Ibadan) PhD(Iowa State University) ...........Associate Professor
Soley, J.T., BA(Hons)(Unisa) MSc(Witwatersrand) PhD(Pret) ....Associate Professor
Van der Merwe, N.J., BVSc DVSc(Pret) ...................................Associate Professor
Hornsvedel, M., BVSc(Pret) ..................................................Senior Lecturer

Department of Companion Animal Medicine
Stadler, P., BVSc(Hons) MMedVet(Med) MBA(Pret) ......................Professor (Head)
Reyers, F., BVSc(Hons) MMedVet(CLD) DTO(Pret) ......................Professor
Van den Berg, J.S., MMedVet(Med)(Pret) ...............................Professor
Leisewitz, A.L., BVSc(Hons) MMedVet(Med)(Pret)ECVIM ..........Associate Professor
Lobetti, R.G., BVSc(Hons) MMedVet(Med)(Pret)ECVIM .............Associate Professor
Dippenaar, G., BVSc(Hons)(Pret) .......................................Senior Lecturer
Miller, D.J., BVSc(Hons)(Pret) ..........................................Senior Lecturer
Scheepers, E., BSc(Hons) BVSc(Pret) ...................................Senior Lecturer
Schoeman J.P., BVSc(Pret) Cert SAM (RCVS, London) .............Senior Lecturer
Van der Merwe, L.L., BVSc(Hons)(Pret) .................................Senior Lecturer
Donnellan, C.M.B., BVSc(Pret) ...........................................Lecturer
Goddard, A., BVSc(Hons)(Pret) ..........................................Lecturer
Rajput, J., BVMCh(Medunsa) ..........................................Lecturer
Jacobson, L.S. BVSc MMedVet(Med)(Pret) ..........................Research Officer

Department of Companion Animal Surgery
Vacant ..............................................................Professor (Head)
Kirberger, R.M., MMedVet(Rad)(Pret) DTI Dip ECVDI ..............Professor
Coetzee, G.L., MMedVet(Surg)(Pret) .....................................Associate Professor
Lambrechts, N.E., MMedVet(Surg)(Pret) Dip ECVS .................Associate Professor
Olivier, A., MMedVet(Surg)(Pret) DTI MS (USA) .................Associate Professor
Stegmann, G.F., MMedVet(Aneas)(Pret) DTI Dip ECVA .......Associate Professor
Bester, L., Dip Cur(Anim) BVSc(Pret) DTI ............................Senior Lecturer
Buss, P.E., BVSc(Queensland) ........................................Senior Lecturer
Goodhead, A.D., MMedVet(Ophth)(Pret) ............................Senior Lecturer
Joubert, K.E., BVSc MMedVet(Aneas)(Pret) .........................Senior Lecturer
Marais, H.J., BVSc(Hons)(Pret) ......................................Senior Lecturer
Spotswood, T.C., BVSc(Pret) ............................................. Senior Lecturer
Steenkamp, G., BSc BVSc(Pret) ........................................ Senior Lecturer
Turner, P.H., MMedVet(Surg)(Pret) ................................ Senior Lecturer
Venter, I.J., MMedVet(ophth)(Pret) ................................ Senior Lecturer
Dowdle, S.M., BVSc(Pret) ................................................ Lecturer
Du Plessis, C.J., BVSc(Pret) ............................................. Lecturer
Makanjee, C.R., NDRad(D)(Coronation) DTI ......................... Lecturer

Paraveterinary Studies
McCrindle, C.M.E., BVSc(Hons)(Pret) PhD(Pret) ...................... Professor (Head)
Botha, A.E., Dip Cur Anim THED(Pret) ............................... Lecturer
Songabe, T., BVMCh(Medunsas) ........................................ Lecturer

Department of Pharmacology and Toxicology
Swan, G.E., BVSc(Hons) MMedVet(Pharm et Tox)(Pret) PhD(PU for CHE) ................. Professor (Head)
Botha, C.J., BVSc(Hons) MMedVet(Tox)(Pret) ......................... Associate Professor
Cotton, C.G., BSc BVSc(Pret) Dipl Adv Pub Admin PDL .......... Associate Professor
Gehring, R., BVSc(Pret) ................................................... Lecturer

Department of Production Animal and Community Health
Rautenbach, G.H., BVSc(Hons) MMedVet(Med)(Pret) ............... Professor (Head)
Lourens, D.C., BVSc MMedVet(Med)(Pret) ............................ Professor
Veary, C.M., MMedVet(Hyg)(Pret) .................................. Professor
Le Roux, C.D., BVSc(Pret) MSc(Stell) ................................ Extraordinary Professor
Gummow, B., BVSc(Hons) MMedVet(Pharm)(Pret) ................. Associate Professor
Pettey, K.P., BSc(Hons)(Witwatersrand) BVSc(Pret) ............... Associate Professor
Shakespeare, A.S., BSc(Eng)(Natal) BVSc(Hons) MMedVet(Med)(Pret) ................... Associate Professor
Bisschop, S.P.R., BVSc(Pret) ............................................ Senior Lecturer
Carrington, C.A.P., BVSc(Pret) B Comm(Unisa) ..................... Senior Lecturer
Du Preez, E.R., BAgric(UOFS) BVSc(Pret) MScAgric(Stell) ........ Senior Lecturer
Harmse, J.G., BVSc(Pret) ................................................. Senior Lecturer
Karama, M., DVM(Lubumbashi) ........................................ Senior Lecturer
Linde, R.F., BSc BVSc(Pret) Certificate in Business Management Senior Lecturer
More O’Ferrall, M., BVSc BVSc(Hons) MMedVet(Hyg)(Pret) .... Senior Lecturer
Myburgh, J.G., Dip Pasture Management BVSc(Hons)(Pret) .... Senior Lecturer
Petzer, I.M., BVSc(Pret) ................................................. Senior Lecturer
Robinson, J.T.R., BVSc MMedVet(Hyg) DVPH(Pret) ............... Senior Lecturer
Schultheiss, W.A., BVSc(Hons) MMedVet(Gyn)(Pret) .............. Senior Lecturer
Spencer, B.T., BVSc BComm (Unisa) MMedVet(Suill)(Pret) .......... Senior Lecturer
Thompson, P.N., BVSc MMedVet(Med)(Pret) ........................ Senior Lecturer
Wandrag, D.B.R., BVSc(Hons) MMedVet(Vet)PhD(Pret) .......... Senior Lecturer
Gers, S., BVSc(Hons)(Pret) ........................................... Lecturer
Graham, A., BVSc(Pret) ................................................ Lecturer
Mokantla, E., BVMCh(Medunsas) ..................................... Lecturer
Benjamin, N.F., BVSc(Pret) ........................................... Research Officer
Department of Reproduction
Vacant ................................................................. Professor (Head)
Bertschinger, H.J., BVSc(Pret) Dr MedVet(Zürich) .................. Professor
Nöthling, J.O., BVSc MMedVet(Gyn)(Pret) ........................... Associate Professor
Terblanche, S.J., BVSc MMedVet(Gyn)(Pret) ........................... Associate Professor
Gerber, D., Dr Med Vet(Zürich) Dipl Am Coll Therio .......... Senior Lecturer
Irons, P.C., BVSc(Pret) Dipl Am Coll Therio ........................ Senior Lecturer
Schulman, M.L., BVSc MMedVet(Gyn)(Pret) ......................... Senior Lecturer

Department of Veterinary Pathology
Prozesky, L., MSc(Amsterdam) MMedVet(Path)(Pret) ........... Associate Professor
PhD(Utrecht) ........................................................... (Head)
Duncan, N.M., BVSc(Hons)(Pret) MMedVet(Aves)(Medunsa)
Dip ACVP ............................................................ Associate Professor
Williams, M.C., MMedVet(Path)(Pret) .............................. Associate Professor
Lane, E., BA(Colorado) BVSc MPhil(VetSci)(University
of Zimbabwe) MHCVS (Great Britain) ......................... Senior Lecturer
Pearson, J., BVSc MMedVet(Path)(Pret) ............................ Senior Lecturer
Williams, J.H., BVSc(Pret) ........................................... Senior Lecturer
Clift, S.J., BVSc(Pret) .................................................. Lecturer
Olivier, A.J., BVSc(Pret) .............................................. Lecturer

Department of Veterinary Physiology
Van der Walt, J.G., MSc(Witwatersrand) DSc(Pret) Sci Nat ........ Professor (Head)
Meintjes, R.A., BSc(Witwatersrand) BVSc(Hons) PhD(Pret) .... Associate Professor
Boomker, E.A., MSc DSc(Pret) Sci Nat .............................. Senior Lecturer
Brinders, J.M., MSc(UWK) ............................................. Senior Lecturer
Strydom, S.V., BVSc(Hons)(Pret) ..................................... Senior Lecturer
Vacant ................................................................. Senior Lecturer

Department Veterinary Animal Production and Ethology
Bath, G.F., BVSc(Pret) .................................................... Associate Professor
PhD(Medunsa) (Head)
Donkin, E.F., BSc(Agric)(Natal) MPhil(London) PhD(Medunsa) Associate Professor
Bleby, J., TDJP DVetMed DLAS FiBiol MRCVS(London) ......... Extraordinary
Professor
Boyazoglu, P.A., BVSc(Pret) PhD(Minnesota) ...................... Extraordinary
Professor
Hart, B.L., BS DVM PhD(University of Minnesota) ................. Professor (Honorary)
Skinner, J.D., BSc(Agric)(Natal) MSc(Agric)(Pret) PhD(Cantab) Extraordinary
ClBiol FiBiol FZS FRS(SA) Sci Nat .................................. Professor
Els, H.C., MSc(Agric)(Pret) .............................................. Senior Lecturer
Swanepeol, N.C., BA BVSc(Pret) ....................................... Senior Lecturer
Van Dyk, E., BSc(Agric) MMEdVet(Gyn)(Pret) ...................... Senior Lecturer
Zulch, H.E., BVSc(Hons)(Pret) ......................................... Lecturer

Department of Veterinary Tropical Diseases
Coetzer, J.A.W., BVSc(Hons) MMedVet(Path)(Pret) ................. Professor (Head)
Boomker, J.D.F., MSc(Zool)(RAU) MMedVet(Parasit)(Pret)
DVSc(Medunsa) ......................................................... Professor
Krecek, R.C., BSc(Florida) MS(East Texas State) DSc(Pret)
  MAP (Witwatersrand) .................................................. Professor
Penzhorn, B.L., BSc(Hons)(Pret) MAgric(Texas A&M)
  DSc(Wildlife Management) BVSc(Pret) ................................ Professor
Stewart, C.G., BVMS(Edinburgh) BVSc(Hons)(Pret) MSc(London) .... Professor
Connor, R.J., MVSc(Liverpool) DVetMed(London) ......................... Extraordinary Professor
Howell, P.G., BVSc DVSc(Pret) ............................................. Extraordinary Professor
Pearson, R.A., BSc(Hons)(Nottingham) PhD(Edinburgh) ............... Extraordinary Professor
Provost, A.R.J., Vet MSc(Paris) ............................................ Extraordinary Professor
Swanepoel, R., BVSc(Pret) DTVM PhD(Edinburgh) ....................... Extraordinary Professor
Thomson, G.R., BVSc(Pret) MSc(Birmingham) PhD(London) ........ Honorary Professor
Van Vuuren, M., MMedVet(Micro)(Pret) ................................ Associate Professor
Venter, E.H., MSc(UOVS) PhD(Pret) ...................................... Associate Professor
Bryson, N.R., BSc(Hons)(Rhodes) MMedVet(Parasit)(Pret) .......... Senior Lecturer
Crafford, J.E., BVSc(Pret) .................................................. Senior Lecturer
Picard, J.A., BVSc(Hons)(Pret) ............................................ Senior Lecturer
Schwan, E.V., MedVet(Hannover) MVSc(Liverpool)
  Dr MedVet(Hannover) ............................................... Senior Lecturer
Stoltsz, W.H., BVSc(Pret) .................................................. Senior Lecturer

Centre for Equine Research
Guthrie, A.J., BVSc(Hons) MMedVet(Phys)(Pret)
  PhD(Louisiana State University) ........................................ Professor

Price Forbes Chair for Wildlife
Meltzer, D.G.A., BVSc MSc(Pret) ........................................ Professor

Academic Administration
Snyman, H.C., Mrs. .......................................................... Head
GENERAL INFORMATION

Admission
Any person who wishes to register at the University for the first time, or after an interruption of studies, should apply or reapply for admission. Application for admission to all undergraduate programmes in the Faculty closes on 30 June.

Selection
(a) BVSc degree programme

(i) Selection for the BVSc degree programme takes place before admission to the second year of study, and all candidates who wish to be admitted to the programme must apply for selection on the grounds of their academic achievement in at least one year of university training in a scientific field of study.

(ii) Candidates who wish to be admitted to the second year of study for the BVSc degree programme are therefore required to register for a BSc or a BSc(Agric) degree programme or an equivalent degree programme, with courses at 100 level in Chemistry (one full year course, two semester courses or four modules), Physics (one full year course, two semester courses or four modules), Zoology or Biology, including a section in Zoology (one full year course, two semester courses or four modules), as well as another year course, two semester courses or four modules of their own choice. Candidates should apply before 30 June to be considered for selection/admission to the second year of study for the BVSc degree programme in the subsequent year. (Subject to review.)

NB: Only a limited number of vacancies are reserved for international candidates.

(iii) A preliminary selection takes place at the end of the first year of study based on the average of all the examination marks in all the courses mentioned in (a)(ii) above. Provisionally selected candidates are invited to an interview in January. The final selection takes place immediately afterwards.

(iv) Candidates who are not selected after their first year of study for a BSc or equivalent degree, can continue with that degree, and reapply for selection based on the strength of their academic achievement in the subsequent years of study.

(b) DCH(Vet) and DHA(Vet)
The closing date for application to study for these postgraduate diplomas is 15 October, as the courses are only offered if a prescribed minimum number of students apply for registration.

(c) University Diploma in Veterinary Nursing
Only a limited number of students will be admitted [consult V.9 (a)(i), (ii), (iii) and (iv)].
Statement of symbols
When registering at this University for the first time, a candidate has to submit a record of symbols obtained for each course in the Grade 12 examination.

Medium of instruction
In conducting its business, the University uses two official languages, namely Afrikaans and English. However, since 1997, English is the only medium of instruction in the Faculty of Veterinary Science. A proficiency test in English may be required as part of the selection procedure.

In respect of administrative and other services, a student has the right to choose whether the University should communicate with him or her in Afrikaans or English.

