

**FACULTIES OF THE UNIVERSITY  
OF PRETORIA**

HUMANITIES

EDUCATION

NATURAL, AGRICULTURAL AND INFORMATION SCIENCES

LAW

THEOLOGY

ECONOMIC AND MANAGEMENT SCIENCES

VETERINARY SCIENCE

HEALTH SCIENCES

DENTISTRY

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PRETORIA  
0002**

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**FACULTY OF VETERINARY SCIENCE**

**ACADEMIC PERSONNEL AS ON 30 JUNE 1999**

**DEAN**

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**ASSOCIATE DEAN**

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

**DIRECTOR OF CLINICAL SERVICES**

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 Aire, T.A., DVM PhD(Ibadan) FVCS(Nig) ..... Associate Professor  
 Ohale, L.O.C., DVM 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  
 Hornsveld, M., BVSc(Pret) ..... Senior Lecturer

**Department Companion Animal Medicine**

Stadler, P., BVSc(Hons) MMedVet(Med) MBA(Pret)..... Professor (Head)  
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 Shakespeare, T., BSc(Eng)(Elec) BVSc(Hons) MMedVet(Med)(Pret) .... Senior Lecturer  
 Rajput, J., BVMCh(Medunsa) ..... Lecturer  
 Miller, D.J., BVSc(Hons)(Pret) ..... Lecturer  
 Jacobson, J.S. BVSc(Pret) ..... Research Officer

**Department of Companion Animal Surgery**

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 Coetzee, G.L., MMedVet(Surg)(Pret) ..... Associate Professor  
 Lambrechts, N.E., MMedVet(Surg)(Pret) ..... Associate Professor  
 Lübbe, A.M., MMedVet(Surg)(Pret) ..... Associate Professor  
 Stegmann, G.F., MMedVet(Anaes)(Pret) DTI Dip ECVA ..... Associate Professor  
 Olivier, A., MMedVet(Surg)(Pret) DTI MS (USA) ..... Associate Professor  
 Bester, L., Dip Cur(Anim) BVSc(Pret) DTI ..... Senior Lecturer  
 Booth, M.J., BVSc(Pret) ..... Senior Lecturer  
 Fourie, S.L., MMedVet(Rad) Dip ECVDI ..... Senior Lecturer  
 Joubert, K.E., BVSc(Pret) ..... Senior Lecturer  
 Du Plessis, N., BVSc(Pret) ..... Senior Lecturer  
 Marais, J., BVSc(Pret) ..... Senior Lecturer  
 Riley, A., BVSc(Pret) ..... Senior Lecturer  
 Hill, I T., MMedVet(Surg)(Pret) ..... Senior Lecturer  
 Spotswood, T., BVSc(Pret)..... Senior Lecturer

## Veterinary Science

Goodhead, A., MMedVet(Oph)(Pret).....	Senior Lecturer
Venter, I., MMedVet(Oph)(Pret).....	Senior Lecturer
Steenkamp, G., BSc BVSc(Pret).....	Senior Lecturer
Turner, P.H., MMedVet(Surg)(Pret).....	Senior Lecturer

### Paraveterinary Studies

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Botha, A.E., Dip Cur Anim THED(Pret).....	Lecturer

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Cotton, C.G., BSc BVSc(Pret) Dipl Adv Pub Admin PDL.....	Associate Professor
Buss, P.E., BVSc(Queensland).....	Senior Lecturer

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Veary, C.M., BVSc MMedVet(Hyg)(Pret).....	Professor (Head)
Lourens, D.C., BVSc MMedVet(Med)(Pret).....	Professor
Le Roux, C.D., BVSc(Pret) MSc(Stell).....	Professor
Gummow, B., BVSc(Hons) MMedVet(Pharm)(Pret).....	Associate Professor
Petty, K.P., BSc(Hons)(Witwatersrand) BVSc(Pret).....	Associate Professor
Carrington, C.A.P., BVSc(Pret) B Comm(Unisa).....	Senior Lecturer
Du Preez, E.R.B., Agric(UOFS) BVSc(Pret) MSc(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)(Pret).....	Senior Lecturer
Myburgh, J.G., Dip Pasture Management BVSc(Hons)(Pret).....	Senior Lecturer
Odendaal, M.W., MMedVet(Bact)(Pret) PhD(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)(Pret) MMedVet(Gyn)(Pret).....	Senior Lecturer
Shakespeare, A.S., BSc(Eng)(Natal) BVSc(Hons) MMedVet(Med)(Pret).....	Senior Lecturer
Spencer, B.T., BVSc BComm (Unisa) MMedVet(Suill)(Pret).....	Senior Lecturer
Thompson, P.N., BVSc(Pret) MMedVet(Med)(Pret).....	Senior Lecturer
Wandrag, D.B.R., BVSc(Hons)(Pret).....	Senior Lecturer

### Department of Reproduction

Volkman, D.H., BVSc MMedVet(Gyn)(Pret) Dipl Am Coll Therio.....	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

Vacant.....	(Head)
Williams, M.C., MMedVet(Path)(Pret).....	Associate Professor

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Gous, T.A., BVSc(Pret)	Senior Lecturer
Lane, E., BA(Colorado) BVSc MPhil(VetSci)(University of Zimbabwe)	
MHCVS (Great Britain)	Senior Lecturer
Pearson, 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
Strydom, S.V., BVSc(Hons)(Pret)	Senior Lecturer
Brinders, J.M., MSc(UWK)	Senior Lecturer
Vacant	Senior Lecturer

**Department Veterinary Production and Ethology**

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Boyazoglu, P.A., BVSc(Pret) PhD(Minnesota)	Professor
Donkin, E.F., BSc(Agric)(Natal) MPhil(London) PhD(Medunsa)	
Sci Nat(Anim Sci)	Professor
Odendaal, J.S.J., BSc(UOVS) DVSc(Pret) DPhil PhD(Pret)	Professor
Hart, B.L., BS DVM PhD(University of Minnesota)	Professor (Honorary)
Els, H.C., MSc(Agric)(Pret)	Senior Lecturer
Swanepoel, N.C., BA BVSc(Pret)	Senior Lecturer
Van Dyk, E., BSc(Agric) MMedVet(Gyn)(Pret)	Senior Lecturer

**Department of Veterinary Tropical Diseases**

Coetzer, J.A.W., BVSc(Hons) MMedVet(Path)(Pret)	Professor (Head)
Boomker, J., BSc(Zool)(RAU) MMedVet(Parasit)(Pret) DVSc(Medunsa)	Professor
Thomson, G.R., BVSc(Pret) MSc(Birmingham) PhD(London)	Professor (Honorary)
Connor, R.J., MVSc(Liverpool) DVetMed(London)	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
Stewart, C.G., BVMS(Edinburg) BVSc(Hons)(Pret) MSc(London)	Professor
Krecek, R.C., BSc(Florida) MS(East Texas State) DSc(Pret)	Professor
Penzhorn, B.L., BSc(Hons)(Pret) MAgric(Texas A&M) DSc(Wildlife Management) BVSc(Pret)	Professor
Jansen van Vuuren, M., MMedVet(Micro)(Pret)	Associate Professor
Venter, E.H., MSc(UOVS) PhD(Pret)	Associate Professor
Bryson, N.R., BVSc(Pret) BSc(Hons)(Rhodes)	Senior Lecturer
Howell, P.G., BVSc DVSc(Pret)	Senior Lecturer
Picard, J.A., BVSc(Hons)(Pret)	Senior Lecturer
Schwan, E.V., MMedVet MSc(Liverpool) Dr MedVet(Hannover)	Senior Lecturer
Stoltz, W.H., BVSc(Pret)	Senior Lecturer
Tsibane, M.L., BVMCH(Medunsa)	Senior Lecturer

Veterinary Science

**Centre for Equine Research**

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**Price Forbes Chair for Wildlife**

Meltzer, D.G., BVSc MSc(Pret) ..... Professor

**Faculty Administration**

Günther, F. Mrs., BA(Pret) Hons BA(Unisa) ..... Head



<b>GENERAL INFORMATION</b>
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**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 courses closes on 30 June.

