



# UNIVERSITY OF CAPE TOWN

## FACULTY OF HEALTH SCIENCES (POSTGRADUATE)

### 2017

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The Registrar's and General Enquiries offices are located in the Bremner Building and remain open during the lunch hour. The Admissions Office and Student Records Office are located in the Masingene Building, Middle Campus, and are open from 08h30 to 16h30. The Cashier's Office is located in Kramer Building, Middle Campus, and is open from 09h00 to 15h30.

**This handbook is part of a series that consists of**

- Book 1:** Undergraduate Prospectus
- Book 2:** Authorities and information of record
- Book 3:** General Rules and Policies
- Book 4:** Academic Calendar and Meetings
- Book 5:** Student Support and Services
- Book 6-11:** Handbooks of the Faculties of Commerce, Engineering & the Built Environment, Health Sciences, Humanities, Law, Science
- Book 12:** Student Fees
- Book 13:** Bursary and Loan Opportunities for Undergraduate Study
- Book 14:** Financial assistance for Postgraduate Study and Postdoctoral Research

The University has made every effort to ensure the accuracy of the information in its handbooks. However, we reserve the right at any time, if circumstances dictate (for example, if there are not sufficient students registered), to

- (i) make alterations or changes to any of the published details of the opportunities on offer; or
- (ii) add to or withdraw any of the opportunities on offer.

Our students are given every assurance that changes to opportunities will only be made under compelling circumstances and students will be fully informed as soon as possible.

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## 8 GENERAL INFORMATION

### Guide to the usage of this Handbook

The following is a general overview of the structure of this Handbook for the guidance of users. The contents are organised in a number of different sections (see below) each of which has a particular focus. The sections are interlinked by cross-references where relevant.

*General Information:* This section includes contact details, term dates, disciplines within departments, definitions of terminology used and other explanatory notes.

*General rules for postgraduate students:* The rules in this section must be read in conjunction with the degree-specific rules in the next section.

*Rules and curricula for postgraduate programmes:* This section gives an outline of each of the postgraduate degrees and courses within those degrees, as well as rules relating to curricula. Please note especially the readmission rules under each programme; students who fall foul of these rules are in danger of being refused readmission.

*Other courses offered:* This section lists courses that do not form part of the postgraduate degrees, and include stand-alone courses offered to students in this faculty or other faculties.

*Faculty structure and departments:* The second half of this book lists all the teaching and research staff in departments and research structures.

*Additional information:* This section gives details of prizes and awards, charters (e.g. the Teaching and Learning Charter) and also Faculty-specific policies for postgraduate students.

All students must also familiarise themselves with the University rules in Handbook 3, General Rules and Policies. Students are also expected to check annually whether the rules or curriculum requirements have changed since the last edition of this Handbook or of the General Rules book.

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## GENERAL INFORMATION

### Dean's office, Faculty office and other central offices in the Faculty

**DEAN'S OFFICE AND FACULTY OFFICE**

*L2, Barnard Fuller Building and Wernher & Beit North  
(Tel: 021 406 6346 and 021 406 6634)*