Bursaries and loans
Particulars of bursaries and loans are available on request.

Accommodation
Applications for accommodation in university residences for a particular year should be submitted as from 1 April of the preceding year. Applications will be considered as long as vacancies exist, and prospective students are advised to apply well in advance.

Further details are available on request. Applications for accommodation in the residence at Onderstepoort, in the case of BVSc students, will be considered only after the first year of study. Details concerning accommodation fees are available on request.

Welcoming Day and Academic Information Week
Details of the welcoming day to which all parents are cordially invited, and the subsequent academic information week during which all new first-year students must be present, are obtainable from the Dean of Students, University of Pretoria, 0002.

Prescribed books
Students are requested not to purchase any books or instruments before they start with the programme. Specific requirements are stated in the relevant study guides.

Amendment of regulations and fees
The University retains the right to amend the regulations and to change course fees without prior notification.

Dress code
Special instructions regarding dress must be adhered to. Details will be furnished when students are notified that they have been selected for the course.

Excursions
As it is essential to gain practical experience outside the Faculty, students are reminded to make provision for an adequate amount of money to cover expenses for excursions throughout their period of study.
Definition of terms

Familiarise yourself with the following terms. They are used generally in all faculties.

**academic year:** the duration of the academic year, which is determined by the University Council

**certificate of satisfactory preparation:** satisfactory preparation also implies satisfactory attendance of practical classes and clinical work

**course code:** consists of an equal number of capitals and digits, which indicate the name of the course, the year of study, the period of study and the level of the course. A course code consists of three capital letters and three digits, e.g. ANA 100 for Anatomy.
- The **first digit** indicates the year of study in which the course is generally taken or the academic year in which it is offered for the first time, for example 1 = 100 level, 2 = 200 level, 3 = 300 level, 7 = honours level, 8 = master's level and 9 = doctoral level.
- The **second digit** has the following meaning: 0 or 7 = year course, 1 or 3 or 5 = first-semester course, 2 or 4 or 6 = second-semester course, 8 = semester course offered in the first and/or second semester, 9 = indefinite
- The **third digit** differentiates between courses at the same level of which the content differs, e.g. ANA 703 and ANA 704 (Anatomy 703 and Anatomy 704).

**credit (or credit value):** a value unit (credit) accredited to a course in relation to the complexity of and amount of work needed to complete the course

**curriculum:** a series of courses grouped together over a specified period of time and in a certain sequence according to the regulations

**elective module:** a course that can be selected on an elective basis

**examination mark:** the mark awarded to a student in a course on the basis of an examination, including practical and clinical examinations where applicable. If necessary, the examination mark is finalised after ancillary examinations have been completed

**extended study programme:** a study programme for the diploma that is completed over a longer period than the minimum duration of the diploma

**final mark:** the mark calculated on the basis of the semester/year mark and the examination mark awarded to a student in a course, using a formula which is determined from time to time by means of regulations for each course with the proviso that should no semester/year mark be required in a course, the examination mark serves as the final mark

**module:** see course

**regulation for admission:** a regulation drawn up by the Dean of a faculty regarding the admission of students to his or her faculty. It includes a provision regarding the selection process

**semester course:** a course that extends over one semester

**semester/year mark:** the mark awarded to a student on the basis of tests, class-work, practical work or any other work which was done in a particular subject course

**syllabus:** the division of the study material for a specific course

**year course:** a course that extends over one year (two semesters)
1. Admission to undergraduate study

1.1 General

1.1.1 To register for a first bachelor's degree at the University, a candidate should, apart from the required Grade 12 exemption certificate, comply with the particular requirements prescribed in the admission procedures and the faculty regulations of the respective faculties and departments for admission to particular courses and programmes.

1.1.2 The following persons may also be considered for admission:

(i) A candidate who is in possession of another certificate which is accepted by the University as equivalent to the required Grade 12 exemption certificate.

(ii) A candidate who is a graduate from another tertiary institution or has been granted the status of a graduate of such an institution.

Note: A conditional exemption certificate does not qualify a candidate for admission to bachelor's degree study. However, in certain circumstances some of the faculties do accept a certificate of conditional exemption on the basis of mature age. Candidates are advised to contact the specific faculty administration in this regard.

1.1.3 The Senate may limit the number of students allowed to register for a programme, in which case the Dean may, at his or her own discretion, select from the students who qualify for admission those who may be admitted.

1.1.4 Subject to faculty regulations and the stipulations of G.62, a candidate will only be admitted to postgraduate bachelor’s degree studies, if he or she is already in possession of a recognised bachelor’s degree.

2. Admission to diploma studies

A student will only be admitted to an undergraduate diploma programme if he or she complies with the specific requirements for admission to specific courses and programmes as stipulated in the admission procedures and faculty regulations of the various faculties and departments.

3. Language proficiency

It is expected of every new undergraduate student who wishes to register at the University of Pretoria, to complete a language proficiency test. Based on the results of this test, the student will be enrolled in language development courses that have to be passed before the degree will be awarded. In exceptional circumstances the test may be substituted by other courses as approved by the Dean.

4. Computer proficiency

It is expected of every new undergraduate student to provide proof of computer proficiency. This can be achieved through successful completion of prescribed tests or successful completion of prescribed courses (modules).
5. **Registration for a particular year of study**
   At the beginning of an academic year, a student registers for all the courses he or she intends taking in that particular year (whether these be first-semester, second-semester or year courses). Changes to the chosen programme may be made at the beginning of the second semester with the Dean’s approval.

6. **Examination and pass requirements**
   A semester/year mark of at least 40% is required in order to be admitted to the examination in any course, with the exception of first-semester courses at 100 level for which the requirement is 30%. A final mark of at least 50% is required to pass a course.

   6.1 **Subminima in examinations**
   Subminima required in courses or subdivisions of courses appear in the study guides issued annually for these courses.

   6.2 **Examinations (Reg G.12)**
   The examinations for courses offered in the first semester, take place in May/June, while all other examinations (second-semester courses and year courses) take place in October/November.

   6.3 **Ancillary examinations (Reg G.12.3)**
   After completion of an examination and before the final examination results are announced, the examiners will offer an additional evaluation opportunity on certain aspects of the work of the course as provided for in the Guidelines for Semester Assessments and Examinations in the Faculty of Veterinary Science.

   6.4 **Re-marking of examination papers (also consult Reg G.14)**
   After an examination, departments provide feedback to students concerning the framework that was used by the examiners during the examination. The manner in which feedback is given, is determined by the departmental heads.

   Students may apply for re-marking of an examination paper after perusal of the paper and payment of the prescribed fee. This should take place within 14 calendar days after the announcement of the results. The examiner will be appointed by the Head of the Department concerned. Re-marking of oral examinations is not allowed.

   6.5 **Supplementary examinations (Reg G. 12.4)**
   Supplementary examinations in first-semester courses take place as provided for in Reg V.1(d)(ii)(aa), V.9(e)(v) and V.9(i)(i), while those for year courses, take place before the beginning of the first semester of the following year, or otherwise as stipulated in the study guide for that course.
DEGREES AND DIPLOMAS CONFERRED IN THE FACULTY OF VETERINARY SCIENCE

The following degree and diploma programmes are conferred in the Faculty (minimum period of study in brackets):

(a) Bachelor of Veterinary Science - BVSc (6 years)
(b) Bachelor of Veterinary Science (Honours) – BVSc(Hons) (1 year)
(c) Master of Veterinary Medicine - MMedVet (2 years)
(d) Magister Scientiae (Veterinary Sciences) – MSc (2 years)
(e) Philosophiae Doctor - PhD (2 years)
(f) Doctor of Veterinary Science - DVSc
(g) Postgraduate Diploma in Public Health – DCH(Vet) (2 years)
   (Under review – not presented in 2001)
(h) Postgraduate Diploma in Health Administration – DHA(Vet) (2 years)
   (Under review – not presented in 2001)
(i) University Diploma in Veterinary Nursing – DipVetNurs (2 years)

Students who take a course offered by another faculty, must familiarise themselves with the requirements for admission to the course in question as well as the regulations governing subminima in examinations and supplementary examinations, etc.

I. BACHELOR’S DEGREE

General Regulations G.1 to G.15 are applicable to bachelor’s degrees and also apply mutatis mutandis to undergraduate diplomas.

V.1 BACHELOR OF VETERINARY SCIENCE (BVSc) (CODE 08130001)

(a) Admission

NB:
1. Requirements for admission are as stipulated in General Regulation G.1.
2. Candidates are subject to selection (see General Information).
3. Tuition in this Faculty is offered in English as the only medium of instruction. A proficiency test, in English, may be required as part of the selection procedure.
4. Each student must apply, immediately after admission to the second year of study, to the Registrar of the South African Veterinary Council for registration as a student in veterinary science. Registration is compulsory and must be renewed annually for the duration of the study.
5. After the degree has been conferred, graduates are required to register with the South African Veterinary Council as veterinarians before they may practise in South Africa in this capacity.

(b) Duration of study
   Six years of full-time study for students who register as from 1997.
(c) General

(i) General Regulation G.10.1 concerning satisfactory preparation and payment of course fees, applies to examination, promotion and attendance courses. Attendance of all practical classes, clinics and excursions is compulsory. Any form of absence must be justified by submission of a medical certificate or another acceptable form of evidence. Failure to comply may lead to examination refusal.

(ii) Admission to the examinations in some courses is subject additionally to a required subminimum of 40% in the course or sections thereof – consult study guides.

(iii) A student is required to obtain a subminimum of 40% in the examination as well as a final mark of at least 50% to pass a course. A subminimum of 40% in subdivisions of theoretical and/or practical examinations may be required as stipulated by the Dean in consultation with the Head of the Department concerned, and as set out in the annual study guide. In terms of General Regulation G.10.4, a semester mark or year mark of at least 50% must be obtained in attendance courses. The stipulations of General Regulations G.12.1 to G.12.5 also apply.

(iv) A student must pass all the courses of the respective previous years of study in order to be promoted to the third, fourth and fifth year of study, as well as to the clinical rotations.

(v) A student who fails a course or courses in a year of study, has to repeat, subject to the stipulations of General Reg. G11.2(a) to (c) and Regulation V.1(c)(ix), all the courses for that particular year of study, except courses which were passed with a final mark of at least 65%, for which full exemption is granted. Provisional exemption is granted for an examination course passed with a final combined mark of less than 65%. This implies that at least 80% of the lectures and practical periods have to be attended and that a year/semester mark of at least 50% has to be obtained through the completion of all scheduled assessments, tests, tasks, etc, in order to obtain exemption from the examination in those courses at the end of the repeat semester/year. Examinations are compulsory in all the courses previously failed, as well as in those courses in which exemption from the examination has not been obtained. If a student fails any of these examinations (or supplementary examination), he or she will not be allowed to continue their studies in the Faculty [see V.1(c)(x)].

(vi) No limit is placed on the number of courses in which supplementary examinations may be done, except in the sixth year of study where the limit on the number of permitted supplementary examinations is valid. The nature and date of supplementary examinations are determined by the Dean in consultation with the Head of the Department.

(vii) The Dean may require from a student who has been admitted to a supplementary examination, to do additional prescribed work for a specified period of time before he or she may take the supplementary examination.

(viii) Subject to General Regulation G.12.4.3, a minimum of 50% is required to pass a supplementary examination. The semester or year mark is not taken into account.

(ix) In addition to the stipulations of General Regulation G.3.2(b), a student will not be allowed to repeat the same year of study twice or two years of study consecutively.
(x) A student who has to discontinue his or her studies in terms of stipulations (v) and (ix) above, may request the Dean in writing to consider his or her application for re-admission to the Faculty in terms of prescribed procedures as stipulated in Application of General Regulation G.3 and Faculty Regulation V.1.c(ix) in the Faculty of Veterinary Science, University of Pretoria (S2934/97) as approved by the Faculty Council.

(d) Curriculum

Total number of SAQA credits: 1120

(i) First year of study
As stipulated in General Information, (a)(ii) on page 5 of this publication.

(ii) Second year

(1) ANA 213 Anatomy 213
(2) ANA 224 Anatomy 224
(3) HIS 200 Histology 200
(4) PHC 200 Physiology and Physiological Chemistry 200
(5) ECP 200 Ecology and Pasture Science 200
(6) AHG 200 Animal Handling 200

(aa) Supplementary examinations
Supplementary examinations in first semester courses take place after conclusion of the June examinations.

(iii) Third year of study

(1) APH 301 Applied Physiology 301
(2) VPE 301 Animal Production and Ethology 301
(3) IMI 300 Immunology and Microbiology 300
(4) VTP 300 Introductory Veterinary Parasitology 300
(5) GPH 300 General Pharmacology 300
(6) TOX 300 Toxicology 300
(7) GOP 300 General and Organ Pathology 300
(8) ICS 300 Introductory Clinical Studies 300

Second semester

(aa) Three periods of 40 minutes each per week of Junior Clinics in the Veterinary Academic Hospital.

(bb) Practical experience during holidays before the end of the third year of study, preferably in a production animal environment, as prescribed in the study guide of Animal Production and Ethology 301.

(iv) Fourth year of study

(1) SAC 470 Small Animal Clinical Studies 470
(2) BHP 470 Bovine Health and Production 470

(aa) Six periods of 40 minutes each per week in both semesters of Junior Clinics in the Veterinary Academic Hospital.
(v) **Fifth year of study**

1. AST 500  Anaesthesiology 500
2. ECS 500  Equine Clinical Studies 500
3. PHP 500  Porcine Health and Production 500
4. PPR 500  Poultry Health and Production 500
5. VBM 500  Veterinary Business Management and Ethics 500
6. SSH 500  Small Stock Health and Production 500
7. PHE 500  Veterinary Public Health and Applied Epidemiology 500
8. **Electives**
   - One of the following examination courses must be passed:
     - CBF 510  Cage Birds and Fish Diseases 510
     - RMD 510  Research Methodology 510
     - WOC 510  Wildlife, Ostrich and Crocodile Health 510
   - A formal language course (two modules) offered by the Faculty of Humanities (as approved by the Dean).
9. **Attendance Course**
   - DIP 520  Diagnostic Pathology 520

(aa) Six periods of 40 minutes each per week in both semesters of Junior Clinics in the Veterinary Academic Hospital.