**Selection****(a) BVSc degree**

- (i) Selection for the BVSc degree takes place before admission to the **second** year of study, and **all** candidates who wish to be admitted to the course 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 course, are therefore required to register for a BSc or a BSc(Agric) degree course or an equivalent course, with courses at 100 level in **Chemistry** (one full year course or two semester courses), **Physics** (one full year course or two semester courses), **Zoology or Biology** – with a section in Zoology (one full year course or two semester courses), as well as **another year course or two semester courses** 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 course in the subsequent year.

**NB:** Only a limited number of vacancies are reserved for foreign 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.8 (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 subject in the matriculation 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 April 1 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.

### **Open day and orientation**

Details of the open day to which all parents are cordially invited, and the subsequent orientation week during which all new first-year students **must** be present, are obtainable from the Head: Public Relations, University of Pretoria 0002.

### **Prescribed books**

Lists of prescribed books are not available. Students are requested not to purchase any books or instruments before they start with the course. Students have access to a library where most of the important books for the various courses are available.

### **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 and consists of two semesters

**course:** a selected division of a subject deemed to be a unit and to which a course code is allocated, e.g. Anatomy 213 (ANA 213), etc

**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 = undefined.
- 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).

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

**examination mark:** the mark a student obtains for an examination in a course, including practical and clinical examinations where applicable. If necessary, the examination mark is finalised after supplementary examinations have been completed

**extramural study:** classes attended after hours by students who register for the curriculum of a first degree or diploma that is presented over a longer period than the minimum duration indicated in the regulations for the particular degree or diploma

**extended study programme:** a study programme (curriculum) for a degree or diploma that is completed over a longer period than the minimum duration of the particular degree or diploma

**final mark:** the mark calculated on the basis of the semester/year mark and the examination mark a student obtained in a particular course according to a formula which is determined from time to time in the 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

**GS:** a combined mark (semester/year mark plus examination mark) of at least 40%

**level of a course or level:** the academic level of a course which is indicated in the course code

**module:** A portion of a course

**registration:** the process a candidate is required to complete to be admitted as a student of the University or for admission to a 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 a student obtains during the course of a semester or a year for tests, class-work, practical work or any other work in a particular course as approved by regulation

**subject:** a demarcated field of study of which one course or more may be chosen for a degree

**syllabus:** the division of the study material for a specific course, according to the regulations

**year course:** a course that extends over one year (two semesters)

## REGULATIONS AND CURRICULA

### 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 matriculation 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 fields of study.

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.

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 matriculation 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 course, 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.1.3 and 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 course if he or she complies with the specific requirements for admission to specific subject courses and fields of study as stipulated in the admission procedures and faculty regulations of the various faculties and departments.

### 3. 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 field of study may be made at the beginning of the second semester with the Dean's approval.

### 4. 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.

**4.1 Subminima in examinations**

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

**4.2 Examinations**

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.

**4.3 Supplementary examinations**

After completion of an examination and before the examination results are announced, the examiners may offer an additional examination to a student on certain aspects of the work of that course.

**4.4 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 payment of the prescribed fee and within 14 calendar days after commencement of lectures in the next semester. The examiner will be appointed by the Head of the Department concerned.

**4.5 Re-examinations/re-promotion tests**

Re-examinations in first-semester courses take place after conclusion of the June examinations, 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 VETERINARY SCIENCE**

The following degrees and diplomas 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)
- (h) Postgraduate Diploma in Health Administration – DHA(Vet) (2 years)
- (i) University Diploma in Veterinary Nursing – Dip (Vet Nurs) (2 years)

\* Six years full-time study for students who register for the new BVSc curriculum as from 1997 onward.

Students who take a course offered by another faculty, must familiarise themselves with the requirements for admission to the subject in question as well as the regulations governing subminima in examinations and re-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 O8130001)

Also consult General Regulations.

**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 both in Afrikaans and English for students who registered before 1997. For students who have registered for the BVSc degree course since 1997, English is 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 conferment of the degree, students are required to register with the South African Veterinary Council as veterinary surgeons before they may practice in South Africa in this capacity.

**(a) Duration of study**

- (i) **Five and a half years** of full-time study for students who registered **before 1997**.  
**Six years** of full-time study for students who register as **from 1997**.

**(b) General**

- (i) General Regulations G.10.1 and G.10.2 concerning satisfactory preparation and payment of course fees, apply 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 to allow a student admission to examination.
- (ii) Admission to the examinations in some courses is subject additionally to a required subminimum of 40% in the practical work of the course – 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 promotion or attendance courses. The stipulations of General Regulations G.12.1 to G.12.3 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. G.3.2(a) and G11.2(a) to (c), all the courses for that particular year of study, except courses which were passed with a final mark of at least 65%, and where full exemption is granted. For this purpose, the two years of the extended second year of study are regarded as one year of study – see Regulation V.I(c) (ii) (aa) and (bb). 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 get 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 re-examination), he or she will not be allowed to continue their studies in the Faculty [see V.1(b) (x)].
- (vi) No limit is placed on the number of courses in which re-examinations/re-promotion tests may be done, except in the sixth year of study (existing curriculum), where the limit on the number of permitted re-examinations is valid. The nature and date of re-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 re-examination/re-promotion test, to do additional prescribed work for a specified period of time before he or she may take the re-examination.
- (viii) Subject to General Regulation G.12.4.3, a minimum of 50% is required to pass a re-examination/re-promotion test. The semester or year mark is not taken into account. This stipulation is applicable *mutatis mutandis* to re-promotion tests.
- (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. (The two years of the extended second year are regarded as one year of study for these purposes.)
- (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.1.5(ix) in the Faculty of Veterinary Science, University of Pretoria* (S.2934/97) as approved by the Faculty Council.

**(c) Curriculum**

**(i) First year of study**

As stipulated in General Information.

**(ii) Second year (new curriculum)**

- |     |         |  |
|-----|---------|--|
| (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) | CIL 171 | Computer and Information Literacy 171<br>(2 <sup>nd</sup> semester) |
| (7) | CIL 175 | Computer and Information Literacy 175<br>(2 <sup>nd</sup> semester) |

**Attendance Course**

- |     |         |                         |
|-----|---------|-------------------------|
| (8) | VET 201 | Veterinary Ethology 201 |
|-----|---------|-------------------------|

(aa) **Note**

The second year of study may be spread over two years by taking Anatomy 213, Anatomy 224 and Histology 200 in the one year, and Physiology and Physiological Chemistry 200 in the following year. Ecology and Pasture Science 200, and Veterinary Ethology 201 can be taken in either year. Students who are registered for the full second year of study, may at any time prior to the commencement of the final examination period at the end of that year, change over to the extended programme. All courses not passed in the first year of the extended programme, must be completed during the second year of the programme concerned.

(bb) **Re-examinations and continuation of studies**

Re-examinations may be granted to a student in an unlimited number of courses. Students who do not pass all the examination courses at the end of the second year of study (either after one full year, or two years in the case of the extended programme), will be allowed to repeat the second year of study. Such student has to register for all the courses of the BVSc II year of study during the year of repetition [Reg. V.1(b)(v)].

(iii) **Third year of study (new curriculum)**

- |     |         |  |
|-----|---------|--|
| (1) | APH 300 | Applied Physiology and Pathophysiology 300 |
| (2) | VET 301 | Veterinary 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) 3 periods of 40 minutes each of informal contact/junior clinics per week 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 Veterinary Ethology 301.