**Professor and Dean:**

B M Mayosi, BMedSc MBChB UKZN FCP SA DPhil Oxon FESC FACC FRCP MASSAf

**Associate Professor and Deputy Dean: Research:**

J Moodley, MBChB Natal MMed PhD *Cape Town*

**Associate Professor and Deputy Dean: Postgraduate Education:**

D T Hendricks, BSc(Med)(Hons) PhD *Cape Town*

**Associate Professor and Deputy Dean: Undergraduate Education:**

G Perez, BDent *Algiers* DHSM MDent (Community Dentistry) *Witwatersrand*

**Deputy Dean: Clinical Health Services:**

R L Morar, MBChB UKZN DHMEF MMed (Community Health) *Cape Town* FCPHM SA

**Faculty Manager: Academic Administration:**

B Klingenberg, BA HED *UFS*

**Manager: Postgraduate Administration:**

D J A Winckler, BA *Pret*

**Manager: Undergraduate Administration:**

J Stoffberg, BTech *CPUT*

**PRIMARY HEALTH CARE DIRECTORATE**

*E47-25, Old Main Building, Groote Schuur Hospital (Tel: 021 406 6761)*

**Chair and Director:**

S Reid, BSc (Med) MBChB *Cape Town* MFamMed Medunsa PhD (Ed) UKZN

**Senior Lecturers:**

I Datay, MBChB *Cape Town* DPhil *Oxon*

J Irlam, BSc (Med) (Hons) MPhil *Cape Town*

C Tsampiras, MA (AfrHist) *London* PhD (PolHist) *Grahamstown*

**Lecturer:**

S Crawford-Browne, MSocSc ClinSocW *Cape Town*

**Honorary Senior Lecturer:**

L Jenkins, Dip (Anae) (Obs) (HthServMan) CMCA MBChB Stell MFamMed KZN PhD (FamMed) Stell

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**Honorary Lecturers:**

K du Pré le Roux, IMCH MA (IntHlth) *Sweden* MBChB *Cape Town*  
B Gaunt, Dip (Anae) Dip (Obs) *SA* MSc (IntPHC) *London* MBChB *Cape Town*

**Honorary Research Associate:**

R Baum, PhD (DramArts) *California*

**Clinical Teaching Platform Manager:**

D Swart, BSc(Med)(Hons) HDE (PG) *Cape Town* MPhil (PubHth) *UWC*

**CBE Coordinator Eden District:**

H Reuter, HDE *Rhodes* MBChB *Stell*

**Student Coordinator Eden District:**

F Marais, MBChB *Stell*

**Facility Manager:**

S Naidoo, Dip (RNurs) Dip (RM RK) Dip (CHNurs) *Durban*

**Site Facilitators:**

C Beauzac, Hons (DevStud ) MA (ComHth) PhD (ComHlth) *UWC*

T Xapa, Dip (AdEd/BusPlan) *Cape Town*

L Davids BSc (Diet) *Stellenbosch* BSocSc *Cape Town*

F Jordaan

**Site Coordinators:**

Z Nyati, Dip (OffAdmin) *Cape Town* BA (HlthSC & Soc Serv) *UWC*

A Solomons Dip (HRMan) *Unisa*

S Adams

N Daniels

F Le Roux

**Administrative Officer & PA to Director:**

C Johnston, BA (Psych/ArtHist) *Johannesburg*

## CENTRE FOR BIOETHICS

*c/o Philosophy Department, 3.03 Neville Alexander Building, University Avenue, Upper Campus, University of Cape Town.*

*The Bioethics Centre, formally established in 1992, grew out of the Bioethics Unit, which has functioned informally in the (then) Faculty of Medicine since 1988. Since 2009, the Bioethics Centre has been a joint Centre of the Faculty of Health Sciences and the Department of Philosophy in the Faculty of Humanities. Bioethics Centre staff are actively engaged in bioethics teaching and research, and provide a consultation service.*

*To arrange bioethics consultations please email: [bioethicsconsult@uct.ac.za](mailto:bioethicsconsult@uct.ac.za) (all emails to this address are confidential).*

*For general enquiries to the Bioethics Centre please email: [bioethics@uct.ac.za](mailto:bioethics@uct.ac.za)*

**Professor and Director:**

D Benatar, BSocSc(Hons) PhD *Cape Town*

**Emeritus Professor:**

S R Benatar, MBChB DSc(Med) *Cape Town* FFA FRCP (Hon) FCP *SA* (Hon)

**Associate Professors:**

J Anthony, MBChB *Cape Town FCOG SA MPhil Stell*  
 A Pope, LDipLib *Stell BA LLB Rhodes PG Dip (International Research Ethics) Cape Town*

**Senior Lecturers:**

T Burgess, BSc, BSc (Med)(Hons) PhD *Cape Town*  
 J de Vries, MSc (Hons) *Wageningen MSc European University Institute PhD Oxon*  
 E Galgut, BA(Hons) MA *Witwatersrand MA Cape Town PhD Rutgers*

**Honorary Senior Lecturer:**

L Henley, MSocSc MPhil(Bioethics) PhD *Cape Town*

**Lecturers:**

D Chapman, BSc Cape Town BSc(Hons) *Rhodes MA Cape Town PhD New York*  
 G Fried, BA(Hons) Cape Town MPhil PhD *Cantab*  
 G Hull, BA(Hons) *Cantab MPhil PhD London*