(vi) **Sixth year of study**

1. BHP 600  Applied Bovine Health and Production 600
2. SSH 600  Applied Small Stock Health and Production 600
3. PHP 600  Applied Porcine Health and Production 600
4. PPR 600  Applied Poultry Health and Production 600
5. SAC 600  Applied Small Animal Clinical Studies 600
6. ECS 600  Applied Equine Clinical Studies 600
7. PHE 600  Applied Veterinary Public Health 600

(aa) **Supplementary examinations**

A student in the sixth year of study may be granted a maximum of two supplementary examinations, after having worked full-time in the department concerned for a period determined by the Head of the Department and with the Dean's approval.

(bb) **Special examination**

A student who has failed one or two courses and who has not been admitted to a supplementary examination, or who fails the supplementary examination(s), may be allowed to take a special examination at the end of the following semester.

If he or she fails the latter, the Dean will determine when a further examination may be taken.

(cc) **Repetition of the sixth year of study**

A student who has failed more than two courses, must repeat the last two semesters of the curriculum in the courses concerned, unless the Dean decides differently.
Practical work
Practical work must be done as follows and proof of satisfactory completion must be submitted to the Head: Academic Administration, prior to the commencement of the final examinations:
– In State Control of stock diseases and administration: experience at an approved institution as determined by the Dean.
– Practical and clinical experience at the Faculty and at approved private practices as well as other institutions as stipulated by the Dean.

Degree with distinction
The BVSc degree is conferred with distinction on a student who has obtained at least 60% in the examinations for each course during the last three years of study, and an average of at least 75% for all the courses in the final examinations.

II. HONOURS DEGREE

V.2 BACHELOR OF VETERINARY SCIENCE (HONOURS) BVSc(Hons) (CODE 08240001)

Also consult General Regulations G.16 to G.29.

The honours degree provides the student with a broad scientific background in the theoretical aspects of the courses that are required for eventual MMedVet degree studies. However, the conferment of the honours degree is not subject to future registration for master's degree studies.

(a) Requirements for admission
A candidate must have a BVSc or an equivalent degree. Entrance examinations for individual modules may be required.
In addition to the stipulations of the regulations, the Head of the Department has the prerogative to require an entrance test prior to registration for honours degree studies. Candidates may also be required to pass an English proficiency test (TOEFL) at an acceptable level.

(b) Duration
The course has to be completed within two years following first registration for the degree in the case of full-time study, and within three years in the case of part-time study. The minimum duration is one year.

(c) Curriculum
Total number of SAQA credits: 180

The curriculum consists of a number of modules equivalent to a minimum of 24 and a maximum of 30 credits, chosen from the following list, or from relevant modules/ courses offered in other faculties of the University as approved by the Dean:
<table>
<thead>
<tr>
<th>COURSE NAME</th>
<th>COURSE CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Epizootical Diseases</td>
<td>AEZ 781</td>
</tr>
<tr>
<td>Anaesthesiology</td>
<td>ANE 771, 772</td>
</tr>
<tr>
<td>Anatomy</td>
<td>ANA 703, 704, 705, 774, 779</td>
</tr>
<tr>
<td>Bacterial Diseases</td>
<td>BAS 700</td>
</tr>
<tr>
<td>Bacteriology</td>
<td>BAL 700</td>
</tr>
<tr>
<td>Biometry</td>
<td>BME 120</td>
</tr>
<tr>
<td>Beef Herd Health</td>
<td>BKG 782</td>
</tr>
<tr>
<td>Clinical Pathology</td>
<td>KPA 701, 702, 703</td>
</tr>
<tr>
<td>Companion Animal Behaviour</td>
<td>CAB 700</td>
</tr>
<tr>
<td>Dairy Cattle Herd Health</td>
<td>BKG 781</td>
</tr>
<tr>
<td>Diagnostic Imaging</td>
<td>DIM 771, 772, 773, 781, 782, 783, 784, 785, 786</td>
</tr>
<tr>
<td>Draught Animal Power</td>
<td>DAP 771</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>EPI 751, 752, 753, 754</td>
</tr>
<tr>
<td>Helminthology</td>
<td>HEL 700</td>
</tr>
<tr>
<td>Histology</td>
<td>HIS 700</td>
</tr>
<tr>
<td>Immunology</td>
<td>IMM 700</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>IFS 771, 772, 773, 774, 775, 776, 777</td>
</tr>
<tr>
<td>Laboratory Animal Science</td>
<td>LAS 700</td>
</tr>
<tr>
<td>Medicine</td>
<td>GEN 702, 703, 704, 705, 707</td>
</tr>
<tr>
<td>Microbiology</td>
<td>MBG 781</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>OFT 700, 701, 702</td>
</tr>
<tr>
<td>Parasitology</td>
<td>PAR 772, 773, 774, 775, 781</td>
</tr>
<tr>
<td>Pathology</td>
<td>PAT 700, 702, 703, 704, 705, 706, 707, 708, 709, 771</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>FAR 706, 707, 708, 709, 775, 776, 777</td>
</tr>
<tr>
<td>Physiology</td>
<td>FSG 713, 787, 788</td>
</tr>
<tr>
<td>Pig Herd Health</td>
<td>VKH 780</td>
</tr>
<tr>
<td>Poultry Health and Production</td>
<td>PHP 771</td>
</tr>
<tr>
<td>Poultry Nutrition</td>
<td>PVV 700</td>
</tr>
<tr>
<td>Production Animal Management</td>
<td>PAM 700</td>
</tr>
<tr>
<td>Protozoal Diseases</td>
<td>PTS 700</td>
</tr>
<tr>
<td>Research Methodology</td>
<td>VRM 781, 782</td>
</tr>
<tr>
<td>Small Stock Herd Health</td>
<td>KKS 780</td>
</tr>
<tr>
<td>Surgery</td>
<td>CHR 703, 704, 705, 706</td>
</tr>
<tr>
<td>Reproduction</td>
<td>GSK 702, 703, 704, 705, 706, 707</td>
</tr>
<tr>
<td>Toxicology</td>
<td>TOK 701, 702, 703, 704</td>
</tr>
<tr>
<td>Veterinary Ectoparasitology</td>
<td>VEP 701</td>
</tr>
<tr>
<td>Veterinary Public Health</td>
<td>VPH 781, 782, 783, 784</td>
</tr>
<tr>
<td></td>
<td>VVD 700, 701</td>
</tr>
<tr>
<td>Virus Diseases</td>
<td>VIS 700</td>
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<tr>
<td>Virology</td>
<td>VIR 700</td>
</tr>
<tr>
<td>Wildlife Diseases</td>
<td>WSK 700</td>
</tr>
</tbody>
</table>

See SYLLABI for the number of credits awarded to these courses.
Veterinary Science

(i) Where the honours degree precedes a master's degree, the courses chosen for the honours degree programme must support the particular field of study for the prospective master's degree programme. The selection of courses is approved by the Dean, on the recommendation of the Head of the Department in which the study for the master's degree will be undertaken. Credits obtained will be recognised in the MMedVet Degree programme [see V.3(d)].

(ii) If a candidate plans to register for an honours degree only, the selected courses are approved by the Dean, following consultation with the heads of the departments concerned.

(d) Registration
Students intending to register for this programme, must consult with the Dean and the Heads of the Departments concerned, well in advance, as not all the postgraduate courses are necessarily offered every year.

(e) Examinations
(Consult General Regulation G.26.1)
To determine whether a student passes the honours examination, the marks obtained in each module are calculated proportionately to the number of course credits: Provided that, should a student fail one module, but score a mark of at least 40%, he or she may be admitted to a supplementary examination, which has to be taken either during the same examination period, or not later than the subsequent examination period. If a student fails to qualify for a supplementary examination, a special examination may be granted after one semester has lapsed.
(i) A minimum examination mark of 50% is required in each of the courses where a semester or year mark is not required. However, where a semester or year mark is required, a minimum semester or year mark of 40% is set, with a subminimum of 40% in the examination, and a final mark of at least 50% as a pass mark in the course. Instructions regarding requirements for semester, year or examination marks are published in the departmental manuals, for the specific attention of students.
(ii) To obtain the degree with distinction, a minimum of 60% is required in each course, as well as a proportionately calculated average of at least 75% for the degree as a whole.

III. MASTER'S DEGREE

V.3 MASTER OF VETERINARY MEDICINE (MMedVet)

Also consult General Regulations G.30 to G.44.

The Master's degree in Veterinary Medicine is a professional degree and equips the student with a broad scientific background in the theoretical and practical aspects of the chosen field of study.
(a) Fields of study

The MMedVet degree is offered in the following fields of study. The total number of SAQA credits is indicated in respect of each specialisation field.

<table>
<thead>
<tr>
<th>Field of study</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Anaesthesiology (Anaes)</td>
<td>685</td>
</tr>
<tr>
<td>(ii) Cattle Herd Health (Bov)</td>
<td>640</td>
</tr>
<tr>
<td>(iii) Surgery (Chir) (Eq)</td>
<td>797</td>
</tr>
<tr>
<td>(iv) Surgery (Chir) (Small Animals)</td>
<td>822</td>
</tr>
<tr>
<td>(v) Medicine (Med)(Bov)</td>
<td>640</td>
</tr>
<tr>
<td>(vi) Medicine (Med)(Eq)</td>
<td>560</td>
</tr>
<tr>
<td>(vii) Medicine (Med)(Small Animals)</td>
<td>560</td>
</tr>
<tr>
<td>(viii) Reproduction (Gyn)</td>
<td>630</td>
</tr>
<tr>
<td>(ix) Small Stock Herd Health (CapRov)</td>
<td>600</td>
</tr>
<tr>
<td>(x) Clinical Laboratory Diagnostics (Clin Lab Diag)</td>
<td>480</td>
</tr>
<tr>
<td>(xi) Ophthalmology (Ophth)</td>
<td>664</td>
</tr>
<tr>
<td>(xii) Pathology (Path)</td>
<td>640</td>
</tr>
<tr>
<td>(xiii) Poultry Diseases (Altil)</td>
<td>640</td>
</tr>
<tr>
<td>(xiv) Laboratory Animal Science (LAS)</td>
<td>550</td>
</tr>
<tr>
<td>(xv) Diagnostic Imaging (DiagIm)</td>
<td>626</td>
</tr>
<tr>
<td>(xvi) Pig Herd Health(Suill)</td>
<td>620</td>
</tr>
<tr>
<td>(xvii) Veterinary Ethology (VetEt)</td>
<td>640</td>
</tr>
<tr>
<td>(xviii) Veterinary Public Health (Hyg)</td>
<td>620</td>
</tr>
<tr>
<td>(xiv) Wildlife Diseases (Fer)</td>
<td>650</td>
</tr>
<tr>
<td>(xx) Pharmacology (Pharm)</td>
<td>462</td>
</tr>
<tr>
<td>(xxi) Toxicology (Tox)</td>
<td>480</td>
</tr>
</tbody>
</table>

(b) Admission

(i) Subject to the stipulations of General Regulation G.62, a candidate must be in possession of the BVSc or an equivalent degree. In certain cases, the Head of the Department under which a specific field of study for the MMedVet falls, may require that a candidate first obtains a BVSc(Hons) degree [Reg. V.2(c)], with modules applicable to the particular MMedVet degree study. A minimum of 60% in each module may be required before a student may commence with studies for the MMedVet degree.

A student who wishes to commence studies for the MMedVet degree, and already has a BVSc(Hons) degree and complies with the requirements already mentioned, will retain credit for the modules concerned for a period of two years, unless the Head of Department decides otherwise.

(ii) Furthermore, a Head of Department has the prerogative to require, in addition to the requirements of the said regulation, an evaluation of a student, which may include practical components, or the setting of special conditions. A student may also be required to pass a proficiency test in English (TOEFL), at an acceptable level.

(iii) The number of students, who can be admitted to the MMedVet degree programme annually, depends on the training capacity of a department and the number of available posts.
(c) **Duration and attendance requirements**

(i) For candidates who are already in possession of the BVSc(Hons) degree with the applicable courses, the degree programme extends over at least two years, with a maximum duration of four years. If all the required courses have to be included in the MMedVet curriculum, the programme extends over a maximum of six years.

(ii) Unless stipulated otherwise, the Dean must be satisfied that the candidates will have sufficient access to appropriate facilities and, where necessary, supervision by an appropriate person to complete the work required for the degree at a satisfactory level.

(iii) Attendance requirements are determined in each individual case by the Dean (as recommended by the Head of the Department concerned).

(iv) Candidates have to complete an acceptable course in Research Methodology successfully.

(d) **Curricula**

The courses required will in all instances be determined in consultation with the Head of the Department which offers the proposed special field of study and may include an acceptable course in Research Methodology. The number of credits of the applicable prescribed courses should not be less than 18 and not more than 24 [see V.2(c) and V.2(c)(i)]. If deemed necessary, courses and/or modules offered by other Faculties of the University of Pretoria may form part of the prescribed programme. Students will receive advanced training in the theoretical and practical aspects of the chosen field of study.

<table>
<thead>
<tr>
<th>Special field of study</th>
<th>Degree code</th>
<th>Course code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaesthesiology</td>
<td>08250131</td>
<td>ANE 800</td>
</tr>
<tr>
<td>Cattle Herd Health</td>
<td>08250231</td>
<td>BKG 800</td>
</tr>
<tr>
<td>Clinical Laboratory Diagnostics</td>
<td>08250191</td>
<td>KDK 800</td>
</tr>
<tr>
<td>Diagnostic Imaging</td>
<td>08250142</td>
<td>DIM 870</td>
</tr>
<tr>
<td>Laboratory Animal Science</td>
<td>08250211</td>
<td>PFK 800</td>
</tr>
<tr>
<td>Medicine: one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bovine Medicine</td>
<td>08250052</td>
<td>GEN 801</td>
</tr>
<tr>
<td>Equine Medicine</td>
<td>08250053</td>
<td>GEN 802</td>
</tr>
<tr>
<td>Small Animal Medicine</td>
<td>08250054</td>
<td>GEN 803</td>
</tr>
<tr>
<td>Ophthalmoiology</td>
<td>08250251</td>
<td>OFT 800</td>
</tr>
<tr>
<td>Pathology</td>
<td>08250101</td>
<td>PAT 800</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>08251131</td>
<td>FAR 800</td>
</tr>
<tr>
<td>Pig Herd Health</td>
<td>08250182</td>
<td>VKH 800</td>
</tr>
<tr>
<td>Poultry Diseases</td>
<td>08250171</td>
<td>PHP 800</td>
</tr>
<tr>
<td>Reproduction</td>
<td>08250031</td>
<td>GSK 800</td>
</tr>
<tr>
<td>Small Stock Herd Health</td>
<td>08250241</td>
<td>KKS 800</td>
</tr>
<tr>
<td>Surgery: One of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equine Surgery</td>
<td>08251121</td>
<td>CHR 804</td>
</tr>
<tr>
<td>Small Animal Surgery</td>
<td>08250022</td>
<td>CHR 803</td>
</tr>
<tr>
<td>Toxicology</td>
<td>08251141</td>
<td>TOK 800</td>
</tr>
<tr>
<td>Veterinary Ethology</td>
<td>08250082</td>
<td>VET 800</td>
</tr>
<tr>
<td>Veterinary Public Health</td>
<td>08250041</td>
<td>VVD 800</td>
</tr>
<tr>
<td>Wildlife Diseases</td>
<td>08250221</td>
<td>WSK 800</td>
</tr>
</tbody>
</table>
(e) **Conferment of degree**

The MMedVet degree is conferred by virtue of an examination and a dissertation.