(iv) **Fourth year of study (interim curriculum)**

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



(v) **Fifth year of study (interim curriculum)**

- |     |  |  |
|-----|--|--|
| (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) | PRM 500  | Practice Management 500                                  |
| (6) | SSH 500  | Small Stock Health and Production 500                    |
| (7) | PHE 500  | Veterinary Public Health and Applied<br>Epidemiology 500 |
| (8) | <b>Electives</b>   |  |
|     | One of the following examination courses must be passed:                                 |  |
| –   | CBF 510  | Cage Birds and Fish Diseases 510                         |
| –   | LAS 510  | Laboratory Animal Science 510                            |
| –   | RMD 510  | Research Methodology 510                                 |
| –   | WOC 510  | Wildlife, Ostrich and Crocodile Health 510               |
| –   | A formal language course offered by the Faculty of Humanities (as approved by the Dean). |  |
| (9) | <b>Attendance Course</b>   |  |
|     | DIP 520  | Diagnostic Pathology 520                                 |

(vi) **Sixth year of study (existing curriculum)**

**First semester**

- |     |         |   |
|-----|---------|---|
| (1) | CHR 610 | Surgery 610   |
| (2) | GEN 610 | Medicine 610  |
| (3) | GSK 610 | Reproduction 610  |
| (4) | KUG 610 | Herd Health (Cattle) 610  |
| (5) | KUG 611 | Herd Health (Small Stock) 611<br>(Examination simultaneously with KUG 610<br>and 612) |
| (6) | KUG 612 | Herd Health (Pigs) 612<br>(Examination simultaneously with KUG 610<br>and 611)        |
| (7) | PAT 610 | Pathology 610   |
| (8) | PVT 610 | Poultry Diseases 610  |
| (9) | VVD 610 | Veterinary Public Health 610  |

(aa) **Re-examinations**

A student in the sixth year of study may be granted a maximum of two re-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 re-examination, or who fails the re-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.
- (dd) **Practical work**  
Practical work must be done as follows and proof of satisfactory completion must be submitted to the Head: Faculty 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.
- (ee) **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 two and a half 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 Regulation G.16 to G.29.

The honours degree provides the student with a broad scientific background in the theoretical aspects of the subjects 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.
- (c) **Curriculum**  
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/subject courses offered in other faculties of the University as approved by the Dean :

<b>Module Name</b>	<b>Module Code</b>
African Epizootical Diseases	AEZ 781
Anaesthesiology	ANE 771, 772
Anatomy	ANA 703, 704, 705, 774, 779
Bacterial Diseases	BAS 700
Bacteriology	BAL 700
Biometry	BME 120
Cattle Herd Health	BGK 781, 782
Clinical Pathology	KPA 701,702, 703
Diagnostic Imaging	DIM 771,772, 773, 781, 782, 783, 784, 785, 786
Draught Animal Power	DAP 771
Epidemiology	EPI 751, 752, 753, 754
Helminthology	HEL 700
Histology	HIS 700
Immunology	IMM 700
Infectious Diseases	IFS 771, 772, 773, 774, 775, 776, 777
Medicine	GEN 702, 703, 704, 707
Microbiology	MBG 791
Molecular Biology	MOB 771
Ophthalmology	OFT 700, 701, 702
Parasitology	PAR 772, 773, 774, 775, 781
Pathology	PAT 700, 702, 703, 704, 705, 706, 707, 708, 709, 771
Pharmacology	FAR 706, 707, 708, 709, 775, 776, 777
Physiology	FSG 713, 781, 782, 783, 784, 785, 786, 787
Pig Herd Health	VKH 780
Poultry Health and Production	PHP 771
Poultry Nutrition	PVV 700
Protozoological Diseases	PTS 781, 782
Research Methodology	VRM 781, 782
Small Stock Herd Health	KKS 780
Surgery	CHR 703, 704
Reproduction	GSK 702, 703, 704, 705, 706, 707
Toxicology	TOK 700, 701, 702, 703, 704
Veterinary Ectoparasitology	VEP 701
Veterinary Ethology	VET 701, 702
Veterinary Public Health	VVD 700
Virus Diseases	VIS 700
Virology	VIR 700
Wildlife Diseases	WSK 700

**A list of the number of credits awarded to modules, will be made available to prospective students.**

- (i) Where the honours degree precedes a master's degree, the subject modules chosen for the honours degree study must support the particular field of study for the prospective master's degree. The selection of modules 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.

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

**(d) Registration**

Students intending to register for this course, must consult with the Dean and the heads of the departments concerned, well in advance, as not all the postgraduate modules 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 modular 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 re-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 re-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 modules 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 module. 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 module, 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) Curriculum**

The MMedVet degree is offered in the following fields of study:

- (i) Anaesthesiology (Anaes)
- (ii) Bacteriology (Bact)
- (iii) Cattle Herd Health (Bov)
- (iv) Surgery (Chir) (Eq)
- (v) Surgery (Chir) (Small Animals)
- (vi) Medicine (Med)
- (vii) Reproduction (Gyn)

- (viii) Small Stock Herd Health (CaprOv)
- (ix) Clinical Laboratory Diagnostics (Clin Lab Diag)
- (x) Microbiology (Micro)
- (xi) Ophthalmology (Ophth)
- (xii) Parasitology (Parasit)
- (xiii) Pathology (Path)
- (xiv) Poultry Diseases (AltI)
- (xv) Laboratory Animal Science (LAS)
- (xvi) Radiology (Rad)
- (xvii) Pig Diseases (Suill)
- (xviii) Veterinary Ethology (Vet.Et.)
- (xix) Veterinary Public Health (Hyg)
- (xx) Wildlife Diseases (Fer)
- (xxi) Pharmacology (Pharm)
- (xxii) Toxicology (Tox)

**(b) Admission**

- (i) Subject to the stipulations of General Regulations G.1.3 and G.62, a candidate must be in possession of the BVSc 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(e)], 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 MMVet degree study 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 subject modules, the degree course extends over at least two years, with a maximum duration of four years. If all the required subject modules have to be included in the MMedVet curriculum, the course extends over a maximum of six years.
- (ii) Unless stipulated otherwise, the Dean must be satisfied that the candidates will be working under the direct supervision of a qualified person at a suitable institution with the necessary facilities to enable them 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).

**(d) Curricula**

The modules 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 subject modules should not be less than 24 and not more than 30. If deemed necessary, subject 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.

<b>Special field of study</b>	<b>Degree code</b>	<b>Subject code</b>
Anaesthesiology	08250131	ANE 800
Bacteriology	08250111	BAL 800
Cattle Herd Health	08250231	BKG 800
Clinical Laboratory Diagnostics	08250191	KDK 800
Laboratory Animal Science	08250211	PFK 800
Medicine	08250051	GEN 800
Microbiology	08250201	MBG 870
Ophthalmology	08250251	OFT 800
Parasitology: One of the following:	08250011	–
Veterinary Ectoparasitology	–	VEP 801
Helminthology	–	HEL 800
Protozoology	–	PSL 800
Pathology	08250101	PAT 800
Pharmacology	08251131	FAR 800
Pig Herd Health	08250182	VKH 800
Poultry Diseases	08250171	PVT 800
Radiology	08250141	RDG 800
Small Stock Herd Health	08250241	KKS 800
Surgery: One of the following:	–	–
Equine Surgery	08251121	CHR 804
Small Animal Surgery	08250022	CHR 803
Reproduction	08250031	GSK 800
Toxicology	08251141	TOK 800
Veterinary Ethology	08250082	VET 800
Veterinary Public Health	08250041	VVD 800
Wildlife Diseases	08250221	WSK 800

**(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) The minimum examination mark is 50% 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 subjects, may be admitted by the Dean to a re-examination in those 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) Essay or Dissertation**

Also consult General Regulations G.57 to G.59.

(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, 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.1.3 and G.62, a BSc(Hons), BSc(Agric)(Hons), or BVSc degree as well as an average of at least 60% in the honours examination, where applicable, are required.

Candidates who are accepted for studies for the MSc degree by virtue of the BVSc(Hons) or BVSc degree, 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 units. If deemed necessary by the Head of Department, subject courses offered by other faculties of the University of Pretoria may form part of the prescribed programme. Candidates must register for these additional subjects when initially registering for the MSc degree study.

In certain cases, it remains the prerogative of the Head of Department to require, in addition to the entrance requirements already mentioned, also a BVSc(Hons) degree, or the successful completion of an admissions test from the student 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**

The MSc degree can be obtained in the fields of study offered by the following departments:

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

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 (VVE 890).