## Postgraduate Health Sciences Students' Council

The Postgraduate Health Sciences Students' Council (PGHSSC) represents postgraduate students at the faculty level in the form of postgraduate councils and at the university level as an executive committee. Its mission as active members of the PGHSSC is to ensure that all the postgraduates that it represents have the most fulfilling time possible for the duration of their studies at the University of Cape Town. This means creating an environment in which collective concerns can be addressed, enabling them to have a say in the decisions made regarding their academic development, as well as creating a strong postgraduate community. For more information please visit the PGHSSC's website:

[www.health.uct.ac.za/students/societies/psc](http://www.health.uct.ac.za/students/societies/psc)

## Definitions of terms used in this handbook

**Concession:** Formal Senate approval exempting a student from complying with a required rule.

**Curriculum:** Prescribed course of study for a degree or diploma.

**DP (Due Performance) requirement:** Required minimum level of performance during the year to qualify a student to do an examination in a particular course.

**Exemption and credit:** Exemption from a course means that a student need not complete this course since he/she has passed an equivalent course before. He/she is then also given credit towards the programme for the course he/she passed before.

**Health and Rehabilitation Sciences:** Physiotherapy, Occupational Therapy, Audiology, Speech-Language Pathology, Disability Studies and Nursing.

**HEQSF course level and NQF credits:** The University is required to align its qualifications with the Higher Education Qualifications Sub-framework or HEQSF (which forms part of the National Qualifications Framework). In terms of the Framework, the following criteria apply:

- A Bachelor's degree of four or more years is at HEQSF exit level 8 and must have a minimum of 480 credits. Minimum credits at HEQSF level 7: 120; minimum credits at HEQSF level 8: 96.

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- Courses with content pitched at first year level are at HEQSF level 5; those at second year level at HEQSF level 6; those at third year level at HEQSF level 7; and those at fourth to six year at HEQSF level 8.
- NQF credits: 1 credit is 10 notional hours of learning.

**ISCE:** Integrated Structured Clinical Examination.

**Joint staff:** Staff employed jointly by the University and the Provincial Government of the Western Cape (PGWC).

**OSCE:** Objective Structured Clinical Examination.

**OSPE:** Objective Structured Practical Examination.

**Convener:** Academic staff member in charge of offering the degree or a course within the degree programme.

**Readmission requirements:** Requirements a student must meet to be permitted to continue with the programme. A student who fails to meet one or more of these requirements may be refused readmission.

**Semester:** A half-year.

## Qualification and course codes

**Degree, diploma and plan codes:** Each degree and diploma programme has a code, indicating

M = Faculty of Health Sciences

B = Bachelor's degree

G = Postgraduate Diploma

H = Honours degree

M = Master's degree

D = Doctoral degree

+ a 3-digit number

(See list of qualification codes below.)

Each individual course within a degree or diploma programme has its own code, starting with the organisational code of the Department that offers it (see notes on course codes below).

The University of Cape Town uses the PeopleSoft electronic student administration system. In terms of this system, each qualification must have at least one plan code. Plans represent majors or areas of specialisation. Where a postgraduate programme has more than one specialisation, each specialisation will have its own plan. Programmes without majors or specialisations have a single plan.

Qualification codes are given below; both qualification and plan codes are also included with each curriculum description.

**Course codes:** Every course in this handbook has a course name and a course code. The structure is: AAA1nnnS, where:

AAA is a 3 alpha group identifying the department.

1 is a number identifying the year level at which the course is usually taken.

nnn is a three character number that identifies the course uniquely.

S is a single alpha character, specifying the time period during which the course is offered.

Courses use one of the following possible suffixes, which refer to the following time periods:

- F First Semester
- S Second Semester
- W Full Year – First and Second Semesters
- Z Non-Standard Period

**Qualification codes:**

*[Note: Unless otherwise indicated (with an asterisk), all qualifications are HEQSF-aligned, but SAQA registration numbers are still awaited for some. If a qualification is not listed here, see Table of Contents for specialisations within the generic qualifications.]*