(f) **Examinations**

(i) The examination(s) in the special field of study may be taken after a minimum period of two years.

(ii) The nature and duration of the examination(s), which will test fully the theoretical knowledge as well as the practical skills of the student, is determined by the Head of the Department which offers the chosen field of study.

(iii) A minimum examination mark of 50% is required in each of the theoretical and practical sections of the course where a semester or year mark is not required. However, in cases where a semester or year mark is awarded, a minimum semester or year mark of 40% is required in each section for admission to the examination.

A subminimum of 40% is required in the examination, and a final mark of at least 50% to pass in the theoretical and the practical sections. Instructions in departmental manuals regarding semester, year and examination marks, are brought specifically to the attention of students.

A student who fails in one or more courses, may be admitted by the Dean to a supplementary examination in such course(s), on the recommendation of the Head of the Department concerned, and after a time-lapse determined by the Dean. The average mark awarded for theoretical and practical examinations, accounts for 75% of the final mark, and the dissertation for 25%.

Students who intend applying for membership of a specialist college abroad later on, should bear in mind that many of these colleges require a minimum examination mark, and a final mark of at least 60% for admission.

(g) **Dissertation**

Also consult General Regulations G.57 to G.61.

(i) A student must submit a dissertation, which deals with the particular field of study, prior to the examination in the theoretical section of the chosen field of study.

(ii) A dissertation is based on a research project or related research projects (which need not be original), planned and written down by the student within the theme of the chosen field of study. (Assistance with statistical processing, applied specialised procedures, etc., is allowed, but must be acknowledged.) The student may use appropriate research done previously, to add to the writing of the dissertation.

Earlier, related publications by the student may be bound with the dissertation, but may not substitute the complete text of the 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. The dissertation will be evaluated by an external examiner, who may not necessarily attend the final examination.

A draft article based on the dissertation must be prepared for publication in an acknowledged journal and submitted with the dissertation, 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).
(iii) The average of the separate marks awarded by all the examiners, is the final mark for the dissertation. The minimum pass mark is 50%. A student who has failed, may be permitted by the Dean on the recommendation of the Head of the Department concerned, to submit an amended dissertation for final adjudication. The mark awarded for the dissertation will make up 25% of the final mark.

(h) Degree with distinction
In order to obtain the degree with distinction, a minimum pass mark of 75% is required in the examination in the chosen field of study and the dissertation together.

V.4. MAGISTER SCIENTIAE (VETERINARY SCIENCES) (MSc)

Also consult General Regulations G.30 to G.44.

The MSc degree in Veterinary Sciences is a research degree.

(a) Requirements for admission
Subject to the stipulations of General Regulation G.62, a BSc(Hons), BSc(Agric) (Hons), BVSc or equivalent degree as well as an average of at least 60% in the honours examination, where applicable, are required. Candidates who are accepted for the MSc degree programme have to complete an acceptable course in Research Methodology successfully. Supplementary prescribed work and attendance of certain courses at 700 level in which a pass mark in a test or examination has to be achieved, may be required of all candidates who apply for admission, but may not exceed 20 credits. If deemed necessary by the Head of Department, courses offered by other faculties of the University of Pretoria may form part of the prescribed programme. Candidates must register for these additional courses when initially registering for the MSc degree programme.

In certain cases, it remains the prerogative of the Head of Department to require, in addition to the entrance requirements already mentioned, also an appropriate honours degree, or the successful completion of an admissions test before registration. A student may also be required to pass a proficiency test in English (TOEFL), at an acceptable level.

(b) Duration
The course extends over a minimum period of two years, and a maximum of four years.

(c) Field of study

Total number of SAQA credits: 240

The MSc degree programme is offered by the following departments:

(i) Anatomy (Code 08251001)
(ii) Companion Animal Medicine (Code 08251041)
(iii) Companion Animal Surgery (Code 08251011)
(iv) Paraveterinary Studies (Code 08251112)
(v) Pharmacology and Toxicology (Code 08251021)
(vi) Poultry Diseases (Code 08251091)
(vii) Production Animal and Community Health (Code 08251111)
(viii) Reproduction (Code 08251051)
(ix) Veterinary Pathology (Code 08251081)
(x) Veterinary Physiology (Code 08251031)
(xi) Veterinary Production and Ethology (Code 08251101)
(xii) Veterinary Tropical Diseases (Code 08250901)

The research topic is determined in consultation with the Head of Department, and the research project(s) which follow, must be approved according to Faculty Guidelines.

(d) **Conferment of degree**

The MSc degree is conferred by virtue of the successful completion of a dissertation (VWE 890). Regulations V.3(g)(i) and (ii) apply *mutatis mutandis*. A student must submit at least one draft article for publication in an acknowledged journal with the dissertation, failing which the degree will not be conferred. The draft article must be based on the research for the dissertation and must be acceptable to the supervisor and meet subsidy requirements. (Also consult General Regulations G.57 to G.61 as well as Reg.V.3 (g) (iii) concerning the content, submission and editing of the dissertation.)

(e) **Pass with distinction**

The degree is conferred with distinction on a student who has obtained at least 75% for the dissertation.

### IV. DOCTORATES

<table>
<thead>
<tr>
<th>V.5. PHILOSOPHIAE DOCTOR (PhD)</th>
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</table>

Also consult General Regulations G.45 to G.55.

(a) **Admission requirements**

Subject to the stipulations of General Regulation G.62, a candidate must hold an applicable master's degree to qualify for admission to the study for the PhD degree.

It remains the prerogative of the Head of Department to require an admissions test prior to registration for the degree study, in addition to the regulatory requirements. A pass in a proficiency test in English (TOEFL) at an acceptable level may also be required, especially in the case of international candidates.

(b) **Field of study**

Total number of SAQA credits: 360
The PhD degree is offered by the following departments:

(i) Anatomy (Code 08260111)
(ii) Companion Animal Surgery (Code 08260221)
(iii) Companion Animal Medicine (Code 08260141)
(iv) Paraveterinary Studies (Code 08261112)
(v) Pathology (Code 08260231)
(vi) Pharmacology and Toxicology (Code 08260122)
(vii) Production Animal and Community Health (Code 08260251)
(viii) Reproduction (Code 08260151)
(ix) Veterinary Physiology (Code 08260131)
(x) Veterinary Production and Ethology (Code 08260182)
(xi) Veterinary Tropical Diseases (Code 08260271)

All postgraduate courses are not necessarily offered every year.

The research topic will be determined in consultation with the Head of Department, following which the research projects will be approved in terms of Faculty Guidelines.

Each candidate must satisfy the Dean on the recommendation of the Head of Department, that he or she is working at an institution with the necessary facilities, to enable him or her to complete the work required for the degree satisfactorily, in order to obtain the consent of the Dean.

(c) Duration
The study extends over a minimum period of two years, with a maximum of six years after having complied with all the requirements for the master's degree.

(d) Conferment of degree
The PhD degree is conferred by virtue of the successful completion of a thesis: Provided that additional oral or written examinations may be required.

A student must submit at least one draft article for publication in an acknowledged journal with the thesis, failing which the degree will not be conferred. The draft article must be based on the research for the thesis and must be acceptable to the supervisor and meet subsidy requirements.

Also consult General Regulations G.57 to G.61 with regard to the submission and technical editing of the thesis.

<table>
<thead>
<tr>
<th>V.6. DOCTOR OF VETERINARY SCIENCE (DVSc)</th>
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</table>

The DVSc degree is conferred by virtue of publications (consult General Regulation G.56).
V. POSTGRADUATE DIPLOMAS

The courses are offered in co-operation with the Schools of Medicine and Dentistry in the Faculty of Health Sciences.

The following requirements and regulations are applicable to both the DCH(Vet) and the DHA(Vet).

(a) Requirements for admission
Candidates who wish to register for the DCH(Vet), must have obtained a BVSc or equivalent degree at least one year previously, or at least two years previously in respect of the DHA(Vet). In addition, the candidate must be registered with the South African Veterinary Council as a veterinary surgeon.

(b) Duration
The courses are offered part-time and extend over at least two academic years.

(c) Examinations
Students must attend all lectures and practicals to the satisfaction of the Head of Department before they will be admitted to the examinations, and must pass the prescribed written, oral and/or practical examinations in all the courses.

A minimum examination mark of 50% is required in each of the theoretical and practical sections of a course for which a year or semester mark is not required.

However, in cases where a semester or a year mark is required, a minimum semester or year mark of 40% must be obtained in each section for admission to the examination. A subminimum of 40% in the examination, and at least 50% as a final mark are required to pass in the theoretical and practical sections. Instructions regarding semester, year or examination marks contained in the departmental manuals, are brought to the specific attention of students.

(d) Supplementary examinations
Supplementary examinations are granted in a maximum of two courses in each section and may only take place six months after the original examination. If more than two courses are failed, the courses concerned must be repeated.

(e) Diploma with distinction
A diploma is awarded with distinction to a student who obtains an average of at least 75% in all the courses.
V.7 POSTGRADUATE DIPLOMA IN VETERINARY COMMUNITY HEALTH [DCH(Vet)] (CODE 08220041)

Curriculum

Total number of SAQA credits: 240

Part I
Under review

Part II
Under review

V.8 POSTGRADUATE DIPLOMA IN HEALTH ADMINISTRATION [DHA(Vet)] (CODE 08220051)

Curriculum

Total number of SAQA credits: 240

Part I
Under review

Part II
Under review

VI. UNIVERSITY DIPLOMA

V.9 UNIVERSITY DIPLOMA IN VETERINARY NURSING (DipVetNurs) (CODE 08120002)

(a) Requirements for admission
   (i) A candidate must be in possession of a Grade 12 exemption certificate.
   (ii) A minimum pass mark in Mathematics and Physical Science or Biology of at least 40% at higher grade or 50% at standard grade is required.
   (iii) No provisional exemption certificate or certificate without Grade 12 exemption will be accepted.
   (iv) Students are admitted annually after selection according to the approved procedure.

(b) Duration of study
Two academic years of full-time study.
(c) **Clinical skills training**
Clinic service must be done in the Faculty as well as at approved private practices during the course of the two academic years, as determined by the Dean in consultation with the Heads of Department. A student’s skills, conscientiousness, discipline and professional conduct are assessed on a continuous basis. Admission to the final examination can be refused if his or her performance is unsatisfactory.

(d) **Admission to examinations**
The stipulations of General Regulation G.10.1 regarding satisfactory preparation, as well as the payment of class fees, apply to examination, promotion and attendance courses. In addition, attendance of all the prescribed practicals, clinics and excursions is compulsory. Absence with good reason from any of these must be corroborated by a medical certificate or other acceptable proof, failing which admission to the examination could be refused. Failure to comply with General Regulation G.10.1 will also result in examination refusal.

(e) **Pass requirements in courses and supplementary examinations**
   (i) In order to pass an examination course, a student must obtain a subminimum of 40% in the examination and a final mark of at least 50%. In promotion courses, a semester or year mark of at least 50% is required to pass.
   (ii) The theoretical part (i.e. written and/or oral) and the practical part (where applicable) of the examinations contribute an equal amount (i.e. 50:50) in the calculation of the final mark.
   (iii) If the examination includes a practical as well as a theoretical part, a sub-minimum of 40% is required in each section.
   (iv) An examination mark of 50% is required to pass a supplementary examination. The semester or year mark is not taken into calculation.
   (v) Supplementary examinations may be granted to a student in an unlimited number of courses in the first year of study, but not in the second year of study.

(f) **Promotion to the second year of study**
A student who fails one or more courses in the first year of study, is subjected to selection once again. If re-admitted, the student has to repeat the first year of study. Students may apply for exemption from the examination in courses already passed, provided that a year or semester mark of at least 50% is obtained in the relevant courses in the year during which first-year studies are repeated. For courses passed with a final mark of 65% or more, full exemption of lectures and examinations is granted.

(g) **Pass with distinction**
The Diploma is awarded with distinction to a student who has obtained at least 60% in each course throughout the programme, and an average of at least 75% in the final year.

(h) **Medium of instruction**
A student must have a sufficient command of English to follow the lectures, as English is the medium of instruction at the Faculty of Veterinary Science.
(i) **Curriculum**

Total number of SAQA credits: 355

(i) **First year of study**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANA 104</td>
<td>Anatomy 104</td>
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<tr>
<td>FAR 120</td>
<td>Pharmacology 120</td>
</tr>
<tr>
<td>FSG 104</td>
<td>Physiology 104</td>
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<tr>
<td>VET 110</td>
<td>Veterinary Ethology 110</td>
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<tr>
<td>LTG 120</td>
<td>Laboratory Technique 120</td>
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<tr>
<td>MBG 111</td>
<td>Microbiology 111</td>
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<td>AVP 111</td>
<td>General Nursing 111</td>
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<tr>
<td>PAR 120</td>
<td>Parasitology 120</td>
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</tbody>
</table>

**Promotion courses**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MVP 120</td>
<td>Medical Nursing 120</td>
</tr>
<tr>
<td>TPR 120</td>
<td>Theatre Practice 120</td>
</tr>
<tr>
<td>GSV 120</td>
<td>Reproductive Nursing 120</td>
</tr>
</tbody>
</table>

**Note:**

- Students must apply for admission to the extended programme by the end of April.
- Admission to the extended programme is at discretion of the Dean, Faculty of Veterinary Science, on recommendation of the relevant lecturers and Heads of Department via the Head: Paraveterinary Studies.
- Courses not passed in the first year of the extended programme have to be included in the second year of the relevant programme. The two years of the extended programme are regarded as one year of study for purposes of promotion to the second year of study – see Reg.V.9(f).

