



UNIVERSITEIT•STELLENBOSCH•UNIVERSITY  
jou kennisvennoot • your knowledge partner

## Faculty of **Medicine and Health Sciences**

Dean:

**Prof JA Volmink**

BSc, MB,ChB (Cape Town), DCH (SA), MPH (Harvard),  
DPhil (Oxon), MASSAf



CALENDAR 2013  
PART 12



# TABLE OF CONTENTS

<b>1. General Information</b>	<b>3</b>
<b>2. The Faculty of Medicine and Health Sciences</b>	<b>14</b>
<b>3. Programme Offering</b>	<b>24</b>
<b>Degrees and Diplomas</b>	<b>24</b>
<b>Bachelor's Degrees</b>	<b>26</b>
Bachelor of Medicine and Bachelor of Surgery (MB,ChB)	26
Bachelor of Occupational Therapy (BOccTher)	37
Bachelor of Science in Dietetics (BScDiet)	42
Bachelor of Science in Physiotherapy (BScPhysio)	49
Bachelor of Speech-Language and Hearing Therapy (BSL and HT)	57
<b>Extended Degree Programmes (EDP)</b>	<b>63</b>
Extended Degree Programme (EDP) for MB,ChB	63
Extended Degree Programme (EDP) for BSc in Physiotherapy	65
Extended Degree Programme (EDP) for BSc in Dietetics	67
Extended Degree Programme (EDP) for B of Speech-Language and Hearing Therapy	67
<b>Honours Degrees</b>	<b>69</b>
Bachelor of Nursing with Honours	69
Bachelor of Science with Honours	74
<b>Master's Degrees</b>	<b>96</b>
Master of Audiology	96
Master of Human Rehabilitation Studies	96
Master of Medicine	99
Master of Nursing	146
Master of Nutrition	150
Master of Occupational Therapy	152
Master of Pathology	155
Master of Philosophy	157
Master of Physiotherapy	171
Master of Science	174
Master of Speech-Language Therapy	194

<b>Doctoral Degrees</b>	<b>194</b>
Doctor of Philosophy	195
Doctor of Science	199
Transdisciplinary Doctoral Programme focusing on Complexity and Sustainability studies	200
<b>Diplomas</b>	<b>202</b>
Postgraduate Diploma in Addiction Care	202
Postgraduate Diploma in Family Medicine	204
Postgraduate Diploma in Health Research Ethics	206
Postgraduate Diploma in Infection Control	208
Postgraduate Diploma in Nursing	210
Postgraduate Diploma in Occupational Medicine	216
Postgraduate Diploma in Pharmaceutical Medicine	218
<b>4. Module Content of Under- and Postgraduate Modules</b>	<b>222</b>
<b>5. Research and Service Bodies</b>	<b>299</b>

# **1. GENERAL INFORMATION**

## **STANDING INVITATION TO PAST STUDENTS**

The Registrar cordially invites all past students of Stellenbosch University to notify him in writing of any change of address.

The Registrar also welcomes news of distinctions, academic or other, won by our past students, and would appreciate being informed of the titles of any of their publications. The Senior Director: Library and Information Services would be equally happy to receive copies of such publications on behalf of the University Library.

## **SUMMARY: LANGUAGE POLICY AND PLAN**

The official Language Policy and Language Plan of Stellenbosch University were approved by the Council of the University in 2002. The following summary is provided in the interests of brevity, but must be read in conjunction with, and is subject to, the full Language Policy and Plan. The full version is available at <http://www.sun.ac.za/taal>.

### **Language Policy**

1. The University is committed to the use and sustained development of Afrikaans as an academic language in a multilingual context. Language is used at the University in a manner that is directed towards its engagement with knowledge in a diverse society.
2. The University acknowledges the special status of Afrikaans as an academic language and accepts the responsibility to promote it. At the same time, it takes account of the status of English as an international language of communication and of isiXhosa as an emerging academic language.
3. The University distinguishes between the use of the three languages in the following manner:
  - Afrikaans is by default the language of learning and teaching at undergraduate level, while English is used to a greater extent at the postgraduate level;
  - isiXhosa is promoted as an emerging academic language. The University creates opportunities for students and staff to acquire communication skills in isiXhosa.
4. The institutional language of the University is, by default, Afrikaans, while English is also used, depending on the circumstances, as an internal

language of communication. All three languages are used, where possible, for external communication.

## **Language Plan**

1. The Language Plan distinguishes between the implementation of the policy in learning and teaching situations and in the support services and management.
2. Choices between various language options may be made in learning and teaching situations, depending on the language abilities of the lecturer and the composition of the students and programme. These language options are arranged in a hierarchy. Reasons must be provided for deviating from the default option (see point 4 for details).

In extraordinary and compelling circumstances the University may deviate from the language specification of a module or programme, on condition that any such deviation must be reviewed at the end of each semester to determine whether its continuation remains justified. The deans manage this process, reporting on it to the Executive Committee (Senate). The Language Committee must be informed of any deviation from the language specification of a module or programme and must be given the opportunity to enquire about such deviation, where necessary.

3. Three general guidelines apply with regard to the language of learning and teaching in class:
  - Modules in which a language is taught are conducted mainly in the language in question (e.g. isiXhosa is taught mainly in isiXhosa, Mandarin in Mandarin) and tasks, tests and examinations are set and answered accordingly.
  - Questions papers in all other modules are set in Afrikaans and English and students may answer in Afrikaans or English.
  - Except in cases where the aim of the module is language acquisition or the study of the language, students may ask questions and expect answers in Afrikaans or English.
4. Departments choose and implement the various language specifications as follows (the above three points apply generally for all options):

### **A Specification\***

#### *Rationale*

Applies as the default mode for all undergraduate modules. No reasons need to be given for exercising this option.

### *Characteristics*

- Teaching is mainly in Afrikaans
- Study material such as textbooks, notes, transparencies, electronic learning and teaching material may be in Afrikaans and/or English
- Study framework is in Afrikaans and English.

### **T Specification\* (bilingual classes)**

#### *Rationale*

Is used for classes where

- Students' language competence requires greater use of English
- a programme offered is unique to the University
- multilingualism is important in the context of a specific occupation
- the lecturer does not yet have an adequate command of Afrikaans.

#### *Characteristics*

- Teaching is in Afrikaans for at least 50% of the time.
- Textbooks and reading matter are in Afrikaans and/or English.
- Study notes, transparencies and electronic learning and teaching material are fully in Afrikaans and English, or alternately in Afrikaans and English.

### **E Specification (English as the main medium of instruction)**

#### *Rationale*

Is used only in highly exceptional circumstances for

- programmes unique in South Africa
- programmes in which students do not have adequate language skills (foreign or English-speaking students)
- modules in which the lecturer does not have a command of Afrikaans
- regional cooperation and strategic aims that necessitate English.

#### *Characteristics*

- Teaching is primarily in English.
- Textbooks and reading matter are in Afrikaans and/or English.
- Notes are in English with core notes in Afrikaans.
- Transparencies and electronic learning and teaching material are in English.

## **A & E Specification (separate ‘streams’ in Afrikaans and English)**

### *Rationale*

Used only in most exceptional circumstances when academically and financially justified and attainable for

- modules with large numbers of students
- regional cooperation and attaining strategic goals
- programmes offered by satellite technology or interactive telematic education.

### *Characteristics*

The characteristics of the A and E options apply respectively here.

\*For both of these options an academic language competence in Afrikaans and English is essential for successful study.

5. Afrikaans is the default language of communication for the support services and management. All official documents of the University are available in Afrikaans. „Default’ does not, however, mean „exclusively’: important policy documents are available in English and communication with staff is also conducted in English. Guidelines are provided for the language to be used at meetings. Documents relating to the service conditions for staff are available in Afrikaans, English and isiXhosa.
6. Written communication with students is conducted in Afrikaans and English, and recruitment is conducted, where possible, also in isiXhosa. Oral communication is conducted in Afrikaans or English, according to the language of preference of the student.
7. The corporate image of the University reflects the Language Policy and Plan.
8. A Language Committee is appointed by the Council to implement the Language Policy and Plan.
9. The Language Centre assumes the responsibility for the provision and/or the coordination of the relevant language support required for the effective implementation of the Language Policy and Plan.

### **PLEASE NOTE:**

A detailed explanation of the language specifications and the language specification for individual modules can be found in the chapter, “Module Content of Under- and Postgraduate Programmes”.

## **CODE OF CONDUCT FOR LANGUAGE IN THE CLASSROOM**

This Code of Conduct has been drawn up in order to provide practical guidelines for understanding and implementing the Language Policy and Language Plan of SU, which were accepted by the University Council in 2002. The Council regards it as important that the Language Policy and Plan of the SU should be implemented with integrity. The Code is offered as an aid for dealing constructively with possible difficulties or uncertainties. The core principle governing the day-to-day use of language on the campus is that all staff, students and clients of the University are responsible for language matters and may have the expectation that disputes will be approached and dealt with in a spirit of cooperation in which workable solutions are sought.

A distinction is drawn in the Code of Conduct between the responsibilities and expectations of staff and of students. Complaints on language matters of an academic nature will be dealt with in accordance with standard procedures.

The Language Policy and Plan sets the minimum language requirements for students studying at Stellenbosch University (Language Plan 2002:5):

As a general rule, students taking an A module or a T module require an academic language proficiency in both Afrikaans and English for effective study at the undergraduate level. A higher level of academic language proficiency is required for postgraduate study. Lecturers, especially with regard to their obligations to set and assess assignments, tests and question papers in English and Afrikaans, will be expected within a reasonable time from their appointment to develop sufficient receptive skills (listening and reading) in Afrikaans and English to be able to follow discussions in class, to set assignments and examination question papers in both languages and to be able to understand students' answers in both languages. They should also be capable of judging the equivalence of translations and of fairly assessing answers in Afrikaans and English.

### **Lecturers' Responsibilities**

Lecturers bear the responsibility of:

1. implementing the language specifications of the module being taught in accordance with the requirements of the Language Plan (see especially paragraph 3 of the Language Plan).
2. revising and adjusting the language specifications where necessary and according to the circumstances (new text books, other lecturers).



3. informing students briefly at the beginning of the teaching of the module, orally and in the module framework, of the choices and alternative for which the language specifications make provision.
4. ensuring that questions in assignments, tests and examinations have exactly the same content in English and Afrikaans.
5. developing sufficient language proficiency to be able to mark assignments, tests and examinations in Afrikaans and English, or making other satisfactory arrangements that it takes place.
6. ensuring that, in accordance with the guidelines for the T option (see 3.3.1.2 of the Language Plan), students' language proficiency is sufficiently developed, and the necessary measures are in place to ensure subject-specific language proficiency in Afrikaans and English.
7. striving at all times to act courteously and accommodatingly in situations involving language use (e.g. when questions are asked in English in a class where the language specification for the module is A).

### **Lecturers' Expectations**

Lecturers can expect students to:

1. take note of the characteristics of the language specification applicable to the specification laid down for the module. (See paragraph 3, Language Plan).
2. inform the lecturer of their needs with regard to academic language skills.
3. respect the spirit of the Language Policy and Plan, especially with regard to the development of skills in a language which is not their language of choice, by deliberately paying attention to it, taking part actively in class and working on their knowledge of subject terminology and subject discourse in both languages. This expectation applies especially to the T Specification for modules.

### **Students' Responsibilities**

Students bear the responsibility of:

1. ascertaining the language options for each module and noting especially the consequences; e.g. that translations will not be available in some instances.
2. being honest and open-hearted about their language skills and taking the responsibility for early and appropriate action if they should experience difficulties.
3. deliberately developing the receptive skills (listening and reading) in the language not of choice for learning and teaching by active participation in class.

4. buying and using the prescribed material (especially text books) to improve their language skills in the subject.
5. being courteous and accommodating, and acting accordingly, in situations where language use is at issue, e.g. with regard to the difficulties of the minority group in the class.
6. accepting that one or a few students, because of inadequacies in his/her language proficiency, may not exercise or try to exercise a right of veto with regard to the use of Afrikaans or English in the class situation.

### **Students' Expectations**

Students can expect that:

1. help with language skills development will be provided should their academic language proficiency in Afrikaans and/or English be inadequate.
2. they can ask questions and conduct discussions in Afrikaans or English (unless the other languages are required, as in language modules), taking into account their own and the lecturer's language proficiency.
3. Afrikaans and English versions of assignments and question papers will be available and will have the same content.
4. there will be a sensitivity for language difficulties, so that language errors made under examination conditions will be assessed with discretion.

### **NON-RACISM**

Stellenbosch University admits students of any race, colour, nationality or ethnic origin to all rights, privileges, programmes and activities generally accorded or made available to students of the University. The University does not discriminate on the basis of race, colour, nationality or ethnic origin in the implementation of its educational policies, its scholarship and loan programmes, or its sport programmes.

#### **PLEASE NOTE:**

1. In this publication any expression signifying one of the genders includes the other gender equally, unless inconsistent with the context.
2. Before making a final choice of modules (subjects), every student should closely consult the relevant timetables. Should it then become apparent that two modules fall in the same time slot on a particular timetable, the University will not allow registration as a student in both of them for the same year/semester since they will be an inadmissible combination.
3. The University reserves the right to amend the Calendar at any time. The Council and Senate of the University accept no liability for any

inaccuracies there may be in the Calendar. Every reasonable care has, however, been taken to ensure that the relevant information to hand as at the time of going to press is given fully and accurately in the Calendar.

4. In the event of uncertainty or a dispute regarding information in Part 10 of the Calendar, the final interpretation will be based on the Afrikaans version.
5. Parts 1, 2 and 3 of the Calendar contain general information applicable to all students. Students are urged to note with special care the content of the Provisions relating to Examinations and Promotions in the “University Examinations” chapter of Part 1 of the Calendar.

## **CALENDAR CLASSIFICATION**

The University Calendar is divided into the following parts:

General	Part 1
Bursaries and Loans	Part 2
Student Fees	Part 3
Arts and Social Sciences	Part 4
Science	Part 5
Education	Part 6
AgriSciences	Part 7
Law	Part 8
Theology	Part 9
Economic and Management Sciences	Part 10
Engineering	Part 11
Medicine and Health Sciences	Part 12
Military Science	Part 13

Afrikaans (Part 1 – 12) or English copies of the individual parts may be obtained from the Registrar on request.

## **COMMUNICATION WITH THE UNIVERSITY**

### **Student Number**

In dealing with new formal applications for admission, the University assigns a student number to each applicant. This number serves as the unique identification of the person concerned. However, the mere assignment of a student number does not imply that the applicant has been accepted for the proposed programme of study. You will be advised whether or not you have been accepted in a separate letter.

Once you have been informed of your student number you must please quote it in all future correspondence with the University.

**Addresses at the Central Administration**

Correspondence on academic matters – i.e. study-related matters, bursaries, loans, etc. –should be directed to

The Registrar

Stellenbosch University

Private Bag X1

MATIELAND

7602

Correspondence on matters relating to finance and services, including services at University residences, should be directed to

The Executive Director: Operations and Finance

Stellenbosch University

Private Bag X1

MATIELAND

7602

**Other official addresses**

The Dean: Faculty of Medicine and Health Sciences

Private Bag 19063

TYGERBERG

7505

Student Affairs (Non-academic matters)

Neelsie

Private Bag X1

MATIELAND

7602

## USEFUL TELEPHONE AND FAX NUMBERS

### **The Faculty of Medicine and Health Sciences: Tygerberg**

<b>The Faculty of Medicine and Health Sciences: Tygerberg</b>	<b>Telephone</b>	<b>Fax</b>
Director: Business Management: ESA Mouton	(021) 938 9054/ (021) 938 9437	(021) 933 6330
Deputy Registrar: P Retief	(021) 938 9379	(021) 938 9060
Head of Programme Administration & Faculty Secretary: JE Coetzer	(021) 938 9204	(021) 938 9060
Head of Examinations: MA de Vries	(021) 938 9309	(021) 932 5977
Selection Officer (Medicine): E van Wyk	(021) 938 9203	(021) 931 9834
Selection Officer (Allied Health Sciences): C de Doncker	(021) 938 9533	(021) 931 9834
Accommodation: A Scholtz	(021) 938 9378	(021) 931 9834
Applications for Admission (Stellenbosch): JJ Spies	(021) 808 4842	(021) 808 4499
Bursary enquiries: P Lewis	(021) 938 9458	(021) 931 9834
Health Sciences Library (Tygerberg)	(021) 938 9368	(021) 933 7693

### **Major entities by campus**

Graduate School of Business (Bellville Park)	(021) 918 4111	(021) 918 4112
Medicine and Health Sciences, Faculty of (Tygerberg)	(021) 938 9111	(021) 931 7810
Library (JS Gericke) (Stellenbosch)	(021) 808 4385/ (021) 808 4883	(021) 808 4336
Military Science, Faculty of (Saldanha)	(022) 702 3999	(022) 814 3824
School of Public Leadership (Bellville Park)	(021) 918 4122	(021) 918 4123
Telematic Services (Stellenbosch)	(021) 808 3563	(021) 808 3565

### **Other Units**

Bursaries (Postgraduate candidates)	(021) 808 4208	(021) 808 2739
Bursaries and Loans (Undergraduate candidates)	(021) 808 9111	(021) 808 2954
Centre for Student Communities	(021) 808 2848	(021) 808 2847
Centre for Student Counselling and Development	(021) 808 3894	(021) 808 4706
Centre for Teaching and Learning (Extended Degree Programmes)	(021) 808 3717	(021) 886 4142
Communication and Liaison	(021) 808 4977	(021) 808 3800
Development and Alumni Relations	(021) 808 4020	(021) 808 3026
Examinations Section	(021) 808 9111	(021) 808 2884
Postgraduate and International Office (PGIO)	(021) 808 4628	(021) 808 3799
Research Development	(021) 808 4914	(021) 808 4537

### **Faculty Secretaries**

Medicine and Health Sciences: Applications, Stellenbosch	(021) 808 9111	(021) 808 3822
Medicine and Health Sciences: Tygerberg	(021) 938 9204	(021) 931 7810
AgriSciences	(021) 808 9111	(021) 808 3822
Arts and Social Sciences	(021) 808 9111	(021) 808 3822
Economic and Management Sciences	(021) 808 9111	(021) 808 3822
Education	(021) 808 9111	(021) 808 3822
Engineering	(021) 808 9111	(021) 808 3822
Law	(021) 808 9111	(021) 808 3822
Military Science	(021) 808 9111	(021) 808 3822
Science	(021) 808 9111	(021) 808 3822
Theology	(021) 808 9111	(021) 808 3822

## **2. THE FACULTY OF MEDICINE AND HEALTH SCIENCES**

### **INTRODUCTION**

#### **The Faculty**

The Faculty of Medicine and Health Sciences consists of ten academic departments, namely Anaesthesiology and Critical Care, Biomedical Sciences, Medical Imaging and Clinical Oncology, Surgical Sciences, Medicine, Interdisciplinary Health Sciences, Pathology, Paediatrics and Child Health, Psychiatry, and Obstetrics and Gynaecology. Each department is managed by an Executive Head of Department. Excepting four departments, each comprises different divisions headed by a Head of Division. The Faculty Management consists of the Dean, a Deputy Dean: Education, a Deputy Dean: Research, a Deputy Dean: Community Service and Interaction, and a Director: Business Management.

The Faculty has approximately 3 000 full-time undergraduate and postgraduate students, and each year produces an average of 160 doctors, 60 specialists and 180 graduates and diplomates in supplementary health sciences.

The Faculty of Medicine and Health Sciences is an institution with characteristically exceptional academic training programmes, based on research of outstanding quality and well-integrated administrative and committee structures. It provides for the needs of the different health disciplines in the Western Cape, the rest of South Africa and Africa.

The training complex consists of Tygerberg Hospital, the Clinical Building, the Fisan Building and the Education Block with state-of-the-art lecture, library, computer and laboratory facilities as well as a Clinical Skills Centre. Increasingly, teaching and research activities are also taking place in peripheral health facilities in the rest of the Western Cape. The Ukwanda Centre for Rural Health provides this platform for service, training and research for undergraduate and postgraduate students in rural areas.

The Centre for Health Professions Education enhances the Faculty's reputation of excellence in the field of teaching and research with its strong academic focus on quality education. Apart from the academic activities, the Faculty of Medicine and Health Sciences is further strengthened by local developmental and support functions performed according to a matrix model under supervision of the following office-bearers: a Director: Business Management supported by a Head of Finance, a Deputy Registrar (Academic

Administration), a Human Resource Manager and a Research Development Manager.

### **Historical background**

The Faculty of Medicine began training its first generation of doctors in 1956. Prefabricated buildings behind the Karl Bremer Hospital acted as interim training facility until the new academic buildings on the Tygerberg Campus were officially opened on 14 March 1975. Over the immediately preceding years, departments moved into parts of the building complex as they became available.

From the outset, the unwritten mission of the founder members was to train and develop individuals at undergraduate and postgraduate levels in all disciplines of medicine and the allied health care sciences. The groundwork for the Faculty of Medicine was laid by visionary leaders such as Prof FD du Toit van Zijl, the “father” of the new faculty, and a group of medical specialists such as Profs AJ Brink and JN de Villiers. Shortly afterwards, Prof Van Eck Kirsten was appointed Professor of Anatomy, while Profs HW Weber (Anatomical Pathology) and HD Brede (Medical Microbiology) were recruited in Germany. Within a year after their arrival in South Africa, both of the latter were able to teach in Afrikaans.

### **The vision and mission of the Faculty**

#### *Vision*

The Faculty of Medicine and Health Sciences of Stellenbosch University is recognised for its indispensable leadership in the field of health sciences in Africa and for the value it adds internationally.

#### *Mission*

The Faculty of Medicine and Health Sciences of Stellenbosch University is committed to the goal of optimal health in Southern Africa by:

- developing, in the context of a learning culture, independent professionals capable of making a worthwhile contribution to the community;
- contributing to new knowledge in the field of health sciences by means of research that is relevant to Africa; and
- adding value to the broad community through participation and service delivery.

### **The Tygerberg Campus**

The Tygerberg Campus is situated in Parow Valley, which forms part of the northern suburbs of Greater Cape Town. It is 20 km from Cape Town city



centre and 35 km from Stellenbosch, where the University has its main campus.

As well as being an academic complex, the Campus offers students extensive sports facilities and five excellent residences. The Tygerberg Students' Centre houses a wide range of facilities, such as committee rooms and offices for the Tygerberg Students' Representative Council, consulting rooms for the Student Health Services, a community hall for sports and mass meetings, a modern gymnasium, a cafeteria and the Mankadan Reception Centre and Lodge (offering accommodation for visiting scientists, parents and alumni). A special guesthouse on the Tygerberg Campus caters for foreign visiting students.

### **Student accommodation**

Accommodation for students is available in one of four University residences on the Tygerberg Campus, namely Hippocrates, Huis Francie van Zijl, Kerkenberg and Meerhoff. Particulars of this accommodation are given in Part 3 of the University Calendar.

### **Technologically mediated teaching**

In addition to the familiar modes of delivery, some programmes are also presented by technologically mediated teaching:

- BNurs Honours;
- BSc Honours (Obstetrics and Gynaecology);
- MNurs;
- M in Nutrition;
- MMed (Fam Med);
- MPhil in Health Sciences Education;
- Postgraduate Diploma in Family Medicine; and
- Postgraduate Diploma in Nursing.

### **Ukwanda Centre for Rural Health**

The Ukwanda Centre for Rural Health was established as an initiative of the Faculty of Medicine and Health Sciences in June 2001. The purpose of Ukwanda is to coordinate and support comprehensive, community-based training and research for all the students in the Faculty. Ukwanda therefore provides students with the opportunity to be trained in rural areas and to experience the challenges that are unique to these areas.

At present, Ukwanda provides support and services to the students by means of accommodation and student support in Worcester and Hermanus; intranet and internet access at the various sites where the students are trained;

telehealth; a comprehensive knowledge service to the communities involved with Ukwanda; and the development of other rural health platforms.

### **Centre for Health Professions Education**

The Centre for Health Professions Education (CHPE) was established in January 2006 in order to strengthen the Faculty of Medicine and Health Sciences' reputation of excellence in the field of teaching and research with its strong academic focus on the quality of teaching. The CHPE promotes excellence and scientific and evidence-based teaching in the health sciences on institutional and national level, as well as in the rest of Africa. The CHPE is committed to interdisciplinary teaching and learning, community-based teaching and the promotion of rural health, facilitating learning environments, the promotion of diversity, scientificity, an ethical approach to health care as well as lifelong learning.

## **GENERAL INFORMATION**

### **Immunisation**

All students who are selected for MB,ChB I, BSc in Dietetics I, B of Speech-Language and Hearing Therapy I, BSc in Physiotherapy and B of Occupational Therapy I shall be tested for Hepatitis B by their own medical practitioner or at the Campus Health Service (CHS) of the University. Students with negative results shall have immunisation done before they report to the University as students.

A certificate to confirm that they have been tested and immunised, if necessary, shall be submitted to the CHS, Tygerberg Campus before the end of the first academic year. B of Occupational Therapy students shall submit proof of immunisation during registration at the beginning of the first year as they are in contact with patients in their first year already.

MB,ChB students who have not submitted proof of immunisation before commencement of the midyear examinations for MB,ChB II will not receive their results for these examinations until such time as they submit proof of initial immunisation at least to the CHS. Students who have not at the end of the Introduction to Clinical Medicine 271 module submitted proof that they have completed the full immunisation schedule, will not receive their results for this module.

It is also strongly recommended that students shall have immunisation done against Hepatitis A, Varicella (chicken pox) and measles.

### **Readmission after unsuccessful study**

The provisions governing readmission after unsuccessful study are as set out in Part 1 (General) of the University Calendar. Applications for readmission

should be directed to the Deputy Registrar (Tygerberg Campus) for consideration by the Readmissions Committee of Senate.

### **Bursaries and loans**

Particulars of bursaries and loans are available from the Academic Administration Section of the Faculty of Medicine and Health Sciences.

### **Examination in a module**

At the end of each semester, examinations are conducted in the modules of that semester. Examinations in modules lasting the full year take place at the end of the year. This stipulation does not apply to modules for which continuous assessment is used. All written tests and examinations must be done in ink.

#### *Re-examination and reassessment*

Students with a final mark of less than 40 in a module do not have the right to a re-examination or a reassessment in the specific module. Re-examination/reassessment is applicable as indicated under each programme.

#### *Oral examinations/reassessment*

Should an undergraduate or a postgraduate student achieve a class mark of 60 or more and an examination mark of at least 30 in a module, such a student must be offered the opportunity of a reassessment or an oral examination in the relevant module before a final mark of less than 50 is awarded. In the case of modules in which an oral and/or a clinical examination forms an integral part of the final examination, i.e. the modules for MB,ChB, BOccTher, BScPhysio, BScDiet, BSL and HT, and PG Dip (Nursing), students with a class mark of 60 or more do not have recourse to an oral examination/reassessment should their final mark be less than 50.

#### *Calculation of the final mark after re-examination or reassessment (see also programme-specific guidelines pertaining to re-evaluation, supplementary examinations and special examinations)*

The mark of the first examination and the mark achieved for the re-examination are used in a ratio of 50:50 to calculate the mark after re-examination. The class mark and the mark after re-examination are used in a ratio of 40:60 to calculate a new final mark. Should the mark achieved in the re-examination be 50 or more, the final mark will not be less than 50. In the case of a reassessment the mark obtained in the reassessment shall be used as the final mark, with the understanding that the mark achieved may not be lower than the original final mark obtained in the examination, but not more than 50.

*Re-examinations in modules followed in other faculties*

For students following degree or diploma programmes in the Faculty of Medicine and Health Sciences that require modules presented by other faculties, the general examination policy as set out in Part 1 (General) of the University Calendar, under the heading “Examinations” in the section on Examinations and Promotion, will apply.

*Discussing examination answers with members of the teaching staff*

If a student wishes to learn from his mistakes, he shall be at liberty to discuss his examination answers with the lecturer(s) concerned, provided that:

- A student shall not view his corrected examination script(s) other than in the presence of the lecturer(s) concerned.
- In the Faculty of Medicine and Health Sciences the discussion of such examination script(s) may take place after the final marks have been published on the examination or other relevant notice boards, and with due allowance for any further arrangements the department or division concerned may have made with the approval of the Faculty Board.
- If a student in the Faculty of Medicine and Health Sciences is subject to reassessment or a supplementary examination, the discussion may take place before the reassessment or supplementary examination.
- Any request for such discussion shall be made within one month after the official confirmation of the examination results in question by the Vice-Rector (Teaching).
- The opportunity to discuss examination results with the lecturer(s) concerned is not intended as an opportunity for the re-evaluation of the examination mark received.

**PLEASE NOTE:**

Examination scripts are destroyed two months after the date of the official confirmation of the examination results.

**Re-evaluation of examination scripts**

A student who fails an examination in a module with a mark of 35 to 39, or 45 to 49 may, on payment of a deposit determined annually by the University and published in the General Calendar (Part 1), apply in writing to the Deputy Registrar (Tygerberg Campus) for the re-evaluation of the examination script concerned, subject to the provisions below.

### *General provisions*

- The student should submit an application (on the prescribed form available on the web or at the examination office), accompanied by the above-mentioned deposit, to reach the Deputy Registrar not later than seven calendar days after official notification of examination results on the relevant notice-boards of the Faculty.
- Re-evaluation of the script of a parachute test, reassessment, special or supplementary examination will not be allowed.

In the case of modules where a written re-evaluation follows immediately after the examination (normally within one week after the examination results have been made available), students shall only be able to apply for a re-mark after the results of the re-evaluation concerned have been made available; both the original examination script, as well as the script of the re-evaluation, will be submitted for a re-mark.

- No application will be considered for the re-evaluation of a practical subject (e.g. clinical rotations) or any module in which external examiners were involved.
- No application will be considered for the re-evaluation of an oral, practical or clinical examination forming an integral part of an ordinary university examination.
- No re-evaluation of a test script or other task for assessment will be considered in the case of modules evaluated through continuous assessment. A student who is of the opinion that his final mark has been calculated incorrectly may, on payment of a deposit determined annually by the University, apply in writing to the Deputy Registrar (Tygerberg Campus) for the re-evaluation of his final mark in the relevant module by the relevant department, division or module team. Such application, accompanied by the deposit, should reach the Deputy Registrar not later than seven calendar days after the official notification of the relevant examination results.

### *Internal re-evaluation*

- Re-evaluation is first undertaken by the internal examiners.
- Should a student's application comply with the general provisions above, the division of the Deputy Registrar informs the module chairperson concerned by letter of the application. The letter will also contain clear instructions on the internal re-evaluation process to be followed by the chairperson and a copy of these provisions. The module chairperson then obtains the relevant examination script(s)

(including that of the above-mentioned written reassessment, if applicable), the examination paper and the memorandum of the lecturer(s) concerned.

- The module chairperson arranges for re-evaluation by the internal examiners concerned after ascertaining that no calculation errors were made in the determination of the mark for the script.
- The module chairperson should submit the result of the re-evaluation in writing to the office of the Deputy Registrar within five workdays after initial receipt of the relevant script(s).

### *External re-evaluation*

- Should the internal examiners uphold the initial examination result (in other words, should a student still fail a module after the re-mark in the case where a student obtained a mark of 45 to 49, or still does not have access to a re-evaluation or supplementary examination in the case where a student obtained a mark of 35 to 39), the examination script is re-evaluated by a qualified external examiner.
- The lecturer/module chair concerned identifies a suitable external examiner for the module.
- The Deputy Registrar provides the external examiner with the relevant examination script(s) (including the reassessment script, if applicable), the examination paper(s) and the memorandum/memoranda, as well as a copy of these provisions, in a sealed envelope. The Deputy Registrar also requests the following from the external examiner in accompanying correspondence:
  - That the examiner checks the script(s) for marking errors, e.g. calculation errors, marks for a specific question that had not been added or deviations from the memorandum.
  - That the examiner re-evaluates the script(s) and awards a mark in accordance with the memorandum/memoranda.
  - That, should the examiner not agree with the memorandum/memoranda, he provides a written motivation in this regard and awards the mark that would have been awarded had the script(s) been marked without consideration of the memorandum/memoranda. The external examiner should therefore award two marks, one in accordance with the memorandum and one in accordance with the external examiner's suggested amended memorandum.
  - That, should the mark of the external examiner differ from the original mark, the external examiner clearly explains in writing

how he obtained the new mark and where and why he differs from the internal examiners.

- That the external examiner also states in his written feedback whether or not he feels that the memorandum/memoranda is reliable and valid and, if not, why not (as indicated above).
- The external examiner is requested to inform the Deputy Registrar in writing within ten workdays of the result of his re-evaluation (including the aspects stipulated above).
- The findings of the external examiner are communicated to the module chairperson (and by the chairperson to the other internal examiners/lecturers as the case may be), who should indicate whether these findings are acceptable, or not.

#### *Dispute resolution*

- Should a clear difference of opinion exist between the external examiner and the module chair (and the other internal examiners/lecturers) to the extent that no consensus can be reached on whether the student passes or fails, the programme coordinator convenes an extraordinary meeting of the relevant examination committee, together with the Deputy Dean: Education or his delegate(s). This committee then makes a final and binding decision.
- The ruling stipulated above also applies to a dispute on the validity of the memorandum/memoranda.

#### *Condonation of final mark*

Except in cases as described in the paragraph on “Dispute resolution” above, the final mark of a student (including the condoning of the mark) is determined and ratified by the Deputy Dean: Education, in consultation with the programme coordinator and module chair concerned.

#### **Special arrangements with regard to graduation ceremonies for MB,ChB VI students who repeat modules**

MB,ChB VI students who, at the end of their final year, have failed only one domain and have to repeat only one domain (in other words, who do not have to attend any other domains) can obtain their degree during the graduation ceremony in March/April of the following year. Such students will still have to pay class fees for that specific domain.

MB,ChB VI students who, at the end of their final year, have failed more than one domain or have failed one domain and have to attend one or more of their other domains, and whose clinical rotations and examinations are completed three weeks prior to the graduation ceremony in March/April, will

be able to graduate and obtain their MB,ChB degree in March/April of that year.

MB,ChB VI students who, at the end of their final year, have failed more than one domain and must attend one or more domains, and whose clinical rotations and examinations are incomplete three weeks prior to the March/April graduation ceremony, will only be able to obtain their MB,ChB degree in December of that year.

### **Class fees**

From 2010 class fees for all structured M degree programmes will be levied per module. Until further notice the class fees for MMed programmes will be levied per annum, as in the past, with the exception of the class fees for the MMed (Fam Med) programme which will be levied per module.

The class fees for the research modules within the structured M degree programmes will be spread over two years (70% of the class fees in the first year of registration and 30% in the second year) to prevent students from having to pay the full amount for two consecutive years. A student who completes his research module within one year of study will therefore pay only 70% of the class fees for the specific module. A student who fails to complete the research module within the prescribed two years will be liable, as of the third year of study, to pay a yearly continuation levy equal to the full amount for the module concerned.

Students who register for research M degree programmes pay the full amount in the first year of study with a nominal continuation levy in the second and third year. However, in the fourth and following years of study the continuation levy will double.

### **Commencement of postgraduate studies**

All postgraduate students shall register for their particular programmes at the start of the academic year. The only programmes that students shall take on and register for at the start of the second semester are the MMed programmes and the MSc programme in Nuclear Medicine. Requests for exclusion from this rule shall be submitted to the Deputy Dean: Education, with special motivation.



### 3. PROGRAMME OFFERING

#### DEGREES AND DIPLOMAS

The following degrees and diplomas are offered by the Faculty of Medicine and Health Sciences and are listed alphabetically under each of the five subheadings:

<b>Bachelor's Degrees</b>	
Bachelor of Medicine and Bachelor of Surgery	MB,ChB
Bachelor of Occupational Therapy	BOccTher
Bachelor of Science in Dietetics	BScDiet
Bachelor of Science in Physiotherapy	BScPhysio
Bachelor of Speech-Language and Hearing Therapy	BSL and HT
<b>Honours Degrees</b>	
Bachelor of Nursing with Honours	BNursHons
Bachelor of Science with Honours	BScHons
<b>Master's Degrees</b>	
Master of Audiology	MAud
Master of Medicine	MMed
Master of Nursing	MNurs
Master of Nutrition	MNutr
Master of Occupational Therapy	MOccTher
Master of Pathology	MPath
Master of Philosophy	MPhil
Master of Physiotherapy	MPhysio
Master of Human Rehabilitation Studies	MHumRehab
Master of Science	MSc

Master of Speech-Language Therapy	MSpeech
<b>Doctoral Degrees</b>	
Doctor of Philosophy	PhD
Doctor of Science	DSc
<b>Postgraduate Diplomas</b>	
Postgraduate Diploma in Addiction Care	PG Dip (Addiction Care)
Postgraduate Diploma in Family Medicine	PG Dip (Family Medicine)
Postgraduate Diploma in Health Research Ethics	PG Dip (Health Research Ethics)
Postgraduate Diploma in Infection Control	PG Dip (Infection Control)
Postgraduate Diploma in Nursing	PG Dip (Nursing)
Postgraduate Diploma in Occupational Medicine	PG Dip (Occupational Medicine)
Postgraduate Diploma in Pharmaceutical Medicine	PG Dip (Pharmaceutical Medicine)

## UNDERGRADUATE PROGRAMMES

### Undergraduate Enrolment Management

In order to meet the targets of Council with regard to the size (the total number of students) and shape (fields of study and diversity profile) of the student body of Stellenbosch University (SU), it is necessary to manage the undergraduate enrolments at SU.

SU's total number of enrolments is managed to be accommodated by its available capacity.

SU offers a balanced package of programmes covering all of three main study areas, namely (a) the humanities, (b) the economic and management sciences, and (c) the natural sciences, agricultural sciences, health sciences and engineering (Science, Engineering and Technology or SET).

SU is committed to the advancement of diversity.

Undergraduate enrolment management at SU adheres to the framework of the national higher-education system. A well grounded cohesion between

national and institutional goals, respecting important principles such as institutional autonomy, academic freedom and public responsibility, is pursued. The following points of departure apply:

- The expansion of academic excellence by maintaining high academic standards.
- The maintenance and improvement of high success rates.
- The fulfilment of SU's commitment to correction, to social responsibility and to contributing towards the training of future role models from all population groups.
- The expansion of access to higher education especially for students from educationally disadvantaged and economically needy backgrounds who possess the academic potential to study at SU with success.

Due to the limited availability of places and the strategic and purposeful management of enrolments, not all undergraduate applicants who meet the minimum requirements of a particular programme will automatically gain admission.

Details about the selection procedures and admission requirements for undergraduate programmes are given on [www.maties.com](http://www.maties.com) and on the faculty's website at [www.sun.ac.za/prospect\\_select](http://www.sun.ac.za/prospect_select).

All undergraduate prospective students with the 2014 intake and beyond in mind must write the National Benchmarking Test (NBT). Consult the NBT website ([www.nbt.ac.za](http://www.nbt.ac.za)) or the SU website at [www.maties.com](http://www.maties.com) for more information on the National Benchmarking Test.

The results of the National Benchmarking Tests may be used by SU for the following purposes (details are available at [www.maties.com](http://www.maties.com)):

- Supporting decision-making about the placement of students in extended degree programmes,
- selection, and
- curriculum development.

## **BACHELOR'S DEGREES**

### **Bachelor of Medicine and Bachelor of Surgery (MB,ChB)**

#### *Specific admission requirements*

1. For admission to the MB,ChB degree programme (main stream and extended degree programme) a student shall hold the National Senior Certificate (NSC) with university admission, endorsed by Umalusi, or an

equivalent qualification with an aggregate of at least 70% (level 6), and with at least 50% (level 4) for Mathematics, as well as Physical Sciences and Life Sciences. Students who have passed Mathematical Literacy (and not Mathematics) may be considered under extraordinary circumstances, should they perform well in the National Benchmark Tests (NBTs).

Prospective students are strongly advised to include Afrikaans as a subject for the NSC examination. Refer also to the selection guidelines at [www.sun.ac.za/prospect\\_select](http://www.sun.ac.za/prospect_select).

**PLEASE NOTE:**

There are only a limited number of places in the first year of study of the MB,ChB programme. Admission to the programme is therefore subject to selection. This selection is carried out in terms of clear guidelines that take into account both the academic and the non-academic merit of applicants. Applications for admission must reach the Registrar not later than 31 May of the previous year. All candidates who apply for undergraduate programmes in the Faculty of Medicine and Health Sciences must write the NBT.

2. In order to qualify for the MB,ChB degree, a student shall take the approved programme of this University for not less than the final three academic years.
3. All training shall, from the first year of study, be given on the Tygerberg Campus, in Tygerberg Hospital, and in various accredited local and peripheral hospitals and clinics. In the first year, certain practicals of first-semester modules will be offered on the Stellenbosch campus.
4. Students shall not be registered as student interns unless they have been registered as students in Medicine with the Health Professions Council of South Africa for a period of at least four and a half years.
5. Students of other universities who have failed MB,ChB I or BSc I and who have not been admitted to study Medicine at their respective universities shall not be admitted to MB,ChB I at this University.

*Renewal of registration as a student*

1. A student who does not meet the requirements for a pass in the MB,ChB I programme and who wishes to gain re-entrance into the programme shall be subject to renewed selection or readmission. The provisions relating to the examinations and promotion for the programme still also apply (see “Provisions relating to examinations and promotion for MB,ChB” below).
2. Any student in the MB,ChB (I-V) programme who still does not meet the requirements for a pass in the particular year of study at a second attempt,

and who wishes to gain readmission to the programme, shall reapply for admission.

3. Any student in Medicine who does not comply with the requirements for a pass on the first occasion in two successive years of study of the programme, and who wishes to gain readmission to the programme, shall apply anew for admission.
4. Any final-year MB,ChB student who has been unsuccessful twice in the examination in any domain after fully repeating such a domain shall be submitted to the Faculty Board for approval to repeat the domain once again, whereas students who have been unsuccessful for the third time have to apply for readmission.
5. Any student who has discontinued the MB,ChB programme and wishes to resume at a later stage shall reapply for admission. Such an application shall be considered by the MB,ChB Programme Committee for a recommendation to the Undergraduate Education Committee.

*Registration as a student in Medicine with the Health Professions Council of South Africa*

In terms of the regulations of the Health Professions Council of South Africa, students must apply for registration as students in Medicine.

*Modules for the MB,ChB programme (listed by year of study)*

The content of all modules in the pre-clinical and clinical subjects meet the requirements of the Health Professions Council of South Africa. For information regarding the content of modules please see the chapter “Module Content of Under- and Postgraduate Programmes”.

Due to the close integration between theory and practice, attendance of all first-year and second-year modules is obligatory. Students who render themselves guilty of poor attendance may be penalised academically or may even obtain an incomplete mark for the modules concerned.

**MB,ChB I**

*Compulsory modules (attendance compulsory)*

Life-forms and Functions of Clinical Importance	111(17)
Chemistry for Health Sciences	111(17)
Personal and Professional Development	111(17)
Health in Context	111(19)

Essentials of Disease Processes	141(30)
Principles of Therapy	141(20)
Introduction to Clinical Medicine	141(20)

### **MB,ChB II**

*Compulsory modules (attendance compulsory)*

Respiratory System	271(30)
Cardiovascular System	271(30)
Digestive System	271(30)
Urogenital System	271(30)
Endocrine System	271(15)
Reproductive System	271(20)
Introduction to Clinical Medicine	271(20)

### **MB,ChB III**

*Compulsory modules*

Neurosciences	371(30)
Musculoskeletal System	371(30)
Haematological System	371(20)
Early Clinical Rotations	371(67)

### **MB,ChB IV**

*Compulsory modules*

Infections and Clinical Immunology	471(20)
The Skin	471(10)
Anaesthesiology	471(15)
Health and Disease in Communities	471(20)
Forensic Medicine	471(10)
Middle Clinical Rotations	471(62)

*Continuation module*

Elective	441(20)
----------	---------

**MB,ChB V**

*Compulsory modules*

Health Management	511(10)
Ethics	511(10) (attendance compulsory)
Clinical Pharmacology	511(15)
Elective	541(20)
Middle Clinical Rotations	511(54)

*Continuation module*

Late Clinical Rotations	541(45)
-------------------------	---------

**MB,ChB VI**

*Compulsory modules*

Late Clinical Rotations	678(150)
-------------------------	----------

*Provisions relating to examinations and promotion for MB,ChB*

*Determination of final marks*

In the event of any divergence from the general provisions, the MB,ChB Programme Committee shall, at the beginning of the year, make known to students how the marks will be accrued in each specific instance.

For examination and promotion regulations, per year of study, please see below.

**First year**

**PLEASE NOTE:**

Attendance of contact sessions for all MB,ChB I modules is compulsory, and a class mark of less than 50% may be awarded to students whose attendance is unsatisfactory.

*Promotion*

1. To qualify for promotion to MB,ChB II, a student shall pass all modules of the first year, that is, shall obtain in each module of the first year a final mark of not less than 50.
2. The written examinations in all first-semester modules shall be taken within the examination period at the end of the first semester, with the

- exception of the modules Personal and Professional Development 111 Health in Context 111, which are assessed continuously.
3. In the case of a student obtaining a final mark of less than 40 at the end of the first semester in Life-forms and Functions of Clinical Importance 111 and/or Chemistry for Health Sciences 111, he shall not be allowed to continue with the programme during the second semester, unless such a student is granted admission to the extended degree programme in the second semester according to existing criteria. Should such a student register as a special student in Science during the second semester, pass all modules involved, obtain a weighted average final mark of at least 60% and, in writing, indicate that he wants to be reconsidered for the MB,ChB programme, his application for reselection will be considered in December. (Please note that reselection does NOT happen automatically and that compliance with the mentioned conditions does not guarantee reselection.)
  4. A student who has obtained a class mark and/or final mark of under 40 in any two modules of the first semester shall not be entitled to continue with the MB,ChB programme during the second semester, unless such a student, according to existing criteria, is permitted to enter the extended degree programme in the second semester. Should such a student enrol as a special student in Science during the second semester, pass all the relevant modules involved, obtain a weighted average final mark of 60% and, in writing, indicate that he wants to be reconsidered for the MB,ChB programme, his application for reselection will be considered in December. (Please note that reselection does NOT happen automatically and that compliance with the mentioned conditions does not guarantee reselection.)
  5. A student not complying with the requirements for a pass in the first year and having failed more than two modules will have to apply for readmission to the MB,ChB programme. A student who failed one or two modules shall be subjected to reselection for the programme (see also paragraphs 3 and 4 above).

### *Re-evaluation*

Re-evaluation shall apply to all the modules of the first year, except for the Personal and Professional Development 111 and Health in Context 111 modules (see “Reassessment in the modules Personal and Professional Development 111 and Health in Context 111” below). To qualify for re-evaluation in a module, a student shall have obtained in such module a final mark of not less than 40. All re-evaluations shall be done in writing and directly after the examination period (but not within 48 hours of



announcement of the final marks). A student must achieve a mark of not less than 50 in the re-evaluation to pass the module. The final mark after re-evaluation shall not be less than the original final mark and shall also not be more than 50.

*Reassessment in the modules Personal and Professional Development 111 and Health in Context 111*

A student who has obtained a mark of less than 40 in an assessment opportunity in the modules Personal and Professional Development 111 and Health in Context 111, which are assessed continuously, is entitled to a reassessment opportunity directly after the test period (but not within 48 hours of announcement of the test mark). Students who have obtained 40% to 50% in the original assessment opportunity have the choice to make use of the reassessment opportunity to improve their mark. The mark after reassessment shall not be less than the original mark, but also not more than 50. A student shall obtain at least 40 in each reassessment to pass the module as a whole, **on the understanding that the average final mark for the module as a whole shall be at least 50.**

*Credits in arrears*

1. A student who is only one module in arrears at the end of the first semester shall be entitled to a special examination in July of the same year, provided that the final mark obtained in that module was at least 40. In order to pass the module in the July examination, the student shall obtain an examination mark of not less than 50. The final mark after the special examination shall not be less than the original mark, but also not more than 50. A student who is Personal and Professional Development 111 or Health in Context 111, which is assessed continuously, in arrears shall not be entitled to a special examination.
2. A student who is only one second-semester module in arrears at the end of the second semester shall be entitled to a special examination in January of the next year, provided that the final mark obtained in the module was not less than 40. In order to pass the module in the January examination, the student must obtain an examination mark of not less than 50. The final mark after the special examination shall not be less than the original mark, but also not more than 50.

*Repeating the first-year programme*

A student who fails to be promoted to the second year shall repeat all the outstanding modules of the first year (a final mark shall be obtained anew), if permitted to repeat MB,ChB I (cf. paragraphs 3, 4 and 5 under “Promotion” above).

### *Taking MB,ChB II modules in advance*

A student who does not qualify to be promoted to the second year, has passed all the modules of the first semester of MB,ChB I, and has failed Essentials of Disease Processes 141 and/or Principles of Therapy 141 with a final mark of at least 40 in both modules, shall be entitled to take modules of the first semester of MB,ChB II in advance.

A student who does not qualify to be promoted to the second year, and has passed Essentials of Disease Processes 141 and/or Principles of Therapy 141, shall be entitled to take modules of the second semester of MB,ChB II in advance, with the exception of Introduction to Clinical Medicine 271 which may not be taken in advance.

### **Second year**

#### **PLEASE NOTE:**

Attendance of contact sessions for all MB,ChB II modules is compulsory, and a class mark of less than 50% may be awarded to students whose attendance is unsatisfactory.

#### *Promotion*

To qualify for promotion to MB,ChB III, a student shall pass all modules of the second year, that is, obtain in each module of the second year a final mark of not less than 50.

#### *Supplementary examinations*

No re-evaluations in MB,ChB II modules shall take place. A student shall be entitled to a supplementary written exam in January of the following year in all modules in arrears, provided that the final mark obtained in the modules is at least 40. In order to pass the module, the student shall obtain an examination mark of at least 50. This shall apply to domains in which students have obtained a continuous assessment mark of less than 40 (and have not qualified for reassessment) as well as domains which have been failed after reassessment. Only the examination mark of the supplementary examination shall be taken into account when calculating the final mark for the module unless the mark for the supplementary examination is less than the original examination mark, in which case the latter examination mark shall be used. The awarded final mark shall not be more than 50.

#### *Repeating the second-year programme*

A student who fails to be promoted to the third year shall repeat all outstanding modules of the second year, that is, shall in each outstanding module of the second year obtain a class mark and a final mark anew.

### *Taking MB,ChB III modules in advance*

A student who does not qualify to be promoted to the third year shall be entitled to take modules of MB,ChB III in advance, on condition that there is no overlapping with MB,ChB II modules that have to be repeated (including overlapping with test and/or examination dates), and provided that a maximum of two MB,ChB II modules shall be repeated during the second semester. The clinical rotations of MB,ChB III shall not be taken in advance.

### **Third and fourth year and first semester of the fifth year**

#### **PLEASE NOTE:**

Attendance of the Ethics 511 module is compulsory. Attendance of practical sessions for all other theoretical modules is compulsory, as well as of all clinical rotations. A class mark of less than 50% may be awarded to students whose attendance is unsatisfactory.

#### *Promotion*

1. To qualify for promotion to a subsequent year, a student shall have obtained in each module of the current year a final mark of not less than 50.
  - 1.1 In the case of elective modules, a student who is only one elective module in arrears will have to complete the module at the end of the year during the University vacation.
  - 1.2 Should a student have failed in one of his elective modules more than once or be in arrears for both elective modules at the end of MB,ChB V, such a student will not be promoted to MB,ChB VI and will be required to repeat the elective module(s).
2. To qualify for promotion to the next year or next phase (as applicable to the first semester of MB,ChB V), a student shall obtain in each domain of the Early and Middle Clinical Rotations a continuous assessment mark of not less than 50.
  - 2.1 Where a student has obtained a continuous assessment mark of less than 50 in any of the domains of these clinical rotation(s), such a student shall take a reassessment in the domains concerned, provided that the continuous assessment mark obtained shall be not less than 40. To qualify for promotion to the next year/phase, the student shall be required to obtain in such reassessment a mark of not less than 50.
  - 2.2 In the case of MB,ChB III a formal assessment will take place at the end of the year of all clinical skills which have been taught during the course of the year. Submission of a satisfactorily completed logbook is a prerequisite for admission to the clinical skills assessment. A student shall obtain at least 50 in this assessment in order to qualify for

promotion to MB,ChB V. Reassessment also applies (provided that a mark of at least 40 has been obtained in the original assessment) and a mark of not less than 50 shall be obtained in the reassessment to qualify for promotion to MB,ChB IV.

- 2.3 In the case of MB,ChB V a formal assessment will take place at the end of the first semester of all clinical skills which have been taught during the course of the Middle Clinical Rotations in MB,ChB IV and the first semester of MB,ChB V. Submission of a satisfactorily completed logbook is a prerequisite for admission to the clinical skills assessment. A student shall obtain at least 50 in this assessment to qualify for promotion to the Late Clinical Rotations in the second semester of MB,ChB V. Reassessment applies to the clinical skills assessment (provided that a mark of at least 40 has been obtained in the original assessment) and a mark of not less than 50 shall be obtained in the reassessment to qualify for promotion to the Late Clinical Rotations.
- 2.4 Should a student at the end of a specific year or phase have no more than one domain of four weeks duration, or two domains of two weeks duration, or two domains of one week duration and one domain of two weeks duration outstanding, and if the student passed all the relevant theoretical modules, as well as the clinical skills assessment, such a student will be allowed to repeat the clinical rotations in the relevant domains during the vacation period at the end of the year (a continuous assessment mark must be obtained anew). This applies to domains in which a student has obtained a continuous assessment mark of less than 40 (and therefore has not qualified for re-evaluation), as well as domains which a student has failed after re-evaluation. In the case of an MB,ChB V student, this will take place in the period set aside for Elective Module 541 and the relevant student will then have to do his Elective Module during the vacation period at the end of the year. Should the student once again achieve a mark of less than 50 in one or more of the domains in arrears, the student will fail the year and will then be required to repeat all the domains of the clinical rotations of that particular year during the following year and pass (as set out in 2.1 and 2.3) in order to be promoted to the following year of study.
3. Attendance of the Ethics 511 module is compulsory. Students who are guilty of poor attendance may be penalised academically or may even obtain an incomplete mark for the module.