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.

(Also consult General Regulations G.57 to G.59 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**

**V.5. PHILOSOPHIAE DOCTOR (PhD)**

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

**(a) Admission requirements**

Subject to the stipulations of General Regulations G.1.3 and 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 foreign candidates.

**(b) Field of study**

The PhD degree can be obtained in the fields of study offered by the following departments:

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

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 the departments may require additional oral or written examinations.

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.

Also consult General Regulations G.57 to G.59 with regard to the submission and technical editing of the thesis.

**V.5.A DOCTOR OF VETERINARY SCIENCE (DVSc)**

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 Faculties of Medicine and Dentistry.

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 a BVSc or equivalent degree obtained at least one year previously, or at least two years previously for the DHA(Vet), and 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 subjects.

The minimum examination mark is 50% in each of the theoretical and practical sections of a subject 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) Re-examinations**

Re-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.6 POSTGRADUATE DIPLOMA IN VETERINARY COMMUNITY HEALTH [DCH(Vet)]  
(CODE 08220041)**

**Curriculum**

**Part I**

- |     |         |                                 |
|-----|---------|---------------------------------|
| (1) | VEP 702 | Veterinary Ectoparasitology 702 |
| (2) | MBG 703 | Microbiology 703                |
| (3) | PAR 701 | Parasitology 701                |
| (4) | VVD 701 | Veterinary Public Health 701    |
| (5) | WVD 700 | Water and Fodder 700            |

**Part II**

- |     |          |  |
|-----|----------|--|
| (1) | BSN 701  | Biostatistics & Research Methodology 701 |
| (2) | EPI 700  | Epidemiology 700                         |
| (3) | OGH 700  | Environmental Health 700                 |
| (4) | VGW 700  | Veterinary Health Legislation 700        |
| (5) | VGA 700  | Veterinary Health Administration 700     |
| (6) | GGG 701* | Community Health (Oral) 701              |

\* A combined oral examination in all the subjects of Part II must be passed.

**V.7 POSTGRADUATE DIPLOMA IN HEALTH ADMINISTRATION [DHA (Vet)]  
(CODE 08220051)**

**Curriculum**

**Part I**

The same as Part II of the DCH(Vet).

**Part II**

- |     |         |   |
|-----|---------|---|
| (1) | OBS 101 | Business Management 101                             |
| (2) | FBS 101 | Financial Management 101                            |
| (3) | MHB 703 | Human Resources Management 703                      |
| (4) | PAD 701 | Public Administration ( <i>capita selecta</i> ) 701 |
| (5) | GEB 701 | Health Management 701                               |
| (6) | GSI 701 | Health Informatics 701                              |

\* A combined oral examination in all the subjects of Part II must be passed.

<b>V.8 UNIVERSITY DIPLOMA IN VETERINARY NURSING [DipVet (Nursing)] (CODE 08120002)</b>
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**(a) Requirements for admission**

- (i) A candidate must be in possession of a matriculation 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 matriculation exemption will be accepted.
- (iv) A maximum of 36 students are admitted annually (selected according to the selection procedure).

**(b) Duration**

Two academic years of full-time study.

**(c) Practical work**

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 departments. Clinic service must be done throughout the year on weekends and during university holidays. A student's skills, conscientiousness, discipline and professional conduct in the execution of his or her duties are assessed on a continued basis. Admission to the final examination can be refused if his or her performance is unsatisfactory.

**(d) 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 more. If readmitted, 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.

**(e) Pass requirements in courses and re-examinations**

- (i) In order to pass in 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 subminimum of 40% is required in each section.
- (iv) An examination mark of 50% is required to pass in a re-examination. The semester or year mark is not taken into calculation.

**(f) Admission to examinations**

The stipulations of General Regulations G.10.1 and G.10.2 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.

**(g) Pass with distinction**

The Diploma is awarded with distinction on a student who has obtained at least 60% in each subject throughout the course, and an average of at least 75% in the final year.

**(h) Medium of instruction**

A student must have sufficient command of English in order to follow the lectures, as English is the medium of instruction at the Faculty of Veterinary Science.

**(i) Curriculum**

**(i) First year of study**

ANA 104	Anatomy 104
FAR 100	Pharmacology 100
FSG 104	Physiology 104
VET 110	Veterinary Ethology 110
LTG 120	Laboratory Technique 120
MBG 111	Microbiology 111
AVP 111	General Nursing 111
PAR 120	Parasitology 120

**Promotion courses**

MVP 120	Medical Nursing 120
TPR 120	Theatre Practice 120
GSV 120	Reproductive Nursing 120

**Note:**

- The first year of study may be spread over two years, by taking Anatomy 104 and Physiology 104 in the first year of the extended programme, and the rest of the courses in the next year of the relevant programme.
- In terms of requirements set for conditional examination, students may be obliged to follow the extended programme, or to switch over to the extended programme after the Easter recess.
- 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.8(d).

**Clinical co-assistancy:** Students are required to work at various clinics in the Academic Veterinary Hospital. Weekend duties on a rotation basis at out-patients, the isolation ward and the intensive-care unit are compulsory. Students have to do additional duties at the Academic Veterinary Hospital during the summer holidays.

**Re-examinations:** 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 re-examination in the course(s) concerned. Should a student fail the re-examinations as well, he or she may be admitted to a further re-examination at the end of the year. A student will, however, only be admitted to a maximum of three re-examinations and/or promotion tests at the end of the year (i.e. in three examination courses, or two examination courses and one promotion course, or one examination course and two promotion courses, including the second re-examination(s) or promotion test(s) in respect of first semester courses).

(ii) **Second year of study**

MVP 200	Medical Nursing 200
CVP 200	Surgical Nursing 200
TPR 200	Theatre Practice 200
NAR 200	Anaesthetics 200
RAD 200	Radiography 200
GSV 200	Reproductive Nursing 200

**Clinic duties** must be done at various clinics at the Academic Veterinary Hospital. Students also have to work on a rotation basis at out-patients, 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 theriogenological clinic. Each student must work at an approved private practice for two weeks. Students are also required to work at one of the following institutions for two weeks: an approved veterinary institute, private practice or clinic of their own choice at the Academic Veterinary Hospital. Additional duties must be done at the Academic Veterinary Hospital during the April holidays.

**Re-examinations**

A maximum of two re-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 re-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.

**SYLLABI**

**Abbreviations**

l. = lecture  
p.w. = per week  
sem. = semester

d.l. = demonstration lecture  
pr. = practica

**DEPARTMENT OF ANATOMY**

- (1) (ANA 213) **Anatomy 213:** 3rd sem. 1 l.p.w. and 5 pr.p.w.  
Systematic osteology, arthrology, myology, angiology, neurology, splancnology and topographical anatomy of the dog.  
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.p.w.  
Comparative osteology, arthrology, myology, angiology, neurology, splancnology and topographical anatomy of the horse, cow, sheep and pig.  
Anatomy of the cat, 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, splancnology 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, splancnology 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, splancnology 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) (ANA 801) **Anatomy 801** : 6 x 1 hour l.p.w. for 30 weeks, 12 credits.  
The course comprises an in-depth comparative study of the osteology, arthrology, myology, angiology, neurology, splancnology and topographical anatomy of domestic animals. Certain comparative aspects of selected wildlife species.
- (9) (HIS 200) **Histology 200**: 2 l. plus 1 pr.p.w.  
(a) General cytology and histology.  
(b) Special histology of the organs and physical systems of domestic animals.
- (10) (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 subjects for the master's degree.

<b>DEPARTMENT OF COMPANION ANIMAL MEDICINE</b>
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- (1) (CBF 510) **Cage Bird and Fish Diseases 510**: 3 lectures per week – 1 semester  
Details of this subject course available from Department.
- (2) (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.