**Clinical skills training** must be completed at various clinics of the Veterinary Academic Hospital throughout the year and during the December holiday, and also on a rotation basis at Outpatients, Isolation Ward and Intensive Care Unit after-hours and over weekends.

**Supplementary examinations:** Subject to the provisions of Regulation V.9(e)(iii), students who obtain a final mark of between 40% and 49% in General Nursing 111, Microbiology 111 or Veterinary Ethology 110, may be admitted to a supplementary examination immediately after the June examinations. The provisions of Regulation V.9(e)(v) also apply.

(ii) **Second year of study**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MVP 200</td>
<td>Medical Nursing 200</td>
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<tr>
<td>CVP 200</td>
<td>Surgical Nursing 200</td>
</tr>
<tr>
<td>TPR 200</td>
<td>Theatre Practice 200</td>
</tr>
<tr>
<td>NAR 200</td>
<td>Anaesthetics 200</td>
</tr>
<tr>
<td>RAD 200</td>
<td>Radiography 200</td>
</tr>
<tr>
<td>GSV 200</td>
<td>Reproductive Nursing 200</td>
</tr>
</tbody>
</table>

**Clinic skills training** must be completed in various clinics of the Veterinary Academic Hospital. Students also have to work on a rotation basis at Outpatients,
in the Isolation Ward and the Intensive Care Unit after hours and over weekends. After-hour duties are also required in the Equine Clinic, Ambulatory Services and the Reproduction Clinic.

Students are also required to gain experience at the following institutions for two weeks each: an approved veterinary institute, private practice or clinic of their own choice at the Veterinary Academic Hospital. Additional rotations must be done at the Veterinary Academic Hospital during the April holidays.

**Supplementary examinations**
A maximum of two supplementary examinations (including promotion tests) per student are allowed. Students who fail in more than two courses or who fail in one or more of the supplementary examinations or promotion tests, must repeat the second year of study. Students may apply for exemption from examination in courses that have already been passed, provided that they obtain a year or semester mark of at least 50% in these courses when repeating the second year of study. For courses passed with a final mark of 65% or more, full exemption is granted.
Abbreviations
l. = lecture  
d.l. = demonstration lecture  
p.w. = per week  
pr. = practica  
sem. = semester

DEPARTMENT OF ANATOMY

(1) (ANA 213) Anatomy 213: 3rd sem. 1 l.p.w. and 5 pr. of 3 periods each p.w.
Systematic osteology, arthrology, myology, angiology, neurology, splanchnology and
topographical anatomy of the dog and anatomy of the cat. General introduction to
comparative embryology. The early morphogenesis and organogenesis of the body
of domestic animals. The semester is concluded with an examination.

(2) (ANA 224) Anatomy 224: 4th sem. 1 l.p.w. and 5 pr. of 3 periods each p.w.
Comparative osteology, arthrology, myology, angiology, neurology, splanchnology
and topographical anatomy of the horse, cow, sheep and pig. Anatomy of poultry
and fish. Neuro-anatomy and functional neuro-anatomy. Fetomembranes and
placentation of domestic animals, teratology. The semester is concluded with an
examination.

(3) (ANA 703) Anatomy 703: 2 x 1 hour l.p.w. for 30 weeks, 6 credits.
An in-depth study of the osteology, arthrology, myology, angiology, neurology,
splanchnology and topographical anatomy of the horse. Special attention to clinically
important sections of the anatomy.

(4) (ANA 704) Anatomy 704: 2 x 1 hour l.p.w. for 30 weeks, 6 credits.
An in-depth study of the osteology, arthrology, myology, angiology, neurology,
splanchnology and topographical anatomy of cattle. Special attention to clinically
important sections of the anatomy.

(5) (ANA 705) Anatomy 705: 2 x 1 hour l.p.w. for 30 weeks, 6 credits.
An in-depth study of the osteology, arthrology, myology, angiology, neurology,
splanchnology and topographical anatomy of the dog. Special attention to clinically
important sections of the anatomy.

(6) (ANA 774) Anatomy 774: The number of lectures and credits will depend on the
course compiled for the student. A formal course comprises at least 2 credits.
The courses are compiled for each student individually to fulfil the specific needs of
the student concerned.

(7) (ANA 779) Anatomy 779: 2 x 1 hour l.p.w. for 30 weeks, 4 credits.
An in-depth comparative study of the anatomy of the pelvis and surrounding areas,
histology of the reproductive system and the embryological development of the
reproductive system.

(8) (HIS 200) Histology 200: 2 l. plus 1 pr. of 2 periods p.w.
(a) General cytology and histology.
(b) Special histology of the organs and physical systems of domestic animals.
(9) (HIS 700) **Histology 700**: 2 x 1 hour l.p.w. for 30 weeks, 5 credits. 
An in-depth comparative study of light and electron microscopic histology of 
domestic animals, birds and selected wildlife species. 
Consult the Head of Department for details of courses for the master's degree 
programme.

**DEPARTMENT OF COMPANION ANIMAL MEDICINE**

(1) (SAC 600) **Applied Small Animal Clinical Studies 600**
Practical tuition under supervision in the diagnosis, treatment and control of 
diseases of the dog and cat. Includes tuition during after-hours, weekends and 
vacations.

(2) (CBF 510) **Cage Bird and Fish Diseases 510**: 3 l. p.w. – 1st sem. 
Details of this subject course available from the Department.

(3) (ICS 300) **Introductory Clinical Studies 300**: 5th sem.: 4 l.p.w.; 6th sem.: 3 l.p.w. 
Introductory clinical diagnostics, introductory clinical pathology and general 
surgery. 
Departments involved: Departments of Companion Animal Medicine; Companion 
Animal Surgery and Veterinary Physiology.

(4) (GEN 702) **Medicine 702**: 8 credits. 
Advanced theoretical study in small animal medicine. Study of the conditions of 
internal organs is not included in this course. The course may include selected 
practical aspects.

(5) (GEN 703) **Medicine 703**: 9 credits. 
Advanced theoretical study in equine medicine. The course may include selected 
practical aspects.

(6) (GEN 704) **Medicine 704**: 4 credits. 
Advanced theoretical study in cattle medicine and surgery. The course may include 
selected practical aspects.

(7) (GEN 707) **Medicine 707**: 9 credits. 
Advanced theoretical study in small animal medicine specifically applicable to 
conditions of the internal organs. The course may include selected practical 
aspects.

(8) (GEN 802) **Medicine 802**
Advanced training in organ, metabolic and deficiency diseases of equines. 
Pathophysiology, diagnostic and treatment methods are emphasised.

(9) (GEN 803) **Medicine 803**
Advanced training in organ, metabolic and deficiency diseases of small animals. 
Pathophysiology, diagnostic and treatment methods are emphasised.
Veterinary Science

(10) (KDK 800) **Clinical Laboratory Diagnostics 800**: 2 l.p.w.
Advanced training in veterinary clinical laboratory diagnostics including theoretical as well as practical knowledge of clinical biochemistry, clinical endocrinology, haematology, cytology, diagnostic bacteriology, diagnostic virology, diagnostic immunology, diagnostic protozoology, diagnostic toxicology, diagnostic parasitology, quality control, applied biometry, electronics/optics of laboratory equipment and computer use.

(11) (KPA 701) **Clinical Pathology 701**: 6 credits.
Advanced study in clinical pathology including ensymology, cytology, haematology as well as clinical pathology of the kidney.

(12) (KPA 702) **Clinical Pathology 702**: 5 credits
Advanced study in clinical pathology including bloodgas and acid-base balance, gastro-enterology, haemostases, diagnostic indicators and protein electrophoreses.

(13) (KPA 703) **Clinical Pathology 703**: 3 credits
Advanced study in clinical pathology covering a selection (*capita selecta*) of three (3) topics from KPA 701 and/or KPA 702, above.

(14) (SAC 470) **Small Animal Clinical Studies 470**: 15 l.p.w.
The diagnosis, treatment and control of diseases of the dog and cat.
Integration of aspects of clinical veterinary science, including components of contagious and parasitic diseases, clinical diagnostics, clinical pathology, diagnostic imaging, therapeutics, medicine, surgery, reproduction, pathology and behavioural anomalies.
Lectures are offered by Departments of Companion Animal Medicine; Companion Animal Surgery; Pathology; Reproduction and Veterinary Tropical Diseases.

**DEPARTMENT OF COMPANION ANIMAL SURGERY**

(1) (ANE 771) **Anaesthesiology 771**: 4 credits.
Advanced theoretical training on a species-orientated basis, including domestic animals (horses, dogs and cats), birds, laboratory animals and wildlife species. The course 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.

(2) (ANE 772) **Anaesthesiology 772**: 4 credits.
Advanced theoretical training on a species-orientated basis, including domestic animals, production animals (ruminants and pigs), birds, laboratory animals and wildlife species. The course 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.

(3) (ANE 800) **Anaesthesiology 800**
Advanced theoretical and practical and experiential training in the administration of local and general anaesthetics on a species-orientated basis. The course covers the structure and functioning of inhalation anaesthesia and monitor apparatus, the
latest use of total intravenous anaesthetic techniques, positive pressure ventilation, peripheral muscle relaxants and the techniques and equipment employed for the immobilisation of game.

Theoretical training includes the attendance of postgraduate seminars in Anaesthesiology at the Faculty of Medicine.

(4) (AST 500) Anaesthesiology 500: 1\textsuperscript{st} sem: 2 l.p.w.; 2\textsuperscript{nd} sem. 1 l.p.w.

Theoretical training in the basic principles in the administration of premedication, intravenous and inhalation anaesthetic agents to domestic and some common exotic pet animals. The course covers the design and function of the inhalation anaesthetic machine, the monitoring of vital functions during anaesthesia, the diagnosis and treatment of common complications during the peri-anaesthetic period and the administration of local anaesthetic agents.

(5) (ECS 600) Applied Equine Clinical Studies 600

Practical instruction on course matter dealt with in Equine Clinical Studies 500 (ECS 500).

(6) (CHR 703) Surgery 703: 7 credits.

Advanced theoretical study of small animal surgery.

(7) (CHR 704) Surgery 704: 8 credits.

Advanced theoretical study of equine surgery.

(8) (CHR 705) Surgery 705: 3 credits.

Applicable aspects of general surgery and biomaterial science, anaesthesiology and diagnostic imaging.

(9) (CHR 706) Surgery 706: 5 credits.

Aspects of general and abdominal surgery, anaesthesiology and diagnostic imaging applicable to advanced studies in Reproduction (all species).

(10) (CHR 803) Surgery 803

Advanced theoretical, practical and experiential course in small animal surgery.

(11) (CHR 804) Surgery 804

Advanced theoretical, practical and experiential course in equine surgery.

(12) (DIM 771) Diagnostic Imaging 771: 8 credits.

Advanced study in diagnostic imaging of dogs and cats. The course extends over a period of one year. Approximately 23 lectures/group discussions are presented fortnightly on Wednesday mornings.

Approximately 50% is devoted to radiology, 35% to diagnostic ultrasound; 5% to alternative diagnostic methods and 5% to scintigraphy. Training is done mainly by means of practical interpretation of radiographical and ultrasonic images.

The patho-physiology, diagnosis and prognosis of pathological conditions are discussed, as well as ways in which this field of study is linked to other diagnostic methods in order to confirm a diagnosis.

The course is presented in alternate years on condition that more than three candidates apply.
Veterinary Science

(13) (DIM 772) **Diagnostic Imaging 772**: 7 credits
Advanced study in diagnostic imaging of horses. The course extends over a period of one year. Approximately 20 lectures/group discussions are presented fortnightly on Wednesday mornings.
Approximately 50% are devoted to radiology; 5% to radiography; 35% to diagnostic ultrasound; 5% to alternative diagnostic methods and 5% to scintigraphy. Training is done mainly by means of practical interpretation of radiographical and ultrasound images.
The patho-physiology, diagnosis and prognosis of pathological conditions are discussed as well as ways in which this field of study relates to other diagnostic methods used to confirm a diagnosis.
The course is presented in alternate years concurrently with Diagnostic Imaging 773, provided that more than three candidates apply.

(14) (DIM 773) **Diagnostic Imaging 773**: 6 credits.
Advanced study in diagnostic imaging of ruminants. The course extends over a period of one year. Approximately 19 lectures/group discussions are presented fortnightly on Wednesday mornings: Approximately 30% are devoted to radiology; 10% to radiography; 55% to diagnostic ultrasound and 5% to alternative diagnostic methods.
Training is done mainly by means of practical interpretation of radiographical and ultrasound images. The patho-physiology, diagnosis and prognosis of pathological conditions are discussed as well as ways in which this field of study relates to other diagnostic methods used to confirm a diagnosis.
The course is presented in alternate years concurrently with Diagnostic Imaging 772, provided that more than three candidates apply.

(15) (DIM 781) **Diagnostic Imaging 781**: 6 credits.
Radiology section of DIM 771

(16) (DIM 782) **Diagnostic Imaging 782**: 3 credits.
Ultrasound section of DIM 771.

(17) (DIM 783) **Diagnostic Imaging 783**: 5 credits.
Radiology section of DIM 772.

(18) (DIM 784) **Diagnostic Imaging 784**: 3 credits.
Ultrasound section of DIM 772.

(19) (DIM 785) **Diagnostic Imaging 785**: 2 credits.
Radiology section of DIM 773.

(20) (DIM 786) **Diagnostic Imaging 786**: 4 credits.
Ultrasound section of DIM 773.

(21) (DIM 870) **Diagnostic Imaging 870**
Advanced study of small and large animal radiography, radiology, ultrasonography, scintigraphy, magnetic resonance imaging and computed tomography: with a view to specialisation. With the exception of three ancillary courses, DIM 771 and 772 must be passed with at least 60%. Literature study and 100 weeks practical work is also required. Literature study and 90 weeks practical work are also required.
(ECS 500) **Equine Clinical Studies 500**: 1\textsuperscript{st} sem: 8 l.p.w.; 2\textsuperscript{nd} sem: 9 l.p.w.

The diagnosis, treatment and control of diseases of the horse. Integration of aspects of clinical veterinary science, including components of contagious and parasitic diseases, clinical diagnostics, clinical pathology, diagnostic imaging, therapeutics, medicine, surgery, reproduction and pathology. Lectures are offered by different departments.

(22) **(OFT 700) Ophthalmology 700**: 6 credits

A year course consisting of eight theoretical and two practical sessions on ophthalmology of domestic animals (large and small animals). The course 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.

(23) **(OFT 701) Ophthalmology 701**: 3 credits.

Same as OFT 700 above but only with regard to small animals – a semester course.