### *Credits in arrears*

1. A system of supplementary written examinations shall apply to modules in arrears of the third year and fourth year and first semester of the fifth

year, and no re-evaluations shall take place. A student who is any theoretical module(s) in arrears at the end of the third or fourth year, or the first semester of the fifth year, will be allowed to sit for a supplementary examination in January of the following year (or in June of the same year in the case of the first semester of the fifth year), provided the student achieved a final mark of at least 40 for the relevant module. An examination mark of at least 50 must be obtained in the special examination in order to pass the module. Only the examination mark of the supplementary examination shall be taken into account when calculating the final mark for the module unless the mark for the supplementary examination is less than the original mark, in which case the latter examination mark shall be used. A final mark of more than 50 shall not be awarded.

2. Should a fifth-year student be any of the theoretical modules in arrears at the end of the first semester, and if the student passed the Clinical Rotations 511 module, such a student will be allowed to proceed with the Late Clinical Rotations in the second semester. The theoretical module(s) in arrears must then be completed during the first semester of the following year (a class, examination and final mark must be obtained anew). Such students shall not repeat the Middle Clinical Rotations of the first semester of MB,ChB V, but shall be allowed to proceed with relevant domains of the Late Clinical Rotations on condition that there is no overlapping with theoretical modules which have to be repeated. Should the student pass the theoretical module(s) in arrears, he will be allowed to proceed with the Late Clinical Rotations during the second semester.

### *Repeating the year programme*

A student of MB,ChB III or IV who fails to be promoted to the next year shall repeat all outstanding theoretical modules of the current year (a class, examination and final mark must be obtained anew). All clinical rotations, including evaluations, of the relevant year shall be repeated. The final mark obtained for the repeated clinical rotations will be used as the final mark for the relevant clinical rotations module and the applicable rules, as set out in paragraph 2 under the heading “Promotion” above, will apply anew.

### **Sixth year**

#### **PLEASE NOTE:**

Attendance of the Late Clinical Rotations is compulsory, and a class mark of less than 50% may be awarded to students whose attendance is unsatisfactory.

### *Final examination*

In order to pass the final examination, a student shall comply with the following requirement: have passed the core module Late Clinical Rotations 678, that is, obtained a final mark of not less than 50. (Students are also referred to the faculty-specific provisions relating to examinations and promotion that are applicable to the Late Clinical Rotations.)

### *Reassessment*

See faculty-specific provisions pertaining to re-evaluation in domains of the Late Clinical Rotations.

### *Repeating the year programme*

Students, who, at the end of the sixth year, are in arrears (having failed) in any domain(s) of the Late Clinical Rotations, shall have to repeat the outstanding domain(s) during the subsequent year and again obtain a class, examination and final mark in the particular domain(s). Besides the official Student Intern (SI) examination periods in April and November of each year, not more than two additional examination opportunities shall be scheduled for repeaters in January/February and in the course of the second semester.

### *Cum laude*

For the purpose of determining whether a candidate passes MB,ChB with distinction, the procedure set out under “Provisions relating to examinations and promotion” in the chapter regarding University examinations in Part 1 of the Calendar will apply.

### *Transport costs*

The costs relating to the transport of students may be recovered in full from the students concerned.

### **PLEASE NOTE:**

Queries relating to transport costs should be directed to the relevant academic department/division.

## **Bachelor of Occupational Therapy (BOccTher)**

### *Compulsory practical/clinical work*

All students admitted to the BOccTher programme shall perform compulsory practical/clinical work during recess periods. The compulsory practical/clinical work may be done before the start of classes, during the short recess periods or after the examinations. Students will be informed of the arrangements in good time. The duration of the compulsory practical/clinical work will not exceed five weeks over the four years of the programme.

### *Content of modules for the BOccTher programme*

Please consult the chapter “Module Content of Under- and Postgraduate Programmes”.

### *Specific admission requirements*

For admission to the BOccTher programme, a student shall hold the National Senior Certificate (NSC) with university admission, endorsed by Umalusi, or an equivalent qualification with an aggregate of at least 50% (level 4), and with at least 40% (level 3) for Mathematics and at least 50% (level 4) for Life Sciences. Prospective students are strongly advised to include Physical Sciences and Afrikaans as subjects for the NSC examination. Refer also to the selection guidelines at: [www.sun.ac.za/prospect\\_select](http://www.sun.ac.za/prospect_select).

### **PLEASE NOTE:**

There are a limited number of places in the first year of study of the BOccTher programme.

Admission to the programme is therefore subject to selection. Applications for admission must reach the Registrar not later than 31 May of the previous year. Selection is carried out in terms of clear guidelines that take into account both the academic and the non-academic merits of applicants. All applicants for admission who are still at school are required to take the National Benchmark Test. All applicants for admission must submit a medical certificate on the form prescribed by the University.

A student who fails the first year of study and wishes to repeat it is subject to renewed selection.

### *Modules for the Bachelor of Occupational Therapy programme*

#### **First year**

The first year of the programme shall be presented mainly on the Stellenbosch Campus. Presentation thereafter shall be on the Tygerberg Campus. The modules to be studied in this programme are as follows:

#### *Compulsory modules*

Occupational Therapy	178(50)
Psychology	114(12), 144(12)
Sociology	114(12), 144(12)
Special Physics	142(8)
Industrial Psychology	162(6)
Industrial Psychology (Occupational	132(6)

Therapy)	
Biology (OCC)	111(18), 153(14)

## Second year

### *Compulsory modules*

Occupational Therapy	278(60)
Psychology	212(8), 222(8), 242(8), 252(8)
Physiology (AHS)	278(26)
Anatomy (AHS)	278(36)

(Biology (Medicine) 111 and Biology (AHS) 153 are prerequisite pass modules for Anatomy (AHS) 278 and for Physiology (AHS) 278.)

## Third year

### *Compulsory modules*

Occupational Therapy: Theory	374(32)
Occupational Therapy: Practical	374(62)
Pathology (AHS)	324(10), 334(8), 354(7)
Research Methodology in Occupational Therapy	372(12)

(Psychology 212, 222, 242 and 252 are pass prerequisites for Pathology (AHS) 324.)

## Fourth year

### *Compulsory modules*

Occupational Therapy: Theory	484(26)
Occupational Therapy: Practical	478(112)
Research Methodology in Occupational Therapy	482(12)

### *Determination of final marks*

In the event of any divergence from general provisions, the academic division concerned shall make known to students at the beginning of the year how the relevant final marks are to be determined.



*Provisions relating to examinations and promotion for BOccTher*

The BOccTher programme shall be subject to the general provisions for readmission after unsuccessful study and for the continuation of a module as set forth in Part 1 of the University Calendar.

**First year**

*Promotion*

To qualify for promotion to BOccTher II, a student shall pass all modules of the first year, that is, shall obtain a final mark of not less than 50 in each module of the first year.

*Reassessment*

Reassessment shall apply only to Occupational Therapy 178. The other modules of the first year shall be subject to the examination policy set forth under the heading “Examinations” in “Provisions relating to Examinations and Promotion” in Part 1 of the University Calendar (as applicable to the Stellenbosch Campus).

*Credits in arrears*

A student who is only one semester module in arrears at the end of the year shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module is not less than 40.

*Repeating the year programme*

A student who has failed to be promoted to the second year shall repeat all outstanding modules of the first year, that is, shall in each outstanding module of the first year obtain a class mark anew.

*Taking BOccTher II modules in advance*

A student who has failed to qualify for promotion to the second year may take Psychology 212, 222, 242 and 252, provided that he shall have passed Psychology 114 or Psychology 144 and on condition that the timetables permit.

**Second year**

*Promotion*

To qualify for promotion to BOccTher III, a student shall pass all modules of the second year, that is, obtain in each module of the second year a final mark of not less than 50.

*Reassessment*

Reassessment shall apply to all modules of the programme, except Psychology 212, 222, 242 and 252. The Psychology modules shall be subject

to the examination policy set forth under the heading “Examinations” in Part 1 of the University Calendar (as applicable to the Stellenbosch Campus).

#### *Credits in arrears*

A student who, at the end of the year, is only Anatomy (AHS) 278 or Physiology (AHS) 278 or one semester module in arrears, shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module shall be not less than 40.

#### *Repeating the year programme*

If a student fails to qualify for promotion to the third year, the student shall repeat all outstanding second-year modules, that is, class marks shall be obtained anew; provided, however, that if the student passed Occupational Therapy 278, such a student shall attend these modules again and obtain a certificate of satisfactory attendance.

#### *Taking BOccTher III modules in advance*

A student who is only Psychology 212, 222, 242 or 252 in arrears, and fails to qualify for promotion to the third year, may take the modules of Pathology (AHS) 334 and 354, on condition that the timetables permit.

### **Third year**

#### *Promotion*

To qualify for promotion to BOccTher IV, a student shall pass all modules of the third year, that is, shall obtain in each module of the third year a final mark of not less than 50.

#### *Reassessment*

Reassessment shall apply to all modules of the third year.

#### *Credits in arrears*

A student who, at the end of the year, is only Epidemiology and Statistics 372 or Pathology (AHS) 324 or Pathology (AHS) 334 or Pathology (AHS) 354 in arrears shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module shall be not less than 40.

#### *Repeating the year programme*

If a student fails to qualify for promotion to the fourth year, the student shall repeat all outstanding third-year modules; provided, however, that if such a student has passed Occupational Therapy Theory 374 and/or Occupational Therapy Practical 374, such a student shall attend these modules again and obtain a certificate of satisfactory attendance.

### *Taking BOccTher IV modules in advance*

A student who has passed Epidemiology and Statistics 372 of the third year may take Epidemiology and Statistics 472, on condition that the timetables permit.

## **Fourth year**

### *Final examination*

To pass the final examination, a student shall obtain a final mark of not less than 50 in each of the modules of the programme.

A student who, in the November final examination, fails Epidemiology and Statistics 472 and one of Occupational Therapy: Theory 484 or Occupational Therapy: Practical 478, and who has obtained a final mark of not less than 40 in these modules, shall be entitled to reassessment during the November examination period.

A student who, in the November final examination, fails both Occupational Therapy: Theory 484 and Occupational Therapy: Practical 478, shall repeat all outstanding fourth-year modules and shall be examined in these modules during the November examination period of the next year.

The aforesaid provision shall apply likewise where a student is required to repeat only Occupational Therapy: Theory 484 or Occupational Therapy: Practical 478. No Dean's Concession Examination for Occupational Therapy: Theory 484 will be granted. Final-year Occupational Therapy students who do not pass within two years after their first examinations may, on the recommendation of the Faculty Board, be denied the right to present themselves for any further examination.

### *Transport costs*

The costs relating to the transport of students may be recovered in full from the students concerned.

## **PLEASE NOTE:**

Queries relating to transport costs should be directed to the relevant academic division.

## **Bachelor of Science in Dietetics (BScDiet)**

### *Specific admission requirements*

For admission to the four-year BSc in Dietetics degree programme, a student shall hold the National Senior Certificate (NSC) with university admission, endorsed by Umalusi, or an equivalent qualification with an aggregate of at least 50% (level 4), and with at least 50% (level 4) for Mathematics, Physical Sciences and Life Sciences. Candidates who have passed Mathematical

Literacy (and not Mathematics) may be considered under extraordinary circumstances, should they perform well in the National Benchmark Tests (NBTs). Prospective students are strongly advised to include Afrikaans as a subject for the NSC examination. Refer also to the selection guidelines at: [www.sun.ac.za/prospect\\_select](http://www.sun.ac.za/prospect_select).

**PLEASE NOTE:**

Only a limited number of candidates are accepted for this programme each year. Applications for admission to the programme should reach the Registrar before 31 May of the preceding year. Selection for the programme is according to defined guidelines using both the academic and non-academic merits of the applicant. Applicants for admission who are still at school are required to take the National Benchmark Tests (NBTs). Students who fail the first year for two consecutive years will be subject to renewed selection.

*Modules for the BSc in Dietetics programme*

**First year**

*Compulsory modules*

Chemistry for Health Sciences	111(17)
Medical Microbiology	142(7)
Physiological Biochemistry	142(6)
Nutrition	142(29)
Nutritional Status Assessment	144(12)
Foods	144(14)
Life-forms and Functions of Clinical Importance	111(17)
Health in Context	111(19)

(Life-forms and Functions of Clinical Importance 111 is a prerequisite pass module for Physiology (AHS) 278; Medical Microbiology 142 is a prerequisite for Food Production and Systems 214 and Applied Food Science 254; Foods 144 is a prerequisite pass module for Food Production and Systems 214; Nutrition 142 is a prerequisite pass module for Nutrition in the Life Cycle 214 and Therapeutic Nutrition 244; Nutritional Assessment 144 is a prerequisite pass module for Therapeutic Nutrition 244 and Nutrition in the Life Cycle 214.)

## Second year

### *Compulsory modules*

Physiology (AHS)	278(26)
Anatomy (AHS)	231(9)
Therapeutic Nutrition	244(10)
Applied Food Science	254(14)
Food Production and Systems	214(20)
Nutrition in the Life Cycle	214(15)
Psychology for Health Sciences	242(7)
Ethics and Human Rights	214(3)
Practical Training	272(17)
Community Nutrition	244(7)

(Physiology (AHS) 278 is a prerequisite pass module for Therapeutic Nutrition 378; Nutrition in the Life Cycle 214 is a prerequisite pass module for Therapeutic Nutrition 378 and Community Nutrition 376; Food Production and Systems 214 is a prerequisite pass module for Applied Food Science 254; Practical Training 272 is a corequisite for Food Production and Systems 214, Applied Food Science 254, Nutrition in the Life Cycle 214, Community Nutrition 244 and Therapeutic Nutrition 244; Therapeutic Nutrition 244 is a prerequisite pass module for Therapeutic Nutrition 378; Ethics and Human Rights 214 is a prerequisite pass module for Ethics and Human Rights 341; Community Nutrition 244 is a prerequisite pass module for Community Nutrition 376. Practical Training 272 is a prerequisite pass module for Practical Training 374.)

## Third year

### *Compulsory modules*

Therapeutic Nutrition	378(35)
Community Nutrition	376(27)
Management Principles	377(18)
Research Methodology	312(9)
Biostatistics and Epidemiology	322(9)

Ethics and Human Rights	341(4)
Practical Training	374(28)

(Practical Training 374 is a corequisite for Therapeutic Nutrition 378, Community Nutrition 376 and Management Principles 377.)

## **Fourth year**

### *Compulsory modules*

Research Methodology	413(16)
Food Service Management	476(37)
Therapeutic Nutrition	478(58)
Community Nutrition	478(37)

Students are also exposed to the division's clinical infrastructure for 34 weeks, and during this time they receive practical training in the three basic components of dietetics: therapeutic nutrition, community nutrition and food service management.

### *Content of modules for the BSc in Dietetics programme*

Please consult the chapter "Module Content of Under- and Postgraduate Programmes".

### *Determination of final marks*

In the event of any divergence from the general provisions, the academic division concerned shall make this known to the students at the beginning of the year.

### *Provisions relating to examination and promotion for BSc in Dietetics*

The BScDiet programme shall be subject to the general provisions for readmission after unsuccessful study and for the continuation of modules as set forth in Part 1 of the University Calendar.

## **First year**

### *Promotion*

1. To qualify for promotion to BScDiet II, a student shall pass all modules of the first year, that is, shall obtain a final mark of not less than 50 in each module of the first year.
2. A system of continuous assessment applies to the module Health in Context 111. Assignments, projects, tutorials, theory tests and practical assessments are used to determine the final mark.

3. The written examinations in all modules of the first semester shall be taken during the examination period at the end of the first semester, except for the Health in Context 111 module which is subject to continuous assessment.

### *Re-evaluation*

Re-evaluation shall apply to all modules of the first year, except for the Health in Context 111 module which is subject to continuous assessment. To qualify for re-evaluation in a module, a student shall have obtained a final mark of not less than 40. All re-evaluations shall be done in writing and directly after the examination period (but not within 48 hours of announcement of the final marks). A student must achieve a mark of not less than 50 in the re-evaluation to pass the module. The final mark after re-evaluation shall not be less than the original final mark.

### *Reassessment in the module Health in Context 111*

A student who has obtained a mark of less than 40 in an assessment opportunity in the module Health in Context 111, which is assessed continuously, is entitled to a reassessment opportunity directly after the test period (but not within 48 hours of announcement of the test mark). Students who have obtained 40% to 50% in the original assessment opportunity have the choice to make use of the reassessment opportunity to improve their mark. The mark after reassessment shall not be less than the original mark, but also not more than 50. A student shall obtain at least 40 in each reassessment to pass the module as a whole, **on the understanding that the average final mark for the module as a whole shall be at least 50.**

### *Credits in arrears*

1. A student who is only one semester module in arrears at the end of the first semester shall be entitled to a special examination in July of the same year, provided that the final mark obtained in the module was not less than 40. In order to pass the module in the July examination, the student shall obtain an examination mark of not less than 50. A student who is only Health in Context 111 in arrears at the end of the first semester shall not qualify for a special examination (refer to previous point).
2. A student who, at the end of the year, is only Physiology (AHS) 278 or one second-semester module (except service modules) in arrears shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module shall be not less than 40. To pass the module in the January examination, the student shall obtain an examination mark of not less than 50.

### *Repeating the year programme*

A student who has failed to be promoted to the second year shall repeat all outstanding modules of the first year, that is, shall in each outstanding module of the first year obtain a class mark and a final mark anew. The student shall be entitled to continue with the programme should he have acquired sufficient HEMIS credits (refer to Part 1 of the University Calendar). See also faculty-specific guidelines pertaining to the transition from the existing to the revised curriculum.

### *Taking BScDiet II modules in advance*

A student who has failed to qualify for promotion to the second year may take the modules of the second year, provided that he meets the general requirements relating to pass, co- and prerequisites as well as continuation of modules, and on condition that the class, test and examination timetables permit.

## **Second year**

### *Promotion*

To qualify for promotion to BScDiet III, a student shall pass all modules of the second year, that is, shall obtain in each module of the second year a final mark of not less than 50.

### *Re-evaluation*

Re-evaluation shall apply to all modules of the second year.

### *Credits in arrears*

1. A student who, at the end of the first semester, is only one module in arrears shall be entitled to a special examination in July of the same year, provided that the final mark obtained in such module shall be not less than 40. In order to pass the module in the July examination, the student shall obtain an examination mark of not less than 50.
2. A student who, at the end of the year, is only Physiology (AHS) 278 or one second-semester module (except service modules) in arrears shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module shall be not less than 40. To pass the module in the January examination, the student shall obtain an examination mark of not less than 50. A student who, at the end of the year, is only Practical Training 272 in arrears shall not be entitled to a special examination as this module is subject to continuous assessment.



### *Repeating the year programme*

If a student fails to qualify for promotion to the third year, the student shall repeat all outstanding second-year modules, that is, class marks shall be obtained anew.

### *Taking BScDiet III modules in advance*

A student who has failed to qualify for promotion to the third year may attend the modules of the third year, except for the Research Methods 312 module, on condition that the class, test and examination timetables permit and provided further that the general requirements relating to pass and prerequisites as well as continuation of modules are met.

## **Third year**

### *Promotion*

To qualify for promotion to BScDiet IV, a student shall pass all modules of the third year, that is, shall obtain in each module of the third year a final mark of not less than 50.

### *Reassessment*

Reassessment shall apply to all modules of the third year.

### *Credits in arrears*

1. A student who, at the end of the first semester, is only one module in arrears shall be entitled to a special examination in July of the same year, provided that the final mark obtained in such module shall be not less than 40. To pass the module in the July examination, the student shall obtain an examination mark of not less than 50.
2. A student who, at the end of the year, is only one semester or year module in arrears shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module shall be not less than 40. To pass the module in the January examination, the student shall obtain an examination mark of not less than 50. A student who, at the end of the year, is only Practical Training 374 in arrears shall not be entitled to a special examination as this module is subject to continuous assessment.

### *Repeating the year programme*

If a student fails to qualify for promotion to the fourth year, such a student shall repeat all outstanding third-year modules, that is, class marks must be obtained anew.

### *Taking BScDiet IV modules in advance*

If a student fails to qualify for promotion to the fourth year, the student may follow the module Research Methods 413, provided that the student passed the modules Research Methods 312 and Biostatistics and Epidemiology 342 and on condition that the timetables permit.

## **Fourth year**

### *Promotion*

To pass the final examination, a student shall pass all the modules of the fourth year, that is obtain a final mark of not less than 50 in each of the modules of the programme.

### *Re-evaluation*

Re-evaluation applies to all the modules of the fourth year.

### *Credits in arrears*

A student who is only a single module in arrears at the end of the year will be allowed to write a special examination in January of the next year, provided that a final mark of at least 40 was achieved for the module.

### *Repeating the year programme*

A student who fails in the final examination in November shall repeat the outstanding module(s) during the following year.

### *Transport costs*

The costs relating to the transport of students to teaching sites may be recovered in full from the students concerned.

## **PLEASE NOTE:**

Queries relating to transport costs should be directed to the relevant academic division.

## **Bachelor of Science in Physiotherapy (BScPhysio)**

### *Specific admission requirements*

For admission to the four-year BSc in Physiotherapy degree programme (main stream and extended degree programme), a student shall hold the National Senior Certificate (NSC) with university admission, endorsed by Umalusi, or an equivalent qualification with an aggregate of at least 60% (level 5), and with at least 50% (level 4) for Mathematics, as well as Physical Sciences and Life Sciences. Students who have passed Mathematical Literacy (and not Mathematics) may be considered under extraordinary circumstances, should they perform well in the National Benchmark Tests (NBTs).

Prospective students are strongly advised to include Afrikaans as a subject for

the NSC examination. Refer also to the selection guidelines at:  
[www.sun.ac.za/prospect\\_select](http://www.sun.ac.za/prospect_select).

There are only a limited number of places in the first year of study of the BScPhysio programme. Admission to the programme is therefore subject to selection. This selection is carried out in terms of clear guidelines that take into account both the academic and the non-academic merits of applicants. Application for admission must reach the Registrar not later than 31 May of the previous year. All applicants for admission to the programme who are still at school are required to take the National Benchmark Tests (NBTs). Each candidate who has been successful in the selection procedure will be required to furnish a health certificate to the University. (A prescribed form is available for this purpose.)

### *Compulsory vacation work*

All students taking the degree programme in Physiotherapy are expected to gain experience in nursing during the short vacation in the second semester of the first year of study. All students taking the degree programme in Physiotherapy are expected to gain experience in clinical physiotherapy during a vacation in the final year of study.

### *Clinical exposure*

Clinical training of students takes place on primary, secondary and tertiary levels of the South African health care system, as well as at several institutions which fall under the Department of Education. Urban and rural rotations are used.

### *Registration as a student in Physiotherapy with the Health Professions Council of South Africa*

Students must apply for registration as a student in Physiotherapy in compliance with the regulations of the Health Professions Council of South Africa.

### *Modules for the BScPhysio programme*

#### **First year**

##### *Compulsory modules*

All four years of tuition for the programme are offered at the Tygerberg Campus.

Life-forms and Functions of Clinical Importance	111(17)
Chemistry for Health Sciences	111(17)

Personal and Professional Development	111(17)
Health in Context	111(19)
Special Physics	142(8)
Anatomy (AHS)	141(13)
Psychology	144(12)
Physiotherapy Science	152(20)

## Second year

### *Compulsory modules*

Physiology (AHS)	278(26)
Anatomy (AHS)	211(12)
Anatomical Pathology	221(3)
Physiotherapy Science	272(75)
Clinical Physiotherapy	254(5)
Pathology (AHS)	254(7)

## Third year

### *Compulsory modules*

Pathology (AHS)	312(2), 334(8)
Research Methods (Physiotherapy)	372(10)
Applied Physiotherapy	373(66)
Clinical Physiotherapy	374(40)

## Fourth year

### *Compulsory modules*

Research Methods (Physiotherapy)	472(10)
Applied Physiotherapy	473(19)
Clinical Physiotherapy	474(96)
Physiotherapy Practice	474(4)

*Content of modules for the BSc in Physiotherapy (BScPhysio)*

Please consult the chapter “Module Content of Under- and Postgraduate Programmes”.

*Determination of final marks – non-Physiotherapy modules*

In the event of any divergence from general provisions, the Undergraduate Programme Committee of the Division of Physiotherapy shall make this known to students at the beginning of the year.

The written examination in all modules of the first semester must be done during the examination period at the end of the first semester.

*Calculating the continuous assessment mark for all Physiotherapy modules*

The total number of assessments, and the individual weights that they are to contribute to the final mark, shall be decided by the Undergraduate Programme Committee of the Division of Physiotherapy with due regard to the content and scope of the modules in the programme. In so deciding, the said Division shall adhere to the guidelines laid down in Part 1 of the University Calendar.

*Provisions relating to examinations and promotion for BScPhysio*

The BScPhysio programme shall be subject to the general provisions for readmission after unsuccessful study and for the continuation of a module as set forth in Part 1 of the University Calendar.

**First year**

*Promotion*

1. A student shall pass all modules of the first year to qualify for promotion to BScPhysio II, that is, shall obtain a final mark of not less than 50 in each module.
2. A system of continuous assessment applies to the modules Physiotherapy Science 152, Personal and Professional Development 111 and Health in Context 111. Assignments, projects, tutorials, theory tests and practical assessments are used to determine the final mark.
3. The written examinations in all first-semester modules shall be taken within the examination period at the end of the first semester, except for the modules Physiotherapy Science 152, Personal and Professional Development 111 and Health in Context 111, which are subject to continuous assessment.
4. A student who has obtained a class or final mark of less than 40 in Life-forms and Functions of Clinical Importance 111 at the end of the first

semester, shall not be admitted to Anatomy (AHS) 142 and Physiotherapy Science 152 in the second semester. Such a student may apply to be admitted to the extended degree programme in the second semester according to existing criteria. Should the application be unsuccessful and the student enrol as a special student in Science with Psychology as subject, he shall pass all the respective modules and apply in writing to be reselected for the BSc in Physiotherapy programme. The application for reselection will be considered in December.

A student who has obtained a class or final mark of less than 40 in any two modules (except Life-forms and Functions of Clinical Importance 111) shall not be admitted to Physiotherapy 152 in the second semester. Such a student may apply to be admitted to the extended degree programme in the second semester. Should the application be unsuccessful, he may continue with Psychology 143 and 144 and Anatomy (AHS) 141. He shall not be promoted to the second year of the programme, but shall be allowed to continue with the programme should he have obtained sufficient HEMIS credits.

5. A student who has obtained a class mark and/or final mark of less than 40 in any two modules may apply to be admitted to the extended degree programme in the second semester according to existing criteria.

### *Credits in arrears*

1. A student who is only one module in arrears at the end of the first semester shall be entitled to a special examination in July of the same year, provided that the final mark he has obtained in that module shall be not less than 40. In order to pass the module in the July examination, the student shall obtain an examination mark of not less than 50. A student who is Personal and Professional Development 111 or Health in Context 111, which is assessed continuously, in arrears shall not be entitled to a special examination.
2. A student who is only one second-semester module in arrears at the end of the second semester shall be entitled to a special examination in January of the next year, provided that the final mark obtained in the module was not less than 40. In order to pass the module in the January examination, the student shall obtain an examination mark of not less than 50. A student who is Physiotherapy Science 152, which is assessed continuously, in arrears shall not be entitled to a special examination.
3. Due to the nature of the examination system pursued on the Stellenbosch Campus (refer to the chapter on examinations in Part 1 of the University Calendar), no special examination shall be permitted in Psychology modules and Special Physics.

### *Re-evaluation*

1. Re-evaluation shall apply to all modules of the first year, except for the Personal and Professional Development 111, Health in Context 111 and Physiotherapy 152 modules (see “Reassessment in the modules Personal and Professional Development 111 and Health in Context 111” below). To qualify for re-evaluation a student should have obtained a final mark of at least 40.
2. All re-evaluations shall be done in writing and directly after the examination period (but not within 48 hours of announcement of the final marks). A student shall achieve a mark of not less than 50 in the re-evaluation to pass the module. The final mark after re-evaluation shall not be less than the original final mark.

### *Reassessment in the modules Personal and Professional Development 111 and Health in Context 111*

A student who has obtained a mark of less than 40 in an assessment opportunity in the modules Personal and Professional Development 111 and Health in Context 111, which are assessed continuously, is entitled to a reassessment opportunity directly after the test period (but not within 48 hours of announcement of the test mark). Students, who have obtained 40% to 50% in the original assessment opportunity, have the choice to make use of the reassessment opportunity to improve their mark. The mark after reassessment shall not be less than the original mark, but also not more than 50. A student shall obtain at least 40 in each reassessment to pass the module as a whole, **on the understanding that the average final mark for the module as a whole shall be at least 50.**

### *Repeating the year programme*

If a student fails to qualify for promotion to the second year, the student shall repeat all outstanding modules for the first year and a final mark shall be obtained anew. The student shall be entitled to continue with the programme should he have acquired sufficient HEMIS credits (refer to Part 1 of the University Calendar).

### *Taking BScPhysio II modules in advance*

A student who does not comply with the pass requirements for BScPhysio I due to failing one module may attend the following second-year modules in advance, if the timetable permits: Anatomy (AHS) 211, on condition that Anatomy (AHS) 141 has been passed; Physiology (AHS) 278, provided that the student has passed Life-forms and Functions of Clinical Importance 111 and Chemistry for the Health Sciences 111; Anatomical Pathology 221

and/or Pathology (AHS) 254, provided that the student may attend Physiology (AHS) 278.

## **Second year**

### *Promotion*

1. To qualify for promotion to BScPhysio III, a student shall pass all second-year modules.
2. There will be no formal examination in Anatomical Pathology 221. The class mark constitutes the final mark. The minimum required for a pass in this module is an aggregate of 50%. Only students who do not meet the pass requirements will qualify for a test in which to improve their marks at the end of the second semester.

### *Reassessment*

1. Reassessment shall apply to all modules of the second year, except Physiotherapy Science 272 and Clinical Physiotherapy 254, which are subject to continuous assessment.
2. To qualify for reassessment in a module, a student shall have obtained in such module a final mark of not less than 40. All reassessments shall be done in writing and directly after the examination period (but not within 48 hours of announcement of the final marks). A student shall achieve a mark of not less than 50 in the reassessment to pass the module. The final mark after reassessment shall not be less than the original final mark.

### *Credits in arrears*

A student who, at the end of the year, is only one module of Anatomy (AHS) 211, Anatomical Pathology 221, Physiology (AHS) 278 or Pathology (AHS) 254 in arrears shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module shall be not less than 40. In order to pass the module in the January examination, the student must obtain an examination mark of not less than 50.

### *Repeating the year programme*

If a student fails to qualify for promotion to the third year, the student shall repeat all outstanding modules of the second year.

### *Taking BScPhysio III modules in advance*

A student who fails to qualify for promotion to the third year because he has not passed either Physiotherapy Science 272 or Clinical Physiotherapy 254 may attend the following third-year modules, on condition that the timetable permits: Pathology (AHS) 312, 334.



## **Third year**

### *Promotion*

To qualify for promotion to BScPhysio IV, a student shall pass all modules of the third year.

### *Reassessment*

1. Reassessment shall only apply to Pathology (AHS) 312, 334.
2. To qualify for reassessment in a module, a student shall have obtained in such module a final mark of not less than 40. All reassessments shall be done in writing and directly after the examination period (but not within 48 hours of announcement of the final marks). A student shall achieve a mark of not less than 50 in the reassessment to pass the module. The final mark after reassessment shall not be less than the original final mark.

### *Credits in arrears*

A student, who at the end of the year, is in arrears in respect of only Pathology (AHS) 334 or Pathology (AHS) 312 shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module shall be not less than 40.

### *Repeating the year programme*

A student who fails to be promoted to the fourth year shall repeat all outstanding modules of the third year.

### *Taking BScPhysio IV modules in advance*

A student who is only Clinical Physiotherapy 374 in arrears may take Research Methods (Physiotherapy) 472, on condition that the timetable permits.

## **Fourth year**

### *Promotion*

To pass the programme, a student shall pass all modules of the fourth year. Continuous assessment applies to all the modules of the fourth year.

### *Repeating the year programme*

If a student does not pass the fourth year, the student shall repeat all outstanding modules.

### *Transport costs*

The costs relating to the transport of students to clinical training centres may be recovered in full from the students concerned.

**PLEASE NOTE:**

Queries relating to transport costs should be directed to the relevant academic division.

**Bachelor of Speech-Language and Hearing Therapy (BSL and HT)**

*Specific admission requirements*

For admission to the four-year B in Speech-Language and Hearing Therapy degree programme, a student shall hold the National Senior Certificate (NSC), endorsed by Umalusi for admission to bachelor's degree studies, or an equivalent qualification, with an aggregate of at least 50% (level 4), and with at least 50% (level 4) for English and Afrikaans (Home Language or First Additional Language). Prospective students are strongly advised to include a third language as a subject for the NSC, while Life Sciences and Physical Sciences will serve as further recommendations. Refer also to the selection guidelines at: [www.sun.ac.za/prospect\\_select](http://www.sun.ac.za/prospect_select).

**PLEASE NOTE:**

- The following selection requirements will be compellable as from 2015 (with the 2016 intake in mind), but applicants who comply fully with these as from 2013 will already be considered for selection for the 2014 intake: A student shall hold the National Senior Certificate (NSC) with admission to bachelor's degree study, endorsed by Umalusi, or an equivalent qualification with an aggregate of at least 60% (level 5), and with at least 60% (level 5) for two of the following three languages: English (Home Language or First Additional Language) and/or Afrikaans (Home Language or First Additional Language) and/or a third language, and with at least 50% (level 4) for Physical Sciences or Life Sciences.
- There are only a limited number of places in the first year of study of the BSL and HT programme. Admission to the programme is therefore subject to selection. This selection is carried out in terms of clear guidelines that take into account both the academic and the non-academic merits of applicants. Applications for admission should reach the Registrar by 31 May of the preceding year. All applicants for admission to the programme who are still at school are required to take the National Benchmark Tests (NBTs).

### *Modules for the BSL and HT programme*

In the first and second years of the BSL and HT programme, most of the lectures are presented at the Stellenbosch Campus. For the third and fourth years of study, training is continued at the Tygerberg Campus.

The modules for study in the BSL and HT programme shall be as follows:

#### **First year**

##### *Compulsory modules*

Xhosa	178(24) or
Afrikaans Language Acquisition	178(24) or 188(24) (Students are placed in one of these modules according to the results of a language proficiency test.)
Speech Pathology	121(12), 122(12), 142(6), 162(12)
Psychology	114(12), 144(12)
Clinical Speech Pathology	184(12)
Applied Anatomy	117(12)
General Linguistics	178(24)
Information Skills	172(6)

#### **Second year**

##### *Compulsory modules*

Speech Pathology	212(6), 222(6), 241(6), 251(6), 252(6), 278(24)
Clinical Speech Pathology	274(26)
General Linguistics	278(32)
Psychology	212(8), 222(8), 242(8), 252(8)

#### **Third year**

##### *Compulsory modules*

Speech Pathology	331(12), 332(12), 364(6), 378(24)
Neuroanatomy and Clinical Neurology	372(14)

Clinical Speech Pathology	374(26)
Psychology	318(24), 348(24)

## **Fourth year**

### *Compulsory modules*

Speech Pathology	411(6), 413(12), 478(24)
Clinical Speech Pathology	474(62)
Research Report	472(18)

### *Content of modules for the BSL and HT programme*

Please consult the chapter on the “Module Content of Under- and Postgraduate Programmes”.

### *Awarding of final marks*

In cases where the general regulations are not applied, the relevant academic division will inform students at the beginning of the year on how the final marks are to be calculated.

### *Provisions relating to examinations and promotion for BSL and HT*

The BSL and HT programme shall be subject to the general provisions for readmission after unsuccessful study and for the continuation of a module, as set forth in Part 1 of the University Calendar.

## **First year**

### *Promotion*

To qualify for promotion to BSL and HT II, a student shall pass all modules of the first year, that is, obtain in each module of the first year a final mark of not less than 50 and obtain a mark of not less than 50 in the practical component of Clinical Speech Therapy 184. To be promoted to the modules Speech Pathology (Basic Audiometry) 162 and Speech Pathology (Articulation and Phonological Disorders) 142, a student should have passed Speech Pathology (Speech and Hearing Sciences) 121.

A student who is only Psychology 114 or 144 and/or Applied Anatomy 117 and/or Xhosa 178 or Afrikaans Language Acquisition 178 or 188 in arrears may proceed to the second year of study of the programme, on condition that the timetables permit.

### *Reassessment*

Reassessment shall apply only to the modules in Speech-Language and Hearing Therapy. The other modules shall be subject to the examination

policy set forth under the heading “Examinations” in “Provisions Relating to Examinations and Promotion” in Part 1 of the University Calendar (as applicable to the Stellenbosch Campus).

#### *Credits in arrears*

A student who is only one non-Speech Pathology module in arrears at the end of the first semester shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module was not less than 40.

This same provision shall apply to the second semester. A student who is one first-semester Speech Pathology module in arrears, where the outstanding module serves as a prerequisite for one or more Speech Pathology modules in the second semester, will be allowed a third examination opportunity in the outstanding module *before the start of the second semester*. Such a student will not be afforded any further third examination opportunity should he be one module in arrears in the second semester.

#### *Repeating the year programme*

If a student fails to qualify for promotion to the second year, all modules in arrears shall be repeated and a class mark shall be obtained anew.

Students must repeat these modules and obtain a certificate of satisfactory attendance, even if they achieved a pass mark for their clinical modules.

### **Second year**

#### *Promotion*

To qualify for promotion to BSL and HT III, a student shall pass all modules of the second year, that is, obtain in each module of the second year a final mark of not less than 50 and obtain a mark of not less than 50 for the practical component of Clinical Speech Pathology 274.

#### *Reassessment*

Reassessment shall apply to all second-year modules of the programme, except General Linguistics 278 and Speech Pathology (Language Disorders) 278, which are subject to continuous assessment, and Psychology 212, 222, 242 and 252. These modules shall be subject to the examination policy set forth under the heading “Examinations” in “Provisions Relating to Examinations and Promotion” in Part 1 of the University Calendar (as applicable to the Stellenbosch Campus).

#### *Credits in arrears*

A student who is only one non-Speech Pathology module in arrears at the end of the first semester shall be entitled to a special examination in January of

the next year, provided that the final mark obtained in such module was not less than 40.

This same provision shall apply to the second semester. A student who is one first-semester Speech Pathology module in arrears, where the outstanding module serves as a prerequisite for one or more Speech Pathology modules in the second semester, will be allowed a third examination opportunity in the outstanding module *before the start of the second semester*. Such a student will not be afforded any further third examination opportunity should he be one module in arrears in the second semester.

### *Repeating the year programme*

If a student fails to qualify for promotion to the third year, all second-year modules in arrears shall be repeated, that is, a class mark shall be obtained anew.

Students must repeat these modules and obtain a certificate of satisfactory attendance, even if they achieved a pass mark for their clinical modules.

### *Taking BSL and HT III modules in advance*

A student who is only Psychology 212, 222, 242 or 252 in arrears may take modules of the third year, on condition that the timetables permit.

## **Third year**

### *Promotion*

To qualify for promotion to BSL and HT IV, a student shall pass all modules of the third year, that is, obtain in each module of the third year a final mark of not less than 50 and obtain a mark of not less than 50 for the practical component of Clinical Speech Pathology 374. Speech Pathology (Neurogenic Communication Disorders) 378 is continuously assessed.

### *Reassessment*

Reassessment shall apply to all third-year modules of the programme, except Psychology 318 and 348. These two modules shall be subject to the examination policy as set out under the heading “Examinations” in the “Provisions Relating to Examinations and Promotion” in Part 1 of the University Calendar (as applicable to the Stellenbosch Campus).

### *Credits in arrears*

A student who is only one module in arrears at the end of the first semester shall be entitled to a special examination in January of the next year, provided that the final mark obtained in such module was not less than 40. This same provision shall apply to the second semester.

### *Repeating the year programme*

If a student fails to qualify for promotion to the fourth year, all third-year modules in arrears shall be repeated, that is, a class mark shall be obtained anew.

Students must repeat these modules and obtain a certificate of satisfactory attendance, even if they achieved a pass mark for their clinical modules.

## **Fourth year**

### *Promotion*

The module Speech Pathology (Advanced Seminars in Speech-Language and Hearing Therapy) 478 is continuously assessed. An examination opportunity for this module does not exist. The student shall obtain a final mark of 50% in this module to pass.

### *Final examination*

To pass the final examination, a student shall pass all modules of the fourth year, that is, shall obtain in each module of the fourth year a final mark of not less than 50. The student should also achieve a mark of not less than 50 in the practical component of Clinical Speech Pathology 474.

### *Reassessment*

Re-assessment shall apply to all fourth-year modules of the programme, except Speech Pathology (Advanced Seminars in Speech-Language and Hearing Therapy) 478, which is subject to continuous assessment.

### *Improvement of final mark*

A student who has failed Research Report 472 in November may improve the final mark until the end of January of the next year, provided that the final mark obtained in such module in November was not less than 40.

### *Repeating the year programme*

If a student fails to meet all the pass requirements, such a student will have to repeat all the outstanding modules of the fourth year. In such a case, he will have to attend these modules again and obtain a certificate of satisfactory attendance, even if the student obtained a pass in the clinical modules.

### *Transport costs*

The costs relating to the transport of students may be recovered in full from the students concerned.

## **PLEASE NOTE:**

Queries relating to transport costs should be directed to the relevant academic division.

## EXTENDED DEGREE PROGRAMMES (EDP)

Students selected for the MB,ChB, BSc in Dietetics, BScPhysio and BSL and HT programmes who have been disadvantaged by suboptimal schooling may be selected by the Faculty to join its extended degree programme. The objective is to put the degree in Medicine, Dietetics, Physiotherapy or Speech-Language and Hearing Therapy within reach of such persons. To this end, the programme offers them assistance in developing their potential.

### Extended Degree Programme (EDP) for MB,ChB

*Modules for the extended degree programme for MB,ChB*

#### First year (revised curriculum)

*Compulsory modules*

Introduction to Health Sciences	198(10)
Personal and Professional Development	111(17)
Biology (Medicine)	197(12)
Life-forms and Functions of Clinical Importance	111(17)
Essentials of Disease Processes	141(30), 198(5)
Strategic Communication	199(16)
Practical Clinical Exposure	198(10)

#### Second year (revised curriculum)

*Compulsory modules*

Chemistry for Health Sciences	111(17)
Chemistry (Medicine)	197(12)
Health in Context	111(19)
Statistical Concepts and Computer Skills	197(12)
Basic Therapeutical Principles	198(5)
Intermediate Metabolism	198(5)
Principles of Therapy	141(20)



Introduction to Clinical Medicine	141(20)
-----------------------------------	---------

On successful completion of the EDP, students may join the second year of study of the MB,ChB programme.

**PLEASE NOTE:**

The number appearing in brackets after each module indicates the credit value of the specific module.

The content of the modules for the extended degree programme appear in the chapter “Module Content of Under- and Postgraduate Programmes”.

*Provisions relating to examinations and promotion for the extended degree programme for MB,ChB*

**First year (revised curriculum)**

*Promotion*

1. To qualify for promotion to the second year of the EDP, a student shall obtain a final mark of not less than 50 in Biology (Medicine) 197 and Introduction to Health Sciences 198. A student not satisfying these requirements shall not be permitted to continue with the programme and must reapply for admission to the programme.
2. The written examination in Life-forms and Functions of Clinical Importance 111 shall be taken at the end of the first semester. In the event of obtaining a class mark or a final mark of less than 40 in Life-forms and Functions of Clinical Importance 111 at the end of the first semester, a student shall not proceed to the programme of the second semester. Should the student enrol as a special student in Science in the second semester, pass all the relevant modules, obtain a weighted average final mark of at least 60% and indicate in writing that he would want to be reconsidered for MB,ChB, his application will be submitted for reselection in December.
3. A student who has obtained a final mark of less than 50, but at least 40, in Life-forms and Functions of Clinical Importance 111 and/or a final mark of less than 50 in Personal and Professional Development 111 and/or Strategic Communication 199 and/or Practical Clinical Exposure 197 and/or Essentials of Disease Processes 141 shall repeat the said module(s) in the first and/or second semester (as the case may be) of the second year of the EDP.

## Second year (revised curriculum)

### *Promotion*

1. To qualify for promotion to MB,ChB II, a student shall pass all modules of the EDP, that is, obtain in each module of the EDP a final mark of not less than 50.
2. With regard to re-evaluation and reassessment, and outstanding credits, the second year of the EDP shall be subject to the provisions relating to examinations and promotion for MB,ChB I.
3. A student who does not complete the EDP successfully within two years shall apply for readmission to the programme.

## Extended Degree Programme (EDP) for BSc in Physiotherapy

### *Modules for the extended degree programme for BSc in Physiotherapy*

#### **First year**

##### *Compulsory modules*

Biology (Medicine)	197(12)
Strategic Communication	199(16)
Psychology	144(12)
Introduction to Health Sciences	198(10)
Personal and Professional Development	111(17)
Life-forms and Functions of Clinical Importance	111(17)
Practical Clinical Exposure	198(10)
Essentials of Disease Processes	198(5)

#### **Second year**

##### *Compulsory modules*

Chemistry for Health Sciences	111(17)
Chemistry (Medicine)	197(12)
Health in Context	111(19)

Statistical Concepts and Computer Skills	197(12)
Anatomy (AHS)	141(13)
Physiotherapy Science	152(20)
Special Physics	142(8)

On successful completion of the EDP, students may join the second year of study of the BSc in Physiotherapy programme.

**PLEASE NOTE:**

The number appearing in brackets after each module indicates the credit value of the specific module.

The content of the modules for the extended degree programme appear in the chapter “Module Content of Under- and Postgraduate Programmes”.

*Provisions relating to examinations and promotion for the extended degree programme for BSc in Physiotherapy*

**First year**

*Promotion*

1. To qualify for promotion to the second year of the EDP, a student shall obtain a final mark of not less than 50 in Biology (Medicine) 198 and Introduction to Health Sciences 197. A student not complying with these requirements, and thus not permitted to continue with the second year of the programme, shall be allowed to continue with the programme if he has obtained sufficient HEMIS credits (refer to Part 1 of the University Calendar).
2. The written examination in Life-forms and Functions of Clinical Importance 111 shall be taken at the end of the first semester. In the event of obtaining a class mark or a final mark of less than 40 in Life-forms and Functions of Clinical Importance 111 at the end of the first semester, a student shall not proceed to the programme of the second semester. Should the student enrol as a special student in Science in the second semester, pass all the relevant modules and indicate in writing that he would want to be reconsidered for BScPhysio, his application will be submitted for reselection in December.
3. A student who has obtained a final mark of less than 50, but at least 40, in Life-forms and Functions of Clinical Importance 111 and/or a final mark of less than 50 in Personal and Professional Development 111 and/or Strategic Communication 199 and/or Psychology 144 and/or Practical

Clinical Exposure 198 and/or Essentials of Disease Processes 198, shall repeat the said module(s) in the second year of the EDP.

## **Second year**

### *Promotion*

1. To qualify for promotion to BSc in Physiotherapy II, a student shall pass all modules of the EDP, that is, obtain in each module of the EDP a final mark of not less than 50.
2. With regard to outstanding credits, the second year of the EDP shall be subject to the provisions relating to examinations and promotion for BSc in Physiotherapy I.
3. A student who does not complete the EDP successfully within two years will have to apply for readmission to the programme.

## **Extended Degree Programme (EDP) for BSc in Dietetics**

### *Modules for the extended degree programme for BSc in Dietetics*

No students shall currently be accepted for the extended degree programme.

### *Provisions relating to examinations and promotion for the extended degree programme for BSc in Dietetics*

Currently not applicable.

## **Extended Degree Programme (EDP) for B of Speech-Language and Hearing Therapy**

### *Modules for the extended degree programme for B of Speech-Language and Hearing Therapy*

## **First year**

### *Compulsory modules*

Speech Pathology	122(12), 142(6)
General Linguistics	178(24)
Psychology	114(12), 144(12)
Xhosa	178(24) or
Afrikaans Language Acquisition	178(24) or 188(24) (Students are placed in one of these modules according to the results of a language proficiency test.)

Information Skills	172(6)
--------------------	--------

## Second year

### *Compulsory modules*

Speech Pathology	121(12), 162(12)
Clinical Speech Pathology	184(12)
Applied Anatomy	117(12)

On successful completion of the EDP, students join the second year of the BSL and HT programme.

### **PLEASE NOTE:**

The number appearing in brackets after each module indicates the credit value of the specific module.

The content of the modules for the extended degree programme appear in the chapter “Module Content of Under- and Postgraduate Programmes”.

*Provisions relating to examinations and promotion for the extended degree programme for B of Speech-Language and Hearing Therapy*

## First year

### *Promotion*

1. To be promoted to the module Speech Pathology (Articulation and Phonological Disorders) 142, a student shall pass the module Speech Therapy (Human Communication) 122. To qualify for promotion to the second year of the extended degree programme, a student shall obtain a mark of not less than 50 in the module Speech Pathology (Articulation and Phonological Disorders) 142. A student not complying with these requirements shall not be entitled to continue with the programme and shall apply for readmission to the programme.
2. A student who has obtained a class mark or a final mark of less than 40 in Speech Therapy (Articulation and Phonological Disorders) 142 shall not be entitled to continue with the programme. Such student shall accordingly be required to withdraw from the programme at that stage.

## **Second year**

### *Promotion*

1. To be promoted to the module Speech Pathology (Basic Audiometry) 162, a student shall pass the module Speech Therapy (Speech and Hearing Science) 121.
2. To qualify for promotion to BSL and HT II, a student shall pass all modules, including the practical component of Clinical Speech Therapy 184, that is, obtain a final mark of not less than 50 in each module of the EDP.
3. A student who does not complete the EDP successfully within two years shall be subjected to selection for readmission to the programme.
4. Regarding reassessment and outstanding credits, the second year of the EDP shall be subject to the same provisions relating to examinations and promotion for BSL and HT I.

## **POSTGRADUATE PROGRAMMES**

### **HONOURS DEGREES**

#### **Bachelor of Nursing with Honours**

##### *General information*

- The programme and/or modules may be presented utilising technology-mediated teaching.
- The programme is subject to the general provisions for examinations, promotion and re-examination in a single module as stipulated in Part 1 of the University Calendar.
- Additional areas of specialisation may be determined in conjunction with the head of the division.

##### *Admission and selection requirements*

- Students shall hold a Bachelor of Nursing degree and registration certificate(s) in the relevant disciplines from the South African Nursing Council.
- Students holding an appropriate BTech or equivalent degree from a recognised institution for tertiary education may be considered for admission to the BHons programme in Nursing, provided that:
  - the division may require supplementary work to be done;

- candidates shall have performed above average academically during the BTech programme; and
  - candidates shall have passed a preliminary examination that was conducted in accordance with clearly defined criteria set by the Faculty Board to ensure the assessment of the candidate's theoretical background and scientific maturity, as determined by the head of the division or his delegate as convener, together with at least one other expert in the subject area as appointed by the Dean. Candidates shall be considered by the Committee for Postgraduate Education on the basis of their curriculum vitae and a written recommendation from the preliminary examination committee.
- Computer literacy is highly recommended.

### *Nature of programme*

On completion of this programme, the student should be able to demonstrate the following skills:

- advanced knowledge and skills, and the ability to apply them in practice (at advanced cognitive, psychomotoric and affective level);
- the assembly and integration of appropriate knowledge outside of the field of specialty, in areas such as health science technology, research and healthcare-delivery issues;
- the ability to study and perform research independently;
- the internalisation of the appropriate academic and professional values and ethics, and the demonstration of applied and analytical-synthesising thought processes in the academic context as well as in practice;
- participation as a specialist nursing practitioner in the advancement of the quality of life of the local community, South African population and global community;
- the identification, analysis and solving of healthcare problems in the specialist area through basic research and the use of critical and creative thinking;
- leadership traits within the healthcare team and community groups;
- skills to organise and manage healthcare services/patient care in a responsible and effective manner;
- effective communication with healthcare service organisations by means of visual, verbal, non-verbal and written communication skills;

- the exploration of a wide variety of research strategies to advance scientific studies in the field of health care;
- an in-depth (breadth and depth) knowledge of the specialist area of choice;
- an understanding of the principles and concepts on which the specialist area of study is based and of its boundaries and limitations, as well as initiatives and possibilities;
- a broad overview of the recent, relevant and important research in the specialist field;
- competence in research;
- the ability to communicate research findings to colleagues in an effective manner in order to improve service programmes;
- the ability to manage and solve the challenges, demands and problems concerning professional conduct/ethics in the work environment;
- the demonstration of critical thinking and initiative, as well as the ability to argue effectively and convincingly in an intellectual debate;
- the ability to use well-founded theoretical judgement to identify any contradictory information, challenge orthodox theories or practices, and propose new methods/ways of management; and
- in-depth theoretical knowledge (cognitive skills) and the concomitant specialist-clinical skills that will further enable him to study independently and perform research at this level.