## Veterinary Science

- (3) (GEN 610) **Medicine 610:** 83 d.l.p.w. for 6 weeks (this entails after-hours, weekend and vacation tuition under supervision of lecturers).  
Medicine 610 is a continuation and completion of Medicine 520 as described above.
- (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 800) **Medicine 800:** 2 l.p.w.  
Advanced training in regard to species in organ, metabolic and deficiency diseases of domestic animals. Pathophysiology, diagnostic and treatment methods are emphasised.
- (9) (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.
- (10) (KPA 701) **Clinical Pathology 701:** 6 credits.  
Advanced study in clinical pathology including enzymology, cytology, haematology as well as clinical pathology of the kidney.
- (11) (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 electro-phoreses.
- (12) (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.
- (13) (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.

<b>DEPARTMENT OF COMPANION ANIMAL SURGERY</b>
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- (1) (ANE 771) **Anaesthesiology 771**: 4 credits.  
Advanced theoretical training on a species-orientated basis, including birds, laboratory animals, wildlife species and domestic animals (horses, dogs and cats). The latest techniques in anaesthetising compromised animals, the use of total intravenous anaesthetic techniques, positive pressure ventilation, peripheral relaxants and monitor apparatus.
- (2) (ANE 772) **Anaesthesiology 772**: 4 credits.  
Advanced theoretical training on a species-orientated basis, including domestic animals, birds, laboratory animals, wildlife species and production animals (ruminants and pigs).  
The latest techniques in anaesthetising compromised animals, the use of total intravenous anaesthetic techniques, positive pressure ventilation, peripheral relaxants and monitor apparatus.
- (3) (ANE 800) **Anaesthesiology 800**  
Advanced theoretical and practical training in the administration of local and general anaesthetics on a species-orientated basis. Anaesthetising high-risk animals is emphasised. Species include domestic animals, laboratory animals, local and exotic species of reptiles, bird and mammal species.  
The structure and functioning of inhalant anaesthesia and monitor apparatus. The latest techniques in the use of totally intravenous anaesthetics, positive pressure ventilation, peripheral muscle relaxants and monitor apparatus.  
Theoretical training includes the attendance of postgraduate seminars in Anaesthesiology at the Faculty of Medicine.
- (4) (AST 500) **Anaesthesiology 500**: 1<sup>st</sup> semester: 2 l.p.w.; 2<sup>nd</sup> semester 1 l.p.w.  
The basic principles in the administration of premedication, intravenous and inhalation anaesthetic agents to domestic and some common exotic pet animals.  
The design and function of the inhalation anaesthetic machine. Monitoring of vital functions during anaesthesia, and diagnosis and treatment of common complications during the peri-anaesthetic period. Administration of local anaesthetic agents.
- (5) (CHR 610) **Surgery 610**: 65 d. l.p.w. for 5 weeks.  
This also includes tuition after hours, at weekends and during vacations. Surgery 610 is a continuation of Surgery 520. The final examination in Surgery takes place after completion of Surgery 610.
- (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 radiology.
- (9) (CHR 706) **Surgery 706:** 5 credits.  
Applicable aspects of general and abdominal surgery, anaesthesiology and radiology.
- (10) (CHR 803) **Surgery 803**  
Advanced theoretical and practical course in small animal surgery.
- (11) (CHR 804) **Surgery 804**  
Advanced theoretical and practical 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; 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 ultrasonic images.  
The pathophysiology, 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.
- (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% is 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% is 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 pathophysiology, 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 subjects, DIM 781 and 782 must be passed with at least 60%.  
Literature study as well as 90 weeks practical work is involved.
- (22) (ECS 500) **Equine Clinical Studies 500:**  
1st semester: 8 lectures per week; 2<sup>nd</sup> semester: 9 lectures per week.  
Details of this course can be obtained from the Department.
- (23) (OFT 700) **Ophthalmology 700:** 6 credits  
A year course consisting of 8 theoretical and 2 practical sessions on ophthalmology of domestic animals (large and small animals).  
The anatomy and physiology of the eye and its adnexa, examining techniques and aids as well as ocular therapeutics and treatment techniques of the eyes; non-surgical and surgical conditions of: the orbita and eyelids and third eyelid; conjunctiva, lachrymal system and cornea; sclera, anterior chamber and uvea lens and vitreous; retina and hereditary diseases.  
Practical work: The use of instrumentation and accessories during examining and surgical procedures.
- (24) (OFT 701) **Ophthalmology 701:** 3 credits.  
Same as OFT 700 above but only with regard to small animals - a semester course.
- (25) (OFT 702) **Ophthalmology 702:** 3 credits.  
Same as OFT 700 above but only with regard to large animals - a semester course.

**DEPARTMENT OF PARAVETERINARY STUDIES**

- (1) (ANA 104) **Anatomy 104** : 1st sem: 4 l., 2 d.l. ; 2nd 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 DipVet(Nursing). Lectures are offered by die Department of Anatomy.
- (2) (AVP 111) **General Nursing 111**: 1st 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**: 3rd sem: 8 l.p.w.; 4th sem: 97 clinic periods.  
The classification, complications and treatment of inflammation, wounds, bleeding, fractures and dislocation. Healing of wounds. Healing of different types of tissue. Surgical terminology. Examining a traumatised patient. Ocular emergencies. 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 horses and production animals. Bandaging large and small animals. Dental hygiene. Physiotherapy. Pre-operative and post-operative nursing. Lectures offered by the Department of Companion Animal Surgery and the Department of Paraveterinary Studies.
- (4) (FAR 100) **Pharmacology 100 – Pharmacology for veterinary nurses**:  
1st sem: 4 l.p.w.; 2nd sem: 3 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 lectures p.w. plus 36 during the week of orientation; 2nd sem.: 4 lectures 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.  
Elementary reproductive physiology and endocrinology of male and female domestic animals. The oestrus cycle. Artificial insemination of the cow and bitch. Impregnation. The physiology of gestation and care of the animal during gestation. Methods of gestation diagnosis. The normal process of parturition and care of the animal during parturition. Elementary obstetrics. The puerperium. Care of the new-born. Elementary principles of collection, examination and storage of semen. The principles of oestrus control. Sterility of male and female animals. Reproductive emergencies (including administration of epidural anaesthetic and correction of simple abnormal presen-

- tations). The principles of herd health programmes. Laboratory techniques regarding diagnosis and reproductive anomalies. Lectures offered by Department of Paraveterinary Studies as well as Department of Reproduction.
- (7) (GSV 200) **Reproductive Nursing 200**: 4th sem: 56 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 are offered by the Department of Companion Animal Medicine.
  - (9) (MBG 111) **Microbiology 111**: 2nd sem: 6 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.
  - (10) (MVP 120) **Medical Nursing 120**: 2nd 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 Department of Paraveterinary Studies as well as Department of Companion Animal Medicine.
  - (11) (MVP 200) **Medical Nursing 200**: 3rd sem: 8 l.p.w.; 4th sem: 504 clinic periods.  
General aspects of nursing for all the physical systems. Nursing animals with contagious and infectious diseases. Geriatric nursing. Medical nursing of the horse and production animal. Lectures are offered by Department of Paraveterinary Studies, Department of Companion Animal Medicine and Department of Production Animal and Community Health.
  - (12) (NAR 200) **Anaesthesia 200**: 3rd sem : 4 l.p.w., 4th sem: 56 clinic periods.  
The physiology and signs of anaesthesia. Anaesthetics, methods and apparatus of anaesthesia. Anaesthetising and monitoring anaesthesia. Preparation and after-care. Anaesthetic emergencies. Lectures are offered by Department of Companion Animal Surgery.
  - (13) (PAR 120) **Parasitology 120**: 1st sem: 8 l.p.w.  
Elementary parasitology. Lectures are offered by Department of Veterinary Tropical Diseases.
  - (14) (RAD 200) **Radiography 200**: 3rd sem: 4 l.p.w.; 4th sem: 56 clinic periods.  
Generating röntgen rays and their properties. Protective measures. Manipulating exposure factors. Positioning. Purpose and maintenance of accessories. Films, contrast media, development and evaluation of the quality of röntgen photographs. Basic principles of diagnostic ultrasonography. Lectures are offered by Department of Companion Animal Surgery.