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MG007	Postgraduate Diploma in Occupational Health
MG009	Postgraduate Diploma in Health Management
MG010	Postgraduate Diploma in Healthcare Technology Management
MG011	Postgraduate Diploma in Palliative Medicine
MG015	Postgraduate Diploma in Family Medicine
MG016	Postgraduate Diploma in Disability Studies
MG017	Postgraduate Diploma in Health Economics
MG018	Postgraduate Diploma in Maternal & Child Health
MG019	Postgraduate Diploma in Community Eye Health
MG020	Postgraduate Diploma in Paediatric Radiology*
MG021	Postgraduate Diploma in Pesticide Risk Management
MG022	Postgraduate Diploma in Psychotherapy
MG023	Postgraduate Diploma in Public Mental Health
MG024	Postgraduate Diploma in Addictions Care
MG025	Postgraduate Diploma in Dermatology Nursing
MG026	Postgraduate Diploma in Health Professional Education
MG027	Postgraduate Diploma in Community and General Paediatrics
MG028	Postgraduate Diploma in Clinical Paediatric Physiotherapy
MG029	Postgraduate Diploma in Clinical Paediatric Haematology/Oncology
MG030	Postgraduate Diploma in Neonatology
MG031	Postgraduate Diploma in Clinical Paediatric Cardiology
MG032	Postgraduate Diploma in Clinical Paediatric Diabetes
MG033	Postgraduate Diploma in Clinical Paediatric Electrophysiology and Epilepsy
MG034	Postgraduate Diploma in Clinical Paediatric Gastroenterology
MG035	Postgraduate Diploma in Clinical Developmental Paediatrics
MG036	Postgraduate Diploma in Clinical Paediatric Emergency Care
MG037	Postgraduate Diploma in Clinical Paediatric Critical Care
MG038	Postgraduate Diploma in Clinical Paediatric Rheumatology
MG039	Postgraduate Diploma in Clinical Paediatric Pulmonology
MG040	Postgraduate Diploma in Clinical Paediatric Nephrology
MG041	Postgraduate Diploma in TB-HIV Management
MG042	Postgraduate Diploma in Emergency Medicine*
MG043	Postgraduate Diploma in Advanced Midwifery and Neonatal Care
MG044	Postgraduate Diploma in Clinical Hepatology*
MG045	Postgraduate Diploma in Child Nursing
MG046	Postgraduate Diploma in Child Critical Care Nursing
MG049	Postgraduate Diploma in Nephrology Nursing
MG050	Postgraduate Diploma in Neuroscience Nursing
MG051	Postgraduate Diploma in Ophthalmic Nursing
MG052	Postgraduate Diploma in Diabetes Mellitus Nursing & Education
MG053	Postgraduate Diploma in Nursing Education
MG054	Postgraduate Diploma in Nursing Management

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MG055	Postgraduate Diploma in Interdisciplinary Pain Management
MH002	Bachelor of Medical Science Honours
MH003	Bachelor of Medical Science Honours (Exercise Science)
MH004	Bachelor of Medical Science Honours (Biokinetics)
MH005	Bachelor of Medical Science Honours (Dietetics)
MM001	Master of Medicine
MM002	Master of Science in Nursing (by dissertation)
MM004	Master of Science in Physiotherapy (by dissertation)
MM005	Master of Science in Occupational Therapy (by dissertation)
MM006	Master of Philosophy (by coursework & dissertation)
MM008	Master of Science in Audiology (by dissertation)
MM009	Master of Science in Speech-Language Pathology (by dissertation)
MM012	Master of Public Health (by coursework & dissertation)
MM016	Master of Philosophy (for subspeciality training)
MM017	Master of Science in Nursing (by coursework & dissertation)
MM018	Master of Science in Occupational Therapy (by coursework & dissertation)
MM019	Master of Science in Audiology (by coursework & dissertation) ( <i>in abeyance</i> )
MM020	Master of Science in Speech-Language Pathology (by coursework & dissertation) ( <i>in abeyance</i> )
MM021	Master of Philosophy (by dissertation)
MM034	Master of Science in Exercise and Sports Physiotherapy
MM035	Master's in Nursing in Child Nursing
MM036	Professional Master's in Paediatric Neurosurgery
MM050	Master of Medical Science in Nutrition
MM053	Master of Medical Science in Dietetics
MM054	Master of Science in Biomedical Engineering (by dissertation)
MM055	Master of Science in Biomedical Engineering (by coursework & dissertation)
MM094	Master of Science in Medicine (by coursework & dissertation)
MM095	Master of Science in Medicine (by dissertation)
MM166	Master of Medical Science in Genetic Counselling (by coursework & dissertation)
MD001	Doctor of Philosophy
MD002	Doctor of Medicine
MD004	Doctor of Science in Medicine
MZ002	Occasional (Postgraduate)
MZ090	Postdoctoral Fellowship
MZ094	South African Affiliate
MZ095	International Affiliate
MZ097	SADC Affiliate