### *Purpose of programme*

This programme is aimed at exposing students to a specialist area in Nursing, and to equip them with advanced, in-depth theoretical knowledge and clinical skills to practice effectively in the chosen specialist area, to promote critical-analytical thinking, and to complete a mini-research assignment successfully.

### *Assessment*

A variety of formative and summative assessment methods are used. Each student is assessed individually by means of:

- assignments;
- the application of research principles in a research project;
- patient case presentations;
- clinical rounds;
- case studies;



- clinical assessment;
- written tests and examinations; and
- the assessment of psychomotor skills in the relevant specialist area.

The results of the assessment must indicate that outcomes have been achieved. Assessment of the nursing specialist in practice must indicate the successful attainment of appropriate academic depth, focus and integration of theory and practice.

Each module is assessed separately, with a minimum pass mark of 50%. The final mark of the programme is calculated on the basis of the relative weighting of each module, as indicated by the credit value of each module. A final mark of 75% is needed to obtain the degree cum laude. (See Part 1 of the University Calendar.)

## **Bachelor of Nursing Honours in Adult Critical Care Nursing**

### *Presentation*

English.

### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Principles and Processes of Critical Care Nursing	742(20)
System Abnormalities: Critical Care Nursing	743(20)
Clinical Foundations: Critical Care Nursing	774(30)
Research Assignment: Nursing	771(30)

### *Enquiries*

Programme coordinator: Ms J Bell

Tel.: (021) 938 9299/9036 E-mail: jbell@sun.ac.za

Administrative officer: Ms F Kleinhans

Tel.: (021) 938 9822/9036 E-mail: fkleinhans@sun.ac.za

## **Bachelor of Nursing Honours in Advanced Midwifery and Neonatal Nursing**

### *Presentation*

English.

### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Principles and Processes of Advanced Midwifery	774(20)
Principals and Processes of Advanced Neonatology	773(20)
Clinical Foundations: Advanced Midwifery and Neonatology	714(30)
Research Assignment: Nursing	771(30)

### *Enquiries*

Programme coordinator: Ms D Mugendi M'Rithaa

Tel.: (021) 938 9240/9036 E-mail: dkm@sun.ac.za

Administrative officer: Ms C Maclons

Tel.: (021) 938 9821/9036 E-mail: chantelp@sun.ac.za

## **Bachelor of Nursing Honours in Advanced Psychiatric Nursing**

### *Presentation*

English.

### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Principals and Processes of Advanced Psychiatric Nursing	776(40)
Clinical Foundations: Advanced Psychiatric Nursing	775(30)
Research Assignment: Nursing	771(30)

### *Enquiries*

Programme coordinator: Dr K Joyner

Tel.: (021) 938 9293/9036 E-mail: kjoy@sun.ac.za

Administrative officer: Ms M Castle

Tel.: (021) 938 9593/9036 E-mail: mcastle@sun.ac.za

## **Bachelor of Science with Honours**

### *Nature of the honours programme*

The purpose of the programme is to equip students with the insight, practical skills and in-depth knowledge with regard to their chosen field of study. On completion of the programme, the student must be able to function independently as a researcher and academic in the South African context.

The programme aims:

- to promote health care in the South African community;
- to facilitate and innovate health research;
- to facilitate critical and ethical reasoning;
- to promote evaluation management, communication and scientific knowledge;
- to prepare students for further study; and
- to promote lifelong study.

### *Admission of diplomates to study for a Bachelor of Science with Honours*

Persons with a National Higher Diploma in Medical Technology may be considered for admission to the Bachelor of Science with Honours degree if they:

- hold a relevant bachelor's degree or equivalent qualification obtained at a recognised institution for tertiary education;

or

- in exceptional cases, meet the following requirements:
  - Candidates must hold the matriculation certificate or exemption certificate of the Matriculation Board.
  - Candidates must provide proof of above-average academic results during their diploma programme.
  - Prior to admission, candidates must have been academically associated and/or professionally active for a minimum period of

three years, during which at least one research project was completed successfully and published in a recognised journal.

Candidates must provide proof of the successful completion of a preliminary examination:

- that was conducted according to the clearly defined criteria stipulated by the Faculty Board, in order to ensure an adequate scientific standard;
- that was designed to assess the theoretical background and scientific maturity of the candidate; and
- that was conducted by the head of the department/division in which the intended postgraduate studies are envisaged, or by his delegate, together with at least one other expert in the relevant field of study who has been nominated by the Dean.

The Committee for Postgraduate Education considers candidates on merit on the basis of the submission of a *curriculum vitae* and a written recommendation by the preliminary examination committee.

*Admission of candidates with a Bachelor of Technology to the Bachelor of Science with Honours degree*

Persons holding an appropriate Bachelor of Technology degree or equivalent qualification at a recognised institution for tertiary education may be considered for admission to the Bachelor of Science with Honours degree, provided that:

- Departments/divisions may require supplementary work to be completed by such persons.
- Candidates must provide proof of above-average academic performance during the degree programme.
- Candidates have passed a preliminary examination:
  - that was conducted according to clearly defined criteria stipulated by the Faculty Board in order to ensure the meeting of an adequate scientific standard;
  - that was designed to assess the theoretical background and scientific maturity of the candidate; and
  - that was conducted by the head of the department/division in which the intended postgraduate studies are envisaged, or by his delegate, together with at least one other expert in the relevant field of study who has been nominated by the Dean.

The Committee for Postgraduate Education considers candidates on merit on the basis of the submission of a *curriculum vitae* and a written recommendation by the preliminary examination committee.

## **Bachelor of Science with Honours in Clinical Human Genetics**

### *Specific admission requirements*

For admission to this degree programme, a candidate shall hold one of the following qualifications from this University or another recognised tertiary training institution:

- an MB,ChB or BChD degree;

or

- a bachelor's degree in a clinical discipline, e.g. Nursing.

For admission to this programme, the candidate must have achieved at least 60% in the final examination. However, candidates with an average below 60% may be admitted on the basis of an adequate motivation, successful completion of additional work or proof of competence.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Human Genetics Theory	771(60), 773(60)
-----------------------	------------------

### *Assessment and examination*

The final mark will be calculated as follows:

- project report/assignment: 20%
- two written examinations: 80%

### *Enquiries*

Programme coordinator: Dr M Urban

Tel.: (021) 938 9787 E-mail: urban@sun.ac.za

## **Bachelor of Science with Honours in Epidemiology**

### *Specific admission requirements*

For admission to the Bachelor of Science with Honours, with Epidemiology as field of study, a candidate shall hold one of the following qualifications of this University or another recognised university:

- an MB,ChB or BChD degree;

or

- a bachelor's degree in a biological discipline that preferably includes a one-year programme in Mathematics and/or Statistics;

or

- an equivalent qualification that shall be approved by Senate for this purpose, on condition that the applicant has passed Mathematics in matric.

### *Duration*

This part-time programme, which comprises two Compulsory modules, is presented over two academic years, during which time weekly two-hour contact sessions are held.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Biostatistics	772(60)
Epidemiology	771(60)

### *Assessment and examination*

The two-year programme includes two formal class tests and culminates in three three-hour examination papers, one covering the field of Epidemiology, one covering the field of Biostatistics and one being problem based, covering integrated examples. The written assessments are complemented by a problem-based, integrated compulsory oral examination attended by an external examiner (after also having moderated the students' written examination papers). The final mark for the programme is calculated as follows:

- assessment by means of two written class tests (20% of the final mark);
- three written examination papers (60% of the final mark); and
- an oral examination (20% of the final mark).

Candidates shall pass both modules with a minimum of 50% to obtain the degree.

### *Enquiries*

Programme coordinator: Dr JM Barnes

Tel.: (021) 938 9480 E-mail: [jb4@sun.ac.za](mailto:jb4@sun.ac.za) or [mkotze@sun.ac.za](mailto:mkotze@sun.ac.za)

## **Bachelor of Science with Honours in Human Anatomy**

### *Programme description*

The programme aims to address the national shortage of anatomists. It consist of a theoretical and a practical component which will not only enable the successful candidate to be involved in training, but will also equip him with a thorough knowledge on the use of human tissue for research purposes.

### *Specific admission requirements*

For admission to the BScHons degree programme with Human Anatomy as major field of study the candidate shall have one of the following qualifications from a recognised institution:

- BSc with Human Anatomy as major subject, and Biochemistry, Physiology, Genetics, Microbiology or Zoology as an additional major;
- MB,ChB or BChD;
- BTech with appropriate subjects and motivation. Depending on the specific field of study, candidates may be required to do additional work or to complete an admission examination; or
- any other relevant qualification approved by Stellenbosch University Senate.

For all of the abovementioned qualifications candidates shall be required to have obtained at least 65% in the Anatomy modules of the second and third years, and at least 65% in the additional major.

### *Duration*

One year full time or two years part time.

### *Module outline and credit values*

#### *Compulsory modules (80 credits)*

Anatomical Techniques	771(10)
Use of Animals in Research	771(5)
Laboratory Practice	771(10)
Gross Regional Anatomy	771(20)

Legal and Ethical Aspects	771(5)
Assignment (HonsBSc Human Anatomy)	771(30)

*Elective modules (of which modules to a total of 40 credits shall be chosen)*

Physical Anthropology	771(10)
Clinical and Surgical Anatomy	771(10)
Human Anatomical Variation	771(10)
Microscopic Anatomy and Histological Technique	771(20)
Developmental Anatomy	771(10)
Radiological Anatomy	771(10)
Cell Biology	771(10)
Comparative Anatomy	771(10)

### *Assessment and examination*

A subminimum of 50% is required of each of the following assessment components:

- a written three-hour examination covering the subject content of the elective modules (20% of final mark);
- a written three-hour examination covering the subject content of the Compulsory modules (20% of final mark);
- successful completion and submission of the research project report/mini-thesis (30% of final mark);
- oral presentation of the research project (10% of final mark);
- completion of a review article (10% of final mark); and
- preparation of a paper or a poster for presentation at the Academic Year Day of the Faculty of Medicine and Health Sciences and/or a congress (10% of final mark).

The final is determined by calculating the weighted average of the marks obtained in each of the assessed components.

### *Enquiries*

Program coordinator: Prof BJ Page

Tel: (021) 938 9430 E-mail: [bjp@sun.ac.za](mailto:bjp@sun.ac.za)



## **Bachelor of Science with Honours in Human Genetics**

### *Programme description*

This programme equips students with both a theoretical and practical background in basic concepts in molecular biology and human genetics. The programme consists of the attendance of lectures, participation in discussions of academic journals, writing a literature review, participation in a six-month research project and written mid-year and end-of-year examinations. The programme overlaps with the BScHons (Molecular Biology) programme, but includes separate lectures on cytogenetics, clinical genetics and forensic genetics, among others.

### *Specific admission requirements*

For admission to the degree programme, a candidate shall hold one of the following qualifications from this University or another recognised tertiary training institution:

- an MB,ChB or BChD degree;

or

- a bachelor's degree with Genetics as one of the major subjects;

or

- a bachelor's degree with any two of the following as the major subjects: Microbiology, Biochemistry, Physiology and Zoology.

To qualify for admission to the programme, the candidate must have achieved at least 60% in the final examination. However, candidates with an average below 60% may be admitted on the basis of the submission of an adequate motivation, successful completion of additional work and/or proof of competence.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

English.

### *Module outline and credit values*

Human Genetics Theory	775(45)
Human Genetics Research Project	776(75)

### *Assessment and examination*

Modules must be passed with a minimum of 50% to earn the applicable credits. The final mark is calculated as follows:

- project report/mini-thesis (25%);
- project leader's report (12.5%);
- project presentation (12.5%);
- review article (12.5%); and
- three written examinations (37.5%).

### *Enquiries*

Programme coordinator: Dr S Bardien

Tel.: (021) 938 9681/9692 E-mail: sbardien@sun.ac.za

## **Bachelor of Science with Honours in Hyperbaric Medicine**

### *Programme description*

The programme trains medical practitioners in the field of hyperbaric medicine. Medical practitioners are exposed to various hyperbaric medicine concepts, with the main focus being on the practice of hyperbaric medicine in the clinical hospital setting. This programme does not cover the occupational health aspects related to diving medicine or hyperbaric tunnelling (these aspects are covered in the Underwater Medicine programme).

### *Specific admission requirements*

For admission to the degree programme of Bachelor of Science with Honours, with Hyperbaric Medicine as field of study, a candidate shall:

- hold an MB,ChB degree of this or another recognised university, or an equivalent qualification acceptable for registration as a medical practitioner;
- have completed internship year(s); and
- hold, or be able to obtain, a valid diving medical fitness certificate enabling him to partake in hyperbaric exposures.

### *Duration*

It is presented over two years for part-time students and over one year for full-time students.

### *Presentation*

English.

### *Module outline and credit values*

Basic Hyperbaric Medicine	772(25)
Operational Hyperbaric Medicine	773(35)

Advanced Hyperbaric Medicine	774(20)
Research Methodology	775(10)
Research Assignment	776(30)

### *Assessment and examination*

Students will write examinations only on the modules that they complete. The final mark awarded to students completing the entire programme will be calculated on the basis of:

- the successful completion of the examinations set for each module (10% of final mark);
- two written three-hour closed-book examination papers (50% of final mark);
- an oral examination lasting at least 30 minutes (20% of final mark); and
- a research project demonstrating competence in basic research methodology (20% of final mark).

### *Enquiries*

Programme coordinator: Dr CJ Roberts

Tel.: (021) 938 9810 E-mail: [cjroberts@sun.ac.za](mailto:cjroberts@sun.ac.za)

Website: <http://www.hyperbaricmedicine.co.za>

## **Bachelor of Science with Honours in Medical Microbiology**

### *Specific admission requirements*

For admission to the BScHons (Medical Microbiology) programme a candidate must hold a relevant BSc degree from a recognised university with a combination of appropriate subjects, such as Microbiology, Biochemistry, Biotechnology and Genetics. The final-year pass mark should be 60% or higher. Should the number of applicants exceed the intake capacity, the postgraduate programme committee of the Division of Medical Microbiology will shortlist candidates on the basis of their *curriculum vitae* and the final selection will be done after a brief interview.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Medical Microbiology	776(25)
Immunology	714(10)
Medical Biotechnology	771(10)
Molecular Biology	771(10)
Research Methodology	715(5)
Research Project	771(60)

### *Assessment and examination*

The final mark will be calculated on the basis of the following assessment opportunities:

- written examinations (30%);
- the completion of workbooks (10%);
- a practical examination (10%); and
- a research assignment (50%).

The minimum mark required to pass is 50% and a mark of 75% or higher is required to pass with distinction.

### *Enquiries*

Programme coordinator: Dr K Hoek

Tel.: (021) 938 4035 E-mail: [kind@sun.ac.za](mailto:kind@sun.ac.za)

## **Bachelor of Science with Honours in Medical Physiology**

### *Specific admission requirements*

For admission to the degree programme of BScHons (Medical Physiology), a candidate shall hold one of the following qualifications of this University or another recognised university:

- a BSc degree majoring in Physiology, or equivalent qualification with Physiology passed at third-year level with a final mark of at least 60%;
- an MB,ChB or BChD degree, or equivalent qualification; or
- a BVSc or BPharm degree, or equivalent qualification.

### *Presentation*

English and Afrikaans are used as languages of instruction, depending on audience preference.

*Module outline and credit values*

Theoretical Medical Physiology	771(60)
Research in Medical Physiology	772(60)

*Assessment and examination*

The final mark for the programme will be calculated on the basis of the following:

- one written examination on the theoretical work;
- an open-book examination;
- continuous assessment;
- a brain-teaser project; and
- a mini-thesis.

*Enquiries*

Programme coordinator: Prof H Strijdom

Tel.: (021) 938 9387 E-mail: jgstr@sun.ac.za

**Bachelor of Science with Honours in Medical Virology**

*Programme description*

The BScHons programme forms part of continued efforts to create a learning culture for students and researchers capable of making a significant contribution to the field of Medical Virology. Medical Virology offers practical research experience, focusing specifically on research relevant to Africa, for example in the field of HIV/Aids.

*Specific admission requirements*

For admission to the programme, candidates shall hold a recently obtained BSc degree with Virology as major, or a BSc degree in Microbiology, Biochemistry, Genetics or similar field of study. A final-year BSc pass mark of 60% or higher is required, and candidates will have to report for brief interviews. Due to the limited number of candidates who can be admitted, candidates who fail to meet these criteria will automatically be disqualified.

*Presentation*

English.

*Module outline and credit values*

Theory of Medical Virology	771(60)
----------------------------	---------

Practical Research Project (Medical Virology)	772(60)
---	---------

### *Assessment and examination*

Assessment of the theoretical module takes place in the form of continuous assessment (5% of the final mark), a semester examination (20% of the final mark) and a final examination (25% of the final mark). Assessment of the practical research project takes place in the form of assignments, seminars and a mini-thesis (50% of the final mark).

### *Enquiries*

Programme coordinator: Prof W Preiser

Tel.: (021) 938 9353 E-mail: preiser@sun.ac.za

## **Bachelor of Science with Honours in Molecular Biology**

### *Specific admission requirements*

For admission to the BSHons (Molecular Biology) degree programme a candidate should have achieved an average result of above 60% in one of the following qualifications of this University or another recognised tertiary training institution:

- a bachelor's degree with Biochemistry, Genetics, Microbiology or Biotechnology at third-year level;

or

- an MB,ChB or BChD degree.

Candidates with an average result of less than 60% at third-year level may be admitted on the basis of the submission of an adequate motivation and/or successful completion of any additional work and proof of competence, as may be required.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

English.

### *Module outline and credit values*

Molecular Biology Theory	774(45)
Molecular Biology Project	775(75)

### *Assessment and examination*

Both modules must be passed with a minimum of 50% to earn the applicable credits. Assessment opportunities include:

- two written examinations and a review article for the theory module; and
- a research report, research presentation, supervisor's report and written examination for the project module.

### *Enquiries*

Programme coordinator: Prof TC Victor or Ms GA Durrheim

Tel.: (021) 938 9251/9696 E-mail: tv@sun.ac.za or gad@sun.ac.za

## **Bachelor of Science with Honours in Morphological Sciences**

### *Specific admission requirements*

For admission to the degree programme of Bachelor of Science with Honours, with Morphological Sciences as field of study, a candidate must hold a relevant BSc degree from a recognised university, with appropriate subjects such as Physiology, Histology, Zoology or Anatomy as majors. In the case of the students having majored in other subjects, such as Genetics or Microbiology, or being in possession of a BTech degree, additional work may be required. The required final-year pass mark is 60%.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

The Laboratory Practice module is presented first, followed by the elective modules. Epidemiology and Research Methodology, and General Histology and Principles of Macroscopic Anatomy, as well as the research project, are presented for the duration of the programme.

### *Compulsory modules*

Laboratory Practice	775(3)
Epidemiology and Research Methodology	775(10)
Morphological Sciences Research Project	775(60)

General Histology and Principles of Macroscopic Anatomy	775(35)
---	---------

*Elective modules (of which three are to be selected)*

Morphometry and Laser Microdissection and Microphotography	775(4)
Immunohistochemistry	775(4)
Electron Microscopy	775(4)
Flow Cytometry	775(4)
Applied Histology and Histopathology	776(4)

*Assessment and examination*

The year mark is compiled from the following assessment opportunities: The research project entails the assessment of a written report and an oral presentation. For all the other modules, a written test and/or a practical test and report or portfolio will be assessed, with weights proportional to the credit values of the modules involved. A subminimum of 50% is required for each module.

*Enquiries*

Programme coordinator: Dr SH Kotzé

Tel.: (021) 938 9428 E-mail: shk@sun.ac.za

## **Bachelor of Science with Honours in Nuclear Medicine**

*Specific admission requirements*

For admission to the degree programme of BScHons (Nuclear Medicine) a candidate shall hold one of the following qualifications of this or another recognised university:

- the MB,ChB degree;

or

- a bachelor's degree with Physiology as a major subject, and Physics I;

or

- a bachelor's degree with either Biochemistry or Chemistry as a major subject, provided that where Physiology is not the second major



subject, the candidate shall take Physiology as a supplementary subject to the satisfaction of Senate.

A minimum pass mark of 60% in the major subject is a prerequisite for admission.

Candidates who hold a BTech qualification shall be considered for admission if they have:

- passed the BTech degree with a minimum pass mark of 60%; and
- passed a preliminary Nuclear Medicine examination (as determined by the postgraduate programme committee) with a minimum examination mark of 60%.

### *Duration*

The BScHons (Nuclear Medicine) programme is a one-year full-time programme or a two-year part-time programme.

### *Presentation*

English.

### *Module outline and credit values*

Radiation Physics and Instrumentation	771(30)
Clinical Nuclear Medicine	772(60)
Research Assignment (Nuclear Medicine)	773(30)

### *Assessment and examination*

All three modules must be passed with a minimum mark of 50% to obtain the qualification.

### *Part-time students*

Students attending the programme on a part-time basis shall be allowed to write the examinations as follows: one three-hour paper after the first year and two three-hour papers and an oral examination after two years.

### *Full-time students*

Three three-hour papers and an oral examination after one year.

### *Enquiries*

Programme coordinator: Prof A Ellmann

Tel.: (021) 938 4265 E-mail: ae1@sun.ac.za

## **Bachelor of Science with Honours in Obstetrics and Gynaecology**

### *Programme description*

On completion of the programme, students will demonstrate a wide knowledge of general obstetrics and gynaecology, including community obstetrics and gynaecology, basic gynaecological oncology, urogynaecology, contraception and family planning, as well as the ability to act as independent learners committed to professional development.

The programme consists of five modules completed over a period of two years. It combines self-study with technologically-mediated teaching methods. Lectures are recorded on DVD and provided to the students. An opportunity for questions and discussion regarding each DVD is created in a virtual classroom. During the programme, one week of practical training takes place at Tygerberg Hospital or any other academic hospital in South Africa. Should training take place at another academic hospital, the approval of the head of the relevant academic department must be obtained.

### *Specific admission requirements*

For admission to the degree programme of Bachelor of Science with Honours in Obstetrics and Gynaecology a candidate shall hold the MB,ChB degree or an equivalent qualification of this University or another recognised university.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Obstetrics/HIV/Aids	771(22)
Obstetrics	771(23)

These modules include general obstetrics, basic ultrasound and HIV/Aids.

Family Planning	771(22)
General Gynaecology and Reproductive Biology	771(23)

These modules include general gynaecology, basic infertility care, management of the menopause, family planning and ethics applicable to the field.

Research Project	771(30)
------------------	---------

### *Assessment and examination*

Four examinations will be conducted in the course of the programme. The student has to pass all the examinations and the research project.

### *Enquiries*

Programme coordinator: Prof GB Theron

Tel.: (021) 938 9209 E-mail: gbth@sun.ac.za

## **Bachelor of Science with Honours in Pathology**

### *Programme description*

On completion of this programme, graduates will demonstrate skills in:

- the identification and solving of problems;
- the efficient and responsible application of scientific methods and technology;
- the efficient management of the collection, organisation, analysis, evaluation, integration and application of information;
- competent and efficient personal organisation and self-management;
- personal self-development, with an emphasis on insight, responsibility, accountability, continued learning, self-criticism, acceptance of criticism from others, and the ability to work independently;
- the ability to work as part of a team and to add value to the group as a whole by way of constructive cooperation;
- effective communication through the competent presentation of information;
- development of a holistic approach to problem solving within the context of respect and sensitivity towards other people, the community and the environment;
- imparting understanding of the importance of health sciences in general, and laboratory medicine in particular, to the community through the communication of information and results and the transfer of relevant technology; and
- awareness of the opportunities, challenges, needs, requirements and ethical principles that apply to research and good laboratory practice in the health sciences profession.

The graduate will have:

- a sound knowledge of the theoretical principles applicable to the subject matter of the compulsory and relevant choice module in pathology;
- the ability to work independently on assignments and research projects;
- the ability to critically evaluate and utilise information to solve problems effectively by means of appropriate methods with regard to the pathology discipline(s) concerned;
- the ability to apply technical skills and scientific methods, and to use relevant equipment to conduct research that adheres to the applicable legal, safety and bioethical requirements; and
- the ability to design a research project independently, to perform such a project within a group, to present the results and conclusions in an appropriate scientific format and to accept responsibility for them.

### *Specific admission requirements*

For admission to the degree programme of BScHons (Pathology) a candidate must hold:

- an MB,ChB or BChD degree or equivalent qualification deemed adequate by the University;

or

- a bachelor's degree from a recognised university, with Anatomy, Physiology, Histology, Chemistry, Biology, Genetics or Microbiology as major at third-year level, or another qualification approved by Senate. Candidates with other major subjects at third-year level may be admitted on the basis of the submission of an adequate motivation and successful completion of an admission examination. Depending on the field of study, additional work and/or proof of competence may be required;

or

- a BTech degree, on condition that the candidate fulfils all the requirements defined by the University. Depending on the field of study, additional work and/or proof of competence may be required.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

English.

## *Module outline and credit values*

### *Compulsory modules*

Laboratory Practice	776(3)
Epidemiology and Research Methodology	775(10)
Introduction to Molecular Pathology	775(17)
Pathology Research Project	775(60)

### *Elective modules (of which one is to be selected)*

Anatomical Pathology	775(30)
Chemical Pathology	775(30)
Haematology	775(30)
Immunology	775(30)

### *Assessment and examination*

The final mark will be determined by the weighted average of the marks for the components that are assessed. A subminimum of 50% is required for each assessment component as outlined below:

- a three-hour written examination paper, covering the elective modules;
- successful completion of the research project;
- a written report and oral presentation on completion of the research project;
- evaluation of practical skills; and
- a logbook on the learning activities and skills mastered, including a summary of the laboratory logbook.

The pass mark will be 50%, with a mark of 75% or higher serving as a distinction.

### *Enquiries*

Programme coordinator: Mr D Geiger

Tel.: (021) 938 5321 E-mail: dg2@sun.ac.za

## **Bachelor of Science with Honours in Pharmacology**

### *Specific admission requirements*

For admission to the degree programme of Bachelor of Science with Honours, with Pharmacology as field of study, a candidate shall hold one of the following qualifications of this University or another recognised university:

- a BSc degree majoring in Physiology, Biochemistry or Microbiology, with a final mark of at least 60% for subjects in the third year of study;
- an MB,ChB or BChD degree, or equivalent qualification; or
- a BPharm degree, or equivalent qualification.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

English and Afrikaans are used as languages of instruction, depending on audience preference.

### *Module outline and credit values*

Principles of Pharmacology	774(40)
Pharmacology of Systems	775(40), 776(40)

### *Assessment and examination*

The final mark for the programme will be calculated by means of:

- three written examinations covering the theoretical work (45% of the final mark);
- continuous assessment by means of class tests (15% of the final mark);
- assignment and presentation (20% of the final mark); and
- oral examination (20% of the final mark).

During the second year of the programme it is expected of the student to hand in a satisfactory assignment on a pharmacology/toxicology project. The purpose of the assignment is to determine the ability of the student to independently execute a scientific investigation and interpret the results thereof.

### *Enquiries*

Programme coordinator: Prof JM van Zyl

Tel.: (021) 938 9344 E-mail: jmvzyl@sun.ac.za

## **Bachelor of Science with Honours in Reproductive Biology**

### *Specific admission requirements*

For admission to the degree programme of Bachelor of Science with Honours in Reproductive Biology a candidate shall hold one of the following qualifications of this or another recognised university: a bachelor's degree with either Physiology, Biochemistry, Microbiology or Human Genetics as the major subject, and at least one of said subjects at second-year level.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Andrology	771(45)
In Vitro Fertilisation	741(45)
Research Project	771(30)

### *Assessment and examination*

Each module will be assessed separately and continuously, with a combined assessment mark of 50% being required. For examination purposes, two three-hour papers must be written, and an oral examination will be conducted.

### *Enquiries*

Programme coordinator: Dr M-L de Beer

Tel.: (021) 938 4940/5487 E-mail: mlw@sun.ac.za

## **Bachelor of Science with Honours in Underwater Medicine**

### *Specific admission requirements*

For admission to the degree programme of Bachelor of Science with Honours, with Underwater Medicine as field of study, the candidate must:

- hold an MB,ChB degree from this or another recognised university, or an equivalent qualification acceptable for registration as a medical practitioner;
- have completed internship year(s); and
- hold, or be able to obtain, a valid diving medical fitness certificate in order to partake in hyperbaric exposure.

### *Presentation*

English.

### *Module outline and credit values*

Basic Underwater Medicine	772(30)
Advanced Underwater Medicine	774(20)
Operational Underwater Medicine	773(30)
Research Methodology	775(10)
Research Assignment	776(30)

### *Assessment and examination*

Students completing only some of the modules are examined on the specific modules only. Students completing the whole programme will be examined on:

- the successful completion of the examinations in each module (20% of final mark);
- three written three-hour closed-book examination papers (50% of final mark);
- an oral examination lasting at least 30 minutes (15% of final mark); and
- a research project demonstrating competence in basic research methodology (15% of final mark).

### *Enquiries*

Programme coordinator: Dr WAJ Meintjes

Tel.: (021) 938 9272 E-mail: [wajm@sun.ac.za](mailto:wajm@sun.ac.za)

Website: <http://www.divingmedicine.co.za>



## MASTER'S DEGREES

### Master of Audiology

#### *Specific admission requirements*

For admission to the Master of Audiology degree programme, a candidate shall hold a four-year Bachelor's degree in Audiology from an accredited university, or an equivalent qualification as approved by Senate.

Upon written application, a student may be admitted to the programme by Senate, or the Executive Committee acting on behalf of Senate. Only a limited number of students is selected annually.

On application for submission each candidate shall submit a preliminary proposal to the Head of the Division for approval, as agreed with the latter.

#### *Duration*

One year for full-time students; two years for part-time students.

#### *Presentation*

Afrikaans and English.

#### *Module outline and credit values*

Thesis: Audiology	872(180)
-------------------	----------

#### *Assessment and examination*

The thesis is assessed by at least one internal and one external examiner and will contribute 100% to the final mark of the programme. The assessment includes an oral examination. In order to pass the programme, a student needs to achieve a final mark of at least 50% for the thesis.

#### *Enquiries*

Programme coordinator: Mrs D Klop

Tel.: (021) 938 9494 E-mail: dk@sun.ac.za

### Master of Human Rehabilitation Studies

#### *Admission and selection requirements*

For admission to the Master of Human Rehabilitation Studies degree programme, a candidate shall hold an MB,ChB degree, a bachelor's degree, a four-year Bachelor of Science degree or a bachelor honours degree in an appropriate health or health-related field, or an equivalent qualification approved for such purpose by Senate, or shall in some other manner have attained in his particular field of study a standard of competence deemed adequate for such purpose by Senate.

### *Nature of programme*

This programme

- Addresses the current need for advanced interdisciplinary studies and research in the disability- and rehabilitation-related fields, as expressed in various provincial, national and international policy documents, charters and treaties.
- Provides an interdisciplinary pool of specialised rehabilitation professionals, from a variety of professional backgrounds, who have the necessary clinical decision-making, managerial, research and educational knowledge, skills and socio-political attitudes, to assume positions of leadership within the field of rehabilitation.
- Produces rehabilitation specialists who can act as specialist consultants in public and private rehabilitation services, within and beyond their specific professional areas of practice.
- Equips the qualified learner with a sophisticated knowledge and understanding of phenomena pertinent to the disability- and rehabilitation-related fields, within a human rights and social model perspective.
- Ensures mastery of the field of rehabilitation through the high-level analysis of new information, and the ability to deal with complexity and to find workable solutions to problems and challenges.
- Enables the qualified learner to do advanced and independent research.
- Introduces the qualified learner to the world of scholarly communication, inter alia through assistance in publishing his own research reports.
- Contributes to the pool of rehabilitation academics and professionals with the competence and critical intellectual abilities to ensure future advancement of the field of rehabilitation.
- Addresses the country's need for rehabilitation specialists of the highest quality.

Students may choose one of two options for the Master of Human Rehabilitation Studies programme, namely:

#### *Master of Human Rehabilitation Studies (structured)*

Students with a bachelor's degree or a four-year Bachelor of Science degree pursue a part-time, two-year modular programme.

*Master of Human Rehabilitation Studies (thesis)*

Students with an MB,ChB or a relevant honours degree complete a thesis on a subject chosen in consultation with the Head of the Centre for Rehabilitation Studies. In individual cases, supplementary study from the theoretical modules of the structured programme may be required by the Head of the Centre.

**PLEASE NOTE:**

Theoretical modules are also presented by means of technology-mediated education.

**Master of Human Rehabilitation Studies (structured)**

*Presentation*

English.

*Module outline and credit values*

**First year**

Epidemiology and Research Methodology	842(40)
Rehabilitation I	871(40)

**Second year**

Rehabilitation II	872(40)
Assignment	814(60)

*Assessment and examination*

- The Epidemiology and Research Methodology as well as the Rehabilitation I modules are completed at the end of the first year of study, and the Rehabilitation II and Assignment modules at the end of the second year.
- The programme is assessed on a continuous basis by means of tests and assignments. Written examinations are taken in the Rehabilitation I and II modules.
- A minimum mark of 50% is required for each module in order to pass the programme. The student is required to submit a satisfactory research assignment from which it is evident that he is able to conduct an independent scientific study and interpret the results.

## **Master of Human Rehabilitation Studies (thesis)**

### *Presentation*

English.

### *Module outline and credit values*

Thesis (Rehabilitation)	872(180)
-------------------------	----------

### *Assessment and examination*

A mark of at least 50% must be achieved to pass the thesis.

### *Enquiries*

Programme coordinator: Ms G Mji

Tel.: (021) 938 9528/9090 E-mail: gumji@sun.ac.za

## **Master of Medicine**

### *Fields of study*

The fields of study in which the Master's degree in Medicine (MMed) can be obtained, with the abbreviated name and the field of study given in brackets, are as follows:

- Anaesthesiology MMed (Anaes)
- Clinical Pharmacology MMed (Clin Pharm)
- Community Health MMed (Comm Health)
- Dermatology MMed (Derm)
- Emergency Medicine MMed (Em Med)
- Family Medicine MMed (Fam Med)
- Internal Medicine MMed (Int)
- Medical Genetics MMed (Med Gen)
- Neurology MMed (Neurol)
- Neurosurgery MMed (Neurosurg)
- Nuclear Medicine MMed (Nuc Med)
- Obstetrics and Gynaecology MMed (O and G)
- Occupational Medicine MMed (Occ Med)
- Ophthalmology MMed (Ophth)
- Orthopaedics MMed (Orthop)
- Otorhinolaryngology MMed (ORL)
- Paediatrics and Child Health MMed (Paed)

- Paediatric Surgery MMed (Paed Surg)
- Pathology (Anatomical) MMed (Anat Path)
- Pathology (Chemical) MMed (Chem Path)
- Pathology (Clinical) MMed (Clin Path)
- Pathology (Forensic) MMed (Forens Path)
- Pathology (Haematological) MMed (Haem Path)
- Pathology (Microbiological) MMed (Microbiol Path)
- Pathology (Virological) MMed (Virol Path)
- Plastic and Reconstructive Surgery MMed (Plast and Recons)
- Psychiatry MMed (Psych)
- Radiation Oncology MMed (Rad Onc)
- Radiological Diagnosis MMed (Rad D)
- Surgery MMed (Surg)
- Thoracic Surgery MMed (Thor Surg)
- Urology MMed (Urol)

*Admission and selection requirements*

- For admission to the MMed degree programme, a candidate shall have held an MB,ChB degree from this University or another qualification deemed sufficient by this University for at least three years prior to application, and must be registered with the Health Professions Council of South Africa as a medical practitioner. Prospective candidates in the following fields of study also shall have completed the ATLS/ACLS/PALS or APLS: Anaesthesiology, Neurosurgery, Emergency Medicine, Otorhinolaryngology, Orthopaedics, and Plastic and Reconstructive Surgery.
- Written applications must be submitted, and Senate or the Executive Committee, acting on behalf of Senate, shall decide whether a student is to be admitted to the MMed programme.
- Candidates who apply for training posts at the Tygerberg Hospital, the Western Cape Provincial Department of Health or another institution deemed equivalent by this University must make sure of programme-specific recommendations which apply to the respective MMed programmes. Enquiries in this regard may be directed to the programme coordinator of the specific programme.

### *Duration*

The training for the degree takes place over four or five years, depending on the requirements of the department/division under which the student's major subject falls. Major subject refers to the recognised area of Medicine in which the student chooses to specialise.

Students who are appointed as registrars between 1 January and 31 March of the relevant year will graduate at the December graduation ceremony directly preceding the completion of the specific four- or five-year prescribed training period, provided that at they comply with all the academic requirements of the degree that stage. Students who have enrolled for a four-year programme must successfully complete the full prescribed training period following enrolment in order to register as a specialist with the Health Professions Council of South Africa. Students who have enrolled for a five-year programme, and are already registered as a specialist with the Council on the basis of being a Fellow of the Colleges of Medicine of South Africa, also have to complete the full prescribed training period following enrolment in order for the University to provide the Council with a certificate confirming that an MMed degree qualification can be added to the student's credentials.

### *Clinical experience*

Candidates for the MMed degree must prove to the satisfaction of the University that:

- they have successfully held a full-time training position according to the requirements of the relevant department/division for a period of four or five years at Tygerberg Hospital, the Western Cape Department of Health or another institution that the University deems equivalent. The first year of appointment of specialists is regarded as training for disciplines that require five years of residency;
- they have received theoretical, practical and clinical training as stipulated in the "Duration" paragraph above; and
- they have successfully completed the University examinations – written, oral and practical and/or clinical – as prescribed.

### *Exemption*

- With regard to the work mentioned in the "Duration" and "Clinical experience" paragraphs above, the University may grant possible partial or full exemption based on comparable training received and experience gained at another recognised institution.
- With regard to prescribed modules as mentioned in the "Module Content" below, the University may grant possible partial or full exemption based on modules passed at another recognised institution.

### *Nature and objective of the MMed programme*

The purpose of the qualification is to equip a basically qualified medical practitioner (with an MB,ChB or equivalent qualification) with specialised knowledge, as well as with the skills and attitudes required as a specialist in the candidate's chosen speciality, that at least agree with the requirements of the Health Professions Council of South Africa. This will enable the graduate to function as an independent practitioner in the relevant field within any service-rendering and academic environment, by acquiring the knowledge, skills and attitudes to:

- deliver comprehensive health care in a conscientious manner to the patient as an individual and as a member of the community;
- develop the attitudes and abilities needed to become an independent learner and to accept the responsibility for continuous lifelong professional development, including the ability to critically evaluate and interpret the relevant literature and to apply it in the profession;
- plan, execute, interpret and publish research relevant to the graduate's chosen speciality;
- be able to move, if he so aspires, to the highest level of academic work for doctoral study and to promote an approach based on academic integrity and ethics; and
- contribute to the pool of academics and professionals with the competence and critical intellectual abilities to ensure the future advancement of the graduate's chosen speciality, and to make provision for the country's need for a skilled workforce of the highest quality and to ensure that the country remains competitive in an era of growing global competition.

### *Module content*

The curricula for the different fields of study in which the MMed degree could be obtained are as follows:

## **MMed Anaesthesiology**

### *Specific admission requirements*

The candidate shall be registered as an independent practitioner with the Health Professions Council of South Africa.

Recommendations for appointment as registrar include the following: successful completion of primary subjects in Anaesthesiology; experience in Internal Medicine on a level after community service at an institution where a

physician is present; experience in anaesthesia; and appropriate diplomas such as ACLS, ATLS, PALS and DA.

Candidates are required to occupy a post as registrar in the Department of Anaesthesiology and Critical Care for the duration of their study. Exceptions shall only be considered in the following cases:

- where a candidate is registered with the University as a special student with the sole purpose of attempting the primary subjects prior to obtaining a position as registrar; and
- where a candidate has successfully completed his training time and is only registered to complete his research assignment.

### *Programme structure*

The programme consists of modules on anaesthetics as well as critical care. The latter is presented at postgraduate level in daily clinical teaching and during three four-hour formal academic meetings per week. The candidate shall complete a study project in the form of an assignment that will form part of the final assessment for the MMed degree. The protocol for the assignment shall be approved by the postgraduate committee of the Department and the relevant faculty structures not later than 30 months after commencement of studies as MMed student. The assignment shall be completed (assessment finalised) not later than 48 months after commencement of studies as MMed student.

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Anaesthesiology	874(216)
Applied Physics and Principles of Measuring Techniques	873(48)
Applied Physiological Science	872(48)
General Pharmacology	871(48)
Assignment	875(120)

### *Assessment and examination*

- The assessment of the primary modules, i.e. Applied Physics and Principles of Measuring Techniques, Applied Physiological Science



and General Pharmacology, consists of one three-hour written examination and an oral examination under the auspices of the head of the Department or person so appointed by the head of the Department. The successful completion of the primary examination of the Department shall grant a candidate who has registered for the MMed (Anaes) programme as of January 2011 access to the single national exit examination.

- Candidates are required to pass all three primary subjects within two years of registration as a registrar in Anaesthesiology. If a candidate fails to adhere to this requirement he shall vacate the post of registrar. Only in exceptional cases, and with the submission of an appropriate motivation, shall the postgraduate committee of the Department consider continuation of service as a registrar.
- Registrars shall be continuously assessed on a regular basis by means of structured oral assessment opportunities. The examination committee of the Department shall decide on the final mark for continuous assessment at completion of the MMed (Anaes) degree programme.
- The final examination (MMed (Anaes) Part II) consists of three components: two three-hour written papers, two clinical cases and two oral examinations. These are conducted in the presence of the head and senior members of the Department, as well as an independent physician for the clinical cases and an external examiner for the other components. Intracomponent compensation is permissible, but intercomponent compensation will only be considered in exceptional cases.
- A case book shall be kept and updated over the study period, and shall be approved by the head of the Department in order for the student to be regarded as having completed his studies.
- The assignment shall be completed before the degree is awarded. The assignment shall be handed in as a full-length assignment or as a completed manuscript in a peer-reviewed scientific journal.
- The final mark is calculated as follows: the examination mark counts 70% and the assignment 30%.
- Candidates who have enrolled for the MMed (Anaes) programme with the University before January 2011 and have successfully completed the MMed (Anaes) Part II examination of the University shall be granted direct admission to the final examination of the College of Anaesthetists (Colleges of Medicine of South Africa)

without having successfully completed the primary examination of the College.

- For candidates who have enrolled as of January 2011 the following applies: The HPCSA requires successful completion of the single national exit examination for registration as a specialist. The Department acknowledges this examination as equivalent to and substituting the MMed (Anaes) Part II examination. It, however, remains the responsibility of the head of the Department to confirm the following: successful completion of clinical training time; submission of a completed case book; successful completion of an assignment according to the regulations of the University in this regard; and successful completion of continuous assessment.

### *Enquiries*

Programme coordinator: Prof AR Coetzee

Tel.: (021) 938 9226 E-mail: [arc1@sun.ac.za](mailto:arc1@sun.ac.za)

Website: <http://academic.sun.ac.za/anaes/>

## **MMed Clinical Pharmacology**

### *Specific admission requirements*

The candidate shall have a professional medical degree (MB,ChB or equivalent) and be registered as a medical practitioner with the Health Professions Council of South Africa. The candidate shall also have at least two years' medical experience.

### *Programme structure*

The programme consists of modules on principles of clinical pharmacology, applied clinical pharmacology, and research methodology. These will be presented by means of lectures, tutorials, independent self-study and practical workplace experience, including clinical patient care. The following areas will be covered: clinical use of drugs, including pharmacological effects and mechanism of action, pharmacokinetics and drug metabolism, efficacy and side effects of medications; advice to health care providers regarding the appropriate and cost-effective use of drugs; drug epidemiology; legal and ethical issues; development of new drugs; clinical trials; safety of drugs (pharmacovigilance); economics of healthcare; and drug regulatory affairs. The candidate shall complete a study project in the form of a research assignment, which will form part of the final assessment for the MMed programme.

The postgraduate committee of the Department and the relevant faculty structures shall approve the protocol for the research assignment not later

than 12 months after a student has commenced his MMed studies. The research assignment shall be completed before Part II of the Colleges of Medicine of South Africa (CMSA) examination.

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Principles of Clinical Pharmacology	871(80)
Applied Clinical Pharmacology	871(270)
Assignment (MMed (Clin Pharm))	871(120)
Research Methodology (Clinical Pharmacology)	871(10)

### *Assessment and examination*

- The CMSA examination shall constitute the summative assessment of the student. Part I of the examination shall be completed in two years' time, but it is preferable that it be completed within fifteen months. Part II shall be completed by the end of four years but it is preferable that it be completed within three calendar years.
- A logbook of the practical work shall be kept and updated over the study period. This logbook shall be approved by the head of the division in order for the student to be regarded as having completed his studies.
- The student shall submit a portfolio of all relevant activities during the training period, especially information about presentations in the division, at workshops or at conferences or symposia.
- Successful completion and assessment of the research assignment is a prerequisite for the awarding of the degree.
- The prerequisites for eligibility for the final examination are: (a) completed four calendar years as a registered student for the MMed in Clinical Pharmacology and (b) obtained at least 50% in all modular tests, including the research assignment, during the four-year programme.
- The final examination mark shall be calculated as a weighted average of the marks for each component. The weightings will be: 25% for

the assignment and 75% for the total mark obtained in the CMSA examination. The CMSA examination is weighted as follows: (a) two written papers (25% for each paper, making up 50% of the final mark of the CMSA examination), (b) an Objective Structured Clinical Examination (OSCE) that includes clinical slides, interpretation of laboratory results, and short case histories (20%), and (c) an oral examination to the discretion of the examiners (30%) (for details, see Regulations for Admission to the Fellowship of the College of Clinical Pharmacologists of South Africa or the FClinPharm(SA)). The overall pass mark required for this examination is 50%. In order to pass the MMed (Clinical Pharmacology) programme cum laude, the student shall obtain a final mark of at least 75%.

### *Enquiries*

Programme coordinator: Prof B Rosenkranz

Tel.: (021) 938 9331 E-mail: rosenkranz@sun.ac.za

Website: [www.sun.ac.za/pharmacology](http://www.sun.ac.za/pharmacology)

## **MMed Community Health**

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

#### *Theoretical modules (all compulsory)*

Management/Administration Theory and Behavioural Sciences	871(30)
The Measurement of Burden of Health and Disease/Health Information and Indicators	871(50)
The Epidemiology of Communicable and Non-communicable Diseases of Public Health Importance	871(40)
Community Health	872(100)
Assignment	820(120)

*Practical modules (all compulsory)*

Hospital Management	873(60)
Management of Provincial Health Services	873(50)
Management of Local Authority Health Services	873(15)
Occupational Health Services	873(15)

*Assessment and examination*

The MMed (Community Health) examination consists of two parts, namely:

- The MMed research assignment (pass mark of at least 50%); and
- the successful completion of the examination of the Colleges of Medicine of South Africa (Community Health, Medicine), with a pass mark of at least 50% (weighted average).

*Enquiries*

Programme coordinator: Dr SE Carstens

Tel.: (021) 938 9206 E-mail: sec@sun.ac.za

**MMed Dermatology**

*Duration*

The programme extends over four years.

*Presentation*

Afrikaans and English.

*Module outline and credit values*

Anatomy and Histology	871(60)
Dermatology	872(240)
Physiology	873(60)
Assignment	828(120)

*Assessment and examination*

Assessment is done by means of two written papers and an oral examination. The research project comprises 25% of the total credits and should deal with an appropriate topic of the student's choice in Dermatology. The assignment must reflect the candidate's ability to conduct independent research. The

report must be completed according to a standard format to the satisfaction of an internal examiner and an unattached external examiner.

### *Enquiries*

Programme coordinator: Prof HF Jordaan

Tel.: (021) 938 5429/9486 E-mail: hfj@sun.ac.za

## **MMed Emergency Medicine**

### *Programme structure*

The four-year MMed degree programme in Emergency Medicine is a structured master's degree with an assignment component that constitutes 25% of the final mark. The programme is a combined programme offered jointly by Stellenbosch University and the University of Cape Town.

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Basic Applied Sciences	874(120)
Clinical Emergency Medicine	875(240)
Assignment	810(120)

### *Assessment and examination*

The examination entails the successful completion of Emergency Medicine Primary (Basic Sciences) of the Colleges of Medicine of South Africa within eighteen months of first registration. The final examination requires the completion of an assignment and the successful completion of the Part I examination of the Colleges of Medicine of South Africa. The final examination may only be written following at least 36 months' training in an accredited registrar post.

The successful completion of the assignment/publication in a journal is a prerequisite for graduation.

### *Enquiries*

Programme coordinator: Prof Lee A Wallis

Tel.: (021) 948 9908 E-mail: lewallis@pgwc.gov.za

## **MMed Family Medicine**

### *Specific admission requirements*

Foreign qualified applicants who did not use English as medium of instruction for their undergraduate studies may be required to provide evidence of their oral and academic writing proficiency in English.

### *Duration*

The programme extends over four years.

### *Presentation*

English.

### *Notes*

Calendar entries must be read in conjunction with the more comprehensive explanation of the programme regulations as provided to applicants on admission to the programme.

### *Module outline and credit values*

#### *Compulsory web-based modules*

Consultation in Family Medicine	811(20)
Clinical Guidelines and Teaching Evidence-based Medicine	812(20)
Ethics in Family Medicine	843(20)
Family-orientated Family Medicine	815(20)
Chronic Diseases, Health Promotion and Disease Prevention	816(20)
Community-orientated Family Medicine	841(20)
Health Care Management and Administration	851(20)
Teaching and Learning	811(20)

*Two elective web-based modules from:*

Rehabilitation in Family Medicine	815(20)
Principles and Practices of Rural Health Care	813(20)
Geriatrics in Family Medicine	843(20)
Palliative Care in Family Medicine	871(20)
Forensics in Family Medicine	871(20)
Theoretical and Philosophical Foundations of Integrative Medicine	813(20)

*Practical modules*

Clinical Family Medicine	871(45), 872(45), 873(35), 874(35)
--------------------------	------------------------------------

In these four modules, full-time practical professional experience applicable to the practice of family medicine is gained under acceptable and approved professional supervision in a training position that has the approval of the University.

*Research Assignment*

Applied Research	814(120)
------------------	----------

*Assessment and examination*

*Assessment*

- Candidates shall keep a learning portfolio over the four years of the programme. Graduation shall be subject to the approval of the learning portfolio by the Head of the Division of Family Medicine and Primary Care.
- The following applies to the examination for candidates in South Africa:  
Candidates who have enrolled for the MMed (Fam Med) programme with the University before January 2011 and have successfully completed their course work may choose to sit for either the University exam or the single national exit exam, or both.  
For candidates who have enrolled as of January 2011 the Health Professions Council of South Africa (HPCSA) requires successful completion of the single national exit examination to register as a specialist. The Division of Family Medicine and Primary Care acknowledges this examination as equivalent to and substituting the



MMed (Fam Med) final clinical examination of the University. It, however, remains the responsibility of the Head of the Division to confirm the following before admission to the equivalent final national exit examination:

- successful completion of three years of clinical training;
- a successfully completed learning portfolio; and
- a current CPR, ACLS or ATLS certificate of competence or its equivalent.

To successfully complete the research component (Part II) of the Fellowship of the College of Family Physicians the Head of Division shall verify that the candidate has successfully completed the research assignment of the University according to the regulations of the University.

- The following applies to the examination for candidates from outside South Africa:

Candidates not registered with the HPCSA shall sit for the final examination offered by the University.

#### *Obtaining the MMed degree*

In order to obtain the MMed (Fam Med) degree, the student shall:

- keep a learning portfolio over the four years of the programme. Graduation shall be subject to the approval of the learning portfolio by the Head of the Division.
- achieve a final mark of 50% or higher derived from the:
  - class mark (50%) (by obtaining a mark of not less than 50% in all modules calculated equally form the average of the marks achieved in each of the web-based modules and the average of the marks achieved in the four Clinical Family Medicine modules);
  - examination mark (25%) (by passing each individual section of the examination with a mark of 50% or higher); and
  - research assignment (25%).

#### *Pass with distinction*

In order to pass the MMed (Fam Med) degree programme cum laude, the student shall obtain a final mark of at least 75% for the programme as a whole.

#### *Supplementary examinations and repeating modules*

- If a student fails a University examination, a supplementary examination may be attempted. A candidate who has already written

and failed one University supplementary examination, may be denied the right by the Faculty Board to attempt further supplementary examinations.

- If a student fails a module, the module may be repeated. A candidate who has failed the module for the second time may be denied the right by the Faculty Board to attempt the module again.

### *Enquiries*

Programme coordinator: Prof J Blitz

Programme administrator: Ms N Cordon-Thomas

Tel.: (021) 938 9061/9170 E-mail: nicolec@sun.ac.za

Website: <http://www.sun.ac.za/fammed/>

## **MMed Internal Medicine**

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Please note that modules run concurrently and not consecutively. All modules are compulsory; there are no elective modules.

### **First to second year**

Basic Medical Sciences	811(96)
------------------------	---------

This includes all the basic sciences relevant to the practice of Internal Medicine, e.g. physiology, pathology, pharmacology and principles of ethics. Successful completion of this module requires satisfactory attendance, as well as a 50% test mark in the FCP (SA) Part I examination. The student must pass Part I of the examination within eighteen months, and preferably within one year, of registration.