- (15) (TPR 120) **Theatre Practice 120:** 2nd 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 offered by the Department of Paraveterinary Studies.
- (16) (TPR 200) **Theatre Practice 200:** 3rd sem: 4 l.p.w.; 4th sem: 71 clinic periods.  
Basic principles of aseptic and non-traumatic surgery.  
Surgical instruments, equipment and accessories and its maintenance. Instruments. Suture materials, needles, inserting and removing stitches. Assisting the surgeon. Pre-operative preparation of the patient. Theatre ethics. Professional responsibility. Lectures offered by the Department of Companion Animal Surgery and the Department of Paraveterinary Studies.
- (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.

#### DEPARTMENT OF PATHOLOGY

- (1) (DIP 520) **Diagnostic Pathology 520:** 2 lectures per week – 2<sup>nd</sup> semester.  
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, pigmentations, 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 610) **Pathology 610:** 11th sem.: 20 l.p.w. for a total of 4 weeks.  
Practice-orientated post-mortem examinations and macroscopic diagnostic pathology.
- (4) (PAT 700) **Pathology 700:** 9 credits.  
General pathology for students who plan to take Pathology as special field of study for MMedVet.
- (5) (PAT 771) **Pathology 771:** 4 credits.  
Mechanisms of disease (for Medicine students).
- (6) (PAT 702) **Pathology 702:** 4 credits  
Pathology of dogs and cats.
- (7) (PAT 703) **Pathology 703:** 4 credits.  
Pathology of pigs.
- (8) (PAT 704) **Pathology 704:** 4 credits  
Pathology of horses.

- (9) (PAT 705) **Pathology 705:** 4 credits.  
Pathology of ruminants.
- (10) (PAT 706) **Pathology 706:** 7 credits.  
Pathology of Wildlife.
- (11) (PAT 707) **Pathology 707:** 4 credits.  
Necropsy technique and interpretation.
- (12) (PAT 708) **Pathology 708:** 4 credits.  
Ophthalmological Pathology.
- (13) (PAT 709) **Pathology 709:** 4 credits.  
Reproductive Pathology.
- (14) (PAT 800) **Pathology 800**  
Advanced diagnostic pathology of production animals, domestic animals, wildlife, laboratory animals, fish and poultry.

<b>DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY</b>
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- (1) (FAR 706) **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 pharmacokinetic and pharmacodynamic 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) (FAR 707) **Clinical Pharmacology for Horses 707:**  
10 weeks, 3 hours p.w., 8 credits.  
Advanced clinical pharmacological studies in horses: special pharmacokinetic and pharmacodynamic 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) (FAR 708) **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) (FAR 709) **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) (FAR 775) **Pharmacology 775 – Clinical Pharmacology for Small Animals:**  
16 weeks, 3 hours p.w., 8 credits.  
Advanced clinical pharmacological studies in small animals including: special pharmacokinetic and pharmacodynamic 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.
- (6) (FAR 776) **Pharmacology 776 – Advances Studies on the Fundamentals of Veterinary Pharmacology:** 16 weeks, 3 hours p.w., 8 credits.  
Scope and historical development of veterinary pharmacology. Complementary medicines. Veterinary pharmaceuticals and drug development. Drug formulation theory. Pharmacokinetic analysis and modelling. Molecular basis of drug action and pharmacological modulation of organ systems and body functions. Pharmacodynamic responses and adverse drug effects. Mechanism of action of chemotherapeutic agents and their pharmacological responses. Dose-response relationships. Comparative species pharmacology. The fundamentals of pharmacological research.  
The course will be presented annually provided three or more students register.
- (7) (FAR 777) **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.
- (8) (GPH 300) **General Veterinary Pharmacology 300:** 5<sup>th</sup> and 6<sup>th</sup> 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.
- (9) (TOK 300) **Toxicology 300:** 5<sup>th</sup> and 6<sup>th</sup> 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, mycotoxins, 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. Excursions are arranged. A plant collection is required.



- (10) (TOK 701) **Toxicology 701 – Basic and Clinical Veterinary Toxicology:**  
67 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.
- (11) (TOK 702) **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.
- (12) (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 as well as less important poisonous plants and mycotoxins.  
The course will be presented annually provided two or more students register.
- (13) (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.

<b>DEPARTMENT OF PRODUCTION ANIMAL AND COMMUNITY HEALTH</b>
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- (1) (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 and health status and production effectiveness can be improved from a holistic and cost effective viewpoint.
- (2) (BKG 782) **Beef Cattle Herd Health 782:** 4 credits.  
A semester module based on 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 and health status and production effectiveness can be improved within a wide spectrum of beef cattle farming systems and feedlots.
- (3) (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 and 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.

- (4) (EPI 751) **Epidemiology 751:** 4 credits. (Prerequisite BVSc or equivalent qualification).  
An introductory course to veterinary epidemiology designed to supplement module VRM 781. It is therefore advisable that persons who are interested in research or in epidemiology follow this course. The course covers aspects of population medicine, clinical epidemiology, epidemiological instruments used to evaluate population data, to quantify causes of disease and experimental design, sample taking techniques and determining sample size as well as aspects of serological epidemiology.
- (5) (EPI 752) **Epidemiology 752:** 4 credits. (Prerequisite BVSc or equivalent qualification)  
Applied statistical methods for veterinarians. This is an introduction to statistical methodology generally used in veterinary research, veterinary epidemiology and related fields. The course covers reliability intervals and testing hypotheses for statistical significance.
- (6) (EPI 753) **Epidemiology 753:** 1 credit. (Prerequisite: VRM 781 & EPI 751)  
A more advanced course for veterinarians involved in population diagnostics. Interpretation of results of surveys and observation studies are emphasised. The course covers the concept of association, confounding, effect modification, standardisation, validity, misclassification and screening tests.
- (7) (EPI 754) **Epidemiology 754:** 3 credits. (Prerequisite: EPI 751, matriculation Mathematics)  
Animal health economics, system analysis and modelling. This is an advanced module for veterinary epidemiologists and herd health specialists. It covers methodology generally used in animal health economics, disease simulation modelling and risk analysis.
- (8) (KKS 780) **Small Stock Herd Health 780:** 6 credits.  
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 of small stock herds can be raised from a holistic and cost-effective viewpoint.
- (9) (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.
- (10) (KUG 610) **Cattle Herd Health 610:** 40 d.l.p.w. for two weeks.  
Continuation and completion of the subject.
- (11) (KUG 611) **Small Stock Herd Health 611:** 6 d.c., 9 d.l.  
Continuation and completion of the course.
- (12) (KUG 612) **Pig Herd Health 612:** 6 d.c., 4,5 d.l.  
Continuation and completion of the subject.