## Where to find rules and syllabus information about degrees, diplomas and UCT policies affecting students

- (a) All students are advised to study
  - the General rules for postgraduate students in this handbook;
  - the general University rules applicable to all students in the University and published in Handbook 3 of the series titled *General Rules and Policies*.
- (b) Postgraduate students are advised to study the rules and curriculum outlines of the programmes for which they are registered under "Rules and curriculum outlines for postgraduate programmes". Please note that PhD degrees are considered University-based (rather than faculty-based) degrees; hence the rules relating to PhD degrees are contained in Handbook 3 (*General Rules and Policies*).
- (c) Details about academic staff in the Faculty are contained in the second half of this Handbook, under the heading "Departments and Research Structures".

## Programme, plan and course codes

Each study programme has a code, indicating:

M = Faculty of Health Sciences

B = Bachelor's degree

+ a 3-digit number

Example: BSc Physiotherapy = MB004.

### The undergraduate programme codes are as follows:

MB001 BSc (Medicine)

MB003 BSc Occupational Therapy

MB016 BSc Occupational Therapy Intervention Programme

MB004 BSc Physiotherapy

MB017 BSc Physiotherapy Intervention Programme

MB010 BSc Speech-Language Pathology

MB018 BSc Speech-Language Pathology Intervention Programme

MB011 BSc Audiology

MB019 BSc Audiology Intervention Programme

MB014 MBChB

MB020 MBChB Intervention Programme

MU002 Higher Certificate in Disability Practice

Every course has a **course title** and a **course code**.

The structure is:

AAA1nnnS, where:

AAA is a 3 alpha group identifying the department.

1 is a number identifying the year level at which the course is usually taken.

nnn is a three character number that identifies the course uniquely.

S is a single alpha character, specifying the time period during which the course is offered.

In many cases, the only change is the addition of a zero as the first identifying number.

For example: AHS373F becomes AHS3073F.

Courses use one of the following possible suffixes, which refer to the following time periods:

F First Semester

S Second Semester

W Full Year – First and Second Semesters

*[Note: The course extension does not denote the volume of work in the course or the relative weighting of the course in that year of study. The volume of work is determined by the NQF credit value of the course.]*

## GENERAL RULES FOR POSTGRADUATE STUDENTS

*[Note: All students must also familiarise themselves with the general rules for all students at UCT, contained in Handbook 3 of this series.]*

### Registration

FGP1.1 All students are required to renew their registration formally each year by completing registration forms for submission to the Faculty Office. No retrospective registration is allowed. Students who register late pay a penalty fee.

FGP1.2 A candidate for a degree by coursework and dissertation must register by no later than the last Friday of February each year and must register for the full coursework component at that time. When the candidate starts preparing for his/her dissertation, he/she should contact the Faculty Office in order to register for the dissertation component.

FGP1.3 Except by permission of Senate, a candidate who has not registered for the current year shall not be allowed to attend academic commitments and shall have no access to University facilities (or, in the case of students doing a dissertation or thesis, to supervision).

FGP1.4 Postgraduate students doing degrees by dissertation or the dissertation component of coursework master's degrees are required to have unbroken (i.e. uninterrupted) registration, except when they have successfully applied for leave of absence.

FGP1.5 Registrars and senior registrars who have not registered for every year of their studies will not have their clinical training time signed off by the Dean, which will compromise their registration as specialists and subspecialists on completion of training.

FGP1.6 Students doing the BMedSchHons in Dietetics are required to register with the Dietetics Professional Board of the Health Professions Council of South Africa.

FGP1.7 Registrars (MMed students) and subspeciality trainees (MPhil: subspecialty) students are required to register annually with the Health Professions Council of South Africa.