### **First to fourth year**

Clinical Internal Medicine	811(264)
----------------------------	----------

Successful completion of this module requires satisfactory participation whilst rotating as a registrar in General Internal Medicine and the subspecialties, as well as achieving a mark of at least 50% in the FCP (SA) Part II examination. The student is assessed regularly as part of the continuous assessment strategy, and is required to keep a logbook as a record of his clinical exposure and experience with procedures.

## First to third year

Assignment	833(120)
------------	----------

The student must have the research protocol registered within one year and complete the research assignment within three years of registration. This should be submitted in the form of an article ready for publication. Completion of this module is required before the student may write the final (Part II) examination.

### *Assessment and examination*

The modules contribute to the final mark as follows:

- Basic Medical Sciences 20%;
- Clinical Internal Medicine 55%; and
- Research Assignment in Internal Medicine 25%.

### *Enquiries*

Programme coordinator: Prof MR Moosa

Tel.: (021) 938 9044 E-mail: ma@sun.ac.za

## MMed Medical Genetics

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Basic Principles of Genetics	871(175)
Applied Medical Genetics	871(175)
Research Methodology	816(10)
Assignment	841(120)

### *Assessment and examination*

In order to obtain the degree, the student shall:

- complete the prescribed training period successfully;
- pass the written examination in Research Methodology;
- submit a case book of practical work and a portfolio of activities during the study period;

- submit an assignment which is examined according to University guidelines through a process of internal and external examination, and do an oral presentation; and
- pass the Part I and Part II examinations of the Colleges of Medicine of South Africa.

The student shall pass the Part I examination of the Colleges of Medicine of South Africa preferably within 18 months, but definitely within 24 months. The student shall not sit for the Part II examination before 36 months of the programme have been completed, but shall pass the examination within 48 months. The Part II examination consists of a written examination (40%), a practical examination (50%), an OSCE (10%) and an oral examination (to the discretion of the examiner).

The final mark is calculated as the weighted average of the assignment (25%) and the Part II examination (75%). A pass mark is 50% and a mark of 75% is required for a distinction.

### *Enquiries*

Programme coordinator: Dr M Urban

Tel.: (021) 938 9124 E-mail: urban@sun.ac.za

## **MMed Neurology**

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English

### *Module outline and credit values*

The programme consists of the following modules:

#### *Primary phase*

Basic sciences

Neuropathology	872(30)
Neuropsychiatry	873(40)
Neuroradiology	871(40)

#### *Final phase*

Neurophysiology: EEG	874(60)
Neurophysiology: EMG	875(60)

General Neurology	876(130)
Assignment	837(120)

*Assessment and examination*

*Primary phase*

Assessment takes place by means of the primary examination of the Colleges of Medicine of South Africa (FCN Part 1).

*Final phase*

Assessment takes place by means of the final examination of the College of Neurologists of South Africa during the third or fourth year of study.

*Enquiries*

Programme coordinator: Prof J Carr

Tel.: (021) 938 9478/5500 E-mail: [jcarr@sun.ac.za](mailto:jcarr@sun.ac.za)

## **MMed Neurosurgery**

*Duration*

The programme extends over five years.

*Presentation*

Afrikaans and English.

*Module outline and credit values*

The programme is divided into the following modules:

*Primary phase*

Basic sciences

Neuroanatomy and Applied Regional Anatomy	871(20)
Physiology	872(20)
Anatomical Pathology	873(20)

*Intermediate phase*

Neurosurgery (Intermediate)	874(30)
-----------------------------	---------

*Final phase*

Neurosurgery	875(270)
Assignment	836(120)

### *Assessment and examination*

#### *Primary phase*

Assessment takes place by means of a written examination, and where specified an oral examination, in the basic sciences as set out under “Primary phase” above and/or the Primary Examination of the Colleges of Medicine of South Africa (FCS Surgery part 1a). This examination shall be successfully written within the first eighteen months of residency; the successful completion of the examination is an absolute requirement to continue with the programme.

#### *Intermediate phase*

Assessment takes place by means of the surgical intermediate examination of the Faculty of Medicine and Health Sciences and/or the intermediate surgical examination (FCS Surgery Part 1b) of the Colleges of Medicine of South Africa.

This examination should be completed within three and a half years of residency, and is regarded as an absolute requirement to continue with the programme.

#### *Final phase*

Assessment takes place by means of the final Neurosurgery examination of the Faculty of Medicine and Health Sciences (three written papers, including questions on the basic sciences related to neurosurgery, and a clinical oral examination) and/or the Colleges of Medicine of South Africa, to be completed in the fourth or fifth year of study. An assignment to be examined by both internal and external examiners shall be submitted. The assignment constitutes 25% of the final mark. The minimum pass mark for the examination as well as the assignment is 50%.

Students who fail the examination may write a second time, provided that the re-examination takes place in the period indicated above. In certain cases, extension could be granted by the Faculty of Medicine and Health Sciences, depending on the merits of the case.

#### *Enquiries*

Programme coordinator: Prof HB Hartzenberg

Tel.: (021) 938 9265 E-mail: hbh@sun.ac.za

## **MMed Nuclear Medicine**

### *Programme outcomes*

On completion of the programme, the graduate shall be able to:

- practice Nuclear Medicine according to internationally accepted radiation safety principles;
- select the correct Nuclear Medicine examination or therapeutic procedure for a specific disease process;
- select the correct radiopharmaceutical for the specific procedure or therapy;
- conduct Nuclear Medicine studies and therapy according to internationally accepted standards;
- correctly interpret and report Nuclear Medicine studies; and
- plan, execute, interpret and publish advanced and independent research relevant to Nuclear Medicine.

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

#### **First year**

Physiology	870(35)
Radiation Physics and Instrumentation	872(60)
Applied Anatomy	873(25)

#### **Second to fourth year**

Clinical Nuclear Medicine	883(240)
Assignment	834(120)

### *Assessment and examination*

### *Primary modules*

#### *Radiation Physics and Instrumentation*

- Continuous assessment;

- Written (one paper) within the first twelve months of the student's study period; and
- Oral (on recommendation of an examiner and if deemed necessary by the departmental postgraduate programme committee).

#### *Physiology*

- Written (one paper) within the first twelve months of the student's study period; and
- Oral.

#### *Applied Anatomy*

- Continuous assessment;
- Written (one paper) within the first twelve months of the student's study period; and
- Oral (on recommendation of an examiner and if deemed necessary by the departmental postgraduate programme committee).

It is expected of students to complete Physiology as well as Radiation Physics and Instrumentation and Applied Anatomy within eighteen months of registration as registrar in Nuclear Medicine.

#### *Final modules*

##### *Clinical Nuclear Medicine*

- Continuous assessment, including evaluation of the student's academic presentations, an assignment, patient handling and general attitude towards the work; and
- Formal examination at the end of the training period.

##### *Research Assignment*

- The research assignment shall be completed within three years of registration. It should be submitted in the form of an article ready for publication; and
- Completion of this module is required before the student may write the final (Part II) examination.

For all the above modules a minimum pass mark of 50% is required.

#### *Enquiries*

Programme coordinator: Prof A Ellmann

Tel.: (021) 938 4265 E-mail: ae1@sun.ac.za



## **MMed Obstetrics and Gynaecology**

### *Specific admission requirements*

Applications of registrars who are registered students for the MMed (O&G) programme elsewhere in the country and have already completed eighteen months of training time in a numbered training post, will only be considered if they have passed the Part I examination of the College of Obstetricians and Gynaecologists.

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

The programme consists of four modules to be completed over a period of four years.

Basic Sciences	874(120)
Obstetrics	872(120)
Gynaecology	873(120)
Assignment	818(120)

### *Assessment and examination*

Registered students must pass the Basic Sciences module before the end of the second year. Students must pass all remaining modules in the final examination. The minimum pass mark is 50%.

The Part I examination of the College of Obstetricians and Gynaecologists shall be passed within two years of commencement of study.

### *Enquiries*

Programme coordinator: Prof GB Theron

Tel.: (021) 938 9209 E-mail: gbth@sun.ac.za

## **MMed Occupational Medicine**

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

#### *Theoretical modules (all compulsory)*

Environmental Health	872(20)
Epidemiology and Biostatistics	871(60)
Occupational Hygiene	872(20)
Occupational Health Management Systems	871(13)
Occupational Medicine	872(80)
Research Project	873(100)
Social and Behavioural Sciences	871(3)

#### *Practical modules (compulsory)*

Supervised Practical Exposure	874(184)
-------------------------------	----------

### *Assessment and examination*

The MMed (Occupational Medicine) examination consists of two parts, namely:

- the MMed research assignment, with a pass mark of at least 50%; and
- the examination of the Colleges of Medicine of South Africa (Occupational Medicine), with a pass mark of at least 50% (weighted average).

### *Enquiries*

Programme coordinator: Dr SE Carstens

Tel.: (021) 938 9206 E-mail: sec@sun.ac.za

## **MMed Ophthalmology**

### *Specific admission requirements*

It will be to the advantage of the candidate to complete the Primary Examination (Part I) from the College of Ophthalmologists of South Africa (or equivalent) prior to applying for admission. Candidates will also benefit by prior completion of the Diploma in Ophthalmology of the College of Ophthalmologists of the Colleges of Medicine of South Africa.

### *Programme structure*

Mastery of the basic subjects forming the foundation of the specialty, i.e. head and neck anatomy, ophthalmic and applied general physiology, optics

and pathology, will form the academic focus of the first twenty-four months of study. Mastery of the advanced theory and its application to ophthalmology, as well as a comprehensive and specialised knowledge of general ophthalmology, advanced technical and procedural skills, familiarity with the literature and state of research on the subject of the specialty, will be the focus of the following twenty-four months of training. During the final year of study the student will have to demonstrate a capacity for independent study and research via the completion of a research report or publication on a research topic of his choice in ophthalmology.

### *Duration*

The programme extends over forty-eight months.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

#### **First and second year**

All modules are compulsory. The candidate may elect to complete the basic science modules in any order.

Optics	874(40)
Anatomy	874(40)
Physiology for Ophthalmology	871(40)
Pathology for Ophthalmology	876(40)

#### **Third and fourth year**

Ophthalmology	875(200)
Assignment	824(120)

### *Assessment and examination*

The basic science modules will be assessed independently by means of a written and an oral/clinical examination. Surgical ability will be assessed continuously on the basis of a surgical logbook/portfolio. The final mark will be calculated as a composite of the mark obtained in the final Ophthalmology (875) examination (written, clinical and oral), together with the research report in a ratio of 75:25.

### *Enquiries*

Programme coordinator: Prof David Meyer

Tel.: (021) 938 9380 E-mail: dm2@sun.ac.za

Website for more details on the programme:

www.sun.ac.za/eye

## **MMed Orthopaedics**

### *Duration*

The programme extends over five years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

#### *Primary*

Anatomical Pathology	874(25)
Anatomy	875(25)
Physiology	874(25)

#### *Intermediate*

Orthopaedic Surgery (Intermediate)	871(100)
Orthopaedic Surgery	873(185)

#### *Assignment*

Assignment	825(120)
------------	----------

### *Assessment and examination*

#### *Primary*

One paper and an oral examination for each of the three modules. A mark of at least 50% is needed to pass and 75% to pass with a distinction.

#### *Intermediate*

One paper and an oral examination for each of the two modules. A mark of at least 50% is needed to pass and 75% to pass with a distinction.

#### *Final examination*

The final examination is assessed by internal and external examiners and consists of the following:

- Written: Candidates complete one internal and one external paper of three questions each.
- Clinical: One long case and three short cases are covered.
- Operation and operation discussion: X-ray discussion, plaster technique and orthotics.

### *Research assignment*

An assignment of publication quality must be submitted for evaluation and as prerequisite for graduation. The assignment is assessed and approved by both internal and external examiners. A mark of at least 50% is needed to pass, and 75% to pass with a distinction.

### *Enquiries*

Programme coordinator: Prof GJ Vlok

Tel.: (021) 938 9266 E-mail: [gjv@sun.ac.za](mailto:gjv@sun.ac.za)

## **MMed Otorhinolaryngology**

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

#### *Part I (Primary)*

Anatomy	873(33)
Physiology	871(33)
Anatomical Pathology	872(34)

#### *Part II (Intermediate)*

Otorhinolaryngology	871(100)
---------------------	----------

#### *Part III (Final)*

Otorhinolaryngology	871(160)
---------------------	----------

### *Assignment*

Assignment	823(120)
------------	----------

### *Assessment and examination*

The Part III (final) examination consists of the following:

- Written examination: two three-hour papers of three questions each. Each question consists of three parts.
- Clinical examination: a one-hour clinical examination based on the assessment of patients.
- Viva voce/OSCE examination: a half-hour long examination on prepared material for examination provided to the candidate.

### *Enquiries*

Programme coordinator: Prof JW Loock

Tel.: (021) 938 9041/9318 E-mail: jwl@sun.ac.za

## **MMed Paediatrics and Child Health**

### *Programme structure*

The MMed programme in Paediatrics and Child Health consists of training in General Paediatrics and its subspecialties. The candidate shall successfully complete the prescribed training period, pass the MMed Part I and II examinations of the University, or the FCPaed Part I and Part II examinations of the College of Paediatricians of South Africa, and complete a research assignment. The curriculum covers, among others, general paediatrics, ambulatory paediatrics, neonatology, paediatric intensive care, neonatal intensive care, cardiology, pulmonology, gastroenterology, neurology, neurodevelopmental paediatrics, nephrology, endocrinology, infectious diseases, haematology, oncology and allergy.

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Research Methodology (Paediatrics)	871(20)
Specialist Paediatrics	871(240)
Applied Basic Sciences	871(100)
Assignment	813(120)

### *Assessment and examination*

The MMed examination consists of the University's MMed Part I and II examinations, or the equivalent FCPaed Part I and II examinations of the College of Paediatricians of South Africa. The candidate shall pass Part I within the first 18 months of study. The MMed or FCPaed Part II examination shall only be written in the third or fourth year of study, subject to the completion of the research assignment or publication(s). The research assignment, which shall be completed within the first three years of study, shall illustrate the candidate's proficiency in the following:

- the ability to plan a research project;
- the ability to perform a literature study appropriate to the research project;
- the ability to complete a research project; and
- the ability to report the research, preferably in the format of an article suitable for publication.

Students shall pass all three components (the Part I and Part II examinations and the research assignment) to obtain the MMed degree in Paediatrics and Child Health.

### *Enquiries*

Programme coordinator: Prof M Kruger

Tel.: (021) 938 9220 E-mail: marianakruger@sun.ac.za

## **MMed Paediatric Surgery**

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Paediatric Surgery (Primary)	871(80)
Paediatric Surgery (Intermediate)	871(100)
Paediatric Surgery (Final)	871(170)
Research Methodology	881(10)
Assignment	830(120)

### *Assessment and examination*

#### *Primary phase*

Assessment takes place by means of the primary examination of the Faculty of Medicine and Health Sciences or the Colleges of Medicine of South Africa. The examination consists of two multiple choice question papers.

#### *Intermediate phase*

Assessment takes place by means of the intermediate examination of the Faculty of Medicine and Health Sciences or the Colleges of Medicine of South Africa. The examination consists of two three-hour question papers (general principles and application of paediatric surgical principles in clinical practice) and an oral examination.

#### *Final phase*

Assessment takes place by means of the final examination of the Faculty of Medicine and Health Sciences or the Colleges of Medicine of South Africa. The examination consists of two three-hour question papers (general principles and application of paediatric surgical principles in clinical practice), an oral examination with a clinical component (clinical cases) and a non-clinical component (OSCE with ten to fifteen stations).

#### *Research Methodology*

Assessment takes place by means of a written examination to test core competencies.

#### *Assignment*

The written assignment is examined according to University guidelines through a process of internal and external examination.

#### *Enquiries*

Programme coordinator: Prof SW Moore

Tel.: (021) 938 9439 E-mail: [swm@sun.ac.za](mailto:swm@sun.ac.za)

## **MMed Anatomical Pathology**

### *Specific admission requirements*

- Completion of the Pathology for non-Pathology disciplines module prior to application is highly recommended.
- Completion of the Pathology for non-Pathology disciplines module, as well as official evidence of competence in academic English (e.g. IELTS – band 7), are requirements for potential supernumerary registrars.



### *Programme structure*

Attendance of all learning opportunities in all modules is compulsory. Registrars shall officially notify lecturers in advance with a satisfactory explanation if they cannot attend a learning opportunity.

### *Duration*

The programme extends over five years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Anatomical Pathology Part I	874(30)
Anatomical Pathology Part II	872(210)
Laboratory Management	876(10)
Research Methodology	873(10)
Neuropathology	871(20)
Post-mortem Techniques and Principles of Forensic Medicine	811(20)
Cytopathology	875(30)
Applied Histology	875(10)
Molecular Pathology	875(10)
Good Laboratory Practice and Medical Ethics	875(10)
Assignment	873(120)

### *Assessment and examination*

#### *Admission to summative assessment*

- To receive admission to the Part I and Part II examinations the student shall achieve a pass mark of 50% in continuous assessment.
- The assignment shall be submitted for assessment before the student shall be admitted to the Part II assessment and no later than the eighth semester of the programme.
- A portfolio of evidence shall be submitted as part of the continuous assessment and is a prerequisite for graduation. Details of continuous assessment are provided in the study guide.

### *Assessment*

The final mark is calculated as follows:

- MMed assignment: 25%
- Anatomical Pathology Part II: 65%
- Continuous assessment: 10%

### *Number of attempts per examination*

- A registrar shall write the first attempt at Part I after 12 months of commencement of the programme, but not later than 18 months. There shall be three opportunities to attempt Part I. The final attempt at Part I shall be successful within 30 months (at the end of the fifth semester). Students who are not successful within 30 months shall be excluded from the programme.
- A registrar shall write the first attempt at Part II after four years of commencement of the programme, but not later than four years and six months. A registrar usually has to vacate a post after five years irrespective of passing Part II. There shall be three opportunities to attempt Part II. The final attempt at Part II shall be successful within six years. Students who are not successful within six years shall be excluded from the programme.

### *Enquiries*

Programme coordinator: Dr J Bezuidenhout

Tel.: (021) 938 4041 E-mail: jbez@sun.ac.za

## **MMed Chemical Pathology**

### *Duration*

The programme extends over four years.

### *Presentation*

English.

### *Module outline and credit values*

#### **First year**

Basic Principles of Chemical Pathology and Basic Biochemistry	871(60)
Molecular Pathology	875(10)

**Second and third year**

Electrolytes, blood gases, liver functions and lipids	811(65)
Endocrinology	872(65)
Enzymes, proteins, tumour markers and inherited metabolic diseases	843(65)
Nutrition and trace elements, toxicology and immunology	875(65)
Laboratory Management	875(10)
Research Methodology	873(10)
Good Laboratory Practice and Medical Ethics	875(10)
Assignment	876(120)

*Assessment and examination*

The assessment of the first-year modules consists of a written paper as well as an oral examination. The modules are assessed by written papers, as well as practical and oral assessments, if needed, at the completion of each module. The final examination is based on the successful completion of all the modules, and consists of two written papers, an OSCE, a practical examination, an oral examination and cases. The assignment must be presented in the prescribed format and be approved by internal and external examiners. The final mark is 100 (weight = 120 credits). The final examination will contribute 75% to the final mark, whilst the assignment will contribute 25% to the final mark. A portfolio of evidence shall be submitted as part of the continuous assessment and is prerequisite for graduation. Detail of continuous assessment is provided in the study guide.

*Enquiries*

Programme coordinator: Prof RT Erasmus

Tel.: (021) 938 4107 E-mail: [rte@sun.ac.za](mailto:rte@sun.ac.za)

## **MMed Clinical Pathology**

### *Duration*

The programme extends over five years.

### *Presentation*

English.

### *Module outline and credit values*

#### *First seven semesters*

Chemical Pathology	872(70)
Haematology	873(70)
Medical Microbiology	874(70)
Medical Virology	871(70)
Molecular Pathology	875(10)
Research Methodology	873(10)

#### *Final three semesters*

Integrated Pathology	871(60)
----------------------	---------

### *Assignment*

Assignment (Chemical Pathology)	811(120) or
Assignment (Haematological Pathology)	811(120) or
Assignment (Medical Microbiology)	811(120) or
Assignment (Medical Virology)	811(120)

### *Assessment and examination*

Written papers and practical and oral examinations shall be passed at the end of each module. Should two modules not have been passed within a maximum period of three years, the Programme Committee may recommend that studies be suspended. A portfolio of evidence shall be submitted as part of continuous assessment and is prerequisite for admission to assessment of the compulsory Integrated Pathology module or the Part II examination of the College of Pathology. Detail of continuous assessment is provided in the study guide.

The assignment shall be completed and handed in for assessment before the student shall be admitted to the Part II examination of the Colleges of Medicine of South Africa.

### *Enquiries*

Programme coordinators:

Prof RT Erasmus (Chemical Pathology – programme convener); Prof A Abayomi (Haematology); Dr H Orth (Medical Microbiology); Prof W Preiser (Medical Virology)

Tel.: (021) 938 4107

E-mail: rte@sun.ac.za; abayomi@sun.ac.za; medmicro@sun.ac.za; preiser@sun.ac.za

## **MMed Forensic Pathology**

### *Specific admission requirements*

It is strongly recommended that prospective candidates for the MMed in Forensic Pathology programme complete the Diploma in Forensic Pathology (Dip For Med (Path)) of the Colleges of Medicine of South Africa.

### *Duration*

The programme extends over four years.

### *Presentation*

English.

### *Module outline and credit values*

Applied Histology for Forensic Pathology	876(20) *
Forensic Pathology	872(80), 873(220)
Good Laboratory Practice and Medical Ethics	875(10) *
Laboratory Management	876(10) *
Molecular Pathology	875(10) *
Research Methodology	873(10) *
Assignment	827(120)

*\*Generic pathology modules*

### *Assessment and examination*

- All modules offered by the Division of Forensic Pathology are assessed by means of written papers and/or oral examinations and/or microscopic/macrosopic pathology practical assessments and continuous assessment.
- It is strongly recommended that:
  - the module in Applied Histology for Forensic Pathology be completed before attempting the Forensic Pathology Part I module; and
  - the Research Methodology module be completed before starting the MMed assignment.
- Admission to the Forensic Pathology Part II examination will only be granted on the successful completing of all the modules. The examination consists of:
  - two written papers;
  - a medico-legal autopsy;
  - a histopathology examination; and
  - an oral examination.
- Police docket evaluation may be expected at the discretion of the examiners.
- The assignment must be presented as a research assignment in a prescribed format, and will be assessed by an internal and an external examiner.
- The Forensic Pathology Part II examination will contribute 65% to the final mark, the assignment will constitute 25% and the continuous assessment 10%. A portfolio of evidence of learning, including a record of procedures and activities (logbook), shall be submitted as part of the continuous assessment and is prerequisite for graduation. Detail of continuous assessment is provided in the study guide.

### *Enquiries*

Programme coordinator: Prof SA Wadee

Tel.: (021) 938 9325 E-mail: saw@sun.ac.za

**MMed Haematological Pathology***Duration*

The programme extends over four years.

*Presentation*

English.

*Module outline and credit values***First and second year**

Haematological Pathophysiology	875(45)
Immunology	875(25)
Molecular Pathology	875(10)
Research Methodology	873(10)

**Second to fourth year**

Blood Transfusion	812(60)
Haematological Pathology Part II	871(190)
Laboratory Management	875(10)
Good Laboratory Practice and Medical Ethics	875(10)
Assignment	829(120)

*Assessment and examination*

Assessment takes place according to the specifications of the College of Pathologists of South Africa. The first assessment is done by means of two written papers, which must be passed within the first 24 months. The second assessment is done by means of two written papers: the first on haematological pathology and blood transfusion, and the second on practical aspects of the main modules, good laboratory practice and laboratory management. Each paper counts 100 marks. Practical examinations cover blood transfusion practice, laboratory haematology, diagnostic microscopy of blood and bone marrow pathology and clinical cases. An oral examination is also conducted. Each part of the assessment shall be passed with a subminimum mark of 50%. The assignment must be presented in a prescribed format as a research paper, and will be assessed by both internal and external examiners. A portfolio of evidence shall be submitted as part of the

continuous assessment and is prerequisite for graduation. Detail of continuous assessment is provided in the study guide.

### *Enquiries*

Programme coordinator: Prof A Abayomi

Tel.: (021) 938 4608 E-mail: abayomi@sun.ac.za

## **MMed Microbiological Pathology**

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Medical Virology	875(40)
Immunology	876(40)
Infection Control, Sterilisation and Decontamination	874(40)
Infective Organisms and Infectious Diseases	872(100)
Laboratory Diagnosis of Bacteria, Fungi and Parasites	871(100)
Laboratory Management	873(10)
Molecular Pathology	875(10)
Research Methodology	873(10)
Good Laboratory Practice and Medical Ethics	875(10)
Assignment	835(120)

### *Assessment and examination*

Continuous assessment is based on the regular evaluation of a portfolio of evidence presented by the candidate to the supervisor. The written examination for Part I may be taken after a minimum of twelve months, and must be passed with a minimum of 50%. Admission to the Part II examination of the University and the Part II examination of the College of Pathologists requires prior permission by the head of the division in



consultation with the postgraduate programme committee of the division. The Part II examination must also be passed with a minimum of 50%. The assignment carries a weight of 25% of the total credits, and must be on a relevant topic of the student's choice in Medical Microbiology. Through the assignment, the candidate must display his ability to conduct independent research. The report must be completed according to university regulations in a standard format and to the satisfaction of an internal and an unattached external examiner.

Should the candidate have failed to pass the Part I examination within the maximum time period of two years, the programme committee may recommend that studies be discontinued. The programme committee may also recommend that studies be discontinued should the candidate have failed to complete the Part II examination and the research assignment successfully within the maximum training period of five years.

### *Enquiries*

Programme coordinator: Dr H Orth

Tel.: (021) 938 4021 E-mail: medmicro@sun.ac.za

## **MMed Virological Pathology**

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Medical Microbiology	875(40)
Medical Virology	876(280)
Good Laboratory Practice and Medical Ethics	874(10)
Laboratory Management	874(10)
Molecular Pathology	875(10)
Research Methodology	813(10)
Assignment	819(120)

Modules 1-6 entail mainly teaching, while module 7 consists of research. Modules 1-4 are generic Pathology modules.

### *Assessment and examination*

- A student must complete the four generic pathology modules, and the Molecular Pathology module (which entails a six-month rotation through Medical Microbiology) in the first 24 months. Proof of satisfactory attendance is required.
- A Level 1 examination in Molecular Pathology and components of Research Methodology must be completed successfully within eighteen months. Students who fail to complete the Level 1 examination successfully within 18 months will be advised to discontinue the programme.
- Prerequisites for admission to a Level 2 examination are: at least 42 months experience as a registrar in Medical Virology and the achievement of the requirements for the research module. The Level 2 examination entails the assessment of Research Methodology (theoretical, practical and oral examination).
- The minimum pass mark for both the Level 1 and Level 2 examinations is 50%. The prerequisites for graduation are the completion of four years of study and the successful completion of both examinations and the assignment.
- A portfolio of evidence shall be submitted as part of the continuous assessment and is prerequisite for graduation. Detail of continuous assessment is provided in the study guide.

### *Enquiries*

Programme coordinator: Prof W Preiser

Tel.: (021) 938 9353 E-mail: preiser@sun.ac.za

## **MMed Plastic and Reconstructive Surgery**

### *Duration*

The programme extends over five years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Anatomy	876(33)
Anatomical Pathology	875(34)
Physiology	875(33)

Plastic and Reconstructive Surgery (Intermediate)	871(100)
Plastic and Reconstructive Surgery	871(160)
Assignment	826(120)

### *Assessment and examination*

The Part I written examination is conducted within eighteen months, and must be passed with a minimum of 50%. The intermediate examination is completed in writing and orally, and must be passed with a minimum of 50% within three and a half years. Part II consists of a written, practical and oral examination, which must be passed with a subminimum of 50%. The research project counts 25% of the total credits and must cover a relevant topic in Plastic and Reconstructive Surgery in a discipline of the student's choice. Through the assignment, the student must display his ability to conduct independent research. The report must be completed in a standard format to the satisfaction of an internal and an unattached external examiner.

### *Enquiries*

Programme coordinator: Prof FR Graewe

Tel.: (021) 938 9432 E-mail: [graewe@sun.ac.za](mailto:graewe@sun.ac.za)

## **MMed Psychiatry**

### *Duration*

The programme extends over four years.

### *Presentation*

English.

### *Module outline and credit values*

Neuroanatomy	875(30)
Neurophysiology	875(30)
Special Psychology	875(30)
Psychiatry	872(270)
Assignment	815(120)

### *Assessment and examination*

#### *Part I*

Candidates have to complete Part I of the programme within 18 months of commencing studies. Assessment is done in the form of course work and written and oral examinations.

#### *Part II*

Candidates shall have completed Part I before attempting Part II. All candidates shall have completed the course work and the research project before attempting the final examinations of Part II. The Part II examinations consist of the Part II examinations of the College of Psychiatrists of the Colleges of Medicine of South Africa, as well as the assignment. The examination represents 75% of the final mark, and the research project counts for 25%. Candidates must achieve a pass mark in both in order to qualify.

#### *Enquiries*

Programme coordinator: Dr B Chiliza

Tel.: (021) 938 9510 E-mail: [bonga@sun.ac.za](mailto:bonga@sun.ac.za)

## **MMed Radiation Oncology**

### *Programme outcomes*

The objectives of the qualification are to:

- train qualified medical doctors (with an MB,ChB or equivalent qualification) in the non-surgical management of cancers (mainly radiation and chemotherapy) to a standard of safety that complies with the requirements of the Health Professions Council of South Africa, the College of Radiation Oncologists of South Africa and the international community of health professionals;
- train oncologists who will in a conscientious manner provide comprehensive (specialised) health care to the patient as an individual and as a member of the community, in accordance with the strategic framework of Stellenbosch University and the Faculty of Medicine and Health Sciences;
- stimulate independent thinking and promote responsibility for further professional self-development;
- become skilled in the critical interpretation of literature and its application in the daily practice of oncology;
- develop the ability to evaluate and interpret relevant literature in a critical manner, and to apply it to the profession;

- supervise the training of oncologists at the level of technical planning and treatment programmes during radiation;
- ensure that the skills are acquired for decision making on treatment in the fields of radiation, chemotherapy and surgical interventions;
- prepare students who aspire to move to the highest level of academic work for doctoral study, and to promote an approach based on academic integrity and ethics; and
- contribute to the development of the specialty's human resources with the competence and critical intellectual abilities to ensure the future advancement of Radiation Oncology, and who will be responsible for meeting the country's need for a skilled workforce of the highest calibre that will ensure that South Africa remains competitive in an era of growing global competition.

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Anatomical Pathology	871(40)
Anatomy	872(20)
Physiology	873(20)
Radiobiology	872(80)
Radiological Physics	874(80)
Radiotherapy and Radio-isotopes	874(120)
Assignment	817(120)

### *Assessment and examination*

The final results are determined by the assessment of two written examinations (50%), a practical and oral examination (25%), as well as an assignment (25%).

### *Enquiries*

Programme coordinator: Prof FJAI Vernimmen

Tel.: (021) 938 5992/4727 E-mail: fv@sun.ac.za or jdtoit@sun.ac.za

## **MMed Radiological Diagnosis**

### *Specific admission requirements*

The candidate shall be registered as an independent practitioner with the Health Professions Council of South Africa.

Candidates shall occupy a registrar post in the Division of Radiodiagnosis for the duration of their training, except where a candidate

- is registered with the University as a special postgraduate student with the sole purpose of attempting the Part I subjects prior to obtaining a registrar post; or
- has successfully completed his training time and is only registered for the purpose of completing his research assignment.

The following is recommended for admission to the registrar training programme:

- successful completion of Part I subjects in Radiological Diagnosis; and
- supervised clinical experience in some aspect of diagnostic imaging.

### *Programme structure*

The programme consists of unit-specific training modules presented as supervised service-related clinical teaching. Training modules include plain-film reporting, general sonography, fluoroscopy, computed tomography (CT), interventional/vascular radiology, mammography, nuclear medicine, paediatric radiology, obstetric ultrasound, Doppler ultrasound and magnetic resonance imaging (MRI).

Additional educational activities include a daily clinico-radiology review meeting, lunch-hour film-reporting sessions and multi-disciplinary clinico-radiological meetings, a weekly journal discussion and a formal weekly didactic three-hour academic programme.

The candidate shall complete a research project in the form of a research assignment that will form part of the final assessment for the MMed degree. The protocol for the research assignment shall be submitted for approval to the Postgraduate Committee of the Division and other relevant Faculty structures, including the Health Research Ethics Committee, not later than 30 months after appointment in a registrar post.

### *Duration*

The programme extends over four years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

#### *Part I (primary examinations)*

Preferably to be completed as a special postgraduate student prior to registration for the MMed (Rad D) programme and prior to admission to the registrar training programme.

Physiology	872(40)
Radiological Physics	873(40)
Anatomy	871(40)

#### *Part II (structured four-year registrar training programme)*

Radiological Diagnosis	874(240)
------------------------	----------

#### *Research assignment*

Assignment	816(120)
------------	----------

### *Assessment and examination*

#### *Part I (primary examinations)*

- The Part I examinations consist of the following:
  - Physiology: one three-hour written examination under the auspices of the Division of Medical Physiology;
  - Anatomy: one three-hour written examination, an oral examination and a Radiological Anatomy “spot test” under the auspices of the Division of Anatomy and Histology; and
  - Physics: one three-hour written examination and an oral examination under the auspices of the Division of Medical Physics.
- Candidates admitted to the registrar training programme prior to completion of the Part I examinations shall successfully complete all Part I examinations within 18 months of commencement of service as registrar.
- There is reciprocity between the Part I of the MMed (Rad D) of Stellenbosch University and the Part I of the FC Rad (Diag)SA of the College of Radiologists of the Colleges of Medicine of South Africa. The successful completion of the Part I examinations shall grant a candidate who has registered for the MMed (Rad D) programme as of

January 2011 access to the single national exit examination under the auspices of the College of Radiologists of the Colleges of Medicine of South Africa.

*Part II (structured four-year registrar training programme)*

- Should a candidate fail to complete all three Part I examinations within 18 months of acceptance of a registrar post, he shall vacate the post. Only in exceptional cases, and with the submission of an appropriate motivation, shall the Postgraduate Committee of the Division consider extension of registrar training time.
- Candidates shall be assessed at the completion of each modality-specific module of the structured registrar training programme. Assessment shall take the form of an oral evaluation or a reporting session. For the candidate to be deemed to have successfully completed the registrar training programme, a minimum mark of 50% is required for each end-of-module assessment. Candidates who fail to achieve the minimum requirement will be required to repeat the specific training module.
- A case logbook shall be kept and updated throughout the study period. This shall be approved by the Head of the Division in order for the student to be regarded as having successfully completed his structured registrar training programme.
- Candidates presenting for the Part II examination in Radiological Diagnosis shall have completed 36 months of the structured registrar training programme and shall have met the minimum requirements in all end-of-block assessments.
- The MMed (Rad D) Part II examination has three components:
  - two three-hour written papers (25% of the examination mark);
  - long-case reporting session (25% of the examination mark); and
  - two half-hour oral examinations (50% of the examination mark).
- The Part II examination is overseen by the Head of the Division with input from senior academic staff of the Faculty and two external examiners, both senior academics of other South African universities.
- For candidates enrolled for the MMed (Rad D) programme as from January 2011, the Health Professions Council of South Africa requires successful completion of the single national exit examination for registration as a specialist. The Division acknowledges this examination as equivalent to and substituting the MMed (Rad D) Part II examination. It, however, remains the responsibility of the Head of the Division to confirm the following: successful completion of



clinical training time and continuous assessment in all unit modules, submission of a completed case logbook and successful completion of a research assignment according to the regulations of the University.

*Research assignment*

The research assignment shall be completed before the degree is awarded and shall be handed in as a full-length assignment (thesis) or as a published manuscript in a peer-reviewed scientific journal. For candidates registered for the MMed (Rad D) programme as from January 2011, successful completion of the research assignment is a requisite with the Health Professions Council of South Africa.

*Enquiries*

Programme coordinator: Prof Richard Pitcher

Tel.: (021) 938 9320/9052 E-mail: [pitcher@sun.ac.za](mailto:pitcher@sun.ac.za)

**MMed Surgery**

*Duration*

The programme extends over five years.

*Presentation*

Afrikaans and English.

*Module outline and credit values*

Basic Sciences	871(90)
Surgical Principles	872(90)
Clinical Surgery	871(180)
Assignment	812(120)

*Assessment and examination*

Written and oral/practical examinations on completion of each module. The final mark is calculated on the basis of the examination results (75%) and the assignment (25%).

*Enquiries*

Programme coordinator: Prof BL Warren

Tel.: (021) 938 9271 E-mail: [blw@sun.ac.za](mailto:blw@sun.ac.za)

## **MMed Thoracic Surgery**

### *Duration*

The programme extends over five years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Anatomy	861(33)
Anatomical Pathology	876(34)
Physiology	876(33)
Thoracic Surgery	871(160)
Thoracic Surgery (Intermediate)	871(100)
Assignment	831(120)

### *Assessment and examination*

The Part 1 written examination is conducted within eighteen months and must be passed with a minimum of 50%. The Intermediate examination is conducted in writing and orally, and must be passed with a minimum of 50% within three and a half years. Part II comprises written, practical and oral examinations, which must each be passed with a subminimum of 50%. The assignment carries a weight of 25% of the total credits and must focus on a relevant topic in Thoracic Surgery in a discipline of the candidate's choice. By way of the assignment, the candidate must demonstrate his ability to perform independent research. The report must be completed in a standard format to the satisfaction of an internal and an external examiner.

### *Enquiries*

Programme coordinator: Prof G J Rossouw

Tel.: (021) 938 9432 E-mail: gr@sun.ac.za

## **MMed Urology**

### *Duration*

The programme extends over five years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Anatomical Pathology	877(15)
Anatomy	867(15)
Physiology	877(15)
Urology	877(45), 876(180)
Urology (Intermediate)	877(90)
Assignment	832(120)

### *Assessment and examination*

The Part 1 examination shall be passed within eighteen months with a minimum mark of 50%. The Intermediate examination comprises written and oral examinations and shall be passed with a minimum mark of 50% within three and a half years. The Part II examination comprises written, practical and oral examinations, which shall each be passed with a subminimum of 50%. The assignment carries a weight of 25% of the total credits and shall focus on a relevant topic in Urology. The candidate shall demonstrate his ability to conduct independent research. The assignment shall be completed in a standard format as a research document to be assessed by an internal and an unattached external examiner.

The final mark consists of:

- Final (Clinical Part II) examination: 75%;
- MMed assignment: 25%.

### *Enquiries*

Programme coordinator: Prof CF Heyns

Tel.: (021) 938 9282 E-mail: cfh2@sun.ac.za

## **Master of Nursing**

### **PLEASE NOTE:**

The Master of Nursing programme comprises two streams, namely a structured stream and a research stream.

### *Specific admission requirements*

The Master of Nursing programme is a selection programme. The closing date for all applications is 30 September of the previous year. Specific selection criteria apply, including an average mark of at least 65% for the last qualification obtained and at least two years' experience as a registered

professional nurse. Current registration with the South African Nursing Council is a requirement.

*Structured stream*

To be admitted to the structured M of Nursing, candidates shall hold the National Senior Certificate and one of the following:

- a four-year professional B-degree;
- a three-year B degree in Nursing

or

a four-year undergraduate Diploma in Nursing with proof of successful completion of appropriate prior learning on NQF 8 or 9 levels that focus especially on preparation of appropriate research skills. Regarding this qualification, the candidate's application will be considered by the Postgraduate Programme Committee of the Faculty of Medicine and Health Sciences according to the Policy on Assessment and Recognition of Prior Learning of the University, and final approval lies with Senate.

and

at least a one-year postgraduate tertiary qualification;

- another qualification deemed adequate by Senate.

Applicants shall have been professionally active after obtaining the abovementioned qualifications.

*Research stream*

To be admitted to the research stream of the M of Nursing, students shall hold the following qualifications:

- the National Senior Certificate; and
- a BNursHons degree.

Applicants shall have been professionally active after obtaining the abovementioned qualifications.

*Nature and objectives of programme*

On completion of the programme the student shall be able to master the following skills:

- Effective application of the science of health care regarding disease and technology, and of advanced and sophisticated theoretical and clinical subject data in the chosen specialist field of nursing science.
- Responsible and accountable participation in the promotion of the quality of life in the South African community as well as in the

promotion of health care delivery in South Africa with acknowledgement of cultural differences.

- Demonstration of nursing leadership through:
  - identification and solving of health care issues and problems through research and the use of creative and critical thinking;
  - effective organisation and management of comprehensive health care services; and
  - effective leadership of health care teams in the academic and clinical fields.
- Independent research and effective communication of findings to improve training programmes and health care services.
- Comprehensive knowledge in the chosen specialist or research field.
- Advanced theoretical knowledge in nursing science and application thereof in practice.
- Knowledge of recent literature and research with respect to the specialist field.
- Demonstration that the student has the ability to:
  - briefly evaluate relevant literature;
  - identify, define and research complex problems;
  - perform independent research including all steps of the research process;
  - extrapolate data implications and impact, and bring this in relation to broader issues; and
  - question orthodox theory and practices, present new ideas and methods and implement these.
- Understanding and application of appropriate academic and professional values.
- Self-reflection and adaptability to a higher grade of academic milieu and arrangement.

The objectives of the programme are to:

- equip the student with sophisticated knowledge and understanding of phenomena specific to the field of nursing science;
- empower the student to perform independent and advanced research; and

- develop a pool of specialised nurses with the necessary clinical, management, research and educational knowledge, skills and attitude to be leaders and specialist consultants in health care services.

### *Language specification*

English.

### *Program structure*

### *Module outline and credit values*

### *Master of Nursing (structured)*

#### **First year**

Research Methodology	872(60)
Contemporary Health and Nursing Practices	874(30)

#### **Second year**

Research Thesis	876(90)
-----------------	---------

### *Master of Nursing (thesis)*

Research Thesis	881(180)
-----------------	----------

### *Assessment and examination*

#### *Structured stream*

Continuous assessment takes place during the first year. A class mark of at least 40% shall be achieved in each module to qualify for the examination in each module. A final mark of 50% shall be achieved in each module. The class mark and the examination mark contribute 50% each towards the final mark for each module. The final mark for the first year of study is calculated as the weighted average of the marks for the two first-year modules.

Continuous assessment takes place during the research process in the second year, with assessment by an internal and an external examiner on completion of the thesis. This assessment also includes an oral examination. The final mark for the thesis is calculated as follows: internal examiner 30%, external examiner 30%, supervisor 10% and oral examination 30%. A mark of 50% for the thesis shall be achieved.

The final marks for the first year of study and the thesis contribute 50% each towards the final mark for the M degree.

### *Research stream*

Continuous assessment takes place during the research process, as well as assessment by an internal and an external examiner on completion of the thesis. This assessment also includes an oral examination.

The final mark for the thesis is calculated as follows: internal examiner 30%, external examiner 30%, supervisor 10% and oral examination 30%. A mark of 50% for the thesis shall be achieved.

### *Enquiries*

Programme coordinator: Dr EL Stellenberg

Tel.: (021) 938 9244 E-mail: [elstel@sun.ac.za](mailto:elstel@sun.ac.za)

Administrative assistant: Mrs J Petersen

Tel.: (021) 938 9823 E-mail: [jpetersen@sun.ac.za](mailto:jpetersen@sun.ac.za)

Website: <http://www.sun.ac.za>

## **Master of Nutrition**

### *Programme description*

Two streams are available, namely a structured and a research stream.

#### *MNutr (structured)*

This is a structured programme which comprises two theoretical modules and a research project (50% of the total credits). If the academic year extends over 40 weeks, it is expected of the student to utilise 22,5 notional hours per week to complete the programme.

#### *MNutr (research)*

The programme comprises a research project (100% of credits) with no theoretical modules. If the academic year extends over 40 weeks, it is expected that 45 notional hours per week for full-time students and 22,5 notional hours per week for part-time students be utilised to complete the programme.

The candidate shall plan and implement a research project and submit a thesis or preferably two articles for submission for publication in a peer-reviewed journal, in the format specified in the study guide.

### *Specific admission requirements*

For admission to the Master of Nutrition degree programme, a candidate shall hold a relevant bachelor's degree with an NQF exit level of 8 (or international equivalent) and at least Nutrition (at an advanced level), as well as Physiology, Biochemistry and Research Methodology, or shall otherwise have attained a standard of competence deemed adequate for such purpose by

Senate. For the research stream experience in the planning and implementation of a research project at undergraduate level is a requirement. Only a limited number of students is selected annually.

### *Duration*

The structured stream extends over a minimum of two years, and the research stream over a minimum of one year for full-time students and two years for part-time students.

### *Presentation*

English.

### *Module outline and credit values*

#### *Structured stream*

#### **First year**

Nutritional Epidemiology	842(45)
--------------------------	---------

#### **Second year**

Nutrition and Dietetics	843(45)
-------------------------	---------

#### **First and Second year**

Research Project	882(45), 882(45)
------------------	------------------

(Nutritional Epidemiology 842 is a prerequisite pass module for Research Project 882.)

#### *Research stream*

Thesis (Nutritional Sciences)	871(180)
-------------------------------	----------

### *Assessment and examination*

#### *Structured stream*

- Final marks for theoretical modules: class mark from WebCT and written assignments (35%) and examination mark (65%). A minimum final mark of 50% is required for all three study units of the Nutrition and Dietetics module.
- Students are only permitted two opportunities to complete and pass theoretical modules. If a student has not passed a theoretical module after two attempts, he shall not be allowed to register for the programme again.



- Research project: class mark (protocol) (20%), average of marks of internal and external examiners for the thesis (70%), oral examination (10%).
- Final degree mark: average of theoretical modules (50%) and research project (50%).
- An oral examination by the examiners is compulsory.

#### *Research stream*

Final degree mark: Protocol (20%), average of the marks of the internal and external examiners for the thesis (65%), oral examination (15%).

An oral examination by the examiners is compulsory.

#### *Enquiries*

Programme coordinator: Mrs J Visser

Tel.: (021) 938 9259 E-mail: [jconrad@sun.ac.za](mailto:jconrad@sun.ac.za)

Website: <http://www.sun.ac.za/nutrition>

### **Master of Occupational Therapy**

#### *Admission and selection requirements*

For admission to the Master of Occupational Therapy degree programme, a student shall:

- hold the four-year B degree in Occupational Therapy or the Honours degree in Occupational Therapy of this University or an equivalent qualification approved for such purpose by Senate, and shall be registered as an occupational therapist with the Health Professions Council of South Africa;
- on written application have been admitted to the Master of Occupational Therapy programme by Senate or by the Executive Committee acting on behalf of Senate; and
- have passed a preliminary examination for direct admission to the Master of Occupational Therapy degree programme, the only requirement for which is a thesis. Candidates may be exempted from such preliminary examination if (since obtaining the qualifications above) they have completed at this University or elsewhere an approved curriculum of research and/or advanced study.

Previous experience of at least one year in the treatment of patients with hand conditions/injuries is a prerequisite for prospective candidates in the Hand Therapy field of study. Candidates who choose the Hand Therapy field of specialty shall, for the duration of the programme, work in areas where they will be able to treat patients with hand conditions/injuries.

### *Programme outcomes*

The programme aims to:

- equip students with advanced knowledge in order to develop an understanding of the theory pertaining to the profession of occupational therapy
- ensure mastery of the profession by means of the analysis of new information and the application thereof to address problems and challenges within the profession;
- educate students in research methodology, thereby enabling them to perform advanced and independent research that will culminate in the publication of articles;
- prepare students to undertake further studies; and
- qualify students who will competently advance Occupational Therapy as professionals.

### *Programme structure and content*

Students may choose one of two options for the Master of Occupational Therapy degree programme, namely:

#### *Structured Master of Occupational Therapy*

Students shall pursue a two-year modular programme for at least two academic years, consisting of advanced studies on several broad subjects as determined by the division and an assignment. The student has a choice of four speciality fields of study.

#### *Master of Occupational Therapy by thesis*

## **Master of Occupational Therapy (structured)**

### *Module outline and credit values*

#### **First year**

##### *Compulsory modules*

Research Methodology and Statistics	871(15)
-------------------------------------	---------

The Research Methodology and Statistics module is offered every year.

#### **Second year**

##### *Compulsory module*

Assignment	872(60)
------------	---------

*Generic Occupational Therapy modules*

Occupational Science	872(15)
Models in Occupational Therapy	872(15)
Occupational Therapy Practice	872(15)

Generic Occupational Therapy modules are offered every second year and are compulsory.

*Modules in field of speciality*

Occupational Therapy Practice: Assessments in Speciality Field of Study	876(20)
Occupational Therapy Practice: Interventions in Speciality Field of Study	871(40)

Fields of speciality modules are offered every second year.

**PLEASE NOTE:**

Although the Research Methodology and Statistics and Research Assignment modules are indicated as the only Compulsory modules in the first and second years of study respectively, a student shall register for a minimum of two further modules each year depending on the modules offered in that specific year.

*Fields of specialty*

Paediatrics

Hand Therapy

Vocational Rehabilitation

Psychiatry

*Assessment and examination*

Written and oral assessments, as well as assignments, are conducted continuously during the contact sessions. The assignment is a final opportunity to assess the student's integration and application of advanced knowledge, critical and creative thinking, advanced clinical reasoning and management of outcomes (services on all levels, own development and the management of processes) and is presented in a thoroughly conceptualised, well-formulated, logical and coherent document. A weighted mark is calculated on the basis of the credit values of the modules. To pass the programme, a student shall obtain a final mark of no less than 50%. The

weighted marks of the respective modules contribute to the calculation of the final mark. Internal and external moderation will take place according to University regulations.

## **Master of Occupational Therapy (thesis)**

### *Programme description*

This programme choice consists of a thesis only. The thesis contains the results of independent research on a topic chosen in consultation with the head of the division.

### *Duration*

This programme choice extends over at least one academic year.

### *Module outline and credit values*

Thesis	895(180)
--------	----------

### *Assessment and examination*

The thesis integrates a comprehensive literature review, data selection and analysis, discussion of results and recommendations. The study is presented in a thoroughly conceptualised, well-formulated, logical and coherent document. To pass, a student shall obtain a mark of no less than 50% for the thesis.

### *Enquiries*

Programme coordinator: Prof L van Niekerk

Tel.: (021) 938 9307 E-mail: [sbeuk@sun.ac.za](mailto:sbeuk@sun.ac.za)

Website: <http://www.academic.sun.ac.za/healthsciences>

## **Master of Pathology**

### *Programme description*

The research-based programme comprises an approved research project, a thesis, an oral presentation and a student portfolio. The research project can be in Anatomical Pathology, Chemical Pathology, Haematological Pathology or Immunology.

### *Specific admission requirements*

For admission to the Master of Pathology programme, a candidate shall hold:

- a BScHons degree with Pathology, Morphological Sciences, Anatomy, Physiology, Histology, Chemistry, Biology, Genetics or Microbiology; or another qualification approved for such purposes by Senate. Students with other major subjects in the biological sciences

at honours level may be admitted based on an adequate motivation and the successful completion of an admission examination. Depending on the field of study, additional work and/or proof of competency may be required.

or

- a BTech degree on condition that students fulfil the requirements as defined by Stellenbosch University. Depending on the field of study, additional work and/or proof of competency may be required.

### *Duration*

The programme extends over at least two years of full-time study or three years of part-time study.

### *Presentation*

English.

### *Module outline and credit value*

Thesis (Anatomical Pathology)	871(180) or
Thesis (Chemical Pathology)	871(180) or
Thesis (Haematological Pathology)	871(180) or
Thesis (Immunology)	871(180)

### *Assessment and examination*

The initial research protocol is approved by the relevant faculty committee, as well as by the relevant divisional and/or departmental research committee. Progress in experimental work is continuously monitored by the supervisor(s).

The candidate shall complete a research project, which is assessed according to University guidelines through a process of internal and external assessment. The student shall also do an oral presentation on completion of the research project and submit a student portfolio which includes a detailed logbook of all activities during the time of study.

The final mark is calculated from the marks obtained in the thesis, portfolio and presentation.

The pass mark is 50% and a mark of 75% or more is regarded as a distinction.

### *Enquiries*

Programme coordinator: Mr D Geiger

Tel.: (021) 938 5321 E-mail: dg2@sun.ac.za

## Master of Philosophy

### Master of Philosophy in Addiction Psychiatry

#### *Programme description*

The teaching and learning strategy in each module is determined by the nature of the subject. Modules are presented within the framework of a student-centred approach with the purpose of stimulating critical thinking. The programme uses didactical methods, interactive learning, group sessions and supervised clinical work. Independent learning is encouraged. The research assignment is completed under the guidance of a supervisor.

#### *Specific admission requirements*

To be admitted to the programme, students shall hold the following qualifications:

- Master of Medicine in Psychiatry/Neurology;

or

- fellowship of the South African College of Psychiatrists/Neurologists;

or

- equivalent qualification approved by Senate for this purpose;

and

- registration as medical practitioner with the Health Professions Council of South Africa.

#### *Presentation*

English.