- (13) (LAS 510) **Laboratory Animal Science 510:** 3 lectures per week – 1 semester  
 Details of the subject course can be obtained from the Department.
- (14) (PFK 700) **Laboratory Animal Science 700:** (Prerequisite VRM 781, VRM 782)  
 The biology of laboratory animals, their management and use as models in bio-medical 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 new emerging climate of animal rights, and also the special professional role required of the veterinary and paraveterinary professions to enhance humane practice with animal experiments as well as the promotion of a productive scientific effort in the biomedical sciences.
- (15) (PFK 800) **Laboratory Animal Science 800:**  
 The biology of laboratory animals, their management and use as models in biomedical research.
- (16) (PHE) 500) **Veterinary Public Health and Applied Epidemiology 500:**  
 1<sup>st</sup> semester: 4 lectures per week  
 2<sup>nd</sup> semester: 5 lectures per week  
 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. The role of the veterinarian in emergencies and disasters. 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.
- (17) (PHE 610) **Veterinary Public Health 610 (existing curriculum):** 16,5 d.l. and 8,25 prac.p.w. per student (in groups) for practical instruction on subject areas dealt with in VVD 400 and 511.
- (18) (PHP 500) **Porcine Health and Production 500:** 3 lectures per week.  
 Theoretical training in pig herd health and management programmes to integrate and apply the knowledge of relevant veterinary subjects with a view to identifying and solving problems on a herd bases. Further to improve the health status and production effectiveness of intensive and extensive herds from a holistic and cost-effective viewpoint.  
 Departments involved in lectures: Departments of Production Animal and Community Health; Veterinary Tropical Diseases; Pathology; and Reproduction.
- (19) (PPR) 500) **Poultry Health and Production 500:** 3 lectures per week.  
 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) (PVT 610) **Poultry Health and Production 610:**  
11th sem.: 11th sem.: 10 d.l p.w.  
Anatomy, breeding, feeding and housing of poultry. Cause, spreading, pathogenesis, clinical signs, pathology, differential diagnosis and prevention of diseases. Post-mortem examination techniques and diagnostic methods. Influence of genetic characteristics and environment on the incidence of disease. Incidence of contagious diseases.
- (21) (PVT 700) **Poultry Nutrition 700:** 5 credits  
Commercial poultry nutrition (Honours level). This course is a prerequisite for admission to the MmedVet (Atil) degree course.
- (22) (PVT 800) **Poultry Health and Production 800.**  
Advanced training in poultry diseases and *capita selecta* from parasitology, pharmacology, toxicology and pathology.
- (23) (SSH 500) **Small Stock Health and Production 500:** 5 lectures per week  
Details of this subject course can be obtained from the Department.
- (24) (VKH 780) **Pig Herd Health 780:** 6 credits.  
A semester module based on pig 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.
- (25) (VKH 800) **Pig 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 pig herds can be raised within a wide spectrum of pig-farming systems.
- (26) (VRM 781) **Veterinary Research Methodology 781:** 1 credit. (Prerequisite: An approved bachelor's degree)  
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.
- (27) (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.

- (28) (VVD 610) **Veterinary Public Health 610:**  
16,5 demonstration classes and 8,25 practicals per week per student for practical training in VVD 400 and VVD 510.
- (29) (VVD 700) **Veterinary Public Health 700:** 8 credits.  
A synoptic and advanced course in Veterinary Public Health.
- (30) (VVD 701) **Veterinary Public Health 701:**  
Extending basic principles of the VVD 400 and VVD 511 courses as a special module for veterinarians doing postgraduate diploma courses.
- (31) (VVD 800) **Veterinary Public Health 800:**  
An in-depth course, lectures, tutorials, seminars and practicals in Veterinary Public Health, including a research project.

**Note:** The following modules require a minimum of three registered students in order to be presented. The epidemiology and veterinary public health modules will be offered alternately every second year.

<b>DEPARTMENT OF REPRODUCTION</b>
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- (1) (BHP 400) **Bovine Health and Production 400:** 15 lectures 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 610) **Reproduction 610:** 76 d. l.p.w. for 2 weeks  
(This entails after-hours, weekend and vacation instruction under the supervision of lecturers.) Reproduction 610 is a continuation and completion of Reproduction 521 as described above.
- (3) (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).
- (4) (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).

- (5) (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).
- (6) (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.
- (7) (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.
- (8) (GSK 707) **Reproduction 707:** 7 credits  
This course also serves as a prerequisite module for species modules 702, 703, 704, 705 and 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.
- (9) (GSK 800) **Reproduction 800**  
Reproduction 511, 521 and 610 serve as basis for advanced training in obstetrics, gynaecology, andrology and artificial insemination and herd health of domestic animals.

<b>DEPARTMENT OF VETERINARY PHYSIOLOGY</b>
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- (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 300) **Applied Physiology and Pathophysiology 300:** 5th and 6th sem.: 2 l.p.w.  
Pathology of disease conditions and syndromes 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 781) **Physiology 781**: 8 weeks, 3 hours p.w., 4 credits.  
Comparative bird physiology.
- (5) (FSG 782) **Physiology 782**: 8 weeks, 3 hours p.w., 4 credits.  
Exercise Physiology.
- (6) (FSG 783) **Physiology 783**: 8 weeks, 3 hours p.w., 4 credits.  
Comparative Digestive Physiology.
- (7) (FSG 784) **Physiology 784**: 8 weeks, 3 hours p.w., 4 credits.  
Advanced Reproductive Physiology.
- (8) (FSG 785) **Physiology 785**: 8 weeks, 3 hours p.w., 4 credits.  
Pathophysiology of Metabolic Diseases.
- (9) (FSG 786) **Physiology 786**: 8 weeks, 3 hours p.w., 4 credits.  
Physiology of Anaesthesia.
- (10) (FSG 787) **Physiology (c.s.) 787**: 8 weeks, 3 h.p.w. : 5 credits  
Pathophysiology of clinical syndromes (capita selecta).
- (11) (MOB 700) **Molecular biology 700**: 2 lectures p.w. + p.p.w.  
A study of modern concepts with regard to macro molecular biological structure and biosyntheses. Functions of the cell and of micro organisms.

<b>DEPARTMENT OF VETERINARY PRODUCTION AND ETHOLOGY</b>
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- (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) (VET 201) **Veterinary Ethology 201**: 3rd and 4th sem. 3 prac.p.w.  
Animal contact sessions are compulsory and include, inter alia, pony rides for the disabled.
- (3) (VET 301) **Veterinary Ethology 301**: 5th sem.: 9 l.p.w. + 3 prac.p.w.  
6th sem.: 10 l.p.w.  
Introduction to fundamental animal behaviour and man-animal interactions, veterinary genetics, intensive and extensive animal nutrition.  
Applied veterinary ethology for companion and production animals is offered in the following three sub-sections:
  - (a) Background knowledge of the species.

- (b) The management of the species based on (a).
- (c) The production and uses of the species based on (b).

Practical classes include handling techniques. Further involvement in animal management systems is required from students.

Practical projects (with the emphasis on production animals) 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 calculation for examination purposes.

- (4) (VET 701) **Veterinary Ethology for Companion Animals 701** : 8 Credits  
Candidates must pass an entrance examination on undergraduate work and obtain a minimum of 60% in this examination.  
Eight seminars will then be required according to the standard and format set by the Faculty. Each semester constitutes one academic point. 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 should include the study of animal needs, genetics, nutrition, management, housing, record-keeping, hygiene and transit of animals. Attention is also given to the relationship between the veterinary surgeon, the client and the patient.
- (5) (VET 702) **Veterinary Ethology for Production Animals 702** : 8 Credits  
Candidates must pass an entrance examination on undergraduate work with a minimum of 60%.  
Eight seminars will then be required according to the standard and format determined by the Faculty. Each semester constitutes one academic point. 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 needs, genetics, nutrition, management, housing, keeping of records, hygiene and transit of animals.  
Furthermore, attention is given to the relationship between the veterinary surgeon, the client and the patient. The diagnosis and correction of behavioural, management and selection problems will be addressed. An oral examination takes place at the conclusion of the course.

#### **DEPARTMENT OF VETERINARY TROPICAL DISEASES**

- (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 for 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) (BAL 800) **Bacteriology 800**:  
Advanced training in bacteriology, immunology and bacterial diseases.



- (4) (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.
- (5) 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.
- (6) (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.
- (7) (HEL 800) **Helminthology 800**:  
In-depth study of the parasitic worms in domestic animals.
- (8) (IFS 700) **Infection diseases 700**:  
An advanced course in bacterial and virus diseases at postgraduate level.
- (9) (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.
- (10) (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.
- (11) (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.
- (12) (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.
- (13) (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.
- (14) (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).

- (15) (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.
- (16) (IMI 300) **Immunology and Microbiology 300**: 5th and 6th sem.: 4 l.p.w.  
Basic as well as applied aspects of the two fields of study.  
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-economy, pathogenesis, diagnosis, prevention and control and eradication are discussed.  
Departments involved: Departments of Veterinary Tropical Diseases; Production Animal and Community Health; Ministry of Agriculture – Department of Animal Health; Department of Animal Economics, UP; and Department of Anthropology, UP.
- (17) (IMM 700) **Immunology 700**: Year course, 8 credits.  
Advanced theoretical study in immunology with special emphasis on veterinary science.
- (18) (MBG 702) **Microbiology 702**:  
Advanced training in veterinary microbiology with emphasis on diagnostic techniques.
- (19) (MBG 870) **Microbiology 870**:  
Advanced training in veterinary microbiology with emphasis on clinical and diagnostic application.
- (20) (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).
- (21) (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).
- (22) (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.
- (23) (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.