### Rules for degrees and diplomas, and changes to courses and curricula

FGP2.1 Every candidate for a degree or diploma must attend and complete such qualifying courses or perform such work as may be specified in the rules for that degree or diploma. The University reserves the right to revise its rules from time to time, and any alteration of or addition to the rules for any degree or diploma shall, on the date specified in the notice of promulgation of such alteration or addition, become binding upon all candidates for that degree or diploma.

FGP2.2 The University has made every effort to ensure the accuracy of the information in its handbooks. However, it reserves the right at any time, if circumstances dictate, to:

- (a) make alterations or changes to any of the published details of the courses and curricula on offer; or
- (b) add to or withdraw any of the courses or curricula on offer.

### Ethical norms and fitness to practise healthcare

FGP3.1 Students doing degrees involving clinical work are expected to act in

accordance with the ethical norms laid down by the Health Professions Council of South Africa. Students who are found guilty of unprofessional conduct may be required to terminate their registration in the Faculty.

Where a student who qualifies for the award of the degree or diploma for which he/she is registered, or where a student, in the course of his/her studies, following professional assessment, is deemed unfit to practise healthcare, the Dean will report the outcome of such professional assessment to the relevant regulatory body and inform the student accordingly.

The following definitions apply:

**Impaired:** The Health Professions Council (HPCSA) defines impairment as “a condition which renders a practitioner incapable of practising a profession with reasonable skill and safety”.

The University understands this to mean that an undergraduate student may be reported as impaired where he/she:

- *has become physically or mentally disabled to such an extent that the student is unable to perform the clinical duties of her/his chosen profession or it is not in the public's interest to allow that student to practise the profession;*
- *has become unfit to purchase, acquire, keep, use, administer, prescribe, order, supply or possess any scheduled substance;*
- *has used, possessed, prescribed, administered or supplied any substance irregularly for any reason other than medicinal purposes; or*
- *has become addicted to the use of any chemical substance.*

**Unprofessional conduct:** The HPCSA defines unprofessional conduct as “improper or disgraceful or dishonourable or unworthy conduct or conduct which, when regard is taken to the profession of a person who is registered in terms of this Act, is improper or disgraceful or dishonourable or unworthy”.

The University understands this to include but not to be limited to:

- *failure to attend academic, clinical or clinical service commitments and continuing to be absent from academic or clinical commitments without permission;*
- *unethical behaviour (e.g. deliberate misrepresentation or dishonesty, abusive or foul language towards teachers, fellow students or patients).*

- (a) report impairment in another student or practitioner to the Council if he/she were convinced that such other student or practitioner was impaired as defined in the Act;
- (b) self-report his or her impairment to the Council if he/she was aware of his/her own impairment or has been publicly informed of being impaired or has been seriously advised by a colleague to act appropriately to obtain help in view of an alleged or established impairment.

FGP3.2 A Senate-approved policy will be applied for dealing with reported cases of impairment and/or unprofessional behaviour in postgraduate students undergoing clinical training. [The policy is printed in the section titled “Additional Information” at the back of this handbook.]

## 18 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

FGP3.3 The University welcomes applications from applicants with special needs. However, there are some disabilities that would prevent someone from completing a particular health sciences curriculum (for example, someone who is deaf may not be able to hear a heartbeat through a stethoscope). For this reason applicants with disabilities are urged to communicate with the Faculty, via the University's Disability Unit, to establish whether this would apply to them. The Faculty reserves the right to require an applicant (or an admitted student) to undergo a professional assessment to determine the extent and likely impact of a disability on his/her ability to meet the requirements of the curriculum, including such practical training and practice as is required in the health sciences discipline concerned. The University reserves the right to withdraw an offer to an applicant or cancel the registration of a student who fails to declare a disability that is found to be such as to make it impossible for him/her to meet the curriculum requirements in the health discipline concerned.

### Progression and readmission

FGP4.1 The performance of each student is subject to continuous assessment in all courses prescribed for the degree or diploma. The student's academic standard of work performed during any course and, where relevant, the student's attendance will be taken into account in determining the result obtained by him/her in that course and/or the student's progression to the next year of study in the programme for which he/she is registered.

FGP4.2 Except by permission of Senate, a candidate shall not be admitted to register in the following academic year of study unless he/she has satisfactorily completed all the courses prescribed and satisfactorily performed all the work required for the preceding year.