#### *Module outline and credit values*

#### **First year**

Ethics of Addiction	871(5)
Assessment of Substance Misuse	871(10)
Clinical Addiction Psychiatry	871(70)
Neurobiology of Chemical Addiction	871(5)

**Second year**

Service Management	871(5)
Pharmacology of Chemical Dependence	871(5)
Research Methodology	871(5)
Public Health Approach to Addiction	871(5)
Psychosocial Interventions	871(10)
Research Assignment	871(60) *

\*The research assignment is completed over the course of the two years.

*Assessment and examination*

All modules are subject to continuous assessment and a minimum mark of 50% shall be achieved in each module. A student is required to submit a satisfactory research assignment demonstrating his ability to conduct an independent scientific investigation, to interpret results and to make deductions from the results. The research assignment will be assessed according to the guidelines of Stellenbosch University. A minimum of 50% shall be achieved in order to pass the research thesis. The final mark is calculated according to the credit weights of the individual modules. A student shall obtain a final mark of at least 50% to pass the programme.

*Enquiries*

Programme coordinator: Prof WP Pienaar

Tel.: (021) 938 9454 E-mail: [wppien@sun.ac.za](mailto:wppien@sun.ac.za)

**Master of Philosophy in Child and Adolescent Psychiatry***Programme description*

The teaching and learning strategy in each module is determined by the nature of the subject. Modules are presented within the framework of a student-centred approach with the purpose of stimulating critical thinking. The programme uses didactic methods, interactive learning, group sessions and supervised clinical work. Independent learning is encouraged. The research assignment is completed under the guidance of a supervisor.

*Specific admission requirements*

To be admitted to the programme, students shall hold the following qualifications:

- Master of Medicine in Psychiatry/Master of Clinical Psychology;
- or
- fellowship of the South African College of Psychiatrists;
- or
- equivalent qualification approved by Senate for this purpose;
- and
- registration as medical practitioner/clinical psychologist with the Health Professions Council of South Africa.

*Presentation*

English.

*Module outline and credit values*

**First year**

Ethics	873(5)
Ethics and Legislation	871(5)
Developmental Psychiatry	871(10)
Clinical Child Psychiatry	871(40)

**Second year**

*Compulsory modules*

Consultation/Liaison Psychiatry	871(15)
Research Methodology and Project	871(70)

*Elective modules*

Substance Abuse in Young Patients	871(15)
Forensic Child Psychiatry	871(15)
Infant and Toddler Mental Health	871(15)
Advanced Paediatric Psychopharmacology	871(10)
Paediatric Neuropsychology	871(10)
Advanced Child Psychotherapy	871(10)
Child Mental Health Service Development	871(10)



### *Assessment and examination*

All modules are subject to continuous assessment and a minimum mark of 50% shall be obtained in each module. A student is required to submit a satisfactory research assignment, demonstrating his ability to conduct an independent scientific investigation, to interpret results and to draw conclusions from the results. The research assignment will be assessed according to the guidelines of Stellenbosch University. A minimum of 50% shall be achieved in order to pass the research module. The final mark is calculated according to the credit weighting of the individual modules. A student shall obtain a final mark of at least 50% to pass the programme.

### *Enquiries*

Programme coordinator: Dr SM Hawkrige

Tel.: (021) 938 9174 E-mail: smh@sun.ac.za

## **Master of Philosophy in Communicable Diseases**

### *Programme description*

Moderation and supervision will take place according to the programme for the Master of Philosophy, as adopted by the Faculty Board. The programme can be obtained from the head of the Division of Community Health.

### *Specific admission requirements*

- In order to be admitted to the programme, students shall hold an honours degree in a health-related field, including psychology or social science, as approved by Senate for such purpose;

or

- Applicants shall have obtained a four-year bachelor's degree with a significant contribution to a research publication in the field of Communicable Diseases that is primarily equivalent to an honours degree, and that has been approved by Senate for such purpose. This method of obtaining a master's degree is meant for students who have already demonstrated a high level of knowledge and skill in research with regard to one or more infectious disease problems.

### *Presentation*

Afrikaans and English.

### *Assessment and examination*

The subject of the thesis will be determined in consultation with relevant experts in the field and in conjunction with the head of the division. Candidates will be assessed on the basis of an acceptable written thesis and a

scientific oral presentation, followed by questions from a panel of internal and external examiners.

### *Enquiries*

Programme coordinator: Dr Neil Cameron

Tel.: (021) 938 9440 E-mail: [nac@sun.ac.za](mailto:nac@sun.ac.za)

## **Master of Philosophy in Community Mental Health**

### *Programme description*

The teaching and learning strategy in each module is determined by the nature of the subject. Modules are presented within the framework of a student-centred approach with the purpose of stimulating critical thinking. The programme uses didactical methods, interactive learning, group sessions and supervised clinical work. Independent learning is encouraged. The research assignment is completed under the guidance of a supervisor.

### *Specific admission requirements*

To be admitted to the programme, students shall hold the following qualifications:

- Master of Social Work/Clinical Psychology/Nursing/Occupational Therapy;

or

- MB,ChB degree;

or

- MMed (Psych)/exit examination of the Colleges of Medicine of South Africa;

and

- registration as a medical practitioner/social worker/clinical psychologist/registered nurse/occupational therapist with the relevant professional council in South Africa.

### *Presentation*

English.

### *Module outline and credit values*

#### **First year**

Ethics	872(5)
Research Methodology	871(5)

Community Mental Health	871(55)
-------------------------	---------

## **Second year**

### *Compulsory modules*

Social Psychiatry	871(5)
Cultural Psychiatry	871(5)
Public Psychiatry	871(5)
Research Assignment	871(60) *

### *Elective modules*

Community Psychology	871(20)
Psycho-social Rehabilitation	871(20)
Community Psychiatry	871(20)

\*The research assignment is completed over the course of the two years.

### *Assessment and examination*

All modules are subject to continuous assessment and a minimum mark of 50% shall be achieved in each module. A student is required to submit a satisfactory research assignment demonstrating his ability to conduct an independent scientific investigation, to interpret results and to make deductions from the results. The research assignment will be assessed according to the guidelines of Stellenbosch University. A minimum of 50% shall be achieved in order to pass the research thesis. The final mark is calculated according to the credit weights of the individual modules. A student shall obtain a final mark of at least 50% to pass the programme.

### *Enquiries*

Programme coordinator: Dr MS van Heerden

Tel.: (021) 9181627 E-mail: mvheerde@pgwc.gov.za

## **Master of Philosophy in Health Sciences Education**

### *Specific admission requirements*

Only a limited number of students can be admitted annually to the first year of the programme. Admission to the programme therefore happens on the basis of the sequence in which qualifying applications are received before the closing date for applications. Applications for a particular year must be submitted not later than 30 November of the preceding year.

To be admitted to the programme, students shall hold the following qualifications:

- a four-year bachelor's degree in a field of study related to Health Sciences **and** be currently employed in a health sciences environment;

or

- an honours degree in Education or Social Sciences **and** be currently employed in a health sciences environment;

or

- another degree on NQF level 7 or higher **and** relevant experience in tertiary education, including experience in research regarding education of the social sciences **and** be currently employed in a health sciences environment;

or

- a relevant degree or diploma **and** a Postgraduate Diploma in Higher Education **and** relevant experience in tertiary education, including research regarding education or the social sciences **and** be currently employed in a health sciences environment;

or

- a relevant degree **and** a relevant Diploma in Higher Education **and** relevant experience in tertiary education, including research regarding education or the social sciences **and** be currently employed in a health sciences environment;

or

- an equivalent qualification approved by Senate for this purpose, or otherwise having attained a standard of competence in this field deemed adequate for such purpose by Senate.

To be admitted to the thesis programme the student shall conform to the above requirements, submit a complete research protocol to the satisfaction of the program committee and submit proof of sufficient research experience in education or social sciences. If the prospective student cannot submit proof of research experience in education or social sciences, the successful completion of the following modules of the structured programme is an additional requirement:

- Educational Research for Change in Health Sciences Education; and
- Research Methodology Component of the Research Assignment.

### *Programme structure*

The programme is presented by means of technology-mediated teaching and learning, with one contact session per year. The student following the structured programme shall attend the contact sessions. For students who have been admitted to the thesis programme, the contact sessions are optional, except in cases where students cannot submit proof of sufficient research experience as indicated above. Such students shall attend contact sessions for the Educational Research for Change in Health Sciences Education and the Research Methodology Component of the Research Assignment modules to pass.

The programme is research based and aims to equip the student to understand, critically evaluate and apply the following within teaching and learning contexts in health sciences:

- contemporary and appropriate educational approaches;
- principles of professional practice, with specific reference to ethics, reflection and social responsiveness; and
- findings derived from international and particularly African research in health sciences education within the context of diversity and varying levels of resources.

### *Presentation*

Afrikaans and English (A & E).

### *Module outline and credit values*

#### *Structured programme*

#### **First year**

##### *Compulsory modules*

Contextualising Health Sciences Education	881(5)
Learning in Health Sciences Education	882(15)
Facilitating Learning in Health Sciences Education	883(15)
Educational Research for Change in Health Sciences Education	884(10)
Research Methodology	885(10)

*Elective modules*

Skills Development	891(10)
Leadership in Health Sciences Education	892(10)

**Second year**

*Compulsory modules*

Learning and Teaching for Primary Health Care	886(15)
Curriculum Analysis in Health Sciences Education	871(15)
Assessment in Health Sciences Education	871(15)
Research Assignment	871(60)

*Elective modules*

E-learning in Health Sciences Education	895(10)
Academic Personnel and Professional Development	893(10)

*Thesis programme*

Thesis	895(180)
--------	----------

*Assessment and examination*

*Structured programme*

All modules are subject to continuous assessment and a minimum mark of 50% shall be achieved in each module. A student is required to submit a satisfactory research assignment demonstrating his ability to conduct an independent scientific investigation, to interpret results and to make deductions from the results. The research assignment will be assessed according to the guidelines of Stellenbosch University. A minimum of 50% shall be achieved in order to pass the research thesis. The final mark is calculated according to the credit weights of the individual modules. A student shall obtain a final mark of at least 50% to pass the programme.

### *Thesis programme*

A student is required to submit a satisfactory research thesis demonstrating his ability to conduct an independent scientific investigation, to interpret the results thereof and to reach conclusions. This shall be at a more advanced level than required for the research assignment of the structured programme. The thesis will be assessed according to the guidelines of Stellenbosch University and a mark of 50% is required for a pass.

### *Failing of modules*

- A student who fails a module shall be granted the opportunity to once again hand in the assignment(s) which has contributed to the final mark for the module. Whether the topic and nature of the assignment(s) remain unchanged or whether a new assignment(s) is required is left to the discretion of the respective module chair.
- The new assignment(s) shall be handed in within two months after the announcement of the final mark for the module. Should a student miss the due date, he shall register for the module again in the following year.
- A student who fails a module more than once shall not be allowed to continue with the programme.

### *Enquiries*

Programme coordinator: Prof BB van Heerden

Tel.: (021) 938 9595 E-mail: [bbvh@sun.ac.za](mailto:bbvh@sun.ac.za)

## **Master of Philosophy in Neuropsychiatry**

### **Clinical Neuropsychiatry**

#### *Programme description*

The teaching and learning strategy in each module is determined by the nature of the subject. Modules are presented within the framework of a student-centred approach with the purpose of stimulating critical thinking. The programme uses didactical methods, interactive learning, group sessions and supervised clinical work. Independent learning is encouraged. The research assignment is completed under the guidance of a supervisor.

#### *Specific admission requirements*

To be admitted to the programme, students shall hold the following qualifications:

- Master of Medicine in Psychiatry/Neurology;

or

- fellowship of the South African College of Psychiatrists/Neurologists;

or

- equivalent qualification approved by Senate for this purpose;

and

- registration as medical practitioner with the Health Professions Council of South Africa.

### *Presentation*

English.

### *Module outline and credit values*

#### **First year**

Ethics	871(5)
Research Methodology	871(5)
Neuropsychopharmacology	871(5)
Applied Psychiatry of the Elderly	871(10)
Applied Neurology	871(10)
Applied Psychosomatic Medicine	871(10)
Applied HIV and Medicine	871(10)

#### **Second year**

Clinical Neuropsychiatry	871(55)
Neuropsychological and Specialized Assessments	871(5)
Clinical Imaging	871(5)
Research Assignment	871(60) *

\*The research project is completed over the course of the two years.

### *Assessment and examination*

All modules are subject to continuous assessment and a minimum mark of 50% shall be achieved in each module. A student is required to submit a satisfactory research assignment demonstrating his ability to conduct an independent scientific investigation, to interpret results and to make



deductions from the results. The research assignment will be assessed according to the guidelines of Stellenbosch University. A minimum of 50% shall be achieved in order to pass the research thesis. The final mark is calculated according to the credit weights of the individual modules. A student shall obtain a final mark of at least 50% to pass the programme.

### *Enquiries*

Programme coordinator: Dr L Asmal

Tel.: (021) 938 9623 E-mail: laila@sun.ac.za

## **Master of Philosophy in Neuropsychiatry**

### **Old Age Psychiatry**

#### *Programme description*

The teaching and learning strategy in each module is determined by the nature of the subject. Modules are presented within the framework of a student-centred approach with the purpose of stimulating critical thinking. The programme uses didactical methods, interactive learning, group sessions and supervised clinical work. Independent learning is encouraged. The research assignment is completed under the guidance of a supervisor.

#### *Specific admission requirements*

To be admitted to the programme, students shall hold the following qualifications:

- Master of Medicine in Psychiatry/Neurology;

or

- fellowship of the South African College of Psychiatrists/Neurologists;

or

- equivalent qualification approved by Senate for this purpose;

and

- registration as medical practitioner with the Health Professions Council of South Africa.

#### *Presentation*

English.

*Module outline and credit values*

**First year**

Ethics	871(5)
Research Methodology	871(5)
Neuropsychopharmacology	871(5)
Applied Neuropsychiatry	871(10)
Applied Neurology	871(10)
Applied Psychosomatic Medicine	871(10)
Applied HIV and Medicine	871(10)

**Second year**

Old Age Psychiatry	871(45)
Applied Geriatric Medicine	871(10)
Neuropsychological and Specialized Assessments	871(5)
Clinical Imaging	871(5)
Research Assignment	871(60) *

\*The research project is completed over the course of the two years.

*Assessment and examination*

All modules are subject to continuous assessment and a minimum mark of 50% shall be achieved in each module. A student is required to submit a satisfactory research assignment, demonstrating his ability to conduct an independent scientific investigation, to interpret results and to make deductions from the results. The research assignment will be assessed according to the guidelines of Stellenbosch University. A minimum of 50% shall be achieved in order to pass the research thesis. The final mark is calculated according to the credit weights of the individual modules. A student shall obtain a final mark of at least 50% to pass the programme.

*Enquiries*

Programme coordinator: Dr FCV Potocnik

Tel.: (021) 938 9023 E-mail: felix@sun.ac.za

## **Master of Philosophy in Neuropsychiatry**

### **Psychosomatic Medicine**

#### *Programme description*

The teaching and learning strategy in each module is determined by the nature of the subject. Modules are presented within the framework of a student-centred approach with the purpose of stimulating critical thinking. The programme uses didactical methods, interactive learning, group sessions and supervised clinical work. Independent learning is encouraged. The research assignment is completed under the guidance of a supervisor.

#### *Specific admission requirements*

To be admitted to the programme, students shall hold the following qualifications:

- Master of Medicine in Psychiatry/Neurology;

or

- fellowship of the South African College of Psychiatrists/Neurologists;

or

- equivalent qualification approved by Senate for this purpose;

and

- registration as medical practitioner with the Health Professions Council of South Africa.

#### *Presentation*

English.

#### *Module outline and credit values*

### **First year**

Ethics	871(5)
Research Methodology	871(5)
Neuropsychopharmacology	871(5)
Applied Psychiatry of the Elderly	871(10)
Applied Neurology	871(10)
Applied Neuropsychiatry	871(10)
Applied HIV and Medicine	871(10)

## Second year

Psychosomatic Medicine	871(55)
Neuropsychological and Specialized Assessments	871(5)
Clinical Imaging	871(5)
Research Assignment	871(60) *

\*The research project is completed over the course of the two years.

### *Assessment and examination*

All modules are subject to continuous assessment and a minimum mark of 50% shall be achieved in each module. A student is required to submit a satisfactory research assignment demonstrating his ability to conduct an independent scientific investigation, to interpret results and to make deductions from the results. The research assignment will be assessed according to the guidelines of Stellenbosch University. A minimum of 50% shall be achieved in order to pass the research thesis. The final mark is calculated according to the credit weights of the individual modules. A student shall obtain a final mark of at least 50% to pass the programme.

### *Enquiries*

Programme coordinator: Dr B Chiliza

Tel.: (021) 938 9510 E-mail: bonga@sun.ac.za

## **Master of Physiotherapy**

### *Admission and selection requirements*

For admission to the Master's degree in Physiotherapy, a candidate shall:

- hold a four-year bachelor's degree in Physiotherapy, or an equivalent qualification approved by Senate for such purposes, and be registered as a Physiotherapist/ Physiotherapy student with the South African Health Professions Council;

or

- hold a Diploma in Physiotherapy, provided that:
  - this takes place on the recommendation of the Committee for Postgraduate Education;
  - the student has remained academically and professionally active in the specific field since obtaining the diploma;
  - the student has evidence that he has passed the Orthopaedic Manual Therapy I (OMT I) course;

- the student completed a preliminary examination to the satisfaction of the Committee for Postgraduate Education; and
- supplementary work may be required;

and

- have a minimum of one year of clinical experience in Physiotherapy after having obtained the bachelor's degree;

and

- make written application that will be subject to approval by Senate, or by the Executive Committee acting on behalf of Senate.

For admission to the structured Master's degree in Physiotherapy (Ortho-manipulative Therapy), a candidate shall (in addition to the above requirements) provide evidence of:

- successful completion of the Orthopaedic Manual Therapy I (OMT I) programme;

or

- appropriate clinical experience and continuing professional education.

### *Nature of programme*

The aim of the programme is to:

- equip students with advanced knowledge and skills in the chosen field of Physiotherapy;
- advance students' ability to acquire higher-order skills with regard to the critical analysis and evaluation of knowledge and skills;
- equip students with the necessary skills in order to undertake original, advanced and independent research in the field of Physiotherapy;
- prepare students for various forms of scientific professional communication; and
- produce professionals with the skills and critical cognitive capability to advance the profession and to contribute to a pool of professional and academic practitioners in the field of Physiotherapy.

## **Master of Physiotherapy (structured option)**

### *Speciality*

Ortho-Manipulative Therapy

### *Module outline and credit values*

The modules for the theoretical section shall extend over a minimum of two years on a part-time basis.

Biomechanics	873(8) (E)
OMT – Approaches and Concepts	863(20) (E)
OMT – Upper Quadrant	873(12) (E)
OMT – lower Quadrant	882(15) (E)
OMT – Integrated and advanced practice	852(10) (E)
OMT – Clinical	892(25) (E)
Thesis (Physio – OMT)	894(90) (E)

### *Assessment and examination*

- In order to pass, a minimum mark of 50% shall be achieved in each module, including the thesis module.
- All theoretical modules are subject to continuous assessment by a range of clinical portfolios, written tests, clinical, written and oral presentations and reports.
- Regarding the thesis module, continuous assessment of the candidate's progress shall take place during the research process. The candidate shall complete a research project, leading to the submission of a thesis which is assessed according to University guidelines through a process of internal and external assessment. The assessment of the thesis includes an oral examination. The final mark is calculated from a continuous assessment mark (10%) and the marks awarded by the examiners. In order to pass, a minimum final mark of 50% shall be achieved for the thesis module.

## **Master of Physiotherapy (thesis option)**

### *Module outline and credit values*

Thesis (Physiotherapy)	872(180) (E)
------------------------	--------------

The thesis subject will be determined in consultation with the supervisor.

### *Assessment and examination*

Continuous assessment of the candidate's progress shall take place during the research process. The candidate shall complete a research project, leading to the submission of a thesis which is assessed according to University guidelines through a process of internal and external assessment. The assessment of the thesis includes an oral examination. The final mark is calculated from a continuous assessment mark (10%) and the marks awarded by the examiners. In order to pass, a minimum final mark of 50% shall be achieved for the thesis module.

### *Enquiries*

Programme coordinator: Dr SD Hanekom

Tel.: (021) 938 9300 E-mail: [sdh@sun.ac.za](mailto:sdh@sun.ac.za)

## **Master of Science**

### *Fields of study*

The Master of Science degree (MSc) can be obtained in the following fields of study:

- Baromedical Sciences
- Clinical Epidemiology
- Cytopathology
- Epidemiology
- Histology
- Human Genetics
- Infection Prevention and Control
- Medical Microbiology
- Medical Physics
- Medical Physiology
- Medical Virology
- Molecular Biology
- Nuclear Medicine
- Pharmacology
- Reproductive Biology

### *Admission and selection requirements for MSc programmes*

For admission to the Master of Science degree programmes, a candidate shall hold an honours degree in Science of this University, or another honours

degree approved for such purposes by Senate, or shall otherwise have attained a standard of competence deemed adequate for such purpose by Senate.

The initial research proposal is approved by a departmental research committee, as well as by the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences. In instances where research is conducted on animals, the proposal is approved by the Committee for Experimental Animal Research of the faculty.

### *Nature and objectives of MSc programmes*

The thesis MSc programmes entail an independent research project, resulting in a thesis that constitutes 100% of the final mark of the programme. The subject of the research project is selected to support the faculty's research focus areas.

The following overarching objectives are set for the MSc programmes:

- to equip the student with more advanced knowledge and a deeper insight into a chosen subject within the field of study;
- to promote mastery of the chosen topic, with the aid of higher levels of analysis of new information, and to develop the ability to handle complexities and to find solutions to such problems;
- to enable students to do advanced and independent research by means of rigorous training in research methods and to familiarise them with the skills needed for academic communication;
- to prepare students aspiring to higher levels of academic research work for doctoral study and to foster an approach marked by academic integrity and ethics;
- to contribute to the pool of academics and professionals through the development of capabilities and critical intellectual skills aimed at ensuring the healthy continuance of the relevant discipline or profession; and
- to prepare students to utilise their skills to help solve the problems and challenges of the country that fall within the scope of their particular field.

## **MSc in Baromedical Sciences**

### *Programme description*

The research-based programme comprises an approved research project, a thesis and an oral presentation. The initial research protocol shall be



approved by the departmental research committee and the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences.

*Specific admission requirements*

- For admission to the MSc (Baromedical Sciences) programme, a student shall hold the BScHons (Underwater Medicine) degree or the BScHons (Hyperbaric Medicine) degree of this University or another acknowledged institution for tertiary education; or another qualification approved for such purposes by Senate; or shall otherwise have attained a standard of competence deemed adequate for such purposes by Senate.
- Applicants with other major subjects at honours level may be admitted based on a motivation and/or the successful completion of an admission examination. Depending on the field of study, additional work and/or proof of competency may be required.

*Duration*

The programme extends over at least one year of full-time (or at least two years of part-time) studies.

*Presentation*

English.

*Module outline and credit values*

Thesis: Baromedical Sciences	895(180)
------------------------------	----------

*Assessment and examination*

The candidate shall complete a research project, leading to the submission of a thesis which is assessed according to University guidelines through a process of internal and external assessment. A minimum pass mark of 50% is required.

*Enquiries*

Programme coordinator: Dr WAJ Meintjes

Tel.: (021) 938 9272 E-mail: wajm@sun.ac.za

## **MSc in Clinical Epidemiology**

*Programme description*

Clinical Epidemiology is the science of applying the best available research evidence to patient care. It uses the methods of epidemiology to find scientifically valid answers to questions concerning diagnosis, prevention,

therapy, prognosis and aetiology, thus improving the evidence base for the care of individual patients.

The course offers rigorous methodological training for those with a background or experience in a health-related discipline who wish to pursue a career in clinical research or evidence-based practice. The programme would also be of interest to potential researchers who require robust training in research techniques, including advanced concepts and methods of epidemiology.

### *Specific admission requirements*

For admission to the MSc (Clinical Epidemiology) programme the candidate shall hold:

- an MB,ChB or equivalent degree;

or

- a four-year professional bachelor's degree in a health-related discipline;

or

- a BScHons degree of this University or another recognised university;

or

- an equivalent qualification approved by Senate.

Mathematics at National Senior Certificate (NSC) level, computer literacy and fluency in written and spoken English are requirements for admission to the programme.

### *Duration*

The programme is offered on a part-time basis over a minimum period of two years.

### *Presentation*

English.

### *Module outline and credit values*

The programme consists of modules with a total of 120 credits and a research project of 60 credits. Students shall complete ten modules of which eight are compulsory and two elective modules (out of a choice of four).

#### *Compulsory modules*

Fundamentals of Epidemiology	875(12)
Diagnosis and Screening	875(12)

Randomized Controlled Trials	875(12)
Biostatistics I	875(12)
Writing and Reviewing Scientific Papers	875(12)
Research Proposal Writing and Grantsmanship	875(12)
Biostatistics II	875(12)
Systematic Reviews and Meta-analysis	875(12)

*Elective modules (choose two)*

Infectious Disease Epidemiology	875(12)
Clinical Guidelines	875(12)
Teaching Evidence-based Health Care	875(12)
Economic Evaluation in Health Care	875(12)
Qualitative Research Methods for Health	875(12)
Health Systems and Services Research	875(12)

*Research project*

Research Project	875(60)
------------------	---------

*Assessment and examination*

Modules: Formative and summative assessment of modules (120 credits) shall be conducted through written examinations, oral presentations, written assignments and participation in discussions. A pass mark of 50% is required for each module with a subminimum of 45% on formative as well as summative assessment. A candidate who fails any module may be denied the right to reregister for the programme. The student shall be required to participate successfully and to integrate knowledge in projects, reports and assignments.

Research project: The completed research project shall be submitted in the prescribed format and shall be assessed by both internal and external examiners.

### *Enquiries*

Programme coordinator: Dr T Young

Programme administrator: Mrs L Fisher

Tel.: (021) 938 9157 E-mail: [tyoung@sun.ac.za](mailto:tyoung@sun.ac.za) or [lnf@sun.ac.za](mailto:lnf@sun.ac.za)

### **MSc in Cytopathology**

#### *Programme outcomes*

The programme aims:

- to equip the student with more advanced knowledge of and a deeper insight into a chosen subject within the field of study;
- to promote mastery of the chosen topic with the aid of higher levels of analysis of new information, and the ability to handle complexities and to find solutions to such problems;
- to enable the student to undertake independent research;
- to prepare the student aspiring to higher levels of academic research work for doctoral study and to foster a proper approach to academic integrity and ethics;
- to contribute to the pool of academics and professionals with the requisite capabilities and critical intellectual skills to ensure the healthy continuance of the relevant discipline or profession; and
- to prepare the student to utilise his skills to help solve the problems and challenges of the country that fall within the scope of the particular field.

#### *Specific admission requirements*

For admission to the MSc programme with Cytopathology as field of study, a candidate shall:

- hold an MB,ChB/BChD degree with a postgraduate qualification in Anatomical Pathology or Oral Pathology;

or

- hold an MB,ChB/BChD degree with at least two years experience in a cytology laboratory supervised by a specialist cytopathologist or histopathologist with experience in cytopathology;

and

- be registered with the Health Professions Council of South Africa (not applicable to candidates from outside of South Africa).

### *Duration*

The minimum duration of the programme is two years.

### *Presentation*

English.

### *Module outline and credit values*

The programme is presented in a modular format.

Ancillary Diagnostic Research Techniques	875(15)
Abdominal Masses/Retroperitoneum/Mediastinum	875(5)
Breast	875(5)
Gynaecological Cytology 1	875(5)
Gynaecological Cytology 2	875(5)
Gynaecological Cytology 3	875(5)
Head and Neck	875(5)
Quality Assurance	875(15)
Liver	875(5)
Lymph Nodes – Neoplastic	875(5)
Lymph Nodes – Non-neoplastic	875(5)
Research Methodology	875(10)
Research Assignment	875(60)
Neurocytology, Cerebrospinal Fluid and Brain Smears	875(5)
Non-gynaecological Exfoliative Cytology 1	875(5)
Non-gynaecological Exfoliative Cytology 2	875(5)
Kidney/Male Genital Tract	875(5)
Pancreas and Extrahepatic Biliary Tract	875(5)

Paediatric Cytopathology	875(5)
Practical Module	875(15)
Respiratory Tract	875(5)
Soft Tissue and Bone	875(5)
Screening Programmes	875(15)
Cytopathology of Immune Suppression	875(5)
Thyroid	875(5)
Salivary Gland	875(5)
Liquid-based Cytology	875(10)

### *Assessment and examination*

The student must:

- achieve a minimum of 50% in both the theoretical and practical components of each module;
- successfully participate in and integrate knowledge during projects, pathology reports and assignments;
- complete a full research project dealing with a chosen aspect of cytopathology, meeting the standards and requirements of a master's degree project; and
- by means of the project, demonstrate the ability to integrate theoretical concepts and research skills successfully.

### *Enquiries*

Programme coordinator: Dr PT Schubert

Tel.: (021) 938 5349 E-mail: pawels@sun.ac.za

## **MSc in Epidemiology**

### *Programme description*

This is a completely thesis-based master's programme.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Thesis: Epidemiology	872(180)
----------------------	----------

### *Assessment and examination*

The student must complete a research project that is examined in terms of University guidelines through a process of internal and external examination.

### *Enquiries*

Programme administrator: Ms RM Langford

Tel.: (021) 938 9375 E-mail: rlm@sun.ac.za

## **MSc in Histology**

### *Programme description*

This is a completely thesis-based master's programme. The initial research proposal is approved by a departmental research committee and the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences.

### *Specific admission requirements*

Prospective candidates who hold a BTech qualification shall:

- be considered for admission if they have passed the BTech degree with a minimum of 60%; and
- thereafter be admitted if they pass the BScHons examination in the relevant field of study as a preliminary examination with a minimum mark of 60%.

### *Duration*

The programme extends over one year.

### *Presentation*

English.

### *Module outline and credit values*

Thesis: Histology	872(180)
-------------------	----------

### *Assessment and examination*

The student must complete a research project, leading to the submission of a thesis that is examined according to University guidelines through a process of internal and external examination. The final mark is calculated from the marks obtained for the research project and thesis, as well as in a presentation and an oral examination.

### *Enquiries*

Programme coordinator: Dr CC Chase

Tel.: (021) 938 9427 E-mail: ccc@sun.ac.za

## **MSc in Human Genetics**

### *Programme description*

The programme consists of a research project, thesis and project presentation. The research proposal is written by the student with the help of the supervisor and presented to the Committee for Postgraduate Teaching.

### *Specific admission requirements*

Prospective candidates who hold a BTech qualification shall:

- be considered for admission if they have passed the BTech degree with a minimum of 60%; and
- thereafter be admitted if they pass the BScHons examination in the relevant field of study as a preliminary examination with a minimum mark of 60%.

### *Duration*

The programme extends over two years.

### *Presentation*

English.

### *Module outline and credit values*

Thesis: Human Genetics	872(180)
------------------------	----------

### *Assessment and examination*

The student must complete a research project. Progress with experimental work is monitored continuously by the supervisor. Research results must be presented in a thesis which is examined by an internal and external examiner and a project presentation must be delivered. The final mark is calculated from the marks obtained in the research project (supervisor's mark), thesis (internal and external examiner) and project presentation. The pass mark is 50% and a distinction is 75%.

### *Enquiries*

Programme coordinator: Dr S Bardien

Tel.: (021) 938 9681/9692 E-mail: sbardien@sun.ac.za

## **MSc in Infection Prevention and Control**

### *Programme description*

This is a research-based degree programme, comprising a research project (100% of the credits) with no theoretical modules. The candidate shall plan



and implement a research project and submit a thesis in the format specified in the study guide.

### *Programme outcomes*

The field of infection prevention and control (IPC) is an emerging discipline in South Africa, but research in this field of healthcare is lacking. The unique degree programme intends to develop competencies for high-level IPC and related research specific to the African healthcare context, and the purpose of the programme is:

- to ensure a high level of knowledge in the field of IPC by means of high-level analysis of new information, the ability to deal with complexity and finding workable solutions to problems and challenges;
- to prepare students who aspire to do academic research at a higher level for doctoral studies, and to promote an approach based on academic integrity and professional ethics;
- to contribute to the pool of academics and professionals with the competence and critical intellectual abilities to ensure progress in the field of IPC, and to provide for the country's needs by means of a skilled scientific workforce of the highest calibre;
- to prepare students to apply their skills to the task of answering the pertinent questions and meeting the critical needs of the country; and
- to educate and train individuals who can perform research independently and who can contribute to the development of advanced-level IPC knowledge.

### *Specific admission requirements*

For admission to the MSc in IPC degree programme, an applicant shall hold:

- a suitable honours bachelor's degree with the required number of credits at level 8;

and

- the Postgraduate Diploma in Infection Control (PG Dip (Infection Control)) of this University;

or

a similar qualification from another recognised university;

or

other major subjects in sciences at honours level, with strong motivation for application for and successful completion of an admission examination (such students may be admitted on condition

that they fulfil the admission requirements as defined in the Calendar of the Faculty of Medicine and Health Sciences of this University). Depending on the field of study, additional work or proof of competency (or both) may also be required.

Applicants shall also possess basic knowledge of data management and statistics, or shall attend the Fundamentals of Epidemiology and/or the Biostatistics I modules of this University. Planning and implementation of a research project at undergraduate level is a further requirement. Computer literacy is highly recommended.

Only a limited number of applicants is selected annually.

### *Duration*

The programme extends over a minimum of one year for full-time students and two years for part-time students.

### *Presentation*

English.

### *Module outline and credit values*

Thesis (Infection Prevention and Control)	872(180)
---	----------

### *Assessment and examination*

The final mark for the programme will be calculated as follows:

- the protocol (20% of the final mark);
- the average of the marks of the internal and external examiners for the thesis (65% of the final mark); and
- an oral examination (15% of the final mark). The oral examination is compulsory.

### *Enquiries*

Programme coordinator: Prof S Mehtar

Tel: 021 938 5054 E-mail: smehtar@sun.ac.za

Training coordinator: Ms M Aucamp

Tel: 021 938 5054/9 E-mail: mcaucamp@sun.ac.za

Training administrator: Ms C Demink

Tel: 021 938 5054 E-mail: cdemink@sun.ac.za

Website: <http://www.sun.ac.za/uipc>

## **MSc in Medical Microbiology**

### *Programme description*

The programme consists of an extensive research project, leading to the submission of a thesis. The subject of the project is determined in close liaison with the student's supervisor, preferably within the area of expertise of the division, before the student shall be allowed to register for the programme. The initial research proposal is approved by a departmental research committee and the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences. Progress with experimental work is monitored continuously by the supervisor. Should the student not demonstrate satisfactory progress, the programme committee may recommend that studies be discontinued.

### *Specific admission requirements*

Admission and selection requirements for the MSc (Medical Microbiology) programme are the same as for the other MSc programmes.

Prospective candidates who hold a BTech qualification shall:

- be considered for admission if they have passed the BTech degree with a minimum of 60%; and
- thereafter be admitted if they pass the BScHons examination in the relevant field of study as a preliminary examination with a minimum mark of 60%.

Only a limited number of students can be accepted.

### *Duration*

The programme extends over two years of full-time studies.

### *Presentation*

English.

### *Module outline and credit values*

Thesis: Medical Microbiology	872(180)
------------------------------	----------

### *Assessment and examination*

The student must complete a research project, which is examined according to University guidelines through a process of internal and external examination.

### *Enquiries*

Programme coordinator: Dr K Hoek

Tel.: (021) 938 4035 E-mail: medmicro@sun.ac.za

## **MSc in Medical Physics**

### *Programme description*

The initial research proposal is approved by a departmental research committee and by the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences.

### *Specific admission requirements*

A candidate shall hold a BScHons degree of this University, with Medical Physics as subject; or another bachelor's or honours degree approved by Senate; or shall have otherwise attained a standard of competence deemed adequate for such purposes by Senate.

A candidate shall be registered as a Medical Physicist with the Health Professions Council of South Africa.

### *Duration*

The programme extends over two years.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Thesis: Medical Physics	872(180)
-------------------------	----------

### *Assessment and examination*

The student must complete a research project, which is examined according to University guidelines through a process of internal and external examination. The final mark is calculated from the marks obtained in the research project, thesis and oral examination.

### *Enquiries*

Programme coordinator: Dr WA Groenewald

Tel.: (021) 938 6027 E-mail: wag@pgwc.gov.za

## **MSc in Medical Physiology**

### *Programme description*

The programme consists of an extensive research project, leading to the submission of a thesis. The subject of the project is determined in close liaison with the student's supervisor, and should preferably fall within the area of expertise of the division. The initial research proposal is approved by a departmental research committee and the Health Research Ethics

Committee of the Faculty of Medicine and Health Sciences. Progress with experimental work is monitored continuously by the supervisor.

*Specific admission requirements*

Prospective candidates who hold a BTech qualification shall:

- be considered for admission if they have passed the BTech degree with a minimum of 60%; and
- thereafter be admitted if they pass the BScHons (Medical Physiology) examination as a preliminary examination with a minimum mark of 60%.

*Duration*

The programme extends over two years.

*Presentation*

English and Afrikaans.

*Module outline and credit values*

Thesis: Medical Physiology	882(180)
----------------------------	----------

*Assessment and examination*

The student must complete a research project, leading to a thesis that is examined according to University guidelines through a process of internal and external examination.

*Enquiries*

Programme coordinator: Prof H Strijdom

Tel.: (021) 938 9387 E-mail: jgstr@sun.ac.za

## **MSc in Medical Virology**

*Programme description*

The programme, which is primarily practical, is offered once every three years. The initial research proposal is approved by a departmental research committee and the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences. Progress with experimental work is monitored continuously by the supervisor.

*Specific admission requirements*

Prospective candidates for the MSc (Medical Virology) programme who hold a BTech qualification shall:

- be considered for admission if they have passed the BTech degree with a minimum of 60%; and

- thereafter be admitted if they pass the BScHons examination in the relevant field of study as a preliminary examination with a minimum mark of 60%.

*Duration*

This programme extends over two years.

*Presentation*

Afrikaans and English.

*Module outline and credit values*

Thesis: Medical Virology	872(180)
--------------------------	----------

*Assessment and examination*

The student must complete a research project and an oral examination that are examined according to University guidelines through a process of internal and external examination.

*Enquiries*

Programme coordinator: Prof W Preiser

Tel.: (021) 938 9353 E-mail: preiser@sun.ac.za

## **MSc in Molecular Biology**

*Programme description*

The programme consists of a research project, thesis and project presentation. The research proposal is written by the student with the help of the supervisor and presented to the Committee for Postgraduate Teaching.

*Duration*

The programme extends over two years.

*Presentation*

English.

*Module outline and credit values*

Thesis: Molecular Biology	872(180)
---------------------------	----------

*Assessment and examination*

This is a thesis-based programme, with no study modules. The student must complete a research project, present the results in a thesis and deliver a project presentation. The thesis is examined according to University guidelines by an internal and external examiner. The final mark is calculated from the marks obtained in the research project (supervisor's mark), thesis

(internal and external examiner) and project presentation. The pass mark is 50% and a distinction is 75%.

### *Enquiries*

Programme coordinator: Prof TC Victor/Ms G Durrheim

Tel.: (021) 938 9251/9696 E-mail: tv@sun.ac.za or gad@sun.ac.za

## **MSc in Nuclear Medicine**

### *Programme description*

Two streams are available:

#### *Research stream*

A research project (100%) which leads to the writing of a thesis.

*or*

#### *Coursework and research stream*

Coursework identical to that of the BScHons (Nuclear Medicine) programme and a research project which includes an assignment.

The initial research proposal is approved by a departmental research committee, as well as by the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences. Progress with experimental work is monitored continuously by the supervisor.

### *Specific admission requirements*

- A candidate shall hold one of the following qualifications of this or another recognised university:
  - the MB,ChB degree;
  - a bachelor's degree with Physiology as major subject and Physics I and Chemistry I;
  - a bachelor's degree with Chemistry or Biochemistry as main subject, provided that Physiology is supplemented to a standard deemed adequate by Senate should Physiology not be the second main subject;
  - a bachelor's degree in Pharmacy; or
  - another qualification approved for such purposes by Senate.

A minimum pass mark of 60% in the main subject is a prerequisite for admission.

- Candidates who hold a BTech qualification shall be considered for admission if they have passed:
  - the BTech degree with a minimum pass mark of 60%; and

- a preliminary examination in the relevant field of study (as determined by the postgraduate programme committee) with a minimum mark of 60%.

### *Duration*

The programme extends over a minimum of two years.

### *Presentation*

English.

### *Module outline and credit values*

#### *Research stream*

Thesis: Nuclear Medicine	875(180)
--------------------------	----------

#### *Coursework and research stream*

##### *Compulsory modules*

Clinical Nuclear Medicine	872(20)
Radiopharmacy (Basic)	871(20)
Radiation Physics and Instrumentation	871(20)
Research Project	883(60)

##### *Elective modules*

Radiopharmacy (Advanced)	873(30)
Clinical Nuclear Medicine Diagnostic (Advanced)	874(30)
Clinical Nuclear Medicine Therapy (Advanced)	875(30)

Two of the three elective modules shall be passed with a pass mark of 50% in order to obtain the degree.

### *Assessment and examination*

#### *Research stream*

For the research stream the standard rules of the University for the assessment of Master's theses are applicable.

#### *Coursework and research stream*

For the coursework part of the coursework and research stream the standard assessment of coursework as for the BScHons programme is applicable. For



the assignment part the standard rules of the University for the assessment of Master's assignments are applicable.

### *Enquiries*

Programme coordinator: Prof A Ellmann

Tel.: (021) 938 4265 E-mail: ael@sun.ac.za

## **MSc in Pharmacology**

### *Presentation*

English.

### *Module outline and credit values*

Two streams are available for participating in the full-time master's programme over two years:

#### *Thesis in Pharmacology*

A laboratory research project (100%), which leads to the writing of a thesis.

Thesis: Pharmacology	896(180)
----------------------	----------

#### *Lecture and Research Module in Pharmacology*

A laboratory research project, including an assignment, as well as coursework identical to that of the BScHons programme in Pharmacology.

Pharmacology of Systems	874(40), 875(40)
Principles of Pharmacology	872(40)
Research Assignment	884(60)

### *Assessment and examination*

The standard guidelines of this University regarding the assessment of master's theses apply to the first stream (Thesis in Pharmacology).

The standard assessment of coursework, as in the case of BScHons 778, applies to the second stream (Lecture and Research Module in Pharmacology), and the standard guidelines regarding the assessment of master's theses apply to the thesis.

Examinations in the modules (Principles of Pharmacology, as well as Pharmacology of Systems 1 & 2) must be passed with a minimum mark of 50%. The thesis must be completed and approved by examiners, with a pass mark of at least 50% as a prerequisite for graduation.

### *Enquiries*

Programme coordinator: Prof B Rosenkranz

Tel.: (021) 938 9331 E-mail: rosenkranz@sun.ac.za

## **MSc in Reproductive Biology**

### *Programme description*

This programme entails an independent research project in the field of Reproductive Biology (Andrology and/or In Vitro Fertilisation), which culminates in a thesis that constitutes 100% of the final mark for the programme. The research project is selected according to the student's background and interests and in support of the faculty's research focus areas. The initial research proposal is approved by a departmental research committee, as well as by the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences. Progress with experimental work is monitored continuously by the supervisor.

### *Specific admission requirements*

Prospective candidates who hold a BTech qualification shall:

- be considered for admission if they have passed the BTech degree with a minimum of 60%; and
- thereafter be admitted if they pass the BScHons examination in the relevant field of study as a preliminary examination with a minimum mark of 60%.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Thesis: Reproductive Biology	872(180)
------------------------------	----------

### *Assessment and examination*

The completed research project must be submitted in the prescribed format and will be examined by both internal and external examiners.

### *Enquiries*

Programme coordinator: Dr M-L de Beer/Prof TF Kruger

Tel.: (021) 938 5487/9217 E-mail: mlw@sun.ac.za or tfk@sun.ac.za

## **Master of Speech-Language Therapy**

### *Specific admission requirements*

For admission to the Master of Speech-Language Therapy programme, a candidate shall hold the four-year Bachelor's degree in Speech-Language and Hearing Therapy from Stellenbosch University, or a four-year Bachelor's degree in Speech-Language Therapy from another accredited university, or an equivalent qualification as approved by Senate.

Upon written application, a student may be admitted to the programme by Senate or by the Executive Committee acting on behalf of Senate. Only a limited number of students is selected annually.

On application for submission each candidate shall submit a preliminary research proposal to the Head of the Division for approval, as agreed with the latter.

### *Duration*

One year for full-time students; two years for part-time students.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

Thesis: Speech-Language Therapy	872(180)
---------------------------------	----------

### *Assessment and examination*

The thesis is assessed by at least one internal and one external examiner and will contribute 100% to the final mark of the programme. The assessment includes an oral examination. In order to pass the programme, a student shall achieve a final mark of at least 50% for the thesis.

### *Enquiries*

Programme coordinator: Mrs D Klop

Tel.: (021) 938 9494 E-mail: dk@sun.ac.za

## **DOCTORAL DEGREES**

### *Maximum duration*

The maximum duration for all doctoral degrees of the Faculty of Medicine and Health Sciences is five years. The supervisor of a candidate may submit an acceptable motivation for the extension of the period to the Committee for Postgraduate Education of the Faculty, at least six months prior to the expiry of the five years.

## **Doctor of Philosophy**

### *Programme description*

A student can obtain a Doctorate in Philosophy (PhD) in the following disciplines of the medical sciences:

- Anaesthesiology
- Anatomical Pathology
- Audiology\*
- Chemical Pathology
- Community Health
- Dermatology
- Emergency Medicine
- Epidemiology
- Family Medicine
- Haematological Pathology
- Health Sciences Education
- Health Sciences Rehabilitation
- Histology
- Human Genetics
- Internal Medicine
- Medical Microbiology
- Medical Physics
- Medical Physiology
- Medical Virology
- Molecular Biology
- Neurosurgery
- Nuclear Medicine
- Nursing
- Nutritional Sciences
- Obstetrics and Gynaecology
- Occupational Therapy
- Ophthalmology
- Orthopaedic Surgery

- Otorhinolaryngology
- Paediatrics
- Pharmacology
- Physiotherapy
- Plastic and Reconstructive Surgery
- Psychiatry
- Radiological Diagnosis
- Radiotherapy and Radio Isotopes
- Speech-Language Therapy\*
- Surgery
- Thoracic Surgery
- Urology

*\*The offering of this programme is subject to approval by the Higher Education Quality Committee.*

*Specific admission requirements*

A student can be admitted to the degree PhD in Medical Sciences provided that:

- a minimum period of two years has passed since obtaining the degree MB,ChB or BChD;

or

- he has obtained a relevant honours degree in Medical Sciences directly following an MB,ChB/BChD degree;

or

- he has obtained a master's degree in Physiotherapy;

or

- he has obtained a master's degree in Nutrition/Dietetics;

or

- he has obtained a relevant MSc degree (Master of Natural Science) of the University, or another university approved by Senate;

or

- he has obtained another qualification (and has allowed for the required period following the qualification) that is deemed sufficient by Senate;

and

- he complies with all the other provisions for doctorates (as stipulated under Higher Degrees in Part 1 of the Calendar, as well as in the Briefing Document on D degrees).

A student can be admitted to the Doctor of Philosophy degree in Health Sciences Education (PhD in HSE) provided that:

- the applicant has obtained a relevant qualification in the Health Sciences and/or has relevant experience in the Health Sciences;

and

- an M degree in Health Sciences Education or Higher Education has been conferred to him;

or

- he has proven and relevant experience with educational research and/or relevant research in the social sciences;

or

- the applicant has obtained another qualification deemed sufficient by Senate (including the time passed since obtaining the qualification);

and

- he has proven and relevant experience with educational research and/or relevant research in the social sciences.

#### **PLEASE NOTE:**

Admission requirements are subject to amendment based on new requirements of the Department of Higher Education and Training.

#### *Other requirements*

Upon application for registration (enrolment as student), the prospective student needs to use a specific form that can be obtained from the Administration to provide Senate with details of qualifications (accompanied by certified copies of certificates if the qualifications have not been obtained at Stellenbosch University), the place and subject of the dissertation for approval. Upon approval, a supervisor will be appointed.

#### *Programme structure*

The PhD degree will be awarded to a student:

- after he has been registered for the PhD degree at the University for at least two academic years;

- on the condition that, with the supervisor's consent, the student will at least six months prior to the desired date of graduation give written notice to the Registrar of his intention to submit a dissertation;
- based on a dissertation – under supervision by a supervisor – that covers a problem from an area in the Medical Sciences or Health Sciences Education in the case of a PhD in HSE. (The dissertation must provide proof to the satisfaction of the University of advanced, original work, which contributes to the enhancement of fundamental, theoretical and/or clinical knowledge in the particular field of research.);
- provided that the dissertation is accompanied by a statement confirming that it has not previously been submitted to another university or institution in order to obtain a degree or diploma, and that it is the student's own work; and
- after he has passed an oral examination. An oral examination for the doctorate is a general requirement (apart from the advanced doctorates), but subject to the approval of Senate, exemption from this examination may be granted in specific cases based on sufficient motivation.

#### *Assessment and examination*

- The PhD degree is awarded in recognition of high quality, original research and is conventionally assessed based on a dissertation.
- In addition a PhD degree may be obtained in an alternative way, namely primarily based on published scientific articles. However, it is not possible to obtain a PhD degree exclusively on the basis of published articles. More details on this can be found in the briefing document on D studies at the Faculty, and can be obtained from the Faculty Secretary.
- With regard to the date of submission of the dissertation, the number of copies to be submitted, as well as the further requirements with which students have to comply in order to graduate, the general provisions for doctorates will apply as stipulated under Higher Degrees in Part 1 of the Calendar, as well as in the Briefing Document on D degrees of the Faculty of Medicine and Health Sciences.
- The PhD degree is not regarded as basis for registration as a specialist with the Health Professions Council of South Africa, but can indeed be registered as an additional qualification

## **Doctor of Science**

### *Specific admission requirements*

The degree DSc can be awarded to a student, provided that he:

- has done advanced research and/or creative work in the field of Health Sciences to the satisfaction of the University;
- has submitted original, already published work(s) of a high quality that covers a central theme, and proves to Senate his significant and outstanding contribution to the enhancement of knowledge regarding Health Sciences.

Should the prospective student already hold a Doctorate in Philosophy in the Faculty of Medicine and Health Sciences, or another qualification that Senate deems equivalent, he shall:

- be enrolled at this University for at least one academic year prior to being awarded the degree; and
- inform the Registrar in writing of his intention to do so, including the title(s) and scope of the proposed work(s), at least one year prior to reporting as candidate for the degree. Should Senate accept the candidate, a supervisor and examiners will be appointed.

Should the candidate not yet hold a Doctorate in Philosophy in the Faculty of Medicine and Health Sciences, or another qualification that Senate deems equivalent, he shall:

- be enrolled at this University for at least three academic years prior to being awarded the degree; and
- inform the Registrar in writing of his intention to do so, including the title(s) and scope of the proposed work(s), at least three years prior to reporting as candidate for the degree. Should Senate accept the candidate, a supervisor and examiners will be appointed.

A minimum period of five years shall have passed since the candidate had been awarded said Doctorate in Philosophy or another degree or qualification.

### *Assessment and examination*

Prior to 1 August (if the candidate wishes to graduate in December) or prior to 15 October (if the candidate wishes to graduate in March), he shall submit to the University office four copies of the work(s) he wishes to present, accompanied by a statement confirming that it is his own work and that it has not previously been submitted to another university in order to obtain a degree. Where a significant part of the submitted work(s) has not been published in the student's name alone, the student shall provide sufficient



proof of his own contribution, and shall mention who had initiated the work, under whose leadership it had been done, who had executed, processed and formulated it, and which part had already been submitted to another university to obtain a degree.

With regard to the date of submission of the work(s), the number of copies to be submitted, as well as the further requirements with which students have to comply in order to graduate, the general provisions for doctorates will apply as stipulated under Higher Degrees in Part 1 of the University Calendar, as well as in the Briefing Document on D degrees of the Faculty of Medicine and Health Sciences.

## **Transdisciplinary Doctoral Programme focusing on Complexity and Sustainability studies**

### *Programme description*

#### *Inter-departmental and faculty offering*

The Faculty of Medicine and Health Sciences, in cooperation with the Faculties of Arts and Social Sciences, AgriSciences, Engineering, Economic and Management Sciences, Law, Science and Theology, offers opportunities to prospective students who wish to do research on the finding of sustainable solutions to complex social-natural systems problems that cannot necessarily be studied from a particular, mono-disciplinary perspective, to enrich their doctoral studies in any of these faculties through courses on the theory and practice of transdisciplinarity. The current local-global challenges and crises experienced around the issues of poverty, urbanisation, water, waste, energy, food, soil, conflict and violence, equity and justice, etc. are typical problems/themes that lend themselves to research in this regard.

#### *Programme outcomes*

Students completing this doctoral programme can expect to be equipped not only with a profound new understanding of the complex nature of the problems facing the African continent and the world at large, but will also have developed the cross-disciplinary thinking skills necessary to participate in multi-disciplinary teams intent on finding long-term, holistic solutions.