(24) **(OFT 702) Ophthalmology 702**: 3 credits.

Same as OFT 700 above but only with regard to large animals – a semester course.

(25) **(OFT 800) Ophthalmology 800**

An advanced theoretical, practical and experiential course in ophthalmology of domestic animals (large and small animals).

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**DEPARTMENT OF PARAVETERINARY STUDIES**

(1) **(ANA 104) Anatomy 104**: 1\textsuperscript{st} sem: 4 l., 2 d.l.; 2\textsuperscript{nd} sem: 3 l., 1 d.l.p.w.

Basic anatomy, histology and embryology of the dog, including applicable comparative anatomy of the horse and ruminant. Offered for DipVetNurs students.

(2) **(AVP 111) General Nursing 111**: 1\textsuperscript{st} sem: 10 l.p.w.

Professional ethics, human relations, responsibilities towards the employer, the patient and the clients. General safety aspects and preventive measures during hospitalisation, nursing and treatment of patients. Hygiene and maintenance of the hospital, apparatus and treatment of patients. Secure storage of medicines, secure administration and record-keeping of medicines, monitoring patients and important reporting to the veterinary surgeon, using correct veterinary terminology. Arrangements regarding transportation of animals and basic wound dressing. Lectures offered by Department of Paraveterinary Studies.

(3) **(CVP 200) Surgical Nursing 200**: 3\textsuperscript{rd} sem: 8 l.p.w.; 4\textsuperscript{th} sem: 200 clinic periods.

Veterinary Science

General surgical conditions and procedures of the thorax, abdomen, head and neck, skin, vertebral column and motor system. Nutrition of surgical patients. Surgical nursing of companion and production animals. Bandaging large and small animals. Dental hygiene. Physiotherapy. Pre-operative and post-operative nursing. Lectures offered by various Departments.

(4) (FAR 120) **Pharmacology 120**: 2nd sem: 8 l.p.w.
Fundamental principles of Pharmacology required by veterinary nurses. The basic study of groups of functional, systemic and chemotherapeutic drugs used in domestic animals. Regulatory requirements, control and use of veterinary medicines by veterinary nurses. Lectures are offered by the Department of Pharmacology and Toxicology.

(5) (FSG 104) **Physiology 104**: 1st sem.: 12 l.p.w. plus 16 lectures the week of orientation; 2nd sem.: 4 l.p.w.
An elementary course in the physiology and physiological chemistry of the most important physical systems of domestic animals. Lectures offered by Department of Veterinary Physiology.

(6) (GSV 120) **Reproductive Nursing 120**: 2nd sem: 4 l.p.w.

(7) (GSV 200) **Reproductive Nursing 200**: 4th sem: 80 clinic periods.
Duties in the reproductive clinic. Scheduled practical training and participation in herd health programmes. Lectures offered by Department of Paraveterinary Studies as well as Department of Reproduction.

(8) (LTG 120) **Laboratory Technique 120**: 2nd sem: 8 l.p.w.
Maintenance and handling of laboratory equipment. Collecting and dispatching samples. Elementary haematology. Preparation and examination of skin scrapings, excretion samples, bacteriological and urine samples, as well as elementary clinical chemistry. Lectures offered by various Departments.

(9) (MBG 111) **Microbiology 111**: 1st sem: 8 l.p.w.
Elementary bacteriology, virology, immunology and epidemiology. Theory of the effect of antiseptic agents. Introduction to the recognition of the most important infectious diseases of domestic animals. Lectures are offered by Department of Veterinary Tropical Diseases.
Veterinary Science

(10) (MVP 120) **Medical Nursing 120**: 2\(^{nd}\) sem: 1 l.p.w.
Theoretical aspects of intensive care nursing, including liquids therapy, blood transfusions, blood bank, cardiovascular and pulmonary resuscitation, nutrition therapy, recognition and treatment of shock. Practical monitoring of patients. Lectures are offered by various Departments.

(11) (MVP 200) **Medical Nursing 200**: 3\(^{rd}\) sem: 8 l.p.w.; 4\(^{th}\) sem: 640 clinic periods.
General aspects of nursing for all the physical systems. Nursing animals with contagious and infectious diseases. Geriatric nursing. Medical nursing of companion and production animals.

(12) (NAR 200) **Anaesthesia 200**: 3\(^{rd}\) sem: 4 l.p.w., 4\(^{th}\) sem: 80 clinic periods.

(13) (PAR 120) **Parasitology 120**: 2\(^{nd}\) sem: 6 l.p.w.
Elementary parasitology. Lectures are offered by various Departments.

(14) (RAD 200) **Radiography 200**: 3\(^{rd}\) sem: 4 l.p.w.; 4\(^{th}\) sem: 80 clinic periods.

(15) (TPR 120) **Theatre Practice 120**: 2\(^{nd}\) sem: 1 l.p.w.
Basic principles of aseptic and traumatic surgery. Types of surgical infections and their causes. Theatre management, hygiene and routine. Treatment of patients in the theatre. Lectures are offered by various Departments.

(16) (TPR 200) **Theatre Practice 200**: 3\(^{rd}\) sem: 4 l.p.w.; 4\(^{th}\) sem: 80 clinic periods.

(17) (VET 110) **Veterinary Ethology 110**: 1st sem: 6 l.p.w. + 1 prac.p.w.
Introduction to veterinary ethology. Applied ethology of companion animals (dogs, cats, horses) and applied production animal ethology (cattle, sheep, pigs), including livestock, breeds, behaviour, breeding, feeding and care of each species. Lectures offered by Department of Veterinary Production and Ethology.
(1) (DIP 520) **Diagnostic Pathology 520**: 2 lectures per week – 2nd sem. Details of the course can be obtained from Department.

(2) (GOP 300) **General and Organ Pathology 300**: 5th and 6th sem. 6 l.p.w. Definitions, terminology and the pathogenesis of basic lesions in tissue and organs, including causes of diseases, reversible cell damage, pigmentionstions, necrosis, apoptosis, circulatory disturbances, inflammations, immunopathology, growth disturbances and neoplasma on a histological and macroscopic basis. Organ pathology (with the emphasis on macroscopic changes and pathogenesis) of the various organ systems of the body.

(3) (PAT 700) **Pathology 700**: 9 credits. General pathology for students who plan to take Pathology as special field of study for MMedVet.

(4) (PAT 702) **Pathology 702**: 4 credits Pathology of dogs and cats.

(5) (PAT 703) **Pathology 703**: 4 credits. Pathology of pigs.

(6) (PAT 704) **Pathology 704**: 4 credits Pathology of horses.

(7) (PAT 705) **Pathology 705**: 4 credits. Pathology of ruminants.

(8) (PAT 706) **Pathology 706**: 7 credits. Pathology of Wildlife.

(9) (PAT 707) **Pathology 707**: 4 credits. Necropsy technique and interpretation.

(10) (PAT 708) **Pathology 708**: 4 credits. Ophthalmological Pathology.

(11) (PAT 709) **Pathology 709**: 4 credits. Reproductive Pathology.

(12) (PAT 771) **Pathology 771**: 4 credits. Mechanisms of disease (for Medicine students).

(13) (PAT 800) **Pathology 800**
Advanced diagnostic pathology of production animals, domestic animals, wildlife, laboratory animals, fish and poultry.
(1) **Pharmacology 706 – Clinical pharmacology for ruminants:**
16 weeks, 3 hours p.w., 8 credits.
Advanced clinical pharmacology studies in small stock and cattle including: special pharmaceutical, pharmacokinetic, pharmacodynamic and pharmacotherapeutic features related to ruminants; species-specific therapeutic objectives and rational pharmacotherapy; human and environmental hazards and risk-assessment of drugs used in food-producing animals; management and production tools; therapeutic control measures; specialised patient pharmacotherapy and adverse drug effects.
The course will be presented annually provided that three or more students register.

(2) **Clinical Pharmacology for Horses 707:**
16 weeks, 3 hours p.w., 8 credits.
Advanced clinical pharmacological studies in horses: special pharmacokinetic and pharmacodynamic and pharmatherapeutic features related to equines; species-specific therapeutic objectives and rational pharmacotherapy; management tools; therapeutic control; performance enhancement and doping; specialised patient pharmacotherapy; and adverse drug effects.
The course will be presented annually provided three or more students register.

(3) **Pharmacology 708 – Wildlife Clinical Pharmacology**
16 weeks, 3 hours p.w., 8 credits
Fundamentals of pharmacology in wildlife, theoretical and practical training of drugs used in the immobilisation, capture, handling and translocation of wild animals, general pharmacotherapies applied in wildlife; chemical reproductive manipulation of wildlife and drugs used in some unusual species.
The course will be presented annually provided three or more students register.

(4) **Pharmacology 709 – Industrial Pharmacology:**
12 weeks, 3 hours p.w., 6 credits.
Advanced study of the design and development of veterinary pharmaceuticals; veterinary pharmaceutical manufacture; veterinary pharmaceutical services; drug control and registration; theoretical and practical training on the collation of a registration dossier; and the marketing and sales of veterinary products.
The course will be presented annually provided three or more students register.

(5) **Pharmacology 775 – Clinical Pharmacology for Small Animals:**
16 weeks, 3 hours p.w., 8 credits.
Advanced clinical pharmacological studies in small animals including: special pharmaceutical, pharmacokinetic, pharmacodynamic and pharmacotherapy features related to dogs and cats; species-specific therapeutic objectives and rational pharmacotherapy; specialised drug therapy; specialised patient pharmacotherapy; and adverse drug effects.
The course will be presented annually provided that at least three students register.
Pharmacology 776 – Advances Studies on the Fundamentals of Veterinary Pharmacology: 16 weeks, 3 hours p.w., 8 credits.
The course will be presented annually provided three or more students register.

Pharmacology 777: 20 weeks, 3 hours p.w., 12 credits.
A combination of FAR 706, 707 and 775. Mainly aimed at students who envisage following a specialisation for the MMedVet degree.

Pharmacology 800
Information can be obtained from the Department.

General Veterinary Pharmacology 300: 5th and 6th semester: 3 l.p.w.
General principles of pharmaceuticals, pharmacokinetics, pharmacodynamics and pharmacotherapeutics. Regulatory control of veterinary medicines and dispensing requirements. A study of groups of functional, systemic and chemotherapeutic drugs used in general veterinary practice with regard to their origin, classification, representative disposition, dosage forms, general indication, safety and side effects.

Toxicology 300: 5th and 6th sem. 3 l.p.w.
General principles of veterinary toxicology, with emphasis on the relevant factors and circumstances regarding the process of poisoning; special toxicology with regard to inorganic and organic compounds, fungi, algae, plants, dips and insecticides, snake-bite poisoning, etc.
Plant poisonings, mytotoxins, inorganic and organic poisonings under the following headings: epidemiology and species affected, description, identifications, distribution and poisonous component (if applicable), working mechanism, toxicity, clinical signs, pathology (limited to the most important lesions); diagnosis, differential diagnosis, treatment and control or prevention. A plant collection is required.

Toxicology 701 – Basic and Clinical Veterinary Toxicology:
7 weeks, 3 hours per week,: 80% theory, 20% practical work: 5 credits
Advanced studies in toxicological principles to enable students to develop proficiency in routine toxicological investigations, treatment, advice and diagnostic procedures.
The course will be presented annually provided two or more students register.

Toxicology 702 – Laboratory Toxicological Testing:
6 weeks, 3 hours: 80% theory, 20% practical work, 2 credits.
Advanced studies in laboratory toxicological testing and methodology.
The course will be presented annually provided two or more students register.
(13) (TOK 703) **Toxicology 703 – Phytotoxins and Mycotoxins:**
8 weeks, 3 hours: 90% theory, 10% practical work, 6 credits
Advanced training in the most important and well-known plant poisoning syndromes and mycotoxicoses as well as an introduction to newer and less important poisonous plants and mycotoxins. The course will be presented annually provided two or more students register.

(14) (TOK 704) **Toxicology 704 – Organic and Inorganic Toxins:**
6 weeks, 3 hours: 90% theory, 10% practical work, 5 credits.
Advanced training on the most important and well-known zootoxicoses and organic and inorganic poisons, and an introduction to less common organic and inorganic poisoning and other poisonous-venomous species of veterinary importance in southern Africa. The course will be presented annually provided two or more students register.

(15) (TOK 800) **Toxicology 800**
Details can be obtained from the Department.

### DEPARTMENT OF PRODUCTION ANIMAL AND COMMUNITY HEALTH

(1) (BHP 600) **Applied Bovine Health and Production 600:**
Practical tuition under supervision in the diagnosis, treatment and control of diseases of cattle. Includes tuition during after-hours, weekends and vacations.

(2) (PHP 600) **Applied Porcine Health and Production 600:**
Practical instruction on course matter dealt with in Porcine Health and Production 500.

(3) (PPR 600) **Applied Poultry Health and Production 600:**
Practical instruction on course matter dealt with in Poultry Health and Production 500.

(4) (SSH 600) **Applied Small Stock Health and Production 600:**
Practical instruction on course matter dealt with in Small Stock Health and Production 500.

(5) (PHE 600) **Applied Veterinary Public Health 600:**
Two rotations of 16.5 tutorials and 8.5 practicals per week per student for practical instruction and applied consideration of the basic principles of subject areas dealt with in PHE 500.

(6) (BKG 781) **Dairy Cattle Herd Health 781:** 6 credits
A semester module based on dairy-farm visits, discussions, seminars and case studies. The course 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.
(7) (BKG 782) **Beef Herd Health 782**: 4 credits
A semester module based on beef cattle-farm visits, discussions, seminars and case studies. The course 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 within a wide spectrum of beef cattle farming systems and feedlots.

(8) (BKG 800) **Cattle Herd Health 800**: Specialised training based on farm visits, discussions, seminars and case studies. Specialised integration and application of knowledge so that health and production problems can be identified and solved on a herd basis, while health status and production effectiveness of herds can be raised from a holistic and cost-effective viewpoint within a wide spectrum of dairy and beef cattle farming systems and feedlots.

(9) (EPI 751) **Epidemiology 751**: 5 credits. Paper-based distance learning course. Prerequisite: BVSc or equivalent qualification. Recommended: Grade 12 Mathematics (NB. Students who have graduated within the last three years and who wish to do a MSc in epidemiology may apply for exemption from this module.) An introductory course in veterinary epidemiology designed to provide a sound foundation in epidemiology. The module is designed as a paper-based distance learning course which will enable students to complete it in their own time, at their own pace and place. The modules cover aspects of population medicine, disease outbreak investigation, clinical epidemiology, experimental studies, observational studies, surveys, analytical tools and serological tests.