FGP4.3 Senate may refuse to admit an applicant to a programme, or may cancel the registration of a student already admitted to such programme, or may refuse to readmit a student registered for such a programme, if he/she

- (a) has not met the minimum admission or readmission requirements set for the course or qualification concerned, including, but not limited to:
  - i. failure to attend academic or clinical service commitments;
  - ii. failure to make sufficient academic (including clinical, where relevant) progress.
- (b) has been found guilty of unethical behaviour or unprofessional conduct;
- (c) has, following professional assessment, been found unfit to practise healthcare.

FGP4.4 Except by permission of Senate, a student registered for a coursework programme who is permitted to repeat a course and who fails the same course twice, or fails a second course, may be required to withdraw from the programme for which he/she is registered.

*[Notes:*

- *A person doing a higher degree or specialist training will ordinarily have been given ongoing feedback on his/her progress or lack of progress.*
- *In a case of a higher degree, the progress required of a candidate will often be specified in the Memorandum of Understanding (MOU) between the candidate and his/her supervisor. If a candidate fails to make this progress, he/she shall be given an opportunity to explain this, and may – after he/she has been heard – be refused permission to continue.*
- *In the case of a student doing specialist or subspecialist training, a similar process will*

*ordinarily apply.]*

### **Withdrawal from a programme or course or changing a programme or course**

FGP5.1 Students wishing to withdraw from a programme for which they are registered must complete the required forms and submit these to the Faculty Office by the specified dates to avoid being charged the full year's fees (see *Fees Book* for more detail).

FGP5.2 Students wishing to change their curricula (where this is allowed) must do so before the university deadlines for such changes, to avoid being charged a penalty fee.

### **Distinction**

FGP6

- 6.1 To obtain overall distinction in a master's by coursework and dissertation, a candidate must obtain an average of at least 75% for all courses with not less than 70% for any single course, and must have passed all courses at first attempt; and must have passed the dissertation with 75%.
- 6.2 To obtain distinction in the coursework component of a master's degree by coursework and minor dissertation, a candidate must obtain an average of 75% with no less than 70% for any single course, and must have passed all courses at first attempt.
- 6.3 To obtain distinction in the minor dissertation component of a master's by coursework and dissertation, a candidate must obtain 75%.

*Note: Only the last rule applies in the following cases:*

- *MMed and MPhil (sub-speciality programmes), since candidates write Colleges of Medicine examinations for the coursework/clinical training component/s and are given a PA or F (pass or fail) rather than percentages for these.*
- *Where a candidate obtains a credit/exemption for any course/s towards the coursework component of a master's degree (having passed the course/s at other tertiary institutions).*

### **Ethics approval**

FGP7 Research that involves human participants or animal use for research or teaching must undergo ethics review, according to faculty-specific guidelines. Review generally entails prior approval of a research proposal by a Research Ethics or Animal Ethics Committee. In cases where prior approval is not appropriate, the research proposal should be subjected to appropriate deliberative procedures, according to faculty-specific guidelines. Research papers or dissertations or theses or research projects that involve human participants or animal use may not be submitted for examination if they have not undergone any ethics review process.

## GENERAL RULES FOR MASTER'S DEGREE STUDIES

*[These rules must be read in conjunction with the rules in the General Rules and Policies, book 3 of this series.]*

### Research proposal

FGM1 A candidate registered for the degree by dissertation shall submit, to the satisfaction of Senate, a statement of about 500 words indicating the purpose, design and scope of the research project he/she proposes to undertake, not later than six months before submitting the work for examination, to allow for the appointment of examiners.

### Submission

FGM2.1 Notice of intention to submit a dissertation shall be given in writing to the Faculty Office not later than 15 February for possible graduation in June, and 15 July for possible graduation in December.

FGM2.2 The University does not undertake to reach a decision on the award of the degree by any specific date.

### Dissertation requirements

FGM3.1 Unless otherwise specified, the dissertation of 90 credits of a coursework master's degree shall be not more than 25 000 words in length; and that of a 60 credit dissertation shall be no more than 20 000 words in length. A degree by full dissertation shall not be more than 50 000 words in length.

FGM3.2 The dissertation

- (a) must be satisfactory in arrangement and expression and must be typewritten or printed;
- (b) must be prefaced by an abstract prepared according to