#### *Specific admission requirements*

##### *Admission, registration and supervision*

Prospective students submit their doctoral research proposals to a panel of supervisors constituted by representatives of the participating faculties. These representatives are appointed by the deans of the participating faculties. The panel of supervisors will, in consultation with the prospective student, evaluate the research proposal for its transdisciplinary merits and will

recommend an appropriate multi-disciplinary team of main and co-supervisors to each successful research proposal. This panel will also recommend an appropriate academic department and faculty in which the research is registered. The usual criteria and processes of admission, registration and the appointment of the doctoral supervisor(s) of the participating faculties apply.

**PLEASE NOTE:**

Enrolment to the programme is only accepted every third year.

*Programme structure*

*Dissertation, core modules and learning model*

This programme entails a dissertation constituting all the credits of the degree. A set of core modules, presented by international and local experts, in the areas of transdisciplinary epistemology, methodology and complexity theory will be offered at the commencement of the programme. These modules are not credit bearing. However, written assessment of a thorough understanding of the material covered during these modules will be a requirement for proceeding with the programme. Furthermore, for the duration of the programme students will be required to attend a regular postgraduate seminar series, affording them with the opportunity to present and discuss their work-in-progress with fellow students and their supervisors.

*Duration*

This is a full-time two-year programme during which students will, as far as practically possible, be co-located so as to ensure maximum transdisciplinary synergy with and between fellow students and supervisors. Students will be allowed additional time to complete their dissertations.

*Notes*

*Qualification*

The doctoral qualification of the faculty in which a student is registered, is conferred.

*Assessment and examination*

The usual examination procedures of the University and the faculty in which a student is registered apply.

*Application*

*Funding and bursaries*

Students admitted to this programme will be eligible to apply for bursaries made available by the University and other funding institutions in this regard.

More details and application forms can be obtained from the Programme Coordinator.

### *Enquiries*

In addition to completing the normal University postgraduate application forms, prospective students should complete and return in writing the necessary application forms for this programme. These forms can be requested from:

John van Breda

Coordinator: Transdisciplinary Doctoral Programme

Room 1019, AI Perold Building

Stellenbosch University

Tel.: (021) 808 2152

Fax: (021) 808 2085

E-mail: jrvb@sun.ac.za

## **DIPLOMAS**

### **Postgraduate Diploma in Addiction Care**

#### *Programme description*

The Postgraduate Diploma in Addiction Care aims to enrich, broaden and consolidate the knowledge and expertise of professionals working within the field of addiction care, by providing them with a review of the current evidence base relevant to this field. The purpose is to improve the candidate's care for patients with substance use disorders, rather than to provide basic knowledge or research capacity.

The curriculum covers the most important areas within the field of addiction care and will help mould well-rounded addiction-care practitioners. The intended outcomes of the programme include a comprehensive knowledge of the theory relevant to the field of addiction, as well as holistic skills to provide effective, evidence-based interventions to patients with substance use disorders. Candidates will also learn about appropriate professional and ethical practices.

#### *Specific admission requirements*

For admission to the Postgraduate Diploma in Addiction Care, a candidate shall hold a bachelor's degree and appropriate professional registration in a field relevant to health or social welfare, e.g. social work, medicine, nursing, psychology (a four-year bachelor's degree, such as a BPsych, or alternatively a three-year bachelor's degree and a one-year honours degree, such as a BA

in Psychology followed up by a BAHons) or occupational therapy. At least two years' professional experience will be an advantage. Fluency in written and spoken English is a requirement.

### *Duration*

The programme is offered in a modular fashion, and extends over one year if completed on a full-time basis; it extends over two years if completed on a part-time basis.

### *Presentation*

English.

### *Module outline and credit values*

Students shall complete all eight Compulsory modules and choose one of three optional modules.

#### *Compulsory modules*

Assessment of Substance Misuse	775(12)
Case Management and Monitoring	775(6)
Counselling and Substances	775(12)
Evidence-based Treatment	775(36)
Families and Addiction	775(6)
Introduction to Addiction	775(12)
Law, Ethics and Professionalism	775(6)
Substances and Comorbidity	775(18)

#### *Optional modules*

Dual Disorders	775(12)
Psychopharmacology	775(12)
Substance Use among the Youth	775(12)

In addition to the formal lecture series and examination, all modules entail pre-reading, self-study, assignments and homework tasks. The modules Assessment of Substance Misuse, Substances and Comorbidity, Evidence-based Treatment, and Families and Addiction have compulsory practical placements. All modules other than the Introduction to Addiction module have supervision sessions outside of the indicated lecture times.

### *Assessment and examination*

Students shall pass each of their nine modules with a mark of at least 50%. The final mark for the programme shall be calculated as the average of the marks for the nine completed modules.

### *Enquiries*

Programme coordinators: Drs EM Weich and L Kramer

Tel: (021) 940 4400 E-mail: lizew@sun.ac.za or addictions@sun.ac.za

## **Postgraduate Diploma in Family Medicine**

### *Programme description*

The Postgraduate Diploma in Family Medicine aims to provide doctors with a course of study that would expand their knowledge and skills in family medicine and primary care. The programme also aims to enhance the quality of family medicine/general practice, and to provide for professional development in the discipline.

Graduates of the Postgraduate Diploma in Family Medicine should be able to:

- assess and treat patients with both undifferentiated and more specific problems in a cost-effective way according to the biopsychosocial approach;
- provide all health care in an ethical, compassionate and responsible manner, and show respect for human rights while doing so;
- promote the general health and quality of life of the community; and
- evaluate and reflect on personal and professional strengths and weaknesses in order to change professional practice in an appropriate manner according to the best available evidence.

### *Specific admission requirements*

For admission to the Postgraduate Diploma in Family Medicine, a candidate shall have held an MB,ChB degree of this University, or another qualification deemed by the University to be of an adequate standard, for no less than three years, and shall be registered with the Health Professions Council of South Africa or an equivalent registration body outside South Africa. Applications for admission shall be made in writing. Each candidate's admission to the Diploma in Family Medicine shall be decided by Senate, or by the Executive Committee of Senate acting on its behalf. Foreign qualified applicants who did not use English as medium of instruction for their undergraduate studies may be required to provide evidence of their oral and academic writing

proficiency in English. Candidates shall be working in a clinical setting appropriate to the practice and learning of family medicine.

### *Duration*

The programme is offered in a modular fashion, and extends over two years. The programme is offered by Information and Communication Technology (ICT).

### *Presentation*

English.

### *Notes*

The Calendar entries must be read in conjunction with the more comprehensive outline of the programme regulations that are provided to applicants upon admission to the programme.

### *Module outline and credit values*

#### **First year**

Consultation in Family Medicine	711(20)
Clinical Guidelines and Teaching Evidence Based Medicine	712(20)
Ethics in Family Medicine	743(20)

#### **Second year**

Family-orientated Primary Care	715(20)
Chronic Diseases, Health Promotion and Disease Prevention	716(20)
Community-orientated Family Medicine	741(20)

### *Exemption*

Possible partial or full exemption, on the basis of comparable academic training and professional experience gained at another acknowledged institution.

### *Exit Criteria*

- To be awarded the Postgraduate Diploma in Family Medicine, the student shall obtain a final mark of not less than 50%.
- To be awarded the Postgraduate Diploma in Family Medicine cum laude, the student shall obtain a final mark of not less than 75%.

### *Maximum duration*

A candidate who does not complete the programme within the prescribed period of four years shall not be afforded another opportunity.

### *Assessment and examination*

Students shall pass all six modules with a mark of not less than 50%. At the end of the programme, the final mark shall be calculated as the average of the marks for the six completed modules.

### *Enquiries*

Programme coordinator: Prof J Blitz

Programme administrator: Ms N Cordon-Thomas

Tel.: (021) 938 9061/9170 E-mail: nicolec@sun.ac.za

Website: <http://www.sun.ac.za/fammed/>

## **Postgraduate Diploma in Health Research Ethics**

### *Programme description*

The Postgraduate Diploma in Health Research Ethics is a comprehensive programme that includes a structured array of practical experiences and career development activities relevant to the ethical analysis and review of research involving human participants in resource-constrained settings. The programme aims to build capacity and enhance expertise in health research ethics in southern Africa.

Graduates of the Postgraduate Diploma in Health Research Ethics will have:

- acquired a thorough and systematic knowledge of the history of health research ethics;
- developed an understanding of the philosophical basis of research ethics;
- developed the ability to debate and discuss topical and contentious issues in health research ethics;
- developed skills to conduct a competent review of health research protocols based on scientific and ethics perspectives;
- developed the ability to assume or resume leadership roles on their return to their institutions/home countries and to provide training for research ethics committee (REC) members and other interested faculties; and
- developed the ability to establish a REC in their institutions if one does not exist.

### *Specific admission requirements*

For admission to the Postgraduate Diploma in Health Research Ethics, a candidate shall:

- have a background indicating a significant interest in bioethics or research ethics;
- have a degree in health sciences, law, social sciences or the humanities (e.g. philosophy and theology);
- submit a letter of support from their home institution demonstrating institutional support and explaining why the research ethics capacity-building of the candidate is important to the home institution; and
- be computer literate, have internet access and be fluent in spoken and written English.

Applications for admission shall be made in writing. Each candidate's admission to the Diploma in Health Research Ethics shall be decided by Senate, or by the Executive Committee of Senate acting on its behalf. Foreign-qualified applicants who did not use English as medium of instruction for their undergraduate studies may be required to provide evidence of their oral and academic writing proficiency in English.

### **PLEASE NOTE:**

- Mature midcareer professionals who have research ethics experience will be preferred.
- Preference will also be given to members of research ethics committees (national, institutional or private) and regulatory agencies.
- In keeping with South African guidelines for diversity in REC membership, gender and race will be considered in selecting trainees.

### *Duration*

The programme is offered in a modular fashion, and extends over one year. It is presented by means of three two-week contact sessions.

### *Presentation*

English.

### *Notes*

This Calendar entry must be read in conjunction with the more comprehensive outline of the programme regulations, which are provided to students upon admission to the programme.



### *Module outline and credit values*

Introduction to Bioethics, Health Law and Human Rights	775(30)
Dual Review of Research as Ethical Imperative	775(30)
Research and Vulnerability	775(30)
Research Assignment (Health Research Ethics)	775(30)

During the programme, each student shall have an opportunity to work with a clinical research site and with a health REC.

### *Exit Criteria*

- To be awarded the Postgraduate Diploma in Health Research Ethics, the student shall obtain a final mark of not less than 50%.
- To be awarded the Postgraduate Diploma in Health Research Ethics cum laude, the student shall obtain a final mark of not less than 75%.

### *Maximum Duration*

A student who does not complete the programme within two years shall not be afforded further opportunity to continue the programme.

### *Assessment and examination*

Students shall pass all three modules and the research assignment with a mark of not less than 50%. At the end of the programme, the final mark shall be calculated as the average of the marks for the three modules and the research assignment.

### *Enquiries*

Programme manager: Prof Keymanthri Moodley

Programme administrator: Ms Meagan van Ster

Tel.: 021 938 9600 E-mail: [bioethics@sun.ac.za](mailto:bioethics@sun.ac.za)

Website: <http://www.sun.ac.za/bioethics>

## **Postgraduate Diploma in Infection Control**

### *Programme description*

The programme is presented by means of modules. Each module consists of contact sessions, research and self-study assignments, project recordings and assessment.

The Introduction to Microbiology module is offered each year and the other four modules are offered every second year. Candidates have to enquire on registration which modules are offered during that particular year and which modules in the following year.

### *Specific admission requirements*

For admission to the Postgraduate Diploma in Infection Control, the candidate must hold a bachelor's degree (e.g. MB,ChB or BNurs) or a relevant qualification on at least NQF level 7 and/or a BSc or MSc degree in Microbiology or an equivalent qualification. Admission based on approved previous training will be considered for recommendation by Senate, or the Executive Committee on behalf of Senate. Decisions with regard to admission to the Postgraduate Diploma in Infection Control will be made by Senate, or by the Executive Committee acting on behalf of Senate.

### *Duration*

The programme extends over a minimum period of two years (maximum four years).

### *Presentation*

English.

### *Module outline and credit values*

#### **First-year module**

Introduction to Microbiology	775(25)
------------------------------	---------

#### **First- or second-year modules**

Risk Management and Safe Practice	775(25)
Sterilization and Decontamination	775(25)
Surveillance, Epidemiology and Research Methodology	775(20)
Role of Prevention and Control of Infection in Hospital Design and Management	775(25)

### *Assessment and examination*

Candidates are assessed per module, subject to:

- the successful completion of a written examination (33,3%);
- the assessment of fieldwork based on logbook entries by the supervisor (33,3%);

and

- a brief research project. (33,3%).

Candidates are expected to pass each module separately. Unsuccessful candidates either have to repeat the modules or undergo supplementary assessment, as determined by the Faculty Board.

### *Enquiries*

Programme coordinator: Prof S Mehtar

Tel.: (021) 938 5054 E-mail: [smehtar@sun.ac.za](mailto:smehtar@sun.ac.za)

Website: <http://www.sun.ac.za/uipe>

## **Postgraduate Diploma in Nursing**

### **PLEASE NOTE:**

Computer literacy is a recommendation.

### *Objectives of programmes*

- To equip the student with the necessary theoretical knowledge and clinical skills to practice effectively in his chosen specialist area.
- To promote critical-analytical thinking.
- To equip the student with basic principles and skills of research methodology.

### *Nature of programmes*

- Programmes and/or specific modules are presented by means of interactive telematic education technology.
- Additional areas of specialisation may be determined in conjunction with the head of the division.
- On completion of this postgraduate diploma programme, the student should be able to demonstrate the following skills:
  - the ability to apply knowledge and skills of the specialist area in practice effectively, systematically and confidently (application of higher cognitive, psychomotor and affective skills);
  - the ability to apply basic research principles and methods;
  - that as a practitioner he can effectively apply specialist knowledge (theoretical and clinical) in the relevant healthcare area. This specialist knowledge differs in depth and breadth to that of the BNursHons programme;
  - critical thinking at this level of education in the specialist area;

- skills to effectively organise and manage in the healthcare service/healthcare unit/patient care;
- effective communication with healthcare consumers and colleagues in health services through the use of visual, verbal, non-verbal and written communication skills;
- compliance with professional codes of conduct, codes of ethics, scope of practice and effective solving of professional/ethical/practice/management issues;
- as a generic outcome, participation in the advancement of the South African community's quality of life, and as a specific outcome, that the individual, group or community's healthcare needs are managed effectively;
- the application of appropriate academic, ethical and professional values as a role model in the profession;
- the exploration of strategies to promote effective learning, academic self-reflection and adaptability; and
- the delivery of preventive, promotive, curative and rehabilitative service to humankind at any point on the health-disease continuum.

### *Language specification*

English.

### *Assessment*

- All programmes are subject to the provisions regarding examinations, promotion and reassessment in a single module as outlined in Part 1 of the Calendar.
- A variety of formative and summative assessment methods are used. Each student is assessed individually through:
  - assignments;
  - application of research principles and methodology;
  - patient case presentations;
  - clinical rounds;
  - case studies;
  - clinical assessment;
  - written tests and examinations; and
  - assessment of psychomotor skills in the relevant specialist area.

- The assessment results indicate that outcomes are achieved. Assessment of the nursing specialist in practice indicates appropriate academic depth, focus and integration of theory and practice.
- Each module is assessed separately, with a minimum pass mark of 50% required.
- The final mark for the programme is calculated on the basis of the relative weighting of each module, as indicated by the credit value for each module.

## **Postgraduate Diploma in Nursing (Clinical Programmes)**

### ***Critical Care Nursing***

#### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Research Methodology	771(10)
Principles and Processes of Critical Care Nursing	772(20)
System Abnormalities: Critical Care Nursing	773(25)
Clinical Foundations: Critical Care Nursing	774(45)

#### *Enquiries*

Programme coordinator: Ms J Bell

Tel.: (021) 938 9299/9036 E-mail: jbell@sun.ac.za

Administrative assistant: Ms F Kleinhans

Tel.: (021) 938 9822/9036 E-mail: fkleinhans@sun.ac.za

## **Postgraduate Diploma in Nursing (Clinical Programmes)**

### ***Advanced Midwifery and Neonatology***

#### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Research Methodology	771(10)

Principles and Processes of Advanced Midwifery	775(25)
Principles and Processes of Advanced Neonatology	776(25)
Clinical Foundations: Advanced Midwifery and Neonatology	714(40)

*Enquiries*

Programme coordinator: Ms D Mugendi M'Rithaa

Tel.: (021) 938 9240/9036 E-mail: dkm@sun.ac.za

Administrative assistant: Ms C Maclons

Tel.: (021) 938 9821/9036 E-mail: chantelp@sun.ac.za

**Postgraduate Diploma in Nursing (Clinical Programmes)**

***Operating Room Nursing***

*Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Research Methodology	771(10)
Principles and Processes of Operating Room Nursing	718(50)
Clinical Foundations: Operating Room Nursing	719(40)

*Enquiries*

Programme coordinator: Ms J Bell

Tel.: (021) 938 9299/9036 E-mail: jbell@sun.ac.za

Administrative assistant: Ms F Kleinhans

Tel.: (021) 938 9822/9036 E-mail: fkleinhans@sun.ac.za

## **Postgraduate Diploma in Nursing (Clinical Programmes)**

### ***Primary Health Care Nursing***

#### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Research Methodology	771(10)
Principles and Processes in Primary Health Care	773(15)
Health Diagnosis, Treatment and Care	774(25)
Pharmacology	771(20)
Principles of Clinical Primary Health Care Nursing Practice	775(30)

#### *Enquiries*

Programme coordinator: Ms D Kitshoff

Tel.: (021) 938 9058/9036 E-mail: danenek@sun.ac.za

Administrative assistant: Ms C Maclons

Tel.: (021) 938 9821/9036 E-mail: chantelp@sun.ac.za

## **Postgraduate Diploma in Nursing (Clinical Programmes)**

### ***Advanced Psychiatric Nursing***

#### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Research Methodology	771(10)
Principles and Processes in Advanced Psychiatric Nursing	718(50)
Clinical Foundations: Advanced Psychiatric Nursing	719(40)

### *Enquiries*

Programme coordinator: Dr K Joyner

Tel.: (021) 938 9293/9036 E-mail: kjoy@sun.ac.za

Administrative assistant: Ms M Castle

Tel.: (021) 938 9593/9036 E-mail: mcastle@sun.ac.za

## **Postgraduate Diploma in Nursing (Non-Clinical Programmes)**

### ***Nursing Education***

#### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10), 741(10)
Research Methodology	771(10)
Educational Practice	772(20)
Didactics	773(15)
Curriculum Development: Nursing Training	774(20)
Educational Psychology	712(15)
Applied Education: Health Care and Nursing	713(20)

### *Enquiries*

Programme coordinator: Ms J Bell

Tel.: (021) 938 9299/9036 E-mail: jbell@sun.ac.za

Administrative assistant: Ms F Kleinhans

Tel.: (021) 938 9822/9036 E-mail: fkleinhans@sun.ac.za

## **Postgraduate Diploma in Nursing (Non-Clinical Programmes)**

### ***Nursing Management***

#### *Module outline and credit values*

Principles of Advanced Nursing Practice	711(10)
Research Methodology	771(10)



Management Processes in Nursing and Health Care	712(15)
Health Care Economics and Financial Planning	713(15)
Human Resource Management	742(15)
Risk Management in Health Care	743(15)
Policy Analysis	714(15)
Policy Formulation and Implementation	744(15)
Labour Relations in Health Care Management	745(10)

### *Enquiries*

Programme coordinator: Ms A Damons

Tel.: (021) 938 9472/9036 E-mail: damonsa@sun.ac.za

Administrative assistant: Mrs B Durelle

Tel.: (021) 938 9826/9036 E-mail: bvdsm2@sun.ac.za

## **Postgraduate Diploma in Occupational Medicine**

### *Programme description*

The programme aims to equip medical practitioners with knowledge and skills of appropriate breadth and depth in occupational health so that they can comply with the legal requirements for practicing occupational health in South Africa. At the end of the programme, the graduate will be able to effectively plan, implement and manage occupational health services, and effectively manage patients with occupational health-related disease and/or injury within the multidisciplinary team.

### *Programme outcomes*

Upon completion of the diploma programme, the student will be able to demonstrate the following:

- Effective management of individuals with occupational-related disease or injuries utilising appropriate knowledge and skills in occupational medicine, which includes appropriate screening, correct diagnosis and treatment, as well as appropriate referral for further treatment.

- The ability to identify and quantify occupational health-related problems within the worker community and act appropriately by formulating and implementing viable solutions based on occupational health knowledge and skills of appropriate depth and breadth.
- The ability to act as a coordinating link between the employer, the employee and the multidisciplinary team in Occupational Health to ensure optimal worker health.
- The ability to plan, implement and effectively manage occupational health services based on occupational health knowledge and skills of appropriate depth and breadth.

### *Specific admission requirements*

For admission to the Postgraduate Diploma in Occupational Medicine, a student shall have held for no less than two years an MB,ChB degree awarded by this University, or some other qualification deemed adequate by the University, and shall have been registered as a medical practitioner with the Health Professions Council of South Africa for no less than one year. Application shall be made in writing, and Senate, or the Executive Committee acting on behalf of Senate, will decide on whether a candidate will be admitted to the Diploma programme in Occupation Medicine.

### *Presentation*

Afrikaans and English.

### *Module outline and credit values*

#### *Theoretical modules (all compulsory)*

Occupational Health Management and Legislation	772(12)
Occupational Hygiene and Risk Management	772(10)
Chemical Risk Factors in the Workplace	772(12)
Physical Risk Factors in the Workplace	772(12)
Ergonomic Risk Factors in the Workplace	772(12)
Biological Risk Factors in the Workplace	773(6)

Psychosocial Risk Factors in the Workplace	773(6)
Clinical Occupational Medicine	771(16)
Evaluation of Disability and Fitness for Work/Employment	771(16)
Research Methodology	772(10)
Health Promotion and Communication	773(4)
Environmental Medicine	773(4)

*Practical module (not compulsory)*

Exposure through Industrial Visits	773(6)
------------------------------------	--------

*Assessment and examination*

The examination in this programme is conducted in November of the second year of enrolment. The examination consists of three three-hour papers and the minimum pass mark is 50%. The final mark is calculated on the basis of a weighted average in the ratio 30:70 for the continuous assessment and the examination mark. A student who fails the November examination will be admitted to a re-examination in the following January if a final mark of at least 40% has been achieved. The re-examination will be a structured oral assessment.

*Enquiries*

Programme coordinator: Dr SE Carstens

Tel.: (021) 938 9206 E-mail: sec@sun.ac.za

## **Postgraduate Diploma in Pharmaceutical Medicine**

*Programme description*

The Postgraduate Diploma in Pharmaceutical Medicine (PG Dip (Pharmaceutical Medicine)) aims to provide appropriately qualified scientists with a programme of study that would expand their knowledge and skills in pharmaceutical medicine. Pharmaceutical medicine deals with all aspects of non-clinical and clinical drug development, regulatory affairs, marketing of pharmaceutical products and drug safety/pharmacovigilance. Specifically, this discipline encompasses the following areas:

- Discovery of New Medicines
- Pharmaceutical Development

- Toxicity Testing
- Legal and Ethical Issues
- Development of Medicines
- Clinical Trials
- Statistics and Data Management
- Safety of Medicines
- Regulatory Affairs
- Information, Promotion and Education
- Economics of Healthcare

The programme also aims to enhance the quality of scientists working on the development and testing of new drugs, and to provide for professional development in the discipline. Graduates of the Postgraduate Diploma in Pharmaceutical Medicine programme should:

- have a thorough and systematic knowledge of pharmaceutical medicine and drug development;
- be able to identify a relevant research question in the field of pharmaceutical medicine, to design and conduct the research project, to analyse the results and to present the results in a scientific format and in compliance with requirements of regulatory authorities;
- be able to critically evaluate and practically apply new knowledge, understanding and skills to the discipline of pharmaceutical medicine in South Africa; and
- be able to evaluate and reflect on personal and professional strengths and weaknesses in order to change professional practice in an appropriate manner according to the best evidence available.

### *Specific admission requirements*

For admission to the postgraduate diploma programme in Pharmaceutical Medicine, a candidate shall have obtained:

- an MB,ChB or BChD degree; or
- a BPharm degree; or
- a BNurs or BSc (Biological Sciences or Biomathematics) degree with at least two years' experience in drug development/pharmaceutical medicine; or
- another qualification deemed by the University to be of an adequate standard.

Candidates who do not meet any of these criteria, may be enrolled after a successful interview with programme coordinators and on approval by Senate or the Executive Committee on behalf of Senate. Admission based on approved previous training shall be considered for recommendation by Senate, or the Executive Committee on behalf of Senate. Applications for admission shall be made in writing. Foreign-qualified applicants who did not use English as medium of instruction for their undergraduate studies may be required to provide evidence of their oral and academic-writing proficiency in English.

### *Duration*

The programme extends over two years and is presented by means of contact sessions as well as self-study assignments. In addition, the programme includes a research project.

### *Presentation*

English.

### *Notes*

These Calendar entries must be read in conjunction with the more comprehensive outline of the programme regulations, which are provided to applicants upon admission to the programme.

### *Module outline and credit values*

#### **First year**

Introduction to Pharmaceutical Medicine	775(24)
Non-clinical Development of Medicines	775(24)

#### **Second year**

Clinical Development of Medicines	775(24)
Pharmacovigilance, Pharmaceutical Marketing and Economics of Health Care	775(18)

#### **First and second years**

Research Project in Pharmaceutical Medicine	775(30)
---	---------

### *Exit Criteria*

To be awarded the Postgraduate Diploma in Pharmaceutical Medicine, the student shall have:

- completed two calendar years as a registered student for the PG Dip (Pharmaceutical Medicine);
- obtained at least 50% in his modular tests during the two-year programme;
- written two three-hour examination papers covering the modules; and
- submitted a written report and delivered an oral presentation on completion of the research assignment.

### *Assessment and examination*

Students shall pass each of the four modules with a mark of not less than 50%. To complete the PG Dip (Pharmaceutical Medicine) programme successfully, the final mark for the programme shall be 50% or more. To pass the PG Dip (Pharmaceutical Medicine) programme with distinction, the final mark for the programme shall be 75% or more. The final mark for the programme will be made up of a weighted average of the marks for each component, namely:

- two three-hour written papers (2 x 30%);
- a written research assignment and its oral presentation (25%); and
- an oral examination in the presence of an external examiner (15%).

### *Enquiries*

Programme manager: Prof B Rosenkranz

Programme administrator: Ms L Hanekom

Tel.: (021) 938 9331/9045 E-mail: lejandra@sun.ac.za

## 4. MODULE CONTENT OF UNDER- AND POSTGRADUATE MODULES

### ABBREVIATIONS AND NUMBERING SYSTEM FOR SUBJECTS AND MODULES

All subjects are represented by a subject number of five digits. Each module of the subject is represented by a three-digit module code, in which the year of study and semester of presentation (unless otherwise stated) are combined. The subjects, together with their constituent modules, credits, module design, teaching load, language indicator and module content, are detailed below.

#### Example:

65684 LIFE-FORMS AND FUNCTIONS OF CLINICAL IMPORTANCE				
111	17	Life-forms and Functions of Clinical Importance	6L, 4P	T

#### Explanation:

65684 is the subject number, and refers to the subject Life-forms and Functions of Clinical Importance.

111(17) is the module code of the module Life-forms and Functions of Clinical Importance. The 17 is usually placed in brackets. The module code 111(17) has the following meaning:

- The first digit refers to the year of study in which the module is presented.
- The second digit is a number to discriminate between modules of the same subject in the same year of study and refers to the semester (unless stated otherwise), according to the following pattern:
  - 1, 2 or 3: modules offered in the first semester;
  - 4, 5 or 6: modules offered in the second semester; and
  - 7, 8 or 9: modules offered over two semesters, i.e. a year module.
- The third digit has no specific meaning, but can be used to discriminate between different modules of the same subject in the same semester of the same year of study.
- The number in the second block (otherwise in brackets) indicates the credit value of the module.

Life-forms and Functions of Clinical Importance 111(17) is therefore offered as a module during the first semester of the first year and a student will acquire 17 credits on completion of the module.

The teaching load of the module is indicated in the block after the module subject.

The following abbreviations are used:

L = lectures (e.g. 1L)

P = practical periods (e.g. 1P, 2P, 3P)

S = seminar (e.g. 1S, 2S)

T = tutorials (e.g. 1T, 2T)

The teaching load of Life-forms and Functions of Clinical Importance 111(17) amounts to six lectures plus four practicals per week for the duration of the module, i.e. one semester.

In the last block, the language specification of each module is indicated. The following abbreviations are used:

### **A specification**

- Prescribed books are in Afrikaans and/or English.
- Class notes compiled by the lecturer are:
  - fully in Afrikaans; or
  - where possible, fully in Afrikaans and fully/partly (e.g. core class notes) also in English.
- Other required reading (e.g. articles in journals, books) are in Afrikaans and/or English.
- Module frameworks and study guides, compiled by the lecturer, are in Afrikaans and, where possible, made available in both Afrikaans and English to students who prefer English as language of study.
- Transparencies and data projector study material used by lecturers during lectures, seminars, tutorials and practicals are in Afrikaans.
- Verbal communication in lectures, seminars, tutorials and practicals will be in Afrikaans, but key terminology and concepts can also be briefly explained in English. Students may pose questions in English and will be answered in English. Guest lectures may be presented in English by foreign lecturers and/or South African lecturers with limited proficiency in academic Afrikaans.
- Test and examination question papers will be in both Afrikaans and English in the same document.



- Written instructions from lecturers in tutorials, seminars and practicals where assessment is done will be made available in both Afrikaans and English, in the same document.
- The written responses of students arising from tests and examination questions, and for assignments, can be in either Afrikaans or English.
- Verbal presentations by students during lectures, seminars, tutorials and practicals can be in Afrikaans or English.

### **T specification**

- Prescribed textbooks are in Afrikaans and/or English.
- Class notes compiled by lecturers will be:
  - fully in Afrikaans and fully in English; or
  - alternately in Afrikaans and English.
- Other required reading (e.g. journal articles, books) will be in Afrikaans and/or English.
- Module frameworks and study guides will be made available:
  - fully in Afrikaans and fully in English; or
  - alternately in Afrikaans and English in keeping with the language preference of the relevant lecturer.
- Transparencies and data projector material used in lectures, seminars, tutorials and practical will be in Afrikaans or English.
- Verbal communication by a lecturer in lectures, seminars, tutorials and practicals of a module will be:
  - in Afrikaans and English in the same class, provided that Afrikaans will be used for at least 50% of the time; or
  - alternately in Afrikaans and English in different classes of a module or programme, provided that Afrikaans will be used for at least 50% of the time.
- Test and examination question papers will be fully in Afrikaans and fully in English, in the same document.
- Written instructions by lecturers for tutorials, seminars and practicals where assessment is done will be:
  - fully in Afrikaans and fully in English in the same document;
  - alternately in Afrikaans and English, in keeping with the language used in non-assessment material (class notes, module frameworks, study guides, etc.), provided that Afrikaans will be used for 50% of the time.

- The written answers to tests, examinations and assignments may be in either Afrikaans or English according to the preference of the student.
- The oral presentations by students during lectures, seminars, tutorials and practicals may be in Afrikaans or English according to the preference of the student.

Following on the description of the content of the module, the prerequisite pass, prerequisite and/or corequisite modules are given for that module. The following abbreviations are used:

PP = prerequisite pass module

P = prerequisite module

C = corequisite module

The following definitions apply:

- A prerequisite pass module is a module that students must have passed before they are allowed to take the module(s) for which it is a prerequisite pass module.
- A prerequisite module is a module in which students must have achieved a class mark of at least 40, or a final mark of at least 40 in the case of a module subject to continuous assessment, before they are allowed to take the module for which it is a prerequisite module.
- A corequisite module is a module that a student has to take in the same academic year as the module for which it is a corequisite, or in an earlier academic year.

**Note:**

No qualification shall be awarded unless the candidate has passed all the relevant prerequisite and corequisite modules.

<b>10999 ADVANCED HYPERBARIC MEDICINE</b>				
<b>774</b>	<b>20</b>	<b>Advanced Hyperbaric Medicine</b>		
<p>The module indicates the limits of current knowledge about hyperbaric medicine, and prepares the student for the module on research methodology and for the research project.</p> <p>Home department: COMMUNITY HEALTH</p>				

### **11090 ADVANCED STUDIES IN AUDIOLOGY**

**812**

**45**

**Advanced Studies in  
Audiology**

The content of this module will be determined by the head of the division in consultation with the student.

Home department: SPEECH-LANGUAGE AND HEARING THERAPY

### **11000 ADVANCED UNDERWATER MEDICINE**

**774**

**20**

**Advanced Underwater  
Medicine**

This module indicates the limits of current knowledge of underwater medicine. It prepares the student for the module on research methodology and for the research project.

Home department: COMMUNITY HEALTH

### **57487 AFRIKAANS LANGUAGE ACQUISITION**

**178**

**24**

**Afrikaans for foreign  
language speakers**

3L, 2P

Only students with no training in Afrikaans or who had Afrikaans as a Second Additional Language are admitted to this module.

An integrated approach is followed in the module to study the four communication skills – reading, listening, talking and writing.

Elementary interaction around a narrative text and thematically related texts (general

and literary)

Strategic reading and listening skills in academic lecture situations

Relevant language study and vocabulary enhancement

Notes

1. Recommendations on the placing of students in Afrikaans Language Acquisition 178 or in Afrikaans as Second Language are based on departmental language-proficiency tests which are written at the beginning of the year.
2. Students of Speech-Language and Hearing Therapy I and the Extended

Degree Programme for Speech-Language and Hearing Therapy I of the Faculty of Medicine and Health Sciences are placed in either Xhosa 178 or Afrikaans Language Acquisition 178 or 188 according to a language proficiency test.

3. This module does not lead to Afrikaans and Dutch 278.

4. See the departmental information document for further details.

A system of continuous assessment is used in Afrikaans Language Acquisition 178. Students are informed in writing at the beginning of the module about the way in which the final mark is calculated and receive regular feedback on their progress in the course of the module. An oral exam takes place at the end of each semester.

Home department: AFRIKAANS AND DUTCH

**188**

**24**

**Afrikaans as Second Language**

3L, 2P

Only students with Afrikaans as First Additional Language and whose mother language is not Afrikaans are admitted to this module. No mother-tongue speakers of Afrikaans or students who passed Afrikaans as a Home Language may take this module.

An integrated approach is followed in the module to study the four communication skills – reading, listening, talking and writing.

Students encounter various methods of language study:

Advanced interaction around thematically related texts (general and literary)

Strategic reading and listening skills in academic lecture situations

Relevant grammar study

Visual media and film study

Oral communication

*Notes*

1. Recommendations on the placing of students in Afrikaans as a Second Language 178 or in Afrikaans and Dutch 178 are based on departmental language-proficiency tests which are written at the beginning of the year.

2. Students of Speech-Language and Hearing Therapy I and the Extended Degree Programme for Speech-Language and Hearing Therapy I in the Faculty of Medicine and Health Sciences are placed in either Xhosa 178 or Afrikaans Language Acquisition 178 or 188 according to a language proficiency test.

3. This module does not lead to Afrikaans and Dutch 278.

4. See the departmental information document for further details.

A system of continuous assessment is used in Afrikaans as a Second Language 188. Students are informed at the beginning of the module about the way in which the final mark is calculated and receive regular feedback on their progress in the course of the module. An oral exam takes place at the end of each semester.

Home department: AFRIKAANS AND DUTCH

## 10448 ANAESTHESIOLOGY

<b>471</b>	<b>15</b>	<b>Anaesthesiology</b>	3 weeks	<b>T</b>
<p>(i) The module provides introductory principles regarding anaesthesia, resuscitation and intensive care.</p> <p>(ii) It deals with the following lecture subjects: Equipment: Anaesthetic machine and carbon dioxide absorption; Monitoring during anaesthesia; Pharmacology: Autonomic nervous system; Induction agents; Inhalational agents; Muscle relaxants; Inhalational agents: kinetics; Drug interactions; Premedication; Airway: Anatomy, assessment, intubation; Intubation (continued) – failed intubation; Anaesthetic circuits; Blood and fluids; Administration of general anaesthesia; Postoperative nausea and vomiting; Cardiovascular: Physiology, including monitoring of CVP; Ischaemic heart disease; Hypertension and heart failure; Valve lesions, arrhythmias, pace makers; Influence of anaesthesia on the respiratory system; Obstructive and restrictive disease; Opiates; Pain: Physiology and pathophysiology; Asthma, infection and trauma; Ear, nose and throat/ophthalmology; Central nervous system; Kidneys; Liver; Treating pain, including postoperative pain; Endocrine pathology: Diabetes mellitus; Adrenal cortex: Hypo- and hyperfunction; Malignant hyperthermia; Obesity and Geriatrics; Porphyria and atypical response to suxamethonium; Paediatric anaesthesia; Obstetrics: General; Aspiration; Local anaesthesia: pharmacology, including toxic doses and side effects; Spinal and epidural anaesthesia; Further kinds of regional blockade; Conscious sedation, laparoscopic surgery; Resuscitation: General resuscitation, including anaphylaxis; Cardiopulmonary resuscitation; Acute poisoning: Diagnosis and management; Acute poisoning: Snakes, scorpions, spiders, sea animals; Acute poisoning: Intensive Care – CO salicylates, TAD, organophosphates, paracetamol and plants; Blood gases and ventilation; Near drowning; Septic shock, systemic inflammation.</p>				

(iii) It includes a workshop (small groups) about the principles of cardiopulmonary resuscitation.

Home department: ANAESTHESIOLOGY AND CRITICAL CARE

### 10391 ANATOMICAL PATHOLOGY

<b>221</b>	<b>3</b>	<b>Anatomical Pathology</b>	2L	<b>T</b>
------------	----------	-----------------------------	----	----------

General introduction to Anatomical Pathology; principles of the processes of disease, injury and healing.

Home department: PHYSIOTHERAPY

<b>872</b>	<b>34</b>	<b>Anatomical Pathology</b>		
------------	-----------	-----------------------------	--	--

The Anatomical Pathology module encompasses the principles of histology and cytology, cellular injury, inflammation, repair and healing, haemodynamic disorders, neoplasia, genetics and paediatrics, environmental germs, respiratory system pathology, haematology and lymphoid pathology.

Home department: ANATOMIC PATHOLOGY

### 10421 ANATOMICAL PATHOLOGY

<b>775</b>	<b>30</b>	<b>Anatomical Pathology</b>		
------------	-----------	-----------------------------	--	--

General Anatomical Pathology; basic principles of cytopathology; relevant systemic pathology (organ based and relevant to the scope of the research project); techniques and diagnostic modalities used in Anatomical Pathology

Home department: ANATOMIC PATHOLOGY

### 10413 ANATOMICAL PATHOLOGY PART 1

<b>874</b>	<b>30</b>	<b>Anatomical Pathology Part 1</b>		
------------	-----------	------------------------------------	--	--

Advanced basic knowledge and mastery of the theory and its applications in Anatomical Pathology.

Home department: ANATOMIC PATHOLOGY

### 10948 ANATOMICAL PATHOLOGY PART II

**872**

**210**

**Anatomical Pathology Part II**

Comprehensive and specialised knowledge and mastery of advanced theory and its application in Anatomical Pathology.

Home department: ANATOMIC PATHOLOGY

### 13027 ANATOMICAL TECHNIQUES

**771**

**10**

**Anatomical Techniques**

Research-based study on the history of the preservation and embalming of human tissue, and the application of the knowledge thereof.

Home department: ANATOMY AND HISTOLOGY

### 22810 ANATOMY

**873**

**33**

**Anatomy**

The focus of the Anatomy module is the head, neck and thorax. In-depth knowledge is required of the anatomy and embryology of the ear, nose and throat.

Home department: ANATOMY AND HISTOLOGY

**874**

**40**

**Anatomy**

The focus will be on the anatomy of the head and neck area. An in-depth knowledge of the anatomy and embryology of the orbit, eye and adnexae will be required.

Home department: OPHTHALMOLOGY

### 52183 ANATOMY (AHS)

**141**

**13**

**Anatomy (AHS)**

3L, 3P

**T**

Introduction to Anatomy; osteology; anatomy of the musculoskeletal system, cardiovascular system and respiratory system; histology and surface anatomy.

Home department: ANATOMY AND HISTOLOGY

<b>211</b>	<b>12</b>	<b>Anatomy (AHS)</b>	2L, 2P	<b>T</b>
<p>Anatomy and neuroanatomy of the head and neck; synopsis of abdomen, pelvis and perineum, urinary system, skin, endocrine system, male and female reproductive system, nervous system and epithelium; histology and surface anatomy.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				
<b>231</b>	<b>9</b>	<b>Anatomy (AHS)</b>	2L, 0.5P	<b>T</b>
<p>Histology: bone and cartilage, bone formation, nerves, blood cells, blood vessels, skin gastrointestinal tract, respiratory system, urinary system.</p> <p>Anatomy: osteology, endocrine system, digestive system.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				
<b>278</b>	<b>36</b>	<b>Anatomy (AHS)</b>	3.5L	<b>T</b>
<p>Anatomy and neuroanatomy of the head and neck. Thorax, abdomen, pelvis, perineum and extremities. Histology: Cell and intracellular substance, blood, bone, respiratory system, urinary system, skin, endocrine system, male and female reproductive systems, nervous system, epithelium.</p> <p>Students make use of pre-dissected cadavers; they are not required to perform any dissection themselves.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				

#### **46264 APPLIED ANATOMY**

<b>117</b>	<b>12</b>	<b>Applied Anatomy</b>	3L, 1P	<b>T</b>
<p>General gross anatomy, tissues, the skeleton, head and neck, thorax and muscles of respiration, abdomen and supplementary muscles of respiration. Histology.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				

#### **13045 APPLIED BASIC SCIENCES**

<b>871</b>	<b>100</b>	<b>Applied Basic Sciences</b>		
<p>Broad overview of human biology at the genetic, molecular and cellular level. Normal anatomy and physiology of all organ systems of the human body including the immune system. Physiological changes of newborn,</p>				



child and adolescent. Pathophysiological changes due to disease. Principles of laboratory diagnostic methods and imaging techniques. Principles of pharmacotherapeutics. Principles of medical ethics. Principles of epidemiology and research methods, including statistical analysis.

Home department: PEDIATRICS AND CHILD HEALTH

### **11830 APPLIED FOOD SCIENCE**

<b>254</b>	<b>14</b>	<b>Applied Food Science</b>	4L, 4P	<b>T</b>
------------	-----------	-----------------------------	--------	----------

Sensory evaluation; food experiments, and development and evaluation of therapeutic recipes; principles of menu planning and emergency menus; food preservation methods and the effect thereof on the quality and nutrient content of foods; packaging of food; the application of HACCP; nanotechnology; aspects of genetically modified and organic foods.

Home department: HUMAN NUTRITION

### **64769 APPLIED HISTOLOGY AND HISTOPATHOLOGY**

<b>776</b>	<b>4</b>	<b>Applied Histology and Histopathology</b>		
------------	----------	---	--	--

General Anatomical Pathology: characteristics, classification and incidence of disease; diagnostic pathology in clinical practice; responses to cellular injury; ischemia, infarction and shock; immunology and immunopathology; inflammation; carcinogenesis and neoplasia. Techniques and diagnostic modalities used in Anatomical Pathology. Principles of fixation; tissue processing; tissue preparation; histochemistry and enzyme histochemistry.

Home department: ANATOMIC PATHOLOGY

### **52159 APPLIED PHYSIOTHERAPY**

<b>373</b>	<b>66</b>	<b>Applied Physiotherapy</b>	2L, 2P	<b>T</b>
------------	-----------	------------------------------	--------	----------

Choice, relevance and adaptation of physiotherapeutic principles to basic and more complex patient images, including neurological, orthopaedic, pulmonological and dermatological problems in babies, children, adolescents, adults and the aged; clinical processes of decision making. Multi- and interdisciplinary teamwork and references. Basic synopsis of the effect of pharmacological substances.

Home department: PHYSIOTHERAPY				
<b>473</b>	<b>19</b>	<b>Applied Physiotherapy</b>	3L, 6P	<b>T</b>
Choice, application and adjustment of physiotherapy principles regarding selected complicated cases. Integration of all aspects of patient handling. Home department: PHYSIOTHERAPY				

<b>56375 ASSIGNMENT</b>				
<b>810</b>	<b>120</b>	<b>Assignment</b>		
Entails a research assignment at master's level that should preferably be published in a journal. The assignment must be completed for the student to be admitted to the final examination of the Colleges of Medicine of South Africa (applicable to all students admitted to the programme as from 2008). Completion of the assignment is also a prerequisite for graduation. It comes highly recommended for students to complete a clinical research module course in order to successfully complete the assignment module. Home department: EMERGENCY MEDICINE				
<b>812</b>	<b>120</b>	<b>Assignment</b>		
Scientific publication or paper based on original research conducted during the five-year residency. Home department: SURGERY				
<b>814</b>	<b>60</b>	<b>Assignment</b>		
Research assignment: the subject and scope of the assignment are determined by the Head of the Centre for Rehabilitation Studies. Home department: CENTRE FOR REHABILITATION STUDIES				
<b>818</b>	<b>120</b>	<b>Assignment</b>		
A relevant assignment that will be assessed by both internal and external examiners. Home department: OBSTETRICS AND GYNAECOLOGY				
<b>823</b>	<b>120</b>	<b>Assignment</b>		
An assignment, undertaken and executed independently and presented as a formal research project, is the minimum requirement. The quality of the report must be on a par with a published article in a peer-reviewed				

scientific journal. Home department: OTORHINOLARYNGOLOGY				
<b>824</b>	<b>120</b>	<b>Assignment</b>		
The minimum requirement will be a research project undertaken and executed independently and reported in writing in the form of a thesis or a published, peer-reviewed scientific article. The level of the research report will be on a par with a published article in a scientific journal. Home department: OPHTHALMOLOGY				
<b>833</b>	<b>120</b>	<b>Assignment</b>		
The student must have the research protocol registered within one year and complete the research assignment within three years of registration. This should be submitted in the form of an article ready for publication. Completion of this module is required before the student may write the final (Part II) examination. Home department: INTERNAL MEDICINE				
<b>836</b>	<b>120</b>	<b>Assignment</b>		
In the format as prescribed by the Faculty of Medicine and Health Sciences. Home department: NEURO SURGERY				
<b>837</b>	<b>120</b>	<b>Assignment</b>		
Assignment, which includes a research project at master's level and which preferably has to be published in a journal. The assignment must be completed for the student to be admitted to the final examination of the Colleges of Medicine of South Africa. The completion of the assignment is also a prerequisite for graduation. Home department: INTERNAL MEDICINE				
<b>873</b>	<b>120</b>	<b>Assignment</b>		
The capacity for independent study through the completion of an assignment or a research publication during the final year. Home department: ANATOMIC PATHOLOGY				

### 10959 BASIC APPLIED SCIENCES

**874**

**120**

**Basic Applied Sciences**

Must be completed within the first eighteen months of enrolment. Includes Applied Anatomy, Physiology, Pharmacology and Basic Clinical Pathology.

Home department: EMERGENCY MEDICINE

### 10956 BASIC HYPERBARIC MEDICINE

**772**

**25**

**Basic Hyperbaric Medicine**

On completion of the module, the medical practitioner shall be able to decide, on the assessment of any patient, whether sufficient evidence exists for referral of the patient to a hyperbaric unit for hyperbaric oxygen therapy.

Home department: COMMUNITY HEALTH

### 10957 BASIC MEDICAL SCIENCES

**811**

**96**

**Basic Medical Sciences**

This includes all the basic sciences relevant to the practice of Internal Medicine, e.g. physiology, pathology, pharmacology and principles of ethics. Successful completion of this module requires satisfactory attendance, as well as a 50% test mark in the FCP (SA) Part I examination. The student must pass Part I of the examination within two years, and preferably within one and a half years, of registration.

Home department: INTERNAL MEDICINE

### 10961 BASIC SCIENCES

**871**

**90**

**Basic Sciences**

Surgical Anatomy and Physiology, and General Pathology  
Must be completed within eighteen months of first registration.