(9) (EPI 752) **Epidemiology 752**: 4 credits. Paper-based distance learning course. Prerequisite: BVSc or equivalent qualification and Matriculation Mathematics. Applied statistical methods for veterinarians. This module provides students with a foundation in statistical methods commonly used by research veterinarians and veterinary specialists. The module is designed as a paper-based distance learning course which will enable students to complete it in their own time, at their own pace and place. The modules cover statistical building blocks, confidence intervals, hypothesis testing, chi-square procedures, regression and correlation, paired and pooled t-tests, analysis of variance, parametric and non-parametric tests.

(10) (EPI 753) **Epidemiology 753**: 3 credits. (Prerequisite: EPI 751 and EPI 752) (Prerequisites: Advanced statistical techniques and Geographical Information Systems) This module is currently under revision and will not be offered this year.

(11) (EPI 754) **Epidemiology 754**: 5 credits. (Prerequisite: EPI 751 and Grade 12 Mathematics) This module is aimed at those professionals interested in advanced epidemiological techniques or who wish to pursue the Master’s degree programme in Veterinary Epidemiology. It covers aspects of disease modelling, risk assessment and animal health economics.
(12) **Laboratory Animal Science 700**: (Prerequisite VRM 781, VRM 782)
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.

(13) **Laboratory Animal Science 800**
Pre-requisite: VRM 781, VRM 782
An advanced course in the role of the veterinarian in laboratory animal medicine and practical aspects relating to the promotion of a productive scientific effort in the biomedical sciences. A research project is a pre-requisite.

(14) **Medicine (Bovids) 705**: 4 credits
Advanced study in cattle medicine and surgery. The course will include selected practical aspects.

(15) **Medicine (Bovids) 801**
Advanced study in regard to species in the organ, metabolic and deficiency diseases of bovids. Pathophysiology, diagnostic and treatment methods are emphasised.

(16) **Pig Herd Health 780**
A semester module based on farm visits, discussions, seminars and case studies. The course will enable students to integrate and apply knowledge so that health and production problems can be identified and solved on a herd basis, and health status and production effectiveness can be raised from a holistic and cost-effective viewpoint.

(17) **Pig Herd Health 800**
Specialised training based on farm visits, discussions, seminars and case studies. Integration and application of knowledge so that health and production problems can be identified and solved on a herd basis, and health status and production effectiveness of pig herds can be raised within a wide spectrum of pig-farming systems.

(18) **Porcine Health and Production 500**: 3 l.p.w.
Theoretical training in pig parasitic and infectious diseases, herd health and management programmes to integrate and apply the knowledge of relevant veterinary courses with a view to identifying and solving problems on a herd basis. Further to improve the health status and production effectiveness of intensive and extensive piggeries from a holistic and cost-effective viewpoint. Departments involved in lectures: Departments of Production Animal and Community Health; Veterinary Tropical Diseases; Pathology; and Reproduction.
Veterinary Science

(19) (PPR 500) **Poultry Health and Production 500**: 3 l.p.w.
Study of the health risks affecting poultry production including breeding, housing, nutrition, diseases and management. The course provides students with the basic information regarding the health risks and a problem-based syndrome approach covering the major production-related problems in poultry production, including limited-resource poultry farming.

(20) (PHP 771) **Poultry Health and Production 771**: 8 credits
Advanced training in poultry health and production systems (Honours level)

(21) (PVV 700) **Poultry Nutrition 700**: 5 credits
Commercial poultry nutrition (Honours level)

(22) (PHP 800) **Poultry Health and Production 800**
Advanced training (Masters level) in poultry health and production. This course is a prerequisite for the MMedVet(Altit) degree.

(23) (SSH 500) **Small Stock Health and Production 500**
Theoretical training in the infectious and parasitic diseases of small stock, aspects of medical, surgical and reproductive disorders affecting small stock. Applied nutrition and flock health.

(24) (KKS 780) **Small Stock Herd Health 780**: 6 credits
A semester module based on farm visits, discussion, seminars and case studies. The course will enable students to integrate and apply knowledge so that health and production problems can be identified and solved on a flock basis and health status and production effectiveness of small stock flock can be raised from a holistic and cost-effective viewpoint.

(25) (KKS 800) **Small Stock Herd Health 800**
Specialised training based on farm visits, discussions, seminars and case studies. Specialised integration and application of knowledge so that health and production problems can be identified and solved on a herd basis, and health status and production effectiveness of small stock herds can be raised from a holistic and cost-effective viewpoint, within a broad spectrum of sheep and goat-farming systems and feedlots.

(26) (PHE 500) **Veterinary Public Health and Applied Epidemiology 500**
1st semester: 4 l.p.w. 2nd semester: 5 l.p.w.
The role of the veterinary surgeon in veterinary public health. Veterinary food hygiene and nutrition-related diseases of veterinary importance regarding food of animal origin. Meat and milk hygiene; all necessary measures to ensure that food of animal origin is safe, sound and wholesome at all stages of production and manufacture, up to the consumer. Veterinary aspects of environmental health. Zoonoses in veterinary science. Introduction of the use of laboratory animals in biomedical research. Introduction to veterinary epidemiology and the development of basic principles by way of case studies. Introduction to the social aspects of the human-animal interaction with regard to protecting and promoting human health. Departments involved in lectures: Departments of Production Animal and Community Health; Veterinary Tropical Diseases; Paraveterinary Studies.
Veterinary Science

(27) (VPH 781) Veterinary Public Health 781: 4 credits
Specific activities in Veterinary Meat Hygiene: Red Meat, relating to prevention and control of zoonoses and other diseases transmitted by meat, 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.

(28) (V PH 782) Veterinary Public Health 782: 3 credits
Specific activities in Veterinary Meat Hygiene: Poultry, relating to prevention and control of zoonoses and other diseases transmitted by meat, pre-harvesting, harvesting and post-harvesting aspects of poultry meat production, practical application of HACCP relating to the specific activities, prevention and control of chemical residues in meat, including veterinary drug residues.

(29) (VPH 783) Veterinary Public Health 783: 4 credits
Specific activities in Veterinary Milk Hygiene, relating to prevention and control of zoonoses and other diseases transmitted by milk, pre-harvesting, harvesting and post-harvesting aspects of milk production, practical application of HACCP relating to the specific activities, prevention and control of chemical residues in milk, including veterinary drug residues.

(30) (VPH 784) Veterinary Public Health 784: 4 credits
Specific activities in Environmental Health, relating to control of zoonoses of environmental origin, safe collection and disposal of dead animals, condemned meat and other animal wastes, the control of environmental pollution in animal settlements and animal industries, preservation of the urban and rural environment by controlling animal populations, prevention of occupational hazards and diseases connected with live animals and their products in both rural and urban environments in emergency and disaster situations, an overview of the beneficial effects of the human-animal interrelationship using companion animals and the principles of pet-facilitated therapy.

(31) (VVD 700) Veterinary Public Health 700: 8 credits (Old course)
A synoptic and advanced course in Veterinary Public Health

(32) (VVD 701) Veterinary Public Health 701

(33) (VVD 800) Veterinary Public Health 800
Specialised integration and application of knowledge within a single specific activity (core module) in Veterinary Public Health, including an approved research project.

(34) (VRM 781) Veterinary Research Methodology 781: 1 credit
An introductory module to research methodology aimed at graduates who are interested in veterinary research or postgraduate study in the Faculty. The module covers research opportunities, research degrees, writing an essay, article or contract report, the presentation of posters or papers, planning a research project, design of a protocol, questionnaires, experimental design as well as the use of microcomputers and the library in research. This course is a prerequisite for Epidemiology 755.
Veterinary Science

(35) (VRM 782) **Veterinary Research Methodology 782**: 2 credits
(Prerequisite: VRM 781)
An advanced course in research methodology for veterinarians involved with laboratory animals and/or laboratory work. The module covers nutrition, housing, handling and sample-taking of laboratory animals, administrative tasks and record-keeping, laboratory safety procedures and waste disposal, quality control and basic laboratory techniques. A large component of this course entails laboratory practicals.

**DEPARTMENT OF REPRODUCTION**

(1) (BHP 470) **Bovine Health and Production 470**: 15 l.p.w.
The diagnosis, treatment and control of diseases in cattle. Aspects of clinical veterinary science, including components of contagious and parasitic diseases, clinical diagnosis, clinical pathology, diagnostic imaging, therapeutics, medicine, surgery, reproduction, pathology and applied nutrition and herd health.

(2) (GSK 702) **Reproduction (Cattle) 702**: 6 credits
Reproductive physiology, obstetrics, neonatology, gynaecology and andrology of cattle at postgraduate level. The application of knowledge in the management and control of reproduction and pathological conditions of the reproductive system is emphasised. Also included is the examining of animals to determine suitability for breeding, storage of semen and embryo transfer (practical training).

(3) (GSK 703) **Small Stock Reproduction 703**: 5 credits
Reproductive physiology, obstetrics, neonatology, gynaecology and andrology of small stock at postgraduate level. The application of knowledge for the management and control of reproduction and pathological conditions of the reproductive system are emphasised. Also included is the examining of animals to determine suitability for breeding, laparoscopic insemination, storage of semen and embryo transfer (practical training).

(4) (GSK 704) **Equine Reproduction 704**: 6 credits
Reproductive physiology, obstetrics, neonatology, gynaecology and andrology of horses at postgraduate level. The application of knowledge in the management and control of reproduction and pathological conditions of the reproductive system is emphasised. Also included is the examining of animals to determine suitability for breeding, storage of semen and embryo transfer (practical training).

(5) (GSK 705) **Small Animal Reproduction 705**: 5 credits
Reproductive physiology, obstetrics, neonatology, gynaecology and andrology of small animals at postgraduate level. The application of knowledge in the management and control of reproduction and pathological conditions of the reproductive system is emphasised. Also included is the examining of animals to determine suitability for breeding, storage of semen practical training regarding embryo transfer.
(6) (GSK 706) **Wildlife Reproduction 706**: 5 credits
Reproductive endocrinology and physiology of wild mammals and birds including ostriches. Management systems for the natural and artificial breeding of wildlife held captive under intensive conditions. Monitoring reproduction through intervention and non-intervention methods. Use of artificial breeding methods for wildlife. Collection of gametes of live and dead animals for short and long-term storage.

(7) (GSK 707) **Reproduction 707**: 7 credits
This course also serves as a prerequisite module for species modules GSK 702 to 706.
General reproductive endocrinology and physiology of domestic 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-impregnation; 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 *in vitro* insemination.

(8) (GSK 800) **Reproduction 800**
Reproduction 511, 521 and 610 serve as basis for advanced training in obstetrics, gynaecology, andrology and artificial insemination as well as herd health of domestic animals.

**DEPARTMENT OF VETERINARY PHYSIOLOGY**

(1) (PHC 200) **Physiology and Physiological Chemistry 200**: 10 l.p.w. (including practical work).
The physiology and physiological chemistry of the live cell. The physiology and physiological chemistry of all the physical systems of domestic and farm animals.

(2) (APH 301) **Applied Physiology 301**: 5th and 6th sem.: 2 l.p.w.
Applied physiology of domestic and farm animals.

(3) (FSG 713) **Physiology 713**: Advanced Systematic Physiology: 16 weeks, 3 hrs p.w., 6 credits.
Continuation of tuition at an advanced level, with the emphasis on applied and pathophysiology. Admission to the course must be discussed with the Head of Department during June of the preceding year. Prospective students must pass an entrance test during November of the preceding year to be admitted to the course.

(4) (FSG 787) **Physiology (c.s.) 787**: 8 weeks, 3 h.p.w.: 5 credits
Pathophysiology of clinical syndromes (*capita selecta*).

(5) (FSG 788) **Physiology (c.s.) 788**: 8 weeks 3 h.p.w. 5 credits
Applied Physiology of a selected topic (*capita selecta*).
Veterinary Science

DEPARTMENT OF VETERINARY PRODUCTION AND ETHOLOGY

(1) (ECP 200) **Ecology and Pasture Science 200**: 3rd and 4th sem: 2 l.p.w.
To make students aware of ecological laws and processes and how these impact on pasture science. This knowledge will enable students to advise farmers regarding good veld and pasture management as well as the conservation of vegetation.

(2) (AHG 200) **Animal Handling 200**: 3rd and 4th sem. 3 prac.p.w.
Animal contact sessions are compulsory and include, hands-on sessions for domestic animals. Students are expected to acquire the skills necessary to handle animals, and know how and why a range of basic animal management procedures are carried out.

(3) (VPE 301) **Animal Production and Ethology 301**: 5th sem.: 9 l.p.w. + 3 prac.p.w.
6th sem.: 10 l.p.w.
Introduction to the fundamentals of animal behaviour, animal genetics, animal management and animal nutrition. Applied courses followed on dogs, cats, horses, dairy and beef cattle, sheep, goats and pigs. Practical classes provide further practical learning opportunities. Extra involvement in animal management systems is required from students. Practical projects, including farm visits as determined by the Department according to established needs, have to be completed during university holidays and reports on the projects will be taken into account for evaluation purposes.

(4) (CAB 700) **Companion Animal Behaviour 700**: 6 credits
Six seminars will be required according to the standard and format set by the Department. The course extends over one year. No specific practical projects are required, but projects may constitute part of the preparation for the seminars. The species concerned are horses, dogs and cats, and the course content will include the study of animal needs, genetics, nutrition, management, housing, record-keeping, hygiene and welfare of animals. Special attention is given to animal behaviour.

(5) (PAM 700) **Production Animal Management 700**: 6 credits
Six seminars will be required to the standard and format determined by the Department. The course extends over one year. No specific practical projects are required, but projects may constitute part of the preparation for the seminars. The species concerned are dairy cattle, beef cattle, small stock and pigs. The course content includes the study of animal genetics, nutrition, management, housing, keeping of records, hygiene, welfare and behaviour, with special emphasis on nutrition. An oral examination takes place at the conclusion of the course.

(6) (VET 800) **Veterinary Ethology**
Details can be obtained from the Department.
1. **(AEZ 781)** *African Epizootic Diseases 781*: Short course, 2 credits
   Training in the epidemiology, diagnosis and control, as well as the demonstration of economically important epizootic diseases of production and other animals in Africa. (The credits may count towards obtaining a diploma or an honours degree)

2. **(BAL 700)** *Bacteriology 700*: Year course, 5 credits
   Advanced training in veterinary bacteriology, including rickettsiology and mycology with particular emphasis on diagnostic and other laboratory techniques.