- (24) (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.
- (25) (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.
- (26) (PRM 500) **Practice Management 500:** 2 lectures per week.  
Details of the course can be obtained from the Department.
- (27) (PSL 800) **Protozoology 800:**  
In-depth study of the protozoal diseases of domestic animals.
- (28) (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.
- (29) (RMD 510) **Research Methodology 510:** 1<sup>st</sup> semster: 3 l.p.w.  
Details of this subject course can be obtained from the Department.
- (30) (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.
- (31) (VEP 801) **Veterinary Ectoparasitology 801:**  
In-depth study of the arthropoda of medical and veterinary importance.
- (32) (VIR 700) **Virology 700:** Year course, 5 credits.  
Advanced training in veterinary virology with particular emphasis on diagnostic and other laboratory techniques.
- (33) (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.
- (34) (VTP 371) **Introductory Veterinary Parasitology 371:** 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.

- (35) (WOC 510) **Wildlife, Ostrich and Crocodile Health 510:** 1<sup>st</sup> semester: 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.
- (36) (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 tranquillisers and the practical application of capture techniques. Captivity and transit of game.
- (37) (WSK 800) **Wildlife Diseases 800:**  
(i) Game farming and the utilisation of wildlife: capturing, handling, transit, meat production, hunting, fencing, carrying capacity, 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**

<b>Name</b>	<b>Donor</b>	<b>Award</b>
<b>Bachelor of Veterinary Science</b>		
Douw G. Steyn Floating Trophy	Mrs E.J.A. Steyn	For the best progress in Pharmacology and Toxicology
P.J. du Toit Memorial Medal	Farmers' Weekly	To the best student in Veterinary Ethology
S A Veterinary Association Witwatersrand Clinical Prize	Witwatersrand Branch of the South African Veterinary Association	To the best Veterinary Science student in Surgery, Medicine and Reproduction at the end of the eleventh semester and in Bacterial Diseases and Viral Diseases at the end of the eighth semester
Theiler Memorial Medal	Faculty of Veterinary Science	To the student who excels in merit and dedication throughout the veterinary syllabus of the BVSc degree.
Bayer Prize	Bayer (SA) Animal Health	<ul style="list-style-type: none"> <li>• To the final-year BVSc student with the greatest aptitude for and best achievement in Pathology throughout the course</li> <li>• For the best achievement in Introductory Veterinary Parasitology at the end of the third year of the BVSc degree course</li> </ul>
M.H.V. Brown Memorial Prize	South African Veterinary Association	To the best student in Veterinary Parasitology, Immunology and Microbiology at the end of the sixth semester
Malie Smuts Prize	Prof M.M.S. Smuts	To the student with the best performance in the complete Anatomy course at the end of the second year of the BVSc degree course
Pfizer Prize	Pfizer South Africa Division Animal Health	<ul style="list-style-type: none"> <li>• To the student with the best performance in all examination subjects at the end of the second year of the BVSc degree course</li> <li>• To the student with the best performance in all examination subjects at the end of the third year for the BVSc degree course</li> <li>• For the best practical and theoretical achievement in Veterinary Public Health in the final year</li> </ul>

<b>Name</b>	<b>Donor</b>	<b>Award</b>
ABSA Prize for Reproduction	ABSA	Monetary prize to the student who has reached the highest achievement in Reproduction at the end of the eleventh semester.
Kyron Prize	Kyron	To the student with the best achievement in all the examination courses at the end of the ninth and eleventh semester
Logos AGVET Prize	Logos AGVET (Div. of Logos Pharmaceuticals (Pty) Ltd	To the student with the highest mark in Immunology and Microbiology at the end of the third year of the BVSc degree course
Merial Clinical Prize	Merial (SA) (Pty) Ltd	For the best improvement in clinical subjects at the end of the ninth, tenth and eleventh semester, taking into account the student's perseverance, dedication and personality
S.A. Veterinary Association Prize	S.A. Veterinary Association	For the best achievement in Veterinary Public Health in the seventh, eighth and ninth semester
S A Veterinary Association Group Prize	S A Veterinary Association	To all students in the two best clinic groups in the final practical year
Beckman Coulter Prize	Beckman Coulter SA (Pty) Ltd.	To the student with the best performance in Applied Physiology at the end of the third year of the BVSc degree course.
Lion Bridge Prize	Lion Bridge Feeds (Pty) Ltd	To the most promising student with regard to large animal or small animal practice
Upjohn Prize for Promotive Animal Health	Upjohn (Pty) Ltd.	For the best achievement in Herd Health and Poultry Diseases at the end of the eleventh semester.
Synthes Prize for Surgery	Synthes (SA)	For the best achievement in Surgery at the end of the eleventh semester
Taurus Prize for Reproduction	Taurus Co-operative	For the best achievement in the Reproduction part of the subject course Bovine Health and Production at the end of the fourth year of the BVSc degree course
ABSA Anatomy Prize	ABSA	For the best achievement in Anatomy at the end of the BVSc degree course
Wool Board Prize for Small Stock Herd Health and Production	Wool Board	To the best student in Small Stock Herd Health and Production at the end of the final year

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Arnolds-Kyron Surgery Prize	Kyron Laboratories (Pty) Ltd.	To the final-year student with the highest proven aptitude in surgical skills.
The Equine Practitioners Group Prize	The Equine Practitioners Group of the South African Veterinary Association	To the best final-year student in Equine Sciences
Intervet Prize for Poultry Health and Production	Intervet S A (Pty) Ltd	To the best student in Poultry Health and Production at the end of the 5th and the final practical year
<b>University Diploma in Veterinary Nursing</b>		
<b>Name</b>	<b>Donor</b>	<b>Award</b>
X-ray Imaging Silver Medal	X-ray Imaging Services (Pty) Ltd.	To the best student in Radiography
S A Veterinary Association Medal	S A Veterinary Association	For the best achievement throughout the whole course
The Veterinary Nursing Association of South Africa Prize	Veterinary Nursing Association of South Africa	Monetary prize to the student who has improved most in the practical area as well as in his/her professional attitude
Epol Prize for Surgical and Reproductive Nursing	Epol (Pty) Ltd	Monetary prize for the best achievement in Surgical and Reproductive Nursing taking into consideration both academic and practical performance
Epol Prize for Veterinary Ethology and Nursing	Epol (Pry) Ltd	Monetary prize for best achievement in Veterinary Ethology and Practical Medical Small Animal Nursing
Beckman Coulter Physiology Prize	Beckman Coulter Instruments (Pty) Ltd	For the best achievement in Medical Nursing at the end of the fourth semester
Janssen Pharmaceuticals Prize	Janssen Pharmaceuticals	To the student who achieved best in Medical Nursing
Meril Pharmacology Prize	Meril S A (Pty) Ltd	To the student who achieved best in Pharmacology
Kyron Laboratories Prize	Kyron Laboratories (Pty) Ltd.	For the best achievement in Anaesthesiology 200, taking into consideration both academic and practical performance
S A Veterinary Association Practical Prize	S A Veterinary Association, Witwatersrand Branch	To the student with the best practical aptitude in the third and fourth semester
Adcock Ingram Prize for Intensive Care Nursing	Adcock Ingram Group	For the best achievement in practical intensive care for animals, as well as in professional conduct

## Veterinary Science

<b>Name</b>	<b>Donor</b>	<b>Award</b>
<b>Other</b>		
Bayer Prize	Bayer (Pty) Ltd	To the student who has shown the best leadership qualities during the preceding year.
SRC Honorary Medal *	Student Representative Council	To the student who has contributed the best service to the student community.

\* Not limited to the Faculty of Veterinary Science