Home department: SURGERY

<b>874</b>	<b>120</b>	<b>Basic Sciences</b>		
<p>This module includes subjects forming the foundation of Obstetrics and Gynaecology, such as Anatomy, Physiology and Endocrinology.</p> <p>Home department: OBSTETRICS AND GYNAECOLOGY</p>				

<b>66133 BASIC THERAPEUTICAL PRINCIPLES</b>				
<b>198</b>	<b>5</b>	<b>Basic Therapeutical Principles</b>	4L, 1T	<b>T</b>
<p>Introductory aspects of drug therapy. How drugs act: general principles and molecular aspects; absorption and distribution of drugs; drug elimination and pharmacokinetics. The autonomic nervous system, effects of drugs on noradrenergic and cholinergic transmission, and drugs acting on the central nervous system. Anti-inflammatory and immunosuppressive drugs, analgesic drugs, and chemotherapy of infection and malignancy.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

<b>10958 BASIC UNDERWATER MEDICINE</b>				
<b>772</b>	<b>30</b>	<b>Basic Underwater Medicine</b>		
<p>After successful completion of this module, the medical practitioner will be able to examine a diver and determine his ability to work as a diver. The person will also be able to register with the Department of Labour as a Designated Medical Practitioner in terms of the diving regulations.</p> <p>Home department: COMMUNITY HEALTH</p>				

<b>25534 BIOLOGY (MEDICINE)</b>				
<b>197</b>	<b>12</b>	<b>Biology (Medicine)</b>	4L	<b>T</b>
<p>A supplementary module for students in Life Forms and Functions of Clinical Importance 111. It covers the organism kingdom as well as cell structure and functions and an introduction to organ systems and function.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

<b>12545 BIOLOGY (OCC)</b>				
<b>111</b>	<b>18</b>	<b>Basic Biology</b>	5L, 4P	<b>T</b>
<p>Introduction. Classification of organisms; the cell and cell division; genetics of reproduction; basic human genetics; autosome and hereditary chromosome variation; dominant, recessive and hereditary genetic variation. Ecology, evolution, embryology, introduction to mammal biology. Medically important plants and animals.</p> <p><i>Presented by the Department of Botany and Zoology.</i></p> <p>Home department: BOTANY AND ZOOLOGY</p>				
<b>153</b>	<b>14</b>	<b>Biology</b>	4L	<b>T</b>
<p>Cell chemistry, membrane structure, biosynthesis of nucleic acids and proteins, metabolism, introduction to the principles of microbiology.</p> <p>Home department: BOTANY AND ZOOLOGY</p>				

<b>56340 BIOMECHANICS</b>				
<b>873</b>	<b>8</b>	<b>Biomechanics</b>		
<p>Detailed knowledge and application of functional anatomy and biomechanics of joints, and myofascial and peripheral neural systems of the human body; normal and abnormal movement patterns.</p> <p>Home department: PHYSIOTHERAPY</p>				

<b>39985 BIOSTATISTICS AND EPIDEMIOLOGY</b>				
<b>322</b>	<b>9</b>	<b>Biostatistics and Epidemiology</b>	2L	<b>T</b>
<p>Descriptive statistics, probability, hypothesis testing, parametric and non-parametric methods, regression and correlation analyses, analysis of variance with special reference to applications in dietetics. Practical instruction in the use of Excel.</p> <p>Home department: HUMAN NUTRITION</p>				

### 52310 CARDIOVASCULAR SYSTEM

<b>271</b>	<b>30</b>	<b>Cardiovascular System</b>	7 weeks	<b>T</b>
<p>Cardiovascular characteristics of the thoracic wall and cavity; the circulatory system: organisation and haemodynamics; the cardiac pump: structure and function; the arterial system: organisation and structure; the venous system: organisation and structure; micro-circulation and the lymphatic system; basis of electrophysiology; control mechanisms in the cardiovascular system. Evaluation; diseases of rhythm and conduction; cardiovascular system risk factors: general; dyslipidaemia; hypertension; ischaemic heart disease; vascular disease; cardiac valve diseases; infectious and inflammatory diseases of the heart; heart failure and myocardial disease; congenital heart disease; cardiovascular system in systemic diseases; trauma, pregnancy, anaesthetics; evaluation; diseases of rhythm and electrical conduction; cardiovascular system risk factors: general; lipidaemia; hypertension; ischaemic heart disease; vascular disease; valvular diseases; infective and inflammatory diseases of the heart; cardiac failure and myocardial disease; congenital heart disease; the cardiovascular system in systemic diseases, trauma and pregnancy and anaesthesia.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

### 13028 CELL BIOLOGY

<b>771</b>	<b>10</b>	<b>Cell Biology</b>		
<p>The cell is the functional unit of the body and dysfunction of the cell relates to pathology. Hereditary and environmental aspects (pathogens, radiation, toxic/carcinogenic chemicals) are involved in cellular dysfunction which results in organ failure and death.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				

<b>11657 CHEMICAL PATHOLOGY</b>				
<b>775</b>	<b>30</b>	<b>Chemical Pathology</b>		
<p>General Chemical Pathology; techniques and diagnostic modalities used in Chemical Pathology; principles of blood analysis; relevant techniques, including spectrophotometry, chromatography, atomic absorption, electrophoresis, flow cytometry, DNA extraction and polymerase chain reaction</p> <p>Home department: ANATOMIC PATHOLOGY</p>				
<b>872</b>	<b>70</b>	<b>Chemical Pathology</b>		
<ul style="list-style-type: none"> <li>• Renal function, electrolytes, blood gases, liver functions, lipids and cardiac markers</li> <li>• Enzymes, proteins, tumour markers, gastrointestinal system and fluids</li> <li>• Endocrinology and trace elements</li> </ul> <p>Sections are assessed by written papers, practical and oral assessments, if needed, at the completion of each module and a portfolio of evidence submitted as part of continuous assessment and a prerequisite for graduation. Details of continuous assessment are provided in the study guide. The final examination takes place after the successful completion of all the sections, and consists of a written paper, OSCE and oral examination. External examiners are involved according to the University guidelines.</p> <p>Home department: CHEMICAL PATHOLOGY</p>				

<b>65692 CHEMISTRY FOR HEALTH SCIENCES</b>				
<b>111</b>	<b>17</b>	<b>Chemistry for Health Sciences</b>	<b>5L, 3P</b>	<b>T</b>
<p>The module covers areas of general chemistry required as a foundation for studying further in the health sciences. It comprises atomic structure and bonding; stoichiometry; gas laws; properties of solutions; chemical kinetics; chemical equilibria; acids, bases and buffer solutions; electrochemistry; organic chemistry and biomolecules.</p> <p>Home department: CHEMISTRY AND POLYMER SCIENCE</p>				



### 25518 CHEMISTRY (MEDICINE)

<b>197</b>	<b>12</b>	<b>Chemistry for EDP Students</b>	4L, 1P	<b>E</b>
<p>This module is an aid to the mainstream module Chemistry 111 (Health Sciences) and provides an introduction to chemistry for students who are aiming at careers in the health sciences. It is offered parallel to the mainstream module. This module is offered only to qualifying students.</p> <p>Home department: CHEMISTRY AND POLYMER SCIENCE</p>				

### 13029 CLINICAL AND SURGICAL ANATOMY

<b>771</b>	<b>10</b>	<b>Clinical and Surgical Anatomy</b>		
<p>A cadaver-based study of selected aspects of the human body, and the functional and clinical importance of the selected structures and/or regions in the body.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				

### 11027 CLINICAL EMERGENCY MEDICINE

<b>875</b>	<b>240</b>	<b>Clinical Emergency Medicine</b>		
<p>Is offered as a one-year course over each of the four enrolled years of the degree. Includes the theoretical and practical aspects of Emergency Medicine.</p> <p>Home department: EMERGENCY MEDICINE</p>				

<b>11025 CLINICAL INTERNAL MEDICINE</b>				
<b>811</b>	<b>264</b>	<b>Clinical Internal Medicine</b>		
<p>Successful completion of this module requires satisfactory participation whilst rotating as a registrar in General Internal Medicine and the subspecialties, as well as achieving a mark of at least 50% in the FCP (SA) Part II examination. The student is assessed regularly as part of the continuous assessment strategy, and is required to keep a logbook as a record of his clinical exposure and experience with procedures.</p> <p>Home department: INTERNAL MEDICINE</p>				

<b>12178 CLINICAL PHARMACOLOGY</b>				
<b>511</b>	<b>15</b>	<b>Clinical Pharmacology</b>	3 weeks	<b>T</b>
<p>Adverse drug reactions; prescription writing and scheduling of medicines; pharmacokinetics and therapeutic drug monitoring; antimicrobial drugs; treatment of congestive heart failure; management of asthma, ischaemic heart disease (stable angina), deep vein thrombosis, type II diabetes mellitus, and acute and most common poisonings.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

<b>52191 CLINICAL PHYSIOTHERAPY</b>				
<b>254</b>	<b>5</b>	<b>Clinical Physiotherapy</b>	3P	<b>T</b>
<p>Clinical exposure to apply the principles of physiotherapy practice as preparation for clinical practice in the third year. Structured patient interviews, individual observation and assistance during patient treatment by physiotherapists and senior students, patient demonstrations in selected areas of physiotherapy; principles of rehabilitation; multi- and interdisciplinary teamwork and references.</p> <p>Home department: PHYSIOTHERAPY</p>				
<b>374</b>	<b>40</b>	<b>Clinical Physiotherapy</b>	14P	<b>T</b>
<p>Practical clinical experience of running a physiotherapy practice. Handling general, simple problems, as well as selected areas of advanced patient care. Individual handling and group handling of patients and caregivers during three clinical placements (under supervision).</p> <p>Home department: PHYSIOTHERAPY</p>				

<b>474</b>	<b>96</b>	<b>Clinical Physiotherapy</b>	28P	<b>T</b>
<p>Practical clinical experience of physiotherapy practice in all areas and at all levels of patient care. Candidates, while subject to less supervision, will be required to take greater initiative (this further equips them for their role as independently-functioning therapists). Five clinical placements, emergency duties over weekends and an elective placement are requirements for this module.</p> <p>Home department: PHYSIOTHERAPY</p>				

#### **50946 CLINICAL SPEECH PATHOLOGY**

<b>184</b>	<b>12</b>	<b>Clinical Speech Pathology</b>	4L	<b>T</b>
<p>Introduction and exposure to normal development, communication skills, basic generic clinical skills, aspects of assessment of communication development and professional conduct in the field of speech-language and hearing therapy. The above-mentioned occur during observation in preschool environments.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>274</b>	<b>26</b>	<b>Clinical Speech Pathology</b>	4L	<b>T</b>
<p>Speech and language screening; phonological awareness; language programmes in preschool settings; intervention for children with language, phonological awareness, articulation and phonology disorders; hearing screening. Xhosa communication competence in the clinical context.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>374</b>	<b>26</b>	<b>Clinical Speech Pathology</b>	1P	<b>T</b>
<p>Intervention for persons with communication disorders; observation of intervention in a variety of settings. Introduction to sign language; the deaf community and culture; attitudes; resources in the community; history of sign language in South Africa; sign language; finger spelling; use of interpreters in different contexts. Concepts and policies related to disability studies, for instance the social, medical and biopsychosocial models of disability, the International Classification of Function, Disability and Health (ICF) of the WHO, community-based rehabilitation (CBR), and relevant legislation. Xhosa communication competence in the clinical context.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				

<b>474</b>	<b>62</b>	<b>Clinical Speech Pathology</b>	20P	<b>T</b>
<p>Speech-language therapy and intervention for a variety of developmental and acquired communication disorders in children and adults; intervention for the child or adult with swallowing difficulties or dysphasia; outreach services to communities in primary healthcare clinics or centres; multilingualism and second-language learning problems.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				

### 11019 CLINICAL SURGERY

<b>871</b>	<b>180</b>	<b>Clinical Surgery</b>		
<p>Surgical and operative practice.</p> <p>Home department: SURGERY</p>				

### 34568 COMMUNITY HEALTH

<b>872</b>	<b>100</b>	<b>Community Health</b>		
<p>Including Environmental Health, Occupational Health, Management of Health Services and Systematic/Interventional Epidemiology.</p> <p>Home department: COMMUNITY HEALTH</p>				

### 46973 COMMUNITY NUTRITION

<b>244</b>	<b>7</b>	<b>Community Nutrition</b>	2L	<b>T</b>
<p>The aims of primary health care (PHC) and the human rights-based approach to health care; the dietitian's role in PHC; definition, extent, causes and consequences of malnutrition. The relationship between nutrition education, lifestyle and health promotion. Principles of communication; intercultural communication; principles of effective instruction; instructional planning; outcomes; content selection.</p> <p>Home department: HUMAN NUTRITION</p>				
<b>376</b>	<b>27</b>	<b>Community Nutrition</b>	2.5L, 2P	<b>T</b>
<p>Exposure to the Integrated Nutrition Programme (INP) of the National and Provincial Department of Health, nutrition policy, health profile of the SA population; nutrition intervention, including global and local actions, continuous nutrition surveillance, the theoretical and practical principles of</p>				

nutrition education, methods of instruction, applicable technology, evaluation, advantages of various media, selection of media, modification of behaviour and health promotion among individuals and groups, factors affecting the availability and acceptability of food (food security); economic, social, cultural, psychological, technological and religious factors affecting food intake; changes in nutritional behaviour; community participation and development, project planning and business plans.

Practicals: Planning of a nutritious menu for a family with a limited household budget; investigation of marketing/availability of food in the community; investigation of the magnitude of change in eating behaviour in three generations to understand the concept of nutritional transition, visits to community health centres and community-based projects that relate to the theory; production and formative evaluation of counselling material, health and nutrition promotion activities; the basic formulation of a business plan according to the specifications of the INP.

Home department: HUMAN NUTRITION

<b>478</b>	<b>37</b>	<b>Community Nutrition</b>	10P	<b>T</b>
<p>Exposure to and involvement with service rendering in the Integrated Nutrition Programme (INP) of the National and Provincial Department of Health at community-based platforms in an urban environment, as well as Ukwanda, the peri-urban and rural community-based platforms of the Faculty of Medicine and Health Sciences. Involvement in the Health Facility Based Nutrition Programme (HFBNP). Exposure to the implementation of the Nutrition Therapeutic Programme (NTP), Enteral Feeding Programme, Integrated Management of Childhood Illnesses (IMCI), Vitamin A Supplementation Programme and the Baby-Friendly Hospital Initiative (BFHI). Monitoring of the HFBNP at a community health centre (CHC). Provision of nutrition education (consultation) to adults and children visiting the primary health care (PHC) clinics (well baby, malnutrition and TB), as well as to pregnant women and mothers of newborn babies. Diet therapy to patients treated at the CHCs. Health-promotion activities at clubs (e.g. for women, the elderly, and patients with diabetes, hypertension, obesity), clinics, schools and daycare centres. Exposure to and reflection on nutrition intervention programmes. Compilation and interpretation of a community profile. Exposure to the work of a community dietitian, dietitians in private practice and other members of the PHC team (e.g. intra-professional team, school and district nurses). Development of management skills in community nutrition, exposure to global nutrition and advocacy programmes and human rights and ethics in health care. Exposure to media activities, including</p>				

newspaper reports and radio talks. Exposure to and involvement in the Health Promoting School Initiative within the school health environment.  
Home department: HUMAN NUTRITION

### 13030 COMPARATIVE ANATOMY

<b>771</b>	<b>10</b>	<b>Comparative Anatomy</b>		
The comparative anatomy of certain organ systems of selected representative vertebrate species including commonly used laboratory and domestic animals. Home department: ANATOMY AND HISTOLOGY				

### 57193 CYTOPATHOLOGY

<b>875</b>	<b>30</b>	<b>Cytopathology</b>		
Detailed knowledge of and practical and interpretation skills in gynaecological cytopathology and in general cytopathology, and the knowledge and skills to diagnose the most common cases. Home department: ANATOMIC PATHOLOGY				

### 13031 DEVELOPMENTAL ANATOMY

<b>771</b>	<b>10</b>	<b>Developmental Anatomy</b>		
The mutual relationships between vertebrates, including humans, as illustrated by the embryological development of the Chordates. A study of the systemic anatomical development of the human embryo with reference to environmental and other influences on normal development and/or congenital abnormalities. Home department: ANATOMY AND HISTOLOGY				

### 57681 DIGESTIVE SYSTEM

<b>271</b>	<b>30</b>	<b>Digestive System</b>	7 weeks	T
Embryology of the digestive system and peritoneal cavity; anterior abdominal wall: structure and surface anatomy; oral cavity, tongue, salivary glands and pharynx: structure and function; oesophagus and gastro-intestinal canal: structure and function; intra-abdominal organs:				

liver, gall bladder, biliary tract, pancreas and spleen: structure, relationships, function. Pathology and pathophysiology of common diseases of the abdomen and gastro-intestinal system with correlative characteristic symptom complexes. The oral cavity, salivary glands, pharynx and oesophagus; the stomach and duodenum; the small intestines; the colon and the appendix; the liver, biliary system and pancreas; the abdominal wall, diaphragm, and the retroperitoneal and peritoneal cavities. Abdominal emergencies: trauma, the acute abdomen and gastro-intestinal haemorrhage; functional abnormalities of the gastro-intestinal system. The effect of systemic disorders and medico-surgical therapies on the gastro-intestinal system. Paediatric gastroenterology and abdominal surgery.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

#### 64742 ELECTRON MICROSCOPY

<b>775</b>	<b>4</b>	<b>Electron Microscopy</b>		
<p>Preparation, processing, sectioning and staining of tissue for transmission electron microscopy. Operation of a transmission electron microscope. Identification and photographing of ultrastructural details of cells. Overview of ultrastructure of selected clinically relevant cases in Anatomical Pathology.</p> <p>Home department: ANATOMIC PATHOLOGY</p>				

#### 52353 ENDOCRINE SYSTEM

<b>271</b>	<b>15</b>	<b>Endocrine System</b>	3 weeks	<b>T</b>
<p>Embryology; the macro- and microscopic structure of: the hypothalamus, hypophysis, thyroid, parathyroid, pancreas and adrenal gland; the secretion of chemical messengers; the functioning of water-soluble chemical messengers; the functioning of fat-soluble chemical messengers; interactions of the body's chemical messenger system. Diabetes mellitus; hypoglycaemia; thyroid disease; bone and bone mineral metabolism; diseases of the pituitary gland and iatrogenic Cushing's disease; the child of short stature and with delayed puberty; diseases of the adrenal gland and hirsutism; miscellaneous disorders of the endocrine system</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

### **56022 EPIDEMIOLOGY AND RESEARCH METHODOLOGY**

<b>775</b>	<b>10</b>	<b>Epidemiology and Research Methodology</b>		
<p>Introduction to epidemiology: rates; ratios; proportions; incidence; prevalence; morbidity and mortality; demographics and population dynamics. Research design: sampling; bias; screening; sensitivity; specificity and causality. Writing a research proposal and a research article.</p> <p>Home department: COMMUNITY HEALTH</p>				

### **65749 ESSENTIALS OF DISEASE PROCESSES**

<b>141</b>	<b>30</b>	<b>Essentials of Disease Processes</b>	6 weeks	<b>T</b>
<p>Cell damage, death and adaptation; acute and chronic inflammation; recovery: cell regeneration, fibrosis and wound healing; haemodynamic variations, thrombosis and shock; diseases of the immune system; neoplasia; genetic and paediatric illnesses; principles of infection: bacteriology and parasitology; principles of infection: virology.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				
<b>198</b>	<b>5</b>	<b>Essentials of Disease Processes</b>	2L	<b>T</b>
<p>Introductory aspects of disease processes and infections.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

### **64602 ETHICS**

<b>511</b>	<b>10</b>	<b>Ethics</b>	3 weeks	<b>T</b>
<p>Medical Ethics: The autonomy of the individual; beneficence, non-maleficence and privacy; justice; the medical doctor and the law.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				



<b>12162 ETHICS AND HUMAN RIGHTS</b>				
<b>214</b>	<b>3</b>	<b>Ethics and Human Rights</b>	<b>2L</b>	<b>T</b>
<p>Ethical principles and universal ethical theories that apply to the health care environment are explored, as well as the application in practice. Ethical rules and regulations according to the Health Professions Council of South Africa (HPCSA) are discussed, and the appropriate professional conduct of a dietitian.</p> <p>By way of introduction the history and international context of human rights are sketched and the various categories of human rights explained.</p> <p>The application of human rights in South Africa is examined in view of the relevant institutions and codes, amongst others the Constitution of South Africa, South African Human Rights Commission, Constitutional Court, Patients' Rights Charter and Batho Pele concept.</p> <p>The concept of a human rights-based approach to health is explored.</p> <p>The rationale of the Health Professions Council of South Africa (HPCSA) for education about ethics and human rights, and the transformation of the health care sector are contextualised, as well as the redress mechanism within the healthcare system.</p> <p>Relevant study visits will be undertaken.</p> <p>Home department: HUMAN NUTRITION</p>				
<b>341</b>	<b>4</b>	<b>Ethics and Human Rights</b>	<b>2L</b>	<b>T</b>
<p>Application of a human rights-based approach to development within the context of development. The concept and history of the right to adequate food, and its value for human development, food security and poverty reduction programmes; the relevance of other human rights. Rights holders, State obligations, and the responsibilities of individuals and other role players in society. The process of the implementation of the right to food; resource mechanisms to address violations of the right to food; the relevance of the Right to Food Guidelines as a tool to support the progressive realisation of the right to food. The current situation in South Africa and the role of the Constitution pertaining to the realisation of the right to adequate food in various situations and amongst vulnerable population groups.</p> <p>Relevant study visits will be undertaken.</p> <p>Home department: HUMAN NUTRITION</p>				

### 64750 FLOW CYTOMETRY

<b>775</b>	<b>4</b>	<b>Flow Cytometry</b>		
------------	----------	-----------------------	--	--

Fluorochromes, antibody labelling, immunofluorescence, spectral overlap and compensation. Operation of flow cytometer and use of appropriate software. Immunobiology CD4 monitoring and absolute counts. Cell surface and intracellular staining. Single-colour and multicolour labelling techniques for cell surface markers.

Home department: ANATOMY AND HISTOLOGY

### 11829 FOOD PRODUCTION AND SYSTEMS

<b>214</b>	<b>20</b>	<b>Food Production and Systems</b>	3.5L, 3P	<b>T</b>
------------	-----------	------------------------------------	----------	----------

Role of the dietitian in the food industry. Planning and evaluation of the layout and design of food service units; procurement and maintenance of equipment; ergonomics and safety in the workplace; introduction to various food preparation and serving systems; ration scales and recipe standardisation. Implementation of food standards and relevant legislation; the process of food procurement (including specifications and tenders), food preparation and serving; stock control, waste management and quality control. Sanitation, hygiene and food safety (including HACCP); client satisfaction; ethics in the food service. Two days of practical observation in a food-service unit.

Home department: HUMAN NUTRITION

### 36072 FOODS

<b>144</b>	<b>14</b>	<b>Foods</b>	3L, 3P	<b>T</b>
------------	-----------	--------------	--------	----------

Nutrient composition, chemical structure and specific chemical and physical characteristics of foods; general concepts relating to food sources of protein: meat, fish, chicken, eggs, gelatin, milk and texturised plant proteins; fruit and vegetables; fats and oils; general concepts relating to grains, dough, batter and leavening. Explanation of the effects of different food-preparation methods. Introduction to menu planning. Practical exercises to establish concepts.

Home department: HUMAN NUTRITION

### 52086 FOOD SERVICE MANAGEMENT

<b>476</b>	<b>37</b>	<b>Food Service Management</b>	<b>10P</b>	<b>T</b>
------------	-----------	--------------------------------	------------	----------

Practical exposure to different food-service systems. Planning of normal and therapeutic choice menus and execution of recipe development. Critical observation of and active participation in all aspects pertaining to effective food-service management, including planning, implementation, stock and quality control, client satisfaction, and human resources, people and financial management. Sanitation, hygiene and food safety, and implementation of HACCP. Exposure to the management of outsourced food-service units. Application of relevant legislation and ethical principles. Service learning component: providing a service to community partners (Tygerberg Academic Hospital, Department of Health and private hospitals) according to their needs. Exposure to and involvement with the food-service component of service rendering at community-based platforms in Ukwanda.

Home department: HUMAN NUTRITION

### 57819 FORENSIC MEDICINE

<b>471</b>	<b>10</b>	<b>Forensic Medicine</b>	<b>2 weeks</b>	<b>T</b>
------------	-----------	--------------------------	----------------	----------

General medico-legal principles including natural vs. unnatural death; completion of the death certificate form; the pathology of wounds including basic wound patterns as well as more complex mechanisms of injury (burns, gunshot wounds, electrical injuries, head injuries, etc.); the pathology of complications of wounds; influences of chemical substances, including alcohol, on the body; approach to sudden deaths including sudden infant death syndrome in babies (cot deaths); early and late post-mortal changes; introduction to basic legal aspects in the South African law system; appropriate acts and regulations regarding the following principles in the medical field: inquests, tissue retention, abortion, anaesthetic-related deaths, and ethical and moral codes stipulated by statutes.

Home department: FORENSIC MEDICINE

<b>11100 FORENSIC PATHOLOGY</b>				
<b>872</b>	<b>80</b>	<b>Forensic Pathology I</b>		
Advanced basic knowledge and the mastering of practical and theoretical components in Anatomical Pathology Home department: ANATOMIC PATHOLOGY				

<b>64696 GENERAL HISTOLOGY AND PRINCIPLES OF MACROSCOPIC ANATOMY</b>				
<b>775</b>	<b>35</b>	<b>General Histology and Principles of Macroscopic Anatomy</b>		
Theoretical and practical histology of basic tissues and organ histology. Macroscopic structure of the human body and organ systems (functional anatomy), as well as principles of comparative anatomy. Home department: ANATOMY AND HISTOLOGY				

<b>10294 GENERAL LINGUISTICS</b>				
<b>178</b>	<b>24</b>	<b>Introduction to Linguistics</b>	3L, 1T	<b>T</b>
Nature and objectives; functions of language; construction of (a) language out of a sound system, a meaning system, and systems for forming words and sentences; principles of language use; language diversity and variation; interaction between linguistic and social phenomena; language change; language acquisition; language in the brain; language production and perception. Home department: GENERAL LINGUISTICS				
<b>278</b>	<b>32</b>	<b>Language and the Human Mind</b>	3L	<b>T</b>
Principles and practice of the analysis of language structure (syntax and phonology, other aspects of language structure); principles and practice of the analysis of language use (pragmatics/discourse analysis); sociolinguistic aspects of language; core questions about language acquisition and language processing; <i>capita selecta</i> which contribute to the realisation of the outcomes of the module. A system of continuous assessment is used in General Linguistics 278.				

Home department: GENERAL LINGUISTICS

Formula for Final mark: Students are informed in writing at the beginning of the year about the way in which the final mark is calculated and they receive regular reports on their progress through the year.

### 10942 GENERAL NEUROLOGY

**876**

**130**

**General Neurology**

Diagnosis and handling of relevant neurological conditions

Home department: INTERNAL MEDICINE

### 13032 GROSS REGIONAL ANATOMY

**771**

**20**

**Gross Regional Anatomy**

A cadaver-based study of the systems of the body.

Home department: ANATOMY AND HISTOLOGY

### 11001 GYNAECOLOGY

**873**

**120**

**Gynaecology**

This module includes general gynaecology, community gynaecology, assisted reproduction, reproductive endocrinology, gynaecological oncology, urogynaecology, pathology (incorporating histo- and cytopathology related to the field), contraception and family planning.

Home department: OBSTETRICS AND GYNAECOLOGY

### 47090 HAEMATOLOGY

**873**

**70**

**Haematology**

- Haemopoiesis and lymphopoiesis, haemolysis, haemostasis, routine laboratory tests covered in Integrated Pathology; haemolytic anaemias; anaemias of haematinic deficiencies: pathophysiology and diagnosis.
- Leukaemias and lymphomas; myeloproliferative diseases; bone marrow failure syndromes: diagnosis and classification of these disorders will be supported by microscopic and related diagnostic tests.

- Haemostatic and thrombotic disorders: diagnosis and management of bleeding disorders and hypercoagulability, anticoagulation monitoring, laboratory aspects of blood transfusion and immunohaematology.

Continuous assessment through laboratory reports, clinical case presentations, prepared academic seminars and journal club discussions, as well as a log book. A portfolio of evidence shall be submitted as part of the continuous assessment and is a prerequisite for graduation. Details of continuous assessment are provided in the study guide. Formal assessment is done in the form of one written paper consisting of long and shorter questions on the current state of knowledge in Haematological Pathology. Practical examinations: an interpretative practical on blood transfusion, and haemostatic and haemolytic conditions, and a morphological examination consisting of the microscopic diagnosis of blood and bone marrow pathology. An oral examination. External examiners are involved according to University guidelines.

Home department: HEMATOLOGICAL PATHOLOGY

### 64793 HAEMATOLOGY

<b>775</b>	<b>30</b>	<b>Haematology</b>		
------------	-----------	--------------------	--	--

Laboratory techniques and instrumentation in Haematology; morphology and physiology of normal blood and bone marrow cells; normal values of blood-cell counts and coagulation tests; anaemias; cytopenias and cytoses; immunological aspects of Haematology and blood groups; haemostasis and thrombosis; haematological malignancies.

Home department: ANATOMIC PATHOLOGY

### 52426 HAEMATOLOGICAL SYSTEMY

<b>371</b>	<b>20</b>	<b>Haematological System</b>	<b>4 weeks</b>	<b>T</b>
------------	-----------	------------------------------	----------------	----------

Haematological themes: blood components; haemopoiesis; blood groups; blood clotting mechanisms. Immunological themes: defence mechanisms of the body; the non-specific immune system; the specific immune system. Anaemia; bleeding disorders; cytopaenia and cytosis; haematological malignancies; blood grouping and transfusion; thrombotic conditions.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 52450 HEALTH AND DISEASE IN COMMUNITIES

<b>471</b>	<b>20</b>	<b>Health and Disease in Communities</b>	4 weeks	<b>T</b>
------------	-----------	--	---------	----------

Medical sociology, sociological/anthropological concepts and perspectives. Political, social and cultural context of disease and health. Health-related behaviour; epidemiology; demography; epidemiological surveillance; epidemiology and infectious diseases. Research methodology; data analysis; utilisation of information. Community-orientated primary health care; health promotion; disease prevention; determination of health needs; effect of lifestyle on health and disease; occupational health; environmental health. Women's and children's health as a priority. Rehabilitation and management of physical disability; trauma. The family in disease and in good health.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 65706 HEALTH IN CONTEXT

<b>111</b>	<b>19</b>	<b>Health in Context</b>	7L	<b>T</b>
------------	-----------	--------------------------	----	----------

The aim of this module is to assist the Health Science student to obtain a basic knowledge and insight into the various introductory subjects, which will include: psychosocial perspectives on health; risk factors for illness and the promotion of health, including the assessment thereof; principles of applied bioethics and professionalism, and an overview of health services and occupations.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 47511 HEALTH MANAGEMENT

<b>511</b>	<b>10</b>	<b>Health Management</b>	2 weeks	<b>T</b>
------------	-----------	--------------------------	---------	----------

Health Management: General management and principles of management; financial management; human resource management; marketing of health services.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### **13033 HUMAN ANATOMICAL VARIATION**

**771**

**10**

**Human Anatomical  
Variation**

Human anatomical variation is present in all humans and is demonstrated by the lack of bilateral symmetry in any one individual and by variation within any particular population group.

Home department: ANATOMY AND HISTOLOGY

### **11103 HUMAN COMMUNICATION AND COMMUNICATION DISORDERS**

**812**

**45**

**Human Communication and  
Communication Disorders**

The content of this module will be determined by the head of the division in consultation with the student.

Home department: SPEECH-LANGUAGE AND HEARING THERAPY

### **11038 HUMAN GENETICS RESEARCH PROJECT**

**776**

**75**

**Human Genetics Research  
Project**

Students will conduct research on a subject related to human genetics under the guidance of a supervisor. At the end of the project, the students will be examined on the basis of a thesis, completed with the assistance of their supervisor, and an oral presentation of the project. A written examination and the evaluation mark awarded by the supervisor further contribute to the project mark.

Home department: MOLECULAR BIOLOGY AND GENETICS

### **47295 HUMAN GENETICS THEORY**

**775**

**45**

**Human Genetics Theory**

The module consists of lectures, two written examinations and the writing of a literature review

Home department: MOLECULAR BIOLOGY AND GENETICS



### 64734 IMMUNOHISTOCHEMISTRY

775

4

**Immunohistochemistry**

Preservation and preparation of cells and tissues for immunohistochemistry. Monoclonal and polyclonal antibodies as molecular markers. Controls and quality assessment. Marker panels and clinico-morphological correlation.

Home department: ANATOMIC PATHOLOGY

### 11008 IMMUNOLOGY

775

30

**Immunology**

Inflammatory/infective; auto-immune parameters; infective serology; lymphocyte and neutrophil studies; flow cytometry; clinical immunology: primary immunodeficiencies, infections and rheumatology.

Home department: ANATOMIC PATHOLOGY

### 10553 INDUSTRIAL PSYCHOLOGY

162

6

**Ergonomics**

1.5L,  
0.5P

**A & E**

Nature and history of Ergonomics, Context of Ergonomics (general and environment effects, legislation, management and productivity, built environment), perception and sensation (senses, observation, conscious and unconscious, memory and attention), work environment (space and shape, lighting, noise and vibration, temperature, atmospheric and chemical, processing information and design guidelines), input (displays), output (activities and rest), controls and tools, systems malfunction (errors, safety and health), introduction to Information Ergonomics (mental maps and usability), summary.

Home department: INDUSTRIAL PSYCHOLOGY

### **36846 INDUSTRIAL PSYCHOLOGY (OCCUPATIONAL THERAPY)**

<b>132</b>	<b>6</b>	<b>Industrial Psychology (Occupational Therapy)</b>	2L	<b>T</b>
------------	----------	---	----	----------

The human being as employee; human resource planning; recruitment; selection; placement and induction; communication; motivation; leadership in organisations; overview of labour relations. The module is designed for students in Occupational Therapy and these perspectives will be highlighted throughout.

Home department: INDUSTRIAL PSYCHOLOGY

### **52434 INFECTIONS AND CLINICAL IMMUNOLOGY**

<b>471</b>	<b>20</b>	<b>Infections and Clinical Immunology</b>	4 weeks	<b>T</b>
------------	-----------	---	---------	----------

Principles of infectious diseases; congenital and acquired immunodeficiencies; pyrexia of unknown origin; tuberculosis; septicaemia and bacteraemia; infections that can result in shock; HIV; tropical and travel-associated diseases; sexually transmitted infections; zoonoses; neonatal infections; childhood diseases; bioterrorism; toxin-associated diseases; management of a community outbreak; infection control; immunisation; role of special examinations; anti-infective therapy.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### **53899 INFORMATION SKILLS**

<b>172</b>	<b>6</b>	<b>Information and Computer Competence</b>	1L, 1P	<b>A &amp; E</b>
------------	----------	--	--------	------------------

Study and practice of information usage, the WWW and selected software programs – such as word processing, databases, spreadsheets and presentations – that are necessary for communication and information purposes in the humaniora.

Assessed continuously.

Home department: INFORMATION SCIENCE

Formula for Final mark: The class mark counts as the final mark.

### 38962 INTEGRATED PATHOLOGY

**871**

**60**

**Integrated Pathology**

Integrated Pathology, including Chemical Pathology, Haematology, Microbiology, Virology, Molecular Pathology and Research Methodology.

Home department: HEMATOLOGICAL PATHOLOGY

### 66141 INTERMEDIATE METABOLISM

**198**

**5**

**Intermediate Metabolism**

2L

**T**

Introductory aspects of intermediate metabolism: glucose, lipid, protein and energy metabolism.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 52388 INTRODUCTION TO CLINICAL MEDICINE

**141**

**20**

**Introduction to Clinical  
Medicine**

4 weeks

**T**

Basic subject specific (medical) literacy and terminology. General clinical communication and language skills with patients and their family, and colleagues of all disciplines in the clinical environment. Application in a clinical context of the Golden Threads (communication, professionalism, professional ethics, evidence based medicine and information literacy). Basic clinical examination skills, including surface anatomy, with the focus on normality. Acquisition of a third language. Use of Myers-Briggs questionnaire. Signs of burnout. The doctor-patient relationship. Non-verbal communication. Extracting accurate and succinct information in a sequential manner from a patient or informant about the patient's illness, and individual and contextual factors. Role the history plays in the sequence and development of the illness, and in developing a clinical hypothesis/diagnosis. Systematic approach to the physical examination: general examination, examination of vital signs, cardiovascular system, characteristics of the pulse and sites of the pulses, blood pressure in the adult, elderly and children, respiratory system, gastrointestinal system, dip sticks urine examination, basic clinical epidemiology. Basic research study designs. Gate Frame of critical appraisal. Probability and principles of inference. Populations and samples. Random variables and probability distributions. Sampling distributions, estimation and hypothesis testing.

Research problems concerning groups. Inferences regarding the mean. Home department: MEDICINE AND HEALTH SCIENCES CENTRAL				
<b>271</b>	<b>20</b>	<b>Introduction to Clinical Medicine</b>	4 weeks	<b>T</b>
<p>The structure, tasks and communication skills required of the consultation. Obtaining and documentation of the medical history. Systematic physical examination and documentation. Vital signs. Hand washing. Mutual interaction of disease, circumstances of life and the psyche of the patient. Demands consultation places on physician. Health risks for the doctor. Principles of clinical epidemiology. Doctor-patient relationship. Boundaries appropriate during a consultation. Ground principles of relevant medical ethics. Influence of gender, culture, language, socio-economic status and literacy on the doctor-patient bond of confidentiality. Principles of palliative care. The IMCI approach. Percentile and road to health charts. Psychiatry history and examination. Cardiovascular System. Respiratory System. Paediatric Examination: Four parallels of neurological development. Normal neurological development at the ages of 3, 6, 9 and 12 months. Urological examination. Gynaecological examination. Gastrointestinal system. Musculoskeletal system. Surgical conditions: the mouth, salivary glands and cervical lymph nodes, thyroid, breasts, a mass, an ulcer and a hernia. Examination of the ear, nose and throat. Urine investigation. Geriatric patient: changes in physiological processes that occur with normal ageing and the practical implications, geriatric assessment (including MMSE, functional and social assessment), geriatric syndrome: dementia, delirium, instability (including syncope), immobility, incontinence, medication, and the regimen and pitfalls in a geriatric patient. Cognitive, emotional and behavioural responses of a patient. Multi-faceted effect of disease on a patient and his environment. Distinctive problems arising from disease in each life phase. Difference between healthy and unhealthy disease adjustment. Integrative medicine. CPR.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

<b>11579 INTRODUCTION TO HEALTH SCIENCES</b>				
<b>198</b>	<b>10</b>	<b>Introduction to Health Sciences</b>	2L	<b>T</b>
<p>This module aims to lay the foundation for novice students in terms of (i) relevant knowledge, skills and attitudes for professional development in the health sciences and (ii) facilitating the development of the student to</p>				

optimally utilise training opportunities to become a successful health sciences professional.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### **64777 INTRODUCTION TO MOLECULAR PATHOLOGY**

<b>775</b>	<b>17</b>	<b>Introduction to Molecular Pathology</b>		
------------	-----------	--	--	--

DNA, RNA and hereditary information; structure of the human genome; patterns of inheritance: expression of phenotypes; strategies to identify disease-causing mutations; DNA sequencing; phylogenetics and molecular epidemiology; detection and amplification of nucleic acids; in situ diagnostics; proteomics; flow cytometry; tissue culture and cytogenetics.

Home department: ANATOMIC PATHOLOGY

### **11032 LABORATORY MANAGEMENT**

<b>876</b>	<b>10</b>	<b>Laboratory Management</b>		
------------	-----------	------------------------------	--	--

An understanding of the principles of laboratory management as they apply to pathology.

Home department: ANATOMIC PATHOLOGY

### **64718 LABORATORY PRACTICE**

<b>771</b>	<b>10</b>	<b>Laboratory Practice</b>		
------------	-----------	----------------------------	--	--

Laboratory safety, and legal and bio-ethical aspects.

Home department: ANATOMY AND HISTOLOGY

<b>775</b>	<b>3</b>	<b>Laboratory Practice</b>		
------------	----------	----------------------------	--	--

Laboratory safety, legal aspects, bioethics.

Home department: ANATOMIC PATHOLOGY

<b>776</b>	<b>3</b>	<b>Laboratory Practice</b>		
------------	----------	----------------------------	--	--

Bioethics of laboratory practice, laboratory safety and legal aspects of laboratory practice.

Home department: ANATOMIC PATHOLOGY

### 65730 LATE CLINICAL ROTATIONS

<b>678</b>	<b>150</b>	<b>Late Clinical Rotations</b>	60 weeks	<b>T</b>
------------	------------	--------------------------------	----------	----------

This module and the Clinical Rotations 541 module form the student intern year. No formal theoretical lectures. In the Late Clinical Rotations 678 module, the practical application of the clinical disciplines is consolidated through students' involvement in patient care, ward rounds, case discussions, seminars and outpatient clinics at Tygerberg Hospital and other relevant regional hospitals, day hospitals and clinics.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 13034 LEGAL AND ETHICAL ASPECTS

<b>771</b>	<b>5</b>	<b>Legal and Ethical Aspects</b>		
------------	----------	----------------------------------	--	--

Basic skills and knowledge to communicate coherently orally and in writing on the current legal position and on the major ethical and moral implication of using human material and tissue for research and education purposes.

Home department: ANATOMY AND HISTOLOGY

### 65684 LIFE FORMS AND FUNCTIONS OF CLINICAL IMPORTANCE

<b>111</b>	<b>17</b>	<b>Life-forms and Functions of Clinical Importance</b>	6L	<b>T</b>
------------	-----------	--	----	----------

Introduction; organism classification; embryology; the cell and tissue (structure and function); molecular biology (cell division, reproduction, introduction to genetics and the cell cycle); introduction to human physiology; blood and the immune system; introduction to human anatomy.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 64807 MANAGEMENT PRINCIPLES

<b>377</b>	<b>18</b>	<b>Management Principles</b>	2.5L	<b>T</b>
------------	-----------	------------------------------	------	----------

Basic principles of management required to be a successful entrepreneurial dietitian: planning, organisation, guidance and control. Leadership, communication, ethics, and human resources and people management.

Compilation of a business plan. Basic principles of financial management. Relevant legislation (Labour Act, Basic Conditions of Employment Act, Employment Equity Act, and Occupational Health and Safety Act).  
Home department: HUMAN NUTRITION

### 43737 MEDICAL MICROBIOLOGY

<b>142</b>	<b>7</b>	<b>Medical Microbiology</b>	2L, 0.5P	<b>T</b>
------------	----------	-----------------------------	----------	----------

Micro-organisms and their properties; infection and the spread of micro-organisms; important food pathogens; the role of the dietitian in the management of the HIV-positive patient; nutrition and immunity; sterilisation and disinfection; practical microbiological issues relating to food-preparation areas.

Home department: MEDICAL MICROBIOLOGY

<b>874</b>	<b>70</b>	<b>Medical Microbiology</b>		
------------	-----------	-----------------------------	--	--

The following are presented:

- Medically important bacteria, fungi and parasites;
- The laboratory diagnosis of bacterial, fungal and parasitic diseases; and
- The basis of infectious diseases, antimicrobial therapy and testing, immunology, quality control, pathology in primary care and infection control.

It is a requirement that a portfolio of case studies and a log book of laboratory techniques be compiled during the rotation.

One written paper, a practical examination and an oral examination.

External examiners are involved in these examinations in accordance with University guidelines.

Home department: MEDICAL MICROBIOLOGY

### 43745 MEDICAL VIROLOGY

<b>871</b>	<b>70</b>	<b>Medical Virology</b>		
------------	-----------	-------------------------	--	--

Training consists of a theoretical and a practical module and educational activities:

- Practical training and skills development in laboratory techniques;
- Registrar discussions, seminar presentations, ward round

attendance; and

- The student is responsible for compiling a portfolio with the purpose of continuously updating it with newly acquired skills and educational activities.

Continuous assessment: A portfolio of evidence shall be submitted as part of the continuous assessment and is a prerequisite for graduation. Details of the continuous assessment are provided in the study guide. Final formal assessment of the Virology rotation is done by means of a written, practical and oral examination.

Home department: MEDICAL VIROLOGY

### **64688 MORPHOLOGICAL SCIENCES RESEARCH PROJECT**

<b>775</b>	<b>60</b>	<b>Morphological Sciences Research Project</b>		
------------	-----------	--	--	--

The research project assigned to each student will flow from current research undertaken in one of the divisions involved in the BScHons (Morphological Sciences) programme. The content will be determined by the nature of the project.

Home department: ANATOMIC PATHOLOGY

### **64726 MORPHOMETRY AND LASER MICRODISSECTION AND MICROPHOTOGRAPHY**

<b>775</b>	<b>4</b>	<b>Morphometry and Laser Microdissection and Microphotography</b>		
------------	----------	---	--	--

Concepts and techniques used in light microscopy, digital imaging, microphotography and image processing.

Home department: ANATOMY AND HISTOLOGY

### **52302 MUSCULOSKELETAL SYSTEM**

<b>371</b>	<b>30</b>	<b>Musculoskeletal System</b>	<b>7 weeks</b>	<b>T</b>
------------	-----------	-------------------------------	----------------	----------

Bone: classification, development and growth; the skeleton; joints; cartilage: composition and function; composition and function of the



synovial fluid; skeletal muscle: organisation, structure and function. Applied anatomy of the upper limb, lower limb and spinal column, applied physics. Musculoskeletal terminology and deformities; clinical methods; infective conditions of the musculoskeletal system. Degenerative disorders of the musculoskeletal system; radiological evaluation and appropriate special investigations; rheumatology; arthroplastics of the musculoskeletal system (prosthetics). Congenital and developmental disorders; oncological disorders of bone, joints and soft tissues; conditions and deformities of the spinal column; conditions and deformities of the upper limbs; conditions and deformities of the lower limbs; vascular abnormalities of the musculoskeletal system. Rehabilitation and appliances; emergency management of trauma and the multiply injured patient. General principles in the diagnosis and management of trauma; technique for plaster of Paris, splints and bandages; compartmental syndrome; fractures and dislocations of the vertebral column and pelvis fractures and dislocations of the upper limbs; fractures and dislocations of the lower limbs; sports injuries and injuries due to over-use; soft tissue injuries of the musculoskeletal system.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### **11055 NEUROANATOMY AND APPLIED REGIONAL ANATOMY**

<b>871</b>	<b>20</b>	<b>Neuroanatomy and Applied Regional Anatomy</b>		
Neuroanatomy, including the anatomy of the central nervous system and peripheral nervous system, as well as regional anatomy applicable to neurosurgery.				
Home department: ANATOMY AND HISTOLOGY				

### **59285 NEUROANATOMY AND CLINICAL NEUROLOGY**

<b>372</b>	<b>14</b>	<b>Neuroanatomy and Clinical Neurology</b>	<b>3L</b>	<b>T</b>
Neuroanatomy: subsections of the nervous system; cerebrum, brainstem, cranial nerves, cerebellum, diencephalon, basal ganglia, hippocampus, hypothalamus; limbic system, autonomic nervous system; spinal cord. Principles and methods of neurological assessment; lesions of the cortex and internal capsule; coma and the unconscious patient; brainstem lesions; lesions of the extrapyramidal system; lesions of the cerebellum; spinal cord				

lesions.

Home department: ANATOMY AND HISTOLOGY

### 11058 NEUROPATHOLOGY

<b>871</b>	<b>20</b>	<b>Neuropathology</b>		
------------	-----------	-----------------------	--	--

The skills and knowledge needed to diagnose the most common CNS conditions. Familiarity with the general aspects of a neuropathology laboratory.

Home department: ANATOMIC PATHOLOGY

### 11056 NEUROPHYSIOLOGY: EEG

<b>874</b>	<b>60</b>	<b>Neurophysiology: EEG</b>		
------------	-----------	-----------------------------	--	--

Principles and interpretation of EEG

Home department: INTERNAL MEDICINE

### 11057 NEUROPHYSIOLOGY: EMG

<b>875</b>	<b>60</b>	<b>Neurophysiology: EMG</b>		
------------	-----------	-----------------------------	--	--

Principles and interpretation of EMG

Home department: INTERNAL MEDICINE

### 11059 NEUROPSYCHIATRY

<b>873</b>	<b>40</b>	<b>Neuropsychiatry</b>		
------------	-----------	------------------------	--	--

Diagnosis and handling of neuropsychiatric conditions

Home department: PSYCHIATRY

### 11060 NEURORADIOLOGY

<b>871</b>	<b>40</b>	<b>Neuroradiology</b>		
------------	-----------	-----------------------	--	--

Principles of neuroradiological special examinations, radiological features of neurological conditions

Home department: ANATOMIC PATHOLOGY

## 52299 NEUROSCIENCES

<b>371</b>	<b>30</b>	<b>Neurosciences</b>	8 weeks	<b>T</b>
<p>Development and morphology of the neuron and central, peripheral and autonomic nervous systems (organisation, neurotransmitters and receptors); sensory, motor and integrative (higher) functions of the brain; ventricular system and cerebrospinal fluid; neuralgia and the blood-brain barrier.</p> <p>Localisation of neurological lesions; embryological abnormalities of the nervous system. Disturbances in consciousness; raised intracranial pressure and space-occupying lesions. Epilepsy; brain and spinal cord trauma; cerebrovascular incidents. Abnormalities of balance and coordination; degenerative conditions of the central nervous system and chronic neurological disorders; weakness; headache, facial pain and nerve root pain; infections of the central nervous system. Cost-effective use of neurological services. General neurological emergencies; substance abuse and dependence; schizophrenia and other psychoses; mood disorders; anxiety disorders. Somatic symptoms and psychosomatic disease. Sexual identity and sexuality. Eating disorders. Disorders of impulse control; sleep disorders. Forensic neuroscience and ethics. Adaptation disorders; dissociative disorders; relationship problems and conflict management. Personality disorders. Psychotherapy. Normal and abnormal physical and psychological development in children. Geriatric psychiatry. Syndromes specific to South African culture. Visual system; the eye examination; acute loss of vision; chronic visual loss; ophthalmological emergencies; the eye in systemic disease; adnexal and external eye disorders; motility disturbances of the eye. Community otology; hearing and the semicircular canal system; hearing loss; otalgia; otorrhoea; complications of ear infections; seventh cranial nerve palsies.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

## 16543 NEUROSURGERY

<b>875</b>	<b>270</b>	<b>Neurosurgery</b>		
<p>Principles and practices of neurosurgery. Comprehensive knowledge of pathology, and clinical and diagnostic imaging. Handling and surgery of the following conditions: congenital, neurovascular, neuro-oncology, neuro-spinal and neuro-infectious, and pain handling in both adults and children.</p> <p>Home department: NEURO SURGERY</p>				

### 32212 NEUROSURGERY (INTERMEDIATE)

**874**

**30**

**Neurosurgery  
(Intermediate)**

Surgical principles and specialties, and intensive care.

Home department: NEURO SURGERY

### 36080 NUTRITION

**142**

**29**

**Nutrition**

9L, 3P

**T**

Theme 1: Energy metabolism. Knowledge, understanding, interpretation and application of the recommendations for macronutrients against the background of hormonal and metabolic interrelationships. The metabolism and nutritional implications of alcohol.

Theme 2: Knowledge, interpretation and application of and insight in the nutritional requirements for micronutrients; introduction to functional foods and antioxidant functions of micronutrients; aids used in dietary planning, including dietary guidelines; mini-project: the analysis and interpretation of dietary records.

Home department: HUMAN NUTRITION

### 57800 NUTRITION AND DIETETICS

**843**

**45**

**Nutrition and Dietetics**

- Any combination of three available elective study units may be chosen for the completion of this module\*: Aspects of quality assurance: HACCP; Basic paediatric nutrition; Diabetes mellitus; Nutrition support (enteral and parenteral); Entrepreneurship; Ethics in nutrition; Financial management; Food security; Gastrointestinal disorders; Health promotion; Labour relations; Management of food allergies; Nutrigenomics; Nutrition and HIV/Aids; Oncology nutrition; Renal nutrition; Sports nutrition; Nutritional Status Diagnostics I (Anthropometry); Nutritional Status Diagnostics II (Dietary methodology); Nutritional Status Diagnostics III (Biochemical, clinical and in vivo body composition techniques).
- A minimum of four students per topic is required for the topic to be available.
- Alternatively to combining three elective study units, the NOMA

(Norad's Programme for Master's Studies) stream may be selected. The NOMA stream consists of three subunits (Nutrition, Human Rights and Governance I, II and III) and is presented by Stellenbosch University in South Africa, Norway and Uganda in collaboration with the Oslo and Akershus Universities (Norway) and the Makerere University (Uganda). Students should be willing to travel to these countries for a period of six weeks per country. These study units are funded by Norway and full-time students are eligible for a two-year scholarship. A limited number of students is selected for this stream.

\*Therapeutic Nutrition options are only available to students with the relevant undergraduate qualifications.

Home department: HUMAN NUTRITION

### 56049 NUTRITIONAL EPIDEMIOLOGY

**842**

**45**

**Nutritional Epidemiology**

Nutritional surveillance, nutritional epidemiology, research methodology and epidemiology relating to nutrition disorders.

Home department: HUMAN NUTRITION

### 11828 NUTRITIONAL STATUS ASSESSMENT

**144**

**12**

**Nutritional Status  
Assessment**

3L, 3P

**T**

Study and practical application of techniques for the evaluation of the nutritional status of an individual and the community (diet methodology, anthropometry, body composition analysis, clinical investigations, introduction to biochemical interpretation). Demonstrating and interpreting basic measures of non-invasive physical fitness and routine screening methods (urine glucose and minerals, finger prick blood glucose, haemoglobin and cholesterol tests).

Home department: HUMAN NUTRITION

### 46957 NUTRITION IN THE LIFE CYCLE

<b>214</b>	<b>15</b>	<b>Nutrition in the Life Cycle</b>	3L, 1P	<b>T</b>
------------	-----------	------------------------------------	--------	----------

Study of the nutritional needs, nutritional care and nutritional problems which occur most commonly, as well as the prevention and management of these in the various stages of the life cycle (pregnancy, lactation, infant and young child, adolescent, adult and the elderly).

Home department: HUMAN NUTRITION

### 20923 OBSTETRICS

<b>872</b>	<b>120</b>	<b>Obstetrics</b>		
------------	------------	-------------------	--	--

This module includes general obstetrics, community obstetrics, high-risk obstetrics and maternal/foetal medicine.

Home department: OBSTETRICS AND GYNAECOLOGY

### 10464 OCCUPATIONAL THERAPY

<b>178</b>	<b>50</b>	<b>Occupational Therapy</b>	4L, 2P	<b>T</b>
------------	-----------	-----------------------------	--------	----------

Introduction to: activities of daily living; dysfunction; clinical work; therapeutic modalities; supplementary media (three topics); general principles of professional behaviour; activity study: theory and practical work.

Professional development through the establishment of knowledge, attitudes, views and skills. Personal development, facilitated by ensuring that the student makes optimal use of training opportunities in order to ensure that he can take his place as a responsible person in the broader community. The development of reading and writing skills within the academic environment in general, and specifically in the Health Sciences. Using and understanding relevant academic texts, understanding the various sections of the text, and the use of fluent, correct and suitable language. The development of basic oral and written skills in either Afrikaans, English or isiXhosa within the medical context. The nature and dynamics of the professional consultation.

Home department: OCCUPATIONAL THERAPY

<b>278</b>	<b>60</b>	<b>Occupational Therapy</b>	<b>3L</b>	<b>T</b>
<p>Assessment. Problems involved in activities of daily living. Health. Supplementary media (three topics). Activity study: theory and practice. Clinical work training in the carrying out of assessments. Therapeutic modalities.</p> <p>Home department: OCCUPATIONAL THERAPY</p>				

#### **43990 OCCUPATIONAL THERAPY: PRACTICAL**

<b>374</b>	<b>62</b>	<b>Occupational Therapy: Practical</b>	<b>17P</b>	<b>T</b>
<p>Applying the occupational therapy process, mainly in hospital settings, to render direct services to patients and clients.</p> <p>Home department: OCCUPATIONAL THERAPY</p>				
<b>478</b>	<b>112</b>	<b>Occupational Therapy: Practical</b>	<b>3L</b>	<b>T</b>
<p>Practical work in rendering direct and indirect occupational therapy services to patients and clients in hospitals, institutions, schools and the community. Integrating the theory and practice of occupational therapy to meet the specific needs of individuals and groups.</p> <p>Home department: OCCUPATIONAL THERAPY</p>				

#### **43982 OCCUPATIONAL THERAPY: THEORY**

<b>374</b>	<b>32</b>	<b>Occupational Therapy: Theory</b>	<b>8L</b>	<b>T</b>
<p>Theory: principles for treating certain problems linked to activities of daily living; dysfunction (general and specific principles).</p> <p>Clinical work: application of therapeutic modalities and supplementary media.</p> <p>Activity study.</p> <p>Home department: OCCUPATIONAL THERAPY</p>				

<b>484</b>	<b>26</b>	<b>Occupational Therapy: Theory</b>	1L	<b>T</b>
<p>Treatment of dysfunction. Professional matters concerning the profession, health service provision, occupational therapy services. Application of therapeutic modalities and supplementary media (four topics) in occupational therapy practice. Running a practice: integration of theory and practical work.</p> <p>Home department: OCCUPATIONAL THERAPY</p>				

### **11063 OMT - APPROACHES AND CONCEPTS**

<b>863</b>	<b>20</b>	<b>OMT – Approaches and Concepts</b>		
<p>Current principles and application of manual therapy and rehabilitation concepts, as well as the science of pain. Principles of assessment, clinical reasoning and management of the neuro-musculo articular system. Concepts of medical and behavioural sciences.</p> <p>Home department: PHYSIOTHERAPY</p>				

### **11066 OMT - CLINICAL**

<b>892</b>	<b>25</b>	<b>OMT – Clinical</b>		
<p>Assessment, independent clinical reasoning and management of patients with a variety of neuromuscular articular dysfunctions demonstrating:</p> <ul style="list-style-type: none"> <li>• proficient practical skill in assessment and management; and</li> <li>• rehabilitation of a patient to maximal functioning and role participation.</li> </ul> <p>Home department: PHYSIOTHERAPY</p>				

### **11065 OMT - INTEGRATED AND ADVANCED PRACTICE**

<b>852</b>	<b>10</b>	<b>OMT – Integrated and Advanced Practice</b>		
<p>Application of clinical reasoning, integration of functional rehabilitation models, and variation of appropriate management strategies to rehabilitate chronic/extensive/complicated neuromuscular articular systems according</p>				



to current concepts acknowledged by the International Federation of Orthopaedic Manipulative Therapists and the World Health Organization.  
Home department: PHYSIOTHERAPY

### **11067 OMT- LOWER QUADRANT**

<b>882</b>	<b>15</b>	<b>OMT – Lower Quadrant</b>		
------------	-----------	-----------------------------	--	--

Assessment, appropriate management and prevention of lower quadrant dysfunctions of the neuromuscular articular systems according to current concepts and based on principles of evidence-based clinical reasoning in a bio-psychosocial model.