3. **(BAS 700)** *Bacterial Diseases 700*: Year course, 8 credits
   Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of bacterial, fungal and rickettsial diseases of production and companion animals.

4. **(DAP 771)** *Draught Animal Power 771*: 4-week course (intensive, full-time), 7 credits
   Practical and applied aspects of draught (or traction) animal power, including nutrition, health, socio-economic, participatory rural valuation techniques, promotion of draught animal power, measuring work performance and selection, and use of harnesses and work tools for draught animals.

5. **(HEL 700)** *Helminthology 700*: Year course, 8 credits
   Advanced study of biology, prevention and control as well as the veterinary and socio-economic importance of parasitic worms in production and companion animals.

6. **(IFS 771)** *Infectious Diseases (Large Stock) 771*: Year course, 9 (7) credits
   Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the virus, bacterial, fungal, rickettsial (and protozoal) diseases of cattle.

7. **(IFS 772)** *Infectious Diseases (Dogs and Cats) 772*: Year course, 5 credits
   Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the virus, bacterial, fungal, rickettsial (and protozoal) diseases of dogs and cats.

8. **(IFS 773)** *Infectious Diseases (Small stock) 773*: Year course, 6 credits
   Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the virus, bacterial, fungal, rickettsial (and protozoal) diseases of small stock.

9. **(IFS 774)** *Infectious Diseases (Horses) 774*: Year course, 6 credits
   Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the virus, bacterial, fungal, rickettsial (and protozoal) diseases of horses.
Veterinary Science

(10) (IFS 775) **Infectious Diseases (Pigs) 775**: Year course, 6 credits
Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the virus, bacterial, fungal, rickettsial (and protozoal) diseases of pigs.

(11) (IFS 776) **Infectious Diseases (Public Health) 776**: Year course, 7 (5) credits
Advanced theoretical study of the occurrence, prevention and control as well as the socio-economic importance of the virus, bacterial, fungal, rickettsial (and protozoal) diseases (zoonoses).

(12) (IFS 777) **Infectious Diseases (Wildlife) 777**: Year course: 6 (5) credits
Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the virus, bacterial, fungal, rickettsial (and protozoal) diseases of wildlife.

(13) (IMI 300) **Immunology and Microbiology 300**: 5th and 6th sem.: 4 l.p.w.
Immunology and Microbiology: Basic and applied aspects of the two fields are studied.
Immunology: deals with the basic concepts related to the immune response of animals to infectious, non-infectious and parasitic conditions and the principles and application of immunodiagnostics.
Microbiology: deals with taxonomy and biophysical properties of pathogenic bacteria (including mycoplasmas), fungi, viruses, rickettsias and protozoa of animals. Basic concepts of infectious diseases related to epidemiology, socio-economics, athogenesis, diagnosis, prevention, control and eradication are discussed.

(14) (IMM 700) **Immunology 700**: Year course, 8 credits.
Advanced theoretical study in immunology with special emphasis on veterinary science.

(15) (MBG 781) **Microbiology (Laboratory Diagnostic Series) 781**: Short course, 4 credits per course
Practical training in either veterinary bacteriology or virology; or protozoology or immunology with particular emphasis on applicable techniques for diagnostic laboratories and field workers in Africa. (The credits may be used towards obtaining a diploma or an honours degree).

(16) (PAR 781) **Parasitology (Laboratory Diagnostic series) 781**: Short course, 4 credits per course.
Practical training in either veterinary helminthology or ectoparasitology with particular emphasis on applicable techniques for diagnostic laboratories and field workers in Africa. (The credits may be used towards obtaining a diploma or an honours degree).

(17) (PAR 772) **Parasitology (Cattle) 772**: Year course, 9 (7) credits.
Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the worms, ectoparasites (and protozoal diseases) of cattle.
(18) (PAR 773) **Parasitology (Small Stock) 773**: Year course, 7 credits.
Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the worms, ectoparasites (and protozoal diseases) of small stock.

(19) (PAR 774) **Parasitology (Public Health) 774**: Year course, 6 (4) credits.
Advanced theoretical study of the occurrence, prevention and control as well as the socio-economic importance of the worm, ecto- (and protozoal) parasites that are zoonoses.

(20) (PAR 775) **Parasitology (Wildlife) 775**: Year course, 6 (5) credits.
Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the worms, ectoparasites (and protozoal diseases) of wildlife.

(21) (VBM 500) **Veterinary Business Management and Ethics 500**: 2 l.p.w.
The course is divided into three areas of study, namely Veterinary Business Management, Veterinary Jurisprudence and Ethics, and Regulatory Veterinary Services. The first section includes all principles of general management in veterinary practice. The second section includes all statutes involving the veterinary profession, and the third section includes control measures to prevent the spread of nationally and internationally recognised notifiable disease and the certification of animals and animal products.

(22) (PTS 700) **Protozoal Diseases 700**: Year course, 8 credits.
Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the protozoal diseases of production and companion animals.

(23) (RMD 510) **Research Methodology 510**: 1st semester: 3 l.p.w.
Details of this subject course can be obtained from the Department.

(24) (VEP 701) **Veterinary Ectoparasitology 701**: Year course, 8 credits
Advanced study of the biology, prevention and control as well as the veterinary and socio-economic importance of ectoparasites of production and companion animals. Students also have to collect and identify free-living and parasitic arthropoda.

(25) (VIR 700) **Virology 700**: Year course, 5 credits.
Advanced training in veterinary virology with particular emphasis on diagnostic and other laboratory techniques.

(26) (VIS 700) **Virus diseases 700**: Year course, 8 credits
Advanced theoretical study of the biology, prevention and control as well as the veterinary and socio-economic importance of the virus diseases of production and companion animals.

(27) (VTP 300) **Introductory Veterinary Parasitology 300**: 5th and 6th sem.: 2 l.p.w.
Introduction and terminology of helminths (nematodi, cestodi and trematodi) and ectoparasites (ticks, mites, diptera flies, fleas, bugs and lice) of importance to domestic animals in South Africa.
General concepts related to the taxonomy, identification, pathogenesis, clinical signs and epidemiology and control of these parasites. Control includes the suitable use of anti-parasitic drugs, present status of resistance, biological and integrated control as well as the management, control and prevention of zoonoses.

(28) (WOC 510) **Wildlife, Ostrich and Crocodile Health 510**: 1st semster: 3 l.p.w.
A one-semester (elective) course designed to give veterinary students a working knowledge of the most important infections and parasitic diseases of wildlife and the principles of good management and care of both free-living and farmed populations of wild mammals, ostriches and crocodiles.

(29) (WSK 700) **Wildlife Diseases 700**: Year course, 8 credits
Basic principles of ecology and epidemiology. Mammalogy, including taxonomy, behaviour, nutrition and physiology.
The pharmacology of tranquilisers and the practical application of capture techniques.
Captivity and transit of game.

(30) (WSK 800) **Wildlife Diseases 800**:  
(i) Game farming and the utilisation of wildlife: capturing, handling, transit, meat production, hunting, fencing, carrying capacity, and nutrition. Wildlife diseases: epidemiology, particularly where contact between wildlife and cattle causes the spreading of disease, control measures, diagnostic methods, zoonoses. Veterinary aspects: game in confined areas, design of pens, nutrition, treatment of diseases – internal and external parasites. Treatment of birds and reptiles. Specialised game farming; breeding endangered species; crocodile farming, intensive game farming.
(ii) Pharmacology.  
(iii) Parasitology.
(iv) Veterinary Public Health  
(v) Pasture Management.
(vi) Clinical Pathology.  
(vii) Reproduction.
(viii) Infectious Diseases  
(ix) General Pathology.
(x) Pathophysiology.

Students may be exempted from modules that correspond with their prerequisite subjects.
### MEDALS AND PRIZES IN THE FACULTY

<table>
<thead>
<tr>
<th>Prize</th>
<th>Donor</th>
<th>Criteria</th>
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<tbody>
<tr>
<td>Bachelor of Veterinary Science</td>
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<tr>
<td>ABSA Anatomy Prize</td>
<td>ABSA</td>
<td>Best achievement in Anatomy 213 and 224.</td>
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<tr>
<td>ABSA Prize for Reproduction</td>
<td>ABSA</td>
<td>Best achievement in the clinical aspects of reproduction in the final year.</td>
</tr>
</tbody>
</table>
| Bayer Prize                                | Bayer (SA) Animal Health                  | • Aptitude and best achievement in Pathology throughout the degree programme  
• Best achievement in Introductory Veterinary Parasitology at the end of the third year.                                                                                                               |
| Beckman Coulter Prize                      | Beckman Coulter SA (Pty) Ltd.             | Best performance in Applied Physiology & Pathophysiology at the end of the third year.                                                                                                                     |
| Douw G. Steyn Floating Trophy              | Mrs E.J.A. Steyn                          | Best progress in Pharmacology 300 and Toxicology 300.                                                                                                                                                     |
| IAMS Pet Food Prize                        | IAMS                                      | Best achievement in Animal Production & Ethology and Small Animal Clinical Studies 470 at the end of the 4th year.                                                                                             |
| Intervet Prize for Poultry Health and Production | Intervet S A (Pty) Ltd                   | Best performance in Poultry Health and Production at the end of the 5th and 6th year.                                                                                                                      |
| Kyron Surgery Prize                        | Kyron Laboratories (Pty) Ltd.             | Aptitude and best achievement in surgical skills in the final year.                                                                                                                                       |
| Kyron Prize for Clinical Excellence        | Kyron                                     | Aptitude and best achievement in clinical skills in the final year.                                                                                                                                       |
| Malie Smuts Prize                          | Prof M.M.S. Smuts                         | Best performance in Anatomy 213 and 224.                                                                                                                                                                  |
| M.H.V. Brown Memorial Prize                | South African Veterinary Association      | Best performance in Introductory Veterinary Parasitology and Immunology & Microbiology 300 at the end of the 3rd year.                                                                                         |
| National Wool Grower’s Association Prize for Small Stock Flock Health and Production | National Wool Grower’s Association       | Best performance in applied Small Stock Health and Production at the end of the final year.                                                                                                                                 |


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<tbody>
<tr>
<td>Pfizer Prize</td>
<td>Pfizer South Africa Division Animal Health</td>
<td>• Best performance in all examination courses at the end of the 2&lt;sup&gt;nd&lt;/sup&gt; year&lt;br&gt;• Best performance in all examination courses at the end of the 3&lt;sup&gt;rd&lt;/sup&gt; year&lt;br&gt;• Best practical and theoretical achievement in Applied Veterinary Public Health in the final year.</td>
</tr>
<tr>
<td>P.J. du Toit Memorial Medal</td>
<td>&lt;i&gt; Farmers’ Weekly &lt;/i&gt;</td>
<td>Best performance in Animal Production and Ethology at the end of the 3&lt;sup&gt;rd&lt;/sup&gt; year.</td>
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<tr>
<td>Porcine Health and Production Prize</td>
<td>SA Pig Producers Organisation (SAPPO)</td>
<td>Best achievement in Applied Porcine Health and Production in the final year.</td>
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<tr>
<td>SA Veterinary Association Prize</td>
<td>SA Veterinary Association</td>
<td>Best achievement in Veterinary Public Health and Applied Epidemiology 500.</td>
</tr>
<tr>
<td>S A Veterinary Association Group Prize</td>
<td>S A Veterinary Association</td>
<td>To all students in the two best clinic groups in the final practical year.</td>
</tr>
<tr>
<td>SSEM Small Animal Medicine Prize</td>
<td>SSEM</td>
<td>Best performance in the clinical aspects of small animal medicine in the final year.</td>
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<tr>
<td>Taurus Prize for Bovine Reproduction</td>
<td>Taurus Co-operative</td>
<td>Best achievement in bovine reproduction in the Bovine Health and Production 470 course.</td>
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<tr>
<td>The Equine Practitioners Group Prize</td>
<td>The Equine Practitioners Group of the SA Veterinary Association</td>
<td>Best final year student in Equine Clinical Studies 500 and Applied Equine Clinical Studies</td>
</tr>
<tr>
<td>Theiler Memorial Medal</td>
<td>Faculty of Veterinary Science</td>
<td>To the student who excels in merit and dedication throughout the veterinary degree programme.</td>
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<tr>
<td>Prize</td>
<td>Donor</td>
<td>Criteria</td>
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<tr>
<td>Virbac Prize for Immunology and Microbiology</td>
<td>Logos AGVET (Div. of Logos Pharmaceuticals (Pty) Ltd</td>
<td>Best achievement in Immunology and Microbiology 300.</td>
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<tr>
<td>University Diploma in Veterinary Nursing</td>
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<tr>
<td>Adcock Ingram Prize for Intensive Care Nursing</td>
<td>Adcock Critical Care Ltd</td>
<td>Best achievement in practical intensive care nursing, taking into account the level of professionalism.</td>
</tr>
<tr>
<td>Beckman Coulter Prize for Physiology</td>
<td>Beckman Coulter SA (Pty) Ltd</td>
<td>Best achievement in Physiology 104.</td>
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<tr>
<td>Janssen Pharmaceutica Prize</td>
<td>Janssen Cilag</td>
<td>Best achievement in both the theoretical and practical aspects of Medical Nursing 200.</td>
</tr>
<tr>
<td>Kyron Laboratories Prize</td>
<td>Kyron Laboratories</td>
<td>Best achievement in both the theoretical and practical aspects of Anaesthesiology 200.</td>
</tr>
<tr>
<td>Merial Prize</td>
<td>Merial S A (Pty) Ltd</td>
<td>Best achievement in Pharmacology 100</td>
</tr>
<tr>
<td>SA Veterinary Association Practical Prize</td>
<td>SA Veterinary Association, Witwatersrand Branch</td>
<td>Best practical aptitude during the clinic semester of the final year.</td>
</tr>
<tr>
<td>The Veterinary Nurses Association of South Africa Medal</td>
<td>Veterinary Nurses Association of South Africa</td>
<td>A gold medal for excellence in all aspects of the diploma programme.</td>
</tr>
<tr>
<td>X-ray Imaging Services Prize</td>
<td>X-ray Imaging Services (Pty) Ltd</td>
<td>Best performance in Radiography 200.</td>
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<tr>
<td>Other</td>
<td></td>
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<tr>
<td>SRC Honorary Medal *</td>
<td>Student Representative Council</td>
<td>To the student who has contributed the best service to the student community.</td>
</tr>
</tbody>
</table>

* Not limited to the Faculty of Veterinary Science