Home department: PHYSIOTHERAPY

### **11064 OMT - UPPER QUADRANT**

<b>873</b>	<b>12</b>	<b>OMT – Upper Quadrant</b>		
------------	-----------	-----------------------------	--	--

Assessment, appropriate management and prevention of upper quadrant dysfunctions of the neuromuscular articular system according to current concepts and based on principles of evidence-based clinical reasoning in a bio-psycho-social model.

Home department: PHYSIOTHERAPY

### **11070 OPERATIONAL HYPERBARIC MEDICINE**

<b>773</b>	<b>35</b>	<b>Operational Hyperbaric Medicine</b>		
------------	-----------	--	--	--

On completion of the module, the medical practitioner shall be able to administer hyperbaric oxygen therapy to a patient. The training includes exposure to hyperbaric medical practices, as well as the handling of concomitant emergencies.

Home department: COMMUNITY HEALTH

### **11071 OPERATIONAL UNDERWATER MEDICINE**

**773**

**30**

**Operational Underwater  
Medicine**

After successful completion of this module, the medical practitioner will be able to provide a company in which divers are involved (or any other group of divers) with operational medical assistance, including the prescription and provision of recompression therapy in the case of a diving accident.

Home department: COMMUNITY HEALTH

### **17159 OPHTHALMOLOGY**

**875**

**200**

**Ophthalmology**

An extensive and in-depth knowledge of medical and surgical ophthalmology will need to be demonstrated. A sound knowledge of applied microbiology and clinical pathology will be required.

Home department: OPHTHALMOLOGY

### **17221 OPTICS**

**874**

**40**

**Optics**

Basic and applied clinical optics is covered. At the end of the module, the candidate must demonstrate the ability to perform a clinical refraction successfully.

Home department: OPHTHALMOLOGY

<b>17183 OTORHINOLARYNGOLOGY</b>				
<b>871</b>	<b>160</b>	<b>Otorhinolaryngology</b>		
<p>Specialised knowledge is required of:</p> <ul style="list-style-type: none"> <li>• Advanced ORL Basic Sciences;</li> <li>• ORL Medicine;</li> <li>• ORL Surgery; and</li> <li>• Head and Neck Surgery.</li> </ul> <p>Prior to writing the final ORL examination, the candidate must have four years experience working in an accredited academic ENT department.</p> <p>Home department: OTORHINOLARYNGOLOGY</p>				

<b>45330 OTORTHINOLARYNGOLOGY</b>				
<b>871</b>	<b>100</b>	<b>Otorhinolaryngology</b>		
<p>Prior to writing the Part II examination, the candidate must have had three to six months working experience in an intensive care unit.</p> <p>Home department: ANATOMIC PATHOLOGY</p>				

<b>47813 PATHOLOGY (AHS)</b>				
<b>254</b>	<b>7</b>	<b>Pathology (AHS)</b>	<b>2L</b>	<b>T</b>
<p>General Pathology: aetiology, pathology, clinical picture, medical and surgical treatment and prognosis of various conditions, in the following subjects: Internal Medicine, Neurology, Paediatrics, Geriatrics, Community Health.</p> <p>Home department: COMMUNITY HEALTH</p>				
<b>312</b>	<b>2</b>	<b>Pathology (AHS)</b>	<b>1L</b>	<b>T</b>
<p>Synopsis of classification; psychiatric examination; mental, anxiety, psychotic, cognitive, adaptation, substance-related, personality, somatoform and factitive disorders; child psychiatry; mourning reaction; crisis handling; malingering; psychopharmacology.</p> <p>Home department: PHYSIOTHERAPY</p>				

<b>324</b>	<b>10</b>	<b>Pathology (AHS)</b>	4L	<b>T</b>
Anatomical Pathology; Psychiatry. Home department: ANATOMIC PATHOLOGY				
<b>334</b>	<b>8</b>	<b>Pathology (AHS)</b>	3L	<b>T</b>
Surgery; Orthopaedics; Neurosurgery; Obstetrics and Gynaecology; Ophthalmology; Plastic Surgery. Home department: SURGERY				
<b>354</b>	<b>7</b>	<b>Pathology (AHS)</b>	2L	<b>T</b>
Geriatrics; Internal Medicine; Neurology; Community Health; Paediatrics Home department: COMMUNITY HEALTH				

#### **12746 PATHOLOGY FOR OPHTHALMOLOGY**

<b>876</b>	<b>40</b>	<b>Pathology for Ophthalmology</b>		
Basic and applied pathology with the emphasis on organ specific pathology will be mastered. Home department: OPHTHALMOLOGY				

#### **64785 PATHOLOGY RESEARCH PROJECT**

<b>775</b>	<b>60</b>	<b>Pathology Research Project</b>		
The student will be assigned an appropriate research project that will flow from current research in one of the divisions involved in the BScHons (Pathology) programme. The nature of the project will be determined by the elective module in either Anatomical Pathology, Chemical Pathology, Haematology or Immunology. Home department: ANATOMIC PATHOLOGY				

### **65374 PERSONAL AND PROFESSIONAL DEVELOPMENT**

<b>111</b>	<b>17</b>	<b>Personal and Professional Development</b>	<b>4L</b>	<b>T</b>
<p>Professional development through the establishment of knowledge, attitudes, views and skills. Personal development, facilitated by ensuring that the student makes optimal use of training opportunities in order to ensure that he can take his place as a responsible person in the broader community. The development of reading and writing skills within the academic environment in general, and specifically in the Health Sciences. Using and understanding relevant academic texts, understanding the various sections of the text, and the use of fluent, correct and suitable language. The development of basic oral and written skills in either Afrikaans, English or isiXhosa within the medical context. The nature and dynamics of the professional consultation.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

### **13036 PHYSICAL ANTHROPOLOGY**

<b>771</b>	<b>10</b>	<b>Physical Anthropology</b>		
<p>A detailed study of the skeleton in a normal individual, as well as the tracking of age-related changes from birth to 70+ years. A detailed study of physical anthropology and its relevance to forensic and other similar sciences.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				

### 58262 PHYSIOLOGICAL BIOCHEMISTRY

<b>142</b>	<b>6</b>	<b>Physiological Biochemistry</b>	2L	T
------------	----------	-----------------------------------	----	---

Proteins (structure, food sources, digestion and absorption); amino acid metabolism and catabolism; enzymes (structure and function); carbohydrates (structure, food sources, digestion and absorption); carbohydrate metabolism and catabolism; fat (structure, food sources, digestion and absorption); fat metabolism and catabolism; fat and water-soluble vitamins; nucleic acid metabolism; liver function and cholesterol metabolism; lipoprotein metabolism; integrative metabolism (control of blood glucose, metabolism during fasting and feeding, metabolism during exercise).

Home department: MEDICAL PHYSIOLOGY

### 13080 PHYSIOLOGY

<b>872</b>	<b>20</b>	<b>Physiology</b>		
------------	-----------	-------------------	--	--

Physiology, including neurophysiology

Home department: MEDICAL PHYSIOLOGY

### 22829 PHYSIOLOGY

<b>871</b>	<b>33</b>	<b>Physiology</b>		
------------	-----------	-------------------	--	--

The Physiology curriculum encompasses the physiology of the upper airways (nose and sinuses, larynx, mouth, pharynx, oesophagus), auditory and vestibular systems, as well as general physiology, immunology, haematology, cardiovascular, respiratory and muscle physiology, and the central nervous system.

Home department: MEDICAL PHYSIOLOGY

<b>52205 PHYSIOLOGY (AHS)</b>				
<b>278</b>	<b>26</b>	<b>Physiology (AHS)</b>	4L, 1P	<b>T</b>
<p>Chemical composition of the body, muscle physiology, haematology and immunology, cardiovascular physiology, respiratory physiology, neurophysiology, physiology of the renal and reproductive systems, physiology of the digestive system and endocrinology.</p> <p>Home department: MEDICAL PHYSIOLOGY</p>				

<b>60828 PHYSIOLOGY FOR OPHTHALMOLOGY</b>				
<b>871</b>	<b>40</b>	<b>Physiology for Ophthalmology</b>		
<p>An in-depth knowledge of ophthalmic and general physiology as related to ophthalmic conditions will need to be mastered.</p> <p>Home department: OPHTHALMOLOGY</p>				

<b>64610 PHYSIOTHERAPY PRACTICE</b>				
<b>474</b>	<b>4</b>	<b>Physiotherapy Practice</b>	1L	<b>T</b>
<p>Aspects of practice management; independent, self-responsible practice management; personal and personnel development; advanced aspects of ethical decision making; integration of all aspects of physiotherapeutic practice; different levels of physiotherapeutic service rendering; community physiotherapy; professionalism; occupational structures; healthcare law; applied ethical and moral dilemmas in health care; processes of quality insurance within the South African context.</p> <p>Home department: PHYSIOTHERAPY</p>				

<b>52140 PHYSIOTHERAPY SCIENCE</b>				
<b>152</b>	<b>20</b>	<b>Physiotherapy Science</b>	5L	<b>T</b>
<p>Introductory knowledge and analysis of normal body posture (static). Basic biomechanical concepts (kinematics, kinetics). Introduction to control and normal patterns of movement. Analysis of normal movement; normal development. Knowledge of normal physiological values with reference to physiotherapy. The radiological identification of normal structures where</p>				

relevant. Home department: PHYSIOTHERAPY				
<b>272</b>	<b>75</b>	<b>Physiotherapy Science</b>	5L, 6P	<b>T</b>
Interviewing in physiotherapy; preventative measures of health care in general and in physiotherapy in particular; applying the principles of physiotherapy to specific anatomical structures for the physiological effects desired. Basic principles of physiotherapeutical evaluation and treatment techniques. Biomechanics of the spinal column; re-education of normal movement patterns; specific exercise programmes for the core features of physiotherapy; handling of individuals and of groups; massage; basic principles of passive manual techniques; electrotherapy. Physiotherapy techniques applied to normalise tonus; breathing exercises; techniques to mobilise secretion; walking aids; principles of positioning. Basic knowledge of relevant outcome measures. Outcomes-based therapy. Home department: PHYSIOTHERAPY				

<b>11073 POST-MORTEM TECHNIQUES AND PRINCIPLES OF FORENSIC MEDICINE</b>				
<b>811</b>	<b>20</b>	<b>Post-mortem Techniques and Principles of Forensic Medicine</b>		
Detailed knowledge of and practical and interpretation skills regarding a post-mortem and knowledge of the forensic aspects of pathology. Home department: ANATOMIC PATHOLOGY				

<b>55239 PRACTICAL CLINICAL EXPOSURE</b>				
<b>198</b>	<b>10</b>	<b>Practical Clinical Exposure</b>	10L	<b>T</b>
Exposure of the student to different role players in the hospital, identifying and treating disorders in patients, ways of getting information via the patient. The importance of effective communication, effective visual observation and critical judgment. Awareness of the critical role of the physiotherapist in terms of responsibility. Home department: MEDICINE AND HEALTH SCIENCES CENTRAL				



### 11119 PRACTICAL RESEARCH PROJECT (MEDICAL VIROLOGY)

**772**

**60**

**Practical Research Project (Medical Virology)**

Basic virology, molecular virology or viral immunology

Home department: MEDICAL VIROLOGY

### 47007 PRACTICAL TRAINING

**272**

**17**

**Practical Training**

7P

**T**

Exposure to patient care through therapeutic practical tasks as well as food-service and community nutrition activities, where theoretical principles are demonstrated and applied in practice. This introductory module to isiXhosa and Afrikaans is aimed at basic and subject-related language skills.

Home department: HUMAN NUTRITION

**374**

**28**

**Practical Training**

12P

**T**

Exposure to and evaluation of theoretical principles demonstrated and applied in practice, including patient care through ward rounds, presentation and discussion of case studies, and practical community nutrition and management orientated tasks. Assessment of nutritional status and dietary recommendations are addressed in isiXhosa and Afrikaans.

Home department: HUMAN NUTRITION

### 52272 PRINCIPLES OF THERAPY

**141**

**20**

**Principles of Therapy**

4 weeks

**T**

Pharmacokinetics; pharmacodynamics; agonists/antagonists of cholinergic receptors; agonists/antagonists of adrenergic receptors; agonists/antagonists of dopamine receptors; agonists/antagonists of GABA receptors; agonists/antagonists of serotonin receptors; agonists/antagonists of histamine receptors; agents that inhibit enzymes; agents that inhibit pumps and active absorption processes; agents for controlling pain and inflammation; development of medications, quality management and control; principles of radiation therapy; principles of surgery.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

<b>18414 PSYCHOLOGY</b>				
<b>114</b>	<b>12</b>	<b>Psychology as a Science</b>	2L, 1T	<b>T</b>
<p>This module is an introduction to psychology both as a science and a profession, with specific emphasis on psychological issues that are relevant in the South African context. Psychology is positioned at the convergence of a number of traditions of research and practice, including biological, philosophical and pragmatic traditions. This introductory module gives students a basis from which to approach further study of the discipline.</p> <p>Home department: PSYCHOLOGY</p>				
<b>144</b>	<b>12</b>	<b>Psychology in Context</b>	2L, 1T	<b>T</b>
<p>In this module the basic principles in psychology are applied in order to understand the person in context, with particular reference to core social issues and challenges facing South African society.</p> <p>Home department: PSYCHOLOGY</p>				
<b>212</b>	<b>8</b>	<b>Approaches to Psychological Theories of the Person</b>	1.5L	<b>T</b>
<p>This module addresses psychological theories and understandings of the person with reference to major contemporary approaches. Theories to be considered may include systemic, psychodynamic, behavioural, cognitive and existential components, with consideration of the applicability of psychological theories to African contexts.</p> <p><i>PP Psychology 114, 144</i></p> <p>Home department: PSYCHOLOGY</p>				
<b>222</b>	<b>8</b>	<b>Social Psychology</b>	1.5L	<b>T</b>
<p>In this module theoretical and methodological developments in contemporary social psychology are presented. Social relationships and identity are investigated with reference to social categories like sex, race, ethnicity and sexual orientation, with emphasis on the South African context.</p> <p><i>PP Psychology 114, 144</i></p> <p>Home department: PSYCHOLOGY</p>				

<b>242</b>	<b>8</b>	<b>Human Development in Context</b>	1.5L	<b>T</b>
<p>In this module human development is studied, with specific reference to the South African context.</p> <p><i>PP Psychology 114, 144</i></p> <p>Home department: PSYCHOLOGY</p>				
<b>252</b>	<b>8</b>	<b>Psychopathology</b>	1.5L	<b>T</b>
<p>This module is an introduction to concepts of normal and abnormal behaviour from different perspectives and classification systems, with specific reference to the mental health context in South Africa.</p> <p><i>PP Psychology 114, 144</i></p> <p>Home department: PSYCHOLOGY</p>				
<b>318</b>	<b>24</b>	<b>Research Methods and Data Analysis in Psychology</b>	4L	<b>T</b>
<p>This module provides students with the knowledge and skills to plan and do research in psychology, to present, describe and analyse data, and to interpret and report research results critically.</p> <p>PP three modules of Psychology 212, 222, 242, 252</p> <p>Home department: PSYCHOLOGY</p>				
<b>348</b>	<b>24</b>	<b>Psychological Interventions</b>	4L	<b>T</b>
<p>Psychologists operate in a range of contexts, from individual psychotherapies to community interventions. This module critically discusses the principles behind the contributions psychologists make to human health, development and individual and collective well-being, with specific reference to the health and mental health context in contemporary South Africa.</p> <p>PP three modules of Psychology 212, 222, 242, 252</p> <p>Home department: PSYCHOLOGY</p>				

### 12272 PSYCHOLOGY FOR HEALTH SCIENCES

<b>242</b>	<b>7</b>	<b>Psychology for Health Sciences</b>	<b>2L</b>	<b>T</b>
<p>Clinical communication techniques; classical and operant conditioning; the influence of family and other interpersonal relations on behaviour; emotional bonding and development during infancy; psychosocial and intellectual development during early childhood and the establishment of behaviour patterns; personality development and identity formation; adaptation during the adult years, ageing and geriatrics; eating disorders.</p> <p>Home department: HUMAN NUTRITION</p>				

### 13037 RADIOLOGICAL ANATOMY

<b>771</b>	<b>10</b>	<b>Radiological Anatomy</b>		
<p>A study of the internal structures of the human body by means of X-rays, CT and MRI scans and other medical imaging techniques.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				

### 52418 REPRODUCTIVE SYSTEM

<b>271</b>	<b>20</b>	<b>Reproductive System</b>	<b>5 weeks</b>	<b>T</b>
<p>The adult reproductive system: normal structure and function; dysmenorrhoea; infertility; contraception; abortion; sexual dysfunction; the breast; menopause. Normal pregnancy; abnormal pregnancy; foetal evaluation; normal labour; abnormal labour; obstetric emergencies; the puerperium; organisation and evaluation of maternal health services; genetic and congenital deformities and management; non-systemic aspects of the neonate.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

<b>11043 RESEARCH IN MEDICAL PHYSIOLOGY</b>				
<b>772</b>	<b>60</b>	<b>Research in Medical Physiology</b>		
<p>A laboratory research project, culminating in the submission of an assignment, laboratory rotations and self-planned experiments.</p> <p>Home department: MEDICAL PHYSIOLOGY</p>				

<b>47015 RESEARCH METHODOLOGY</b>				
<b>312</b>	<b>9</b>	<b>Research Methodology</b>	2L, 1.5P	<b>T</b>
<p>Problem formulation, planning of a research programme, measuring instruments, formulation of a research protocol; collection of data, organisation, classification, analysis and interpretation of data; writing research reports; standardisation and the training of field workers.</p> <p>Home department: HUMAN NUTRITION</p>				
<b>413</b>	<b>16</b>	<b>Research Methodology</b>	3P	<b>T</b>
<p>The planning, implementation, analysis and reporting of a research project in community nutrition, therapeutic nutrition or food-service management.</p> <p>Home department: HUMAN NUTRITION</p>				
<b>811</b>	<b>45</b>	<b>Research Methodology</b>		
<p>This module consists of fifteen weeks of internet-based teaching in research methodology, together with weekly practical tasks and two assignments. The assignments are aimed at forming the basis of the introduction and methodology of the student's research.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>812</b>	<b>45</b>	<b>Research Methodology</b>		
<p>This module consists of fifteen weeks of internet-based teaching in research methodology, together with weekly practical tasks and two assignments. The assignments are aimed at forming the basis of the introduction and methodology of the student's research.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				

<b>873</b>	<b>10</b>	<b>Research Methodology</b>		
To improve the quality of research by postgraduate students in pathology. Home department: ANATOMIC PATHOLOGY				

#### **51764 RESEARCH METHODOLOGY**

<b>775</b>	<b>10</b>	<b>Research Methodology</b>		
The module addresses themes such as basic biostatistics and basic epidemiology. Tutorials on research projects will be made available, and the students will be expected to complete a research project in the field of hyperbaric medicine. Home department: COMMUNITY HEALTH				

#### **13044 RESEARCH METHODOLOGY IN OCCUPATIONAL THERAPY**

<b>372</b>	<b>12</b>	<b>Research Methodology in Occupational Therapy</b>	<b>2L</b>	<b>T</b>
Introduction to research, principles and methods of research, including research protocols, sampling, measurement, organising data and biostatistics. Home department: OCCUPATIONAL THERAPY				
<b>482</b>	<b>12</b>	<b>Research Methodology in Occupational Therapy</b>	<b>1L</b>	<b>T</b>
Data reporting, alternative approaches to research and carrying out a research project. Home department: OCCUPATIONAL THERAPY				

#### **13047 RESEARCH METHODOLOGY (PAEDIATRICS)**

<b>871</b>	<b>20</b>	<b>Research Methodology (Paediatrics)</b>		
Research toolkit: literature search; formulating the research question; introduction to research methodology; presenting research; scientific writing and peer review. Resources for researchers: introduction to research ethics and				

administration; research funding; biostatistical support.

Art and philosophy of research: on becoming a scholar.

Home department: PEDIATRICS AND CHILD HEALTH

### 54305 RESEARCH METHODS (PHYSIOTHERAPY)

<b>372</b>	<b>10</b>	<b>Research Methods (Physiotherapy)</b>	1L, 3P	<b>T</b>
------------	-----------	---	--------	----------

Epidemiology principles; introduction to research; principles of research; methodology, sampling, measuring, organising the data, biostatistics.

Home department: PHYSIOTHERAPY

<b>472</b>	<b>10</b>	<b>Research Methods (Physiotherapy)</b>	1L, 2P	<b>T</b>
------------	-----------	---	--------	----------

Principles of proven practice; the development of a basic research protocol; the practical execution of a basic research project and the reporting of findings.

Home department: PHYSIOTHERAPY

### 50962 RESEARCH REPORT

<b>472</b>	<b>18</b>	<b>Research Report</b>	2L	<b>T</b>
------------	-----------	------------------------	----	----------

Students are required to do a research project in Speech Pathology. A research report must be submitted at the beginning of the second semester.

Home department: SPEECH-LANGUAGE AND HEARING THERAPY

### 55867 RESEARCH PROJECT

<b>771</b>	<b>30</b>	<b>Research Project</b>		
------------	-----------	-------------------------	--	--

An appropriate research project is required in the form of a literature review, case study or clinical research project. This will be done in conjunction with a project leader.

Home department: OBSTETRICS AND GYNAECOLOGY

<b>882</b>	<b>45</b>	<b>Research Project</b>		
------------	-----------	-------------------------	--	--

The first year includes the planning of a research project and the submission of a protocol for ethics approval. The implementation of a

research project and submission of a thesis, or preferably one article for publication in a peer-reviewed journal, according to the format specified in the study guide, are concluded in the second year of study.

Home department: HUMAN NUTRITION

### 52329 RESPIRATORY SYSTEM

<b>271</b>	<b>30</b>	<b>Respiratory System</b>	7 weeks	<b>T</b>
------------	-----------	---------------------------	---------	----------

Embryology and development of the airways and lung; respiratory characteristics of the thoracic wall and the thoracic and pleural cavities; upper and lower airways: structure; lungs: structure and relationship to respiratory mechanics and ventilation; ventilation/perfusion relationships in the lungs; gas exchange and oxygen transport; oxygen carrying capacity; interaction of the cardiac and respiratory systems; control of breathing; role of the lungs in acid-base balance; functional anatomy, physiology, microbiology, pathology and pharmacology; evaluation of the respiratory system; infections of the upper respiratory tract; infections of the lower respiratory tract; obstructive airways disease; pleural diseases; neoplastic disease of the lung; head and neck tumours; chest trauma and post-surgical complications; neonatal lung disease; prevention and rehabilitation of lung disease; environmental lung disease and interstitial lung disease; respiratory failure; integrated approach to general respiratory symptoms.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 19003 SOCIOLOGY

<b>114</b>	<b>12</b>	<b>Introduction to Sociology and Social Anthropology</b>	3L	<b>T</b>
------------	-----------	--	----	----------

Introduction to conceptual and theoretical themes in sociology and social anthropology, including discussions on social inequality, social stratification, culture, identity (including gender, "race" and ethnicity), socialisation, and age in the context of a life course perspective. Discussion themes are grounded in social theory and methodological approaches in the social sciences.

Home department: SOCIOLOGY AND SOCIAL ANTHROPOLOGY



<b>144</b>	<b>12</b>	<b>Social issues in South Africa</b>	3L	<b>T</b>
<p>A selection of social issues that reflect the complexity of contemporary South African society. Examples of themes include: social change; poverty and development; social institutions such as the family, education and religion; crime and security; health, the body and HIV/AIDS; political and economic relationships.</p> <p>Home department: SOCIOLOGY AND SOCIAL ANTHROPOLOGY</p>				

<b>13046 SPECIALIST PAEDIATRICS</b>				
<b>871</b>	<b>240</b>	<b>Specialist Paediatrics</b>		
<p>Rotations through general paediatrics, ambulatory paediatrics, neonatology, paediatric intensive care, neonatal intensive care, cardiology, pulmonology, gastroenterology, neurology, neurodevelopmental paediatrics, nephrology, endocrinology, infectious diseases, haematology, oncology and allergy.</p> <p>Home department: PEDIATRICS AND CHILD HEALTH</p>				

<b>19267 SPECIAL PHYSICS</b>				
<b>142</b>	<b>8</b>	<b>Physics for Health Sciences</b>	2L, 1T	<b>T</b>
<p>Structure of matter, kinematics, statics, dynamics, heat, temperature, hydrostatics, hydrodynamics, wave motion and electricity.</p> <p>Home department: PHYSICS</p>				

<b>46221 SPEECH PATHOLOGY</b>				
<b>121</b>	<b>12</b>	<b>Speech and Hearing Science</b>	3L, 1T	<b>T</b>
<p>Physiological and neurological basis of communication; role of breathing, resonance, articulation and suprasegmental characteristics in speech production; feedback mechanisms in speech-sound production; theories of speech production; theories of speech perception; speech perception in different populations. The anatomical division of the auditory system; the functional role of the parts of the auditory system; frequency, intensity and duration of sound. Basic physics of sound.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>122</b>	<b>12</b>	<b>Human Communication</b>	3L, 1T	<b>T</b>
<p>Definitions of speech, language and communication; the components of language; different types of communication; definitions of phonation, respiration, resonance and articulation; principles of normal communication development; characteristics of normal communication development in children 0 to 3 years; attachment and the implication for development; development of early literacy and phonological awareness.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>142</b>	<b>6</b>	<b>Articulation and Phonological Disorders</b>	3L, 1T	<b>T</b>
<p>Overview of the nature and extent of articulation and phonological disorders; assessment and intervention of articulation and phonological development disorders.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>162</b>	<b>12</b>	<b>Basic Audiometry</b>	3L, 1T	<b>T</b>
<p>Pathologies of the ear; theoretical aspects of hearing evaluation; basic audiometric test battery (pure-tone audiometry; air and bone conduction; masking; speech threshold testing; immittance measurements of the middle ear); case history and interview; otoscopic examination and tuning fork tests; classification of hearing loss. Identification audiometry; hearing screening of preschool and school-aged children and adults; the effect of noise on hearing; industrial hearing screening; legislation regarding noise in the workplace; hearing conservation programmes.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				

<b>212</b>	<b>6</b>	<b>Promotion of Normal Communication and Prevention of Disability</b>	3L, 1T	<b>T</b>
<p>Health promotion and prevention; early identification of communication disorders and disabilities, prevalence of disability; health policy; primary health care; philosophical background. (The module may be presented according to a service-learning approach.)</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>222</b>	<b>6</b>	<b>Craniofacial Disorders</b>	3L, 1T	<b>T</b>
<p>Revision of embryology, anatomy and physiology of the oral, nasal and pharyngeal structures; cleft lip and/or palate; feeding, speech and resonance characteristics of infants and children with cleft lip and/or palate; intervention for the client and family by the multi-disciplinary team.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>241</b>	<b>6</b>	<b>Principles of Bio-ethics</b>	3L, 1T	<b>T</b>
<p>Principles of bio-ethics, namely beneficence, non-maleficence, justice and respect for autonomy (including the client-centred approach). Ethical decision making. Professional conduct and competence. Professional codes of ethics, including the SASLHA Code of Ethics and HPCSA ethical rules. The job description of the speech-language therapist.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>251</b>	<b>6</b>	<b>Language Disorders in Specific Populations</b>	3L, 1T	<b>T</b>
<p>Intervention of speech and language disorders in specific populations.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>252</b>	<b>6</b>	<b>Voice Disorders</b>	3L, 1T	<b>T</b>
<p>Anatomy and physiology of the phonatory mechanism; the nature and extent of voice disorders; intervention for voice disorders; introduction to tracheo-oesophageal voice restoration; multidisciplinary service delivery.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>278</b>	<b>24</b>	<b>Language Impairment</b>	3L, 1T	<b>T</b>
<p>Introduction and background to children with primary language impairment. Language assessment and intervention for children from 0 to 3 years, and 4 to 6 years. Assessment and intervention for school aged</p>				

children with language impairment. Home department: SPEECH-LANGUAGE AND HEARING THERAPY				
<b>331</b>	<b>12</b>	<b>Intervention for Persons with Hearing Loss</b>	3L, 1T	<b>T</b>
The role of the speech-language therapist; the communication model as basis for the rehabilitation of persons with hearing impairment; rehabilitation technology; speech acoustics; speech perception and hearing loss; approaches to speech perception development of children with hearing loss; speech, language and communication development of children with hearing loss; assessment of speech, language and communication skills of children with hearing loss; therapy approaches for development of speech, language and communication skills in children with hearing loss; early intervention in the population with hearing impairment (underlying principles of successful parent-guidance programmes, parent support through counselling, early communication assessment); educational needs of and challenges for learners with hearing impairment. Home department: SPEECH-LANGUAGE AND HEARING THERAPY				
<b>332</b>	<b>12</b>	<b>Fluency Disorders</b>	3L, 1T	<b>T</b>
Definition of fluency and normal disfluency; nature and extent of fluency disorders; approaches to intervention for fluency disorders in children and adults. Home department: SPEECH-LANGUAGE AND HEARING THERAPY				
<b>364</b>	<b>6</b>	<b>Introduction to Research as Professional Function</b>	3L, 1S	<b>T</b>
Research as process and action; various research paradigms; inductive and deductive reasoning; identification of a research question; formulation of the research question; defining and operationalising of concepts; measurement in research. Home department: SPEECH-LANGUAGE AND HEARING THERAPY				
<b>378</b>	<b>24</b>	<b>Neurogenic Communication Disorders</b>	3L, 1T	<b>T</b>
Aetiology of congenital and neurogenic communication disorders; classification of neurogenic communication disorders; definition and communication characteristics of aphasia, motor-speech disorders, traumatic brain injury, right hemisphere damage and dementia; specific				

<p>approaches to the assessment of neurogenic communication disorders; principles of and approaches to the treatment of aphasia, motor-speech disorders, traumatic brain injury, right hemisphere damage and dementia; family-centred and interdisciplinary team approach to intervention.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>411</b>	<b>6</b>	<b>Augmentative and Alternative Communication (AAC)</b>	3L, 1T	<b>T</b>
<p>Introduction to AAC; principles of intervention; technology in AAC; AAC interventions for individuals with developmental and acquired disabilities; family-centred interventions; multidisciplinary interventions.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>413</b>	<b>12</b>	<b>Dysphasia</b>	3L, 1T	<b>T</b>
<p>Nature and extent of dysphasia; neurology of swallowing; development of feeding and swallowing; clinical, instrumental and radiological assessment of swallowing; approaches to intervention for neurological, mechanical and other disorders of swallowing; multidisciplinary team approach.</p> <p>Home department: SPEECH-LANGUAGE AND HEARING THERAPY</p>				
<b>478</b>	<b>24</b>	<b>Advanced Seminars in Speech-Language and Hearing Therapy</b>	3L, 1T	<b>T</b>
<ul style="list-style-type: none"> <li>• Literacy: principles of literacy; intervention of written language disorders; literacy programmes in high-risk populations; team approaches.</li> <li>• Principles of outcome-based education in South Africa; principles of reading development and support; inclusive education. The role of the speech-language therapist in the educational setting. Application of current education policy and legislation.</li> <li>• New theories and research in speech-language therapy.</li> <li>• Most important approaches to ethical decision making (rule morality, consequentialism, virtue ethics) and methods for ethical decision making.</li> <li>• Secondary professional functions e.g. the speech-language therapist as a consultant in the public, non-governmental and private sectors; forensic practice in speech-language therapy; morals and ethics of professional practice; education and training of other registered</li> </ul>				

professionals; management functions: planning, organising, implementing and monitoring; resource management: personnel, finances, technical, equipment.

- Advanced theories and research in speech-language therapy; application within the context of services in South Africa.
- Technological developments for intervention and rehabilitation.

Home department: SPEECH-LANGUAGE AND HEARING THERAPY

### 65765 STATISTICAL CONCEPTS AND COMPUTER SKILLS

<b>197</b>	<b>12</b>	<b>Statistical Concepts and Computer Skills</b>	2L, 2P	<b>T</b>
<p>The aim of the module is to assist students with respect to the Health in Context 111 module of the MB,ChB foundation phase and especially the theme, Risk Factors of Disease and Health Improvement. Basic knowledge of measuring health and disease is acquired, risk factors are determined and the principles of health improvement and evidence-based medicine are mastered on a basic level. Students with a disadvantage in computer skills will benefit from this module, which includes education in Webstudies, the intranet, e-mail and operating systems of the University, and the internet and search engines. Emphasis is on managing clinical data, which includes gathering, saving, ordering and graphical displaying thereof. The focus is on computer skills with an emphasis on the use of Microsoft Word and Microsoft Excel to analyse data statistically and to write a report on the findings. Relevant concepts and the underlying principles of the statistical analysis of a set of data with computer software are explained, including the terminology of introductory and descriptive Biostatistics and Epidemiology.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

### 55204 STRATEGIC COMMUNICATION

<b>199</b>	<b>16</b>	<b>Communication Skills</b>	4L	<b>T</b>
<p>Generic language skills, such as listening skills, professional oral presentations, reading techniques, academic writing skills and thinking skills, will be developed within the context of studies in the Health Sciences. Elementary research techniques will be addressed and study</p>				

skills will be refreshed throughout.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 10980 SURGICAL PRINCIPLES

<b>872</b>	<b>90</b>	<b>Surgical Principles</b>		
------------	-----------	----------------------------	--	--

General principles of Surgery and principles of the surgical specialties

Must be completed within 42 months of first registration.

Home department: SURGERY

### 11087 THEORETICAL MEDICAL PHYSIOLOGY

<b>771</b>	<b>60</b>	<b>Theoretical Medical Physiology</b>		
------------	-----------	---------------------------------------	--	--

Seminars on capita selecta, research-article evaluations, journal tutorials and brain-teaser projects.

Home department: MEDICAL PHYSIOLOGY

### 11129 THEORY OF MEDICAL VIROLOGY

<b>771</b>	<b>60</b>	<b>Theory of Medical Virology</b>		
------------	-----------	-----------------------------------	--	--

Tissue culture and isolation: cell culture techniques, direct immunofluorescence. Serology: ELISA method. Molecular virology: DNA isolation, PCR sequence determination. Cellular immunology: PBMC isolation; cellular scanning (including FACS analysis).

Home department: MEDICAL VIROLOGY

### 50849 THERAPEUTIC NUTRITION

<b>244</b>	<b>10</b>	<b>Therapeutic Nutrition</b>	2L, 2P	<b>T</b>
------------	-----------	------------------------------	--------	----------

Interpretation of biochemical measurements and haematology, and therapeutic adaptations of the diet. Insight into the medical background to and treatment of diseases; medical documentation; applied evaluation of nutritional status for specific disease conditions; knowledge and understanding of the role of nutrition in the aetiology and treatment of nutrition-related diseases/conditions; implement the theoretical concepts in

<p>practice; case studies of patients with a variety of diseases.</p> <p>Practicals: Evaluation of nutritional status; planning of nutritional support of the relevant conditions.</p> <p>Home department: HUMAN NUTRITION</p>				
<b>378</b>	<b>35</b>	<b>Therapeutic Nutrition</b>	4L, 5P	<b>T</b>
<p>Insight into the medical background to and treatment of diseases; medical documentation; evaluation of nutritional status. Knowledge and understanding of the role of nutrition in the aetiology and treatment of nutrition-related diseases/conditions, and the practical implementation of a nutrition plan; nutritional support (enteral and parenteral nutrition); attendance of and participation in ward rounds to implement the theoretical concepts in practice; case studies of patients with a variety of diseases. Nutrigenomics. Paediatric nutrition.</p> <p>Practicals: Evaluation of nutritional status; planning and implementation of nutritional support and follow-up of patients' treatment; presentation of case studies during nutrition ward rounds.</p> <p>Home department: HUMAN NUTRITION</p>				
<b>478</b>	<b>58</b>	<b>Therapeutic Nutrition</b>	10P	<b>T</b>
<p>Applying the nutritional and behavioural sciences, including the study of food, to provide patients with total nutritional care in the form of nutrition counselling and dietary prescription. The aim is for students to develop skills in the four basic components of clinical dietetics – needs assessment and the planning, implementation and evaluation of nutritional care – as related to a variety of diseases. (Case studies are done, with presentation of patients at ward rounds; the same concepts are put into practice at outpatient clinics.) Participation in nutrition and medical ward rounds. Taking responsibility, under supervision, for the nutritional care of patients in selected wards. Planning both enteral and parenteral nutrition protocols. Managing patient statistics.</p> <p>Utilising the computer in therapeutic nutrition.</p> <p>Home department: HUMAN NUTRITION</p>				

<b>56367 THESIS</b>				
<b>872</b>	<b>90</b>	<b>Thesis</b>		
<p>During the second year, the student shall complete a research project and submit a satisfactory thesis based thereon. The research project must be</p>				



relevant to the discipline of Speech Pathology, and the nature and extent of the project will be determined by the head of the division.

Home department: SPEECH-LANGUAGE AND HEARING THERAPY

**873**

**90**

**Thesis**

During the second year, the student shall complete a research project and submit a satisfactory thesis based thereon. The research project must be relevant to the discipline of Speech Pathology, and the nature and extent of the project will be determined by the head of the division.

Home department: SPEECH-LANGUAGE AND HEARING THERAPY

### **13053 THESIS (PHYSIO - OMT)**

**894**

**90**

**Thesis**

Principles of research methodology. Writing a research proposal and obtaining ethical approval.

Planning, performing and analysis of and reporting on a research project.

Home department: PHYSIOTHERAPY

### **52442 THE SKIN**

**471**

**10**

**The Skin**

2 weeks

**T**

Function of the skin; terminology/approach; epidemiology of skin disease; socio-psychological aspects of dermatology; keratin abnormalities; psoriasiform reactions; pannicular reactions; dermatitis family of reaction patterns; photodermatology as a reaction pattern; the effect of physical factors on the skin; lichenoid reactions; erythrodermal reactions; reactive erythema and vasculitis as a reaction pattern; vascular and lymphatic pathology; adnexal pathology; hypo- and hyperpigmentation; bullous lesions; skin tumours; genodermatosis; infections of the skin; dermatoses from parasites and infections; diabetes and the skin; cutaneous manifestations of pregnancy; paediatric dermatology; internal malignancy of the skin; auto immune diseases; drug reactions; dermatotherapy; HIV and the skin.

Home department: MEDICINE AND HEALTH SCIENCES CENTRAL

### 52337 UROGENITAL SYSTEM

<b>271</b>	<b>30</b>	<b>Urogenital System</b>	7 weeks	<b>T</b>
<p>Kidney/urological themes: Embryology of the urogenital system; the kidney: structure and function; global renal function: glomerular, tubular and collecting duct function; renal blood flow and glomerular filtration; regulation of normal salt and water balance; fluid compartments: composition/changes and quantification; role of the kidney in acid-base balance; the urinary tracts: structure and function in urine transport; bladder: structure and function. Genital/reproductive themes: structure and function of the male genital system; structure and function of the female reproductive system. Renal failure; haematuria; proteinuria; bladder: urinary retention and incontinence; obstruction of the upper urinary tracts; infections of the urinary tract; urinary tract stones; neoplasms of the urinary tract; genital system: scrotal swelling; penile lesions; urogenital trauma; pelvic pain; vaginal discharge and genital ulcers; genital prolapse; tumours of the female genital tract.</p> <p>Home department: MEDICINE AND HEALTH SCIENCES CENTRAL</p>				

### 13039 USE OF ANIMALS IN RESEARCH

<b>771</b>	<b>5</b>	<b>Use of Animals in Research</b>		
<p>Gaining of knowledge and understanding on ethical handling, care and use of research animals for scientific purposes.</p> <p>Home department: ANATOMY AND HISTOLOGY</p>				

### 21687 XHOSA

<b>178</b>	<b>24</b>	<b>Introduction to Xhosa language and Culture</b>	3L, 1T	
<p>Classification of the African languages Language policy and language planning for the African languages; The communication skills of speaking, listening comprehension, reading and writing in socio-cultural contexts; Cultural perspectives and language-related cultural conventions relevant to basic communication in Xhosa; Introduction to the linguistics of Xhosa; Introduction to communication in authentic prescribed texts from the printed media (newspaper, magazine); Introduction to the literature of Xhosa.</p>				

*Notes*

1. Students who have passed Xhosa or Zulu First Language for the matriculation examination or an equivalent examination may not take Xhosa 178 for degree purposes but can take Xhosa 188.
2. Students of Speech-Language and Hearing Therapy I and the Extended Degree Programme for Speech-Language and Hearing Therapy I Faculty of Medicine and Health Sciences are placed in either Xhosa 178 or Afrikaans Language Acquisition 178 or 188 according to a language proficiency test.
3. No previous knowledge of Xhosa is required.

Home department: AFRICAN LANGUAGES

## 5. RESEARCH AND SERVICE BODIES

### **Bureau for Bio-Engineering**

The Bureau is housed at the Faculty of Medicine and Health Sciences and the Tygerberg Hospital, with access to the facilities of the Faculty of Engineering of Stellenbosch University. The objectives of the Bureau are the coordination, provision and promotion of Bio-engineering. This includes the identification of problem areas, and the execution of design tasks and feasibility studies using clinical and laboratory research that requires knowledge of a specialised and advanced nature in the domain of Bio-engineering.

### **Centre for Evidence-Based Health Care (CEBHC)**

The Centre for Evidence-based Health Care (CEBHC) ([www.sun.ac.za/cebhc](http://www.sun.ac.za/cebhc)) aims to develop, teach and promote evidence-based health care (EBHC) at undergraduate and postgraduate levels. Furthermore, it strives to provide EBHC support and resources to health care professionals to help maintain the highest standards of health care practice and to enhance the use of best evidence by government, non-governmental organisations and the private sector in health care policy and practice. The core activities of the CEBHC are research, teaching and knowledge transfer.

**Research:** The CEBHC focuses on conducting high-quality systematic reviews and meta-analyses; on researching the barriers to and facilitators of the uptake of best evidence in health care policy and practice; and on testing interventions aimed at enhancing evidence-based decision-making.

**Teaching:** The CEBHC undertakes a wide spectrum of training, including:

- Integrating EBHC knowledge and skills as a core competency in the under- and postgraduate education of doctors, nurses and other health care professionals trained at SU.
- Training and providing technical support to postgraduate students at the master's and doctorate levels in conducting high-quality systematic reviews – either as a research project for a master's degree or as a component of a doctoral thesis.
- Training teaching staff how to teach EBHC and conduct research in the field of EBHC.

- Providing support to the MSc (Clinical Epidemiology) programme and other relevant degree and diploma programmes that incorporate EBHC as a focus area.

**Knowledge transfer:** The CEBHC promotes the uptake of best evidence by health care decision-makers thereby supporting evidence-based policy and practice. This is achieved by producing reliable evidence assessments based on accessing, assessing and interpreting results from systematic reviews on specific questions, communicating the evidence and promoting its use by a variety of stakeholders, including the general public, the media, health professionals and policymakers.

### **Centre for Human Genetics Research and Education (GENRED)**

The Centre for Human Genetics Research and Education (GENRED) is situated within the Faculty of Medicine and Health Sciences at Stellenbosch University. At present, human genetics projects are being carried out in seven departments/divisions and two other major centres of the faculty.

The founding of the centre in 2003 made provision for a recognised coordinating body to stimulate and facilitate research and training, and to promote new and innovative technology in this high-impact area. The centre aims to coordinate and promote original, fundamental and applied research in the field of human genetics and to be involved in the educating, teaching and training of students and the community. The centre strives to collaborate with other national and international bodies to achieve these goals.

### **Centre for Infectious Diseases (CID)**

The CID is a multidisciplinary entity that researches the prevention and management of infections and infectious diseases, on a regional and national basis, in the South African community. The purpose is to provide a science-based service relating to the prevention, diagnosis and treatment of infectious diseases. The Centre will transfer its scientific knowledge and skills base through the provision of a wide range of formal (on undergraduate and postgraduate level) and informal teaching and training programmes.

The CID integrates the following disciplines as collaborative functional areas on a shared services and academic platform:

- the functional area of adult infectious diseases,
- the functional area of paediatric infectious diseases,
- the functional area of pathology of infectious diseases,
- the functional area of prevention and control of infection,

- public health aspects of the Infectious Diseases Unit at Tygerberg Hospital,
- social and ethical aspects of infectious diseases, and
- molecular biology of infectious diseases, as a basic scientific support and development tool for the clinical sciences.

CID pursues the following objectives:

- **Research:** Enhancing the understanding of infections and infectious diseases in our communities in respect of their pathogenesis, epidemiology, prevention, treatment and care.
- **Teaching and training:** Providing a platform for formal undergraduate and postgraduate programmes in various aspects of infection and infectious diseases. The teaching and training platform will also serve as a launch pad for short and informal courses for health professionals.
- **Service:** Providing services in the areas of diagnosis, management and infection control and prevention.

### **Centre for Medical Ethics and Law (CMEL)**

The Centre for Medical Ethics and Law in the Department of Medicine at the Faculty of Medicine and Health Sciences of Stellenbosch University aims to focus on and enhance the teaching and practice of medical and research ethics. The objective is to allow health science professionals to combine moral reflection with the demands of practice, both at undergraduate and at postgraduate level. Furthermore, the Centre strives to provide ethics support and resources to healthcare professionals so that they may maintain the highest standards of healthcare practice, and so that ethical deliberation by the government, non-governmental organisations and the private sector may be enhanced regarding healthcare policy and practice. The core activities of the CMEL are teaching, research and service.

**Teaching:** The CMEL undertakes a wide spectrum of training, including:

- Integrating ethics knowledge and skills as a core competency in the undergraduate and postgraduate education of doctors and other healthcare professionals trained at SU.
- Training and supervising postgraduate students at master's and at doctoral level in various health science disciplines.
- Training research ethics committee members in Africa as part of the ARESA programme to obtain a Postgraduate Diploma in Health Research Ethics.

- Training teaching staff to teach ethics in all disciplines, as well as in practice, via the monthly Ethics Discussion Group.
- Training researchers in good clinical practice (GCP).
- Providing support for other programmes as well as related degree and diploma programmes that incorporate ethics as a focus area.

**Research:** The CMEL focuses on conducting high-quality empirical research that is both quantitative and qualitative in nature and that focuses on important questions in medical and research ethics. The Centre also undertakes supervision of postgraduate research ethics projects.

**Service:** The CMEL provides an ethics consultancy service to doctors in practice via its ethics hotline and via e-mail. An ethics consultancy service is also provided for Tygerberg Hospital via the Tygerberg Clinical Ethics Committee and ad hoc urgent consultations. Continuing professional development (CPD) activities are provided via CPD ethics talks and an online CPD programme linked to the book on ethics published by the Centre.

### **Centre for Molecular and Cellular Biology (SU/MRC)**

The Centre was established in the Faculty of Medicine and Health Sciences of Stellenbosch University with the joint support of the MRC, Stellenbosch University and the then CPA (now PAWC) as a national facility for research in molecular and cellular biology in South Africa. The decision to establish the Centre was based on an urgent need to support and develop sophisticated South African molecular biological skills, as well as to meet the growing biotechnological demands of the country's research and industrial sectors. Molecular biology, including particularly the ability to manipulate genes (through the amplification, cloning, analysis and alteration of DNA fragments), has set biology and the life processes in a whole new perspective. It is of the utmost importance that these developments should be applied to achieve a better understanding and management of South African health problems. The Centre is using these advanced and developing techniques to study infectious diseases (especially tuberculosis – looking at the infectious organisms and the host immune system), genetic diseases, especially heart diseases (so as to provide both pre- and postnatal diagnosis or counselling), cancer (including familial cancers), and the human immune system. Not only does the mandate of the Centre include research and postgraduate training, but the Centre also serves an important function as a reference centre for the development of skills in molecular biology in South Africa. Smaller research groups supported by the MRC at other South African universities can be strengthened by advice, training and logistical support from the Centre.

### **Centre for Rehabilitation Studies**

The Centre for Rehabilitation Studies is a joint undertaking of the University and the Provincial Government of the Western Cape, and is accommodated in the buildings of the Faculty of Medicine and Health Sciences on the Tygerberg Campus. The Centre is a committed, coordinating and directive institution that aims at excellence in addressing the current need for advanced interdisciplinary studies in the fields of disability care and rehabilitation. This is achieved through the education and training of health professionals from a variety of backgrounds to develop the necessary clinical decision-making, managerial, educational and research knowledge, skills and socio-political attitudes in order to assume positions of consultancy and leadership within the field of rehabilitation. The Centre is linked to the Division of Community Health for the quality assurance of its courses and programmes. The Centre's mission is underpinned by the principles of the comprehensive primary healthcare approach and will be realised by working in collaboration with the disability and service sectors.

### **Clinical Nutrition Research Centre of Stellenbosch University (CNRC(SU))**

#### **Status**

The Centre is a coordinating and directive institution for research and training of the Faculty of Medicine and Health Sciences of Stellenbosch University in the field of clinical nutrition and related fields. The Centre is located in the Division of Human Nutrition and reports to the Medical and Health Sciences Faculty Board.

#### **Mission**

The Centre is committed to developing excellence in clinical nutrition and other related fields of nutrition research.

#### **Objectives**

The Centre aims to:

- Encourage and perform original, fundamental and applied research, in parallel with the training of postgraduate students, in clinical nutrition and other related fields of nutrition.
- Uphold and maintain the highest possible ethical standards.
- Create and maintain strategically important areas of excellence in order to make a relevant contribution locally, and to continue to enhance its prestige internally.



- Develop and support its personnel to realise their full potential as researchers.
- Facilitate optimal growth and deployment of expertise and infrastructure in the Faculty and University so that research and training in the field of clinical nutrition and other related fields of nutrition can be practiced at the highest possible level of competence.
- Collaborate closely with relevant academic institutions and the private sector in South Africa, Africa and internationally.
- Stimulate and maintain collaboration with other role players at every level in South Africa, Africa and internationally.
- Achieve the status of a Centre of Excellence in South Africa, Africa and internationally.
- Provide a nutritional service for nutritional status assessment in South Africa, Africa and internationally.
- Provide an advisory service on clinical nutrition and other related fields of nutrition research in South Africa, Africa and internationally.
- Disseminate nutrition information based on research findings in South Africa, Africa and internationally.

### **Cranio-Facial Unit: Tygerberg Hospital**

The Cranio-facial Unit deals mainly with congenital abnormalities, of which cleft lip and cleft palate are the most common. Because the Unit has become well known, patients with other congenital facial and skull deformities are also referred from other provinces. The Unit usually functions on an interdisciplinary basis through use being made of neurosurgery, maxillofacial and oral surgery, orthodontics, ophthalmology, occupational therapy, physiotherapy, etc.

### **Desmond Tutu TB Centre**

The Desmond Tutu TB Centre ([www.sun.ac.za/tb](http://www.sun.ac.za/tb)) is an academic research centre in the Department of Paediatrics and Child Health, Faculty of Medicine and Health Sciences. It has its main offices on the Tygerberg Campus, and satellite offices in various communities affected by TB and poor health. The Centre's mission is to improve the health of vulnerable groups by influencing policy, using new knowledge created by research that focuses on health-related factors – mainly TB and HIV. To this end the Centre works closely with the Department of Health and local communities. It provides training for academic and health services staff, builds capacity in

the University and the Department of Health, provides services to communities and serves in an advisory capacity regarding TB and health.

### **DST/NRF Centre of Excellence for Biomedical TB Research (CBTBR)**

The CBTBR is one of six Centres of Excellence created through the National Research and Development Strategy of the South African government. The Department of Science and Technology (DST) implemented the centres under the guidance of the National Research Foundation (NRF) of South Africa. The CBTBR was established in July 2004 and signifies the government's commitment to finding solutions for one of the country's most threatening diseases.

The CBTBR comprises two internationally acclaimed TB research laboratories, namely the Division of Molecular Biology and Human Genetics of Stellenbosch University and the NHLS laboratory of the University of the Witwatersrand. By combining the skills and expertise of these two laboratories, the Centre of Excellence is focused on contributing towards local and global research efforts that are aimed at developing new tools for controlling tuberculosis and to use the research as a vehicle for training a new generation of high-quality biomedical research scientists.

The research programme of the CBTBR spans a broad spectrum of topics, ranging from fundamental research aimed at better understanding the biology of the bacterium that enables it to avoid destruction in the host and spread rapidly within human populations, to the application of basic research findings in clinical TB research and management. Included in the latter is research aimed at the development of multidisciplinary approaches for understanding the epidemiology of the disease and the identification of novel bacterial and host markers that will shorten the time taken to develop new diagnostic tools.

### **Unit for Anxiety and Stress Disorders (SU/MRC)**

Disorders of the psyche are fast becoming one of the greatest contributors to the burden of health disorders in both the developing and developed worlds. The Unit for Anxiety and Stress Disorders was founded in late 1997 with the mandate to:

- focus specifically on research on anxiety disorders, including posttraumatic stress disorders;
- foster a multidisciplinary approach to these disorders;
- incorporate a biopsychosocial focus;
- increase awareness about these conditions in the community; and

- build the necessary capacity.

The research covers a wide spectrum, from benchwork to bedside trials using animal models and genetics studies, as well as a variety of actions aimed at appropriate aspects of community psychology and culture. The practical implementation of these findings in the interest of the community, for example through the Unit's Mental Health Information Centre, which includes a 24-hour telephone call service, is given high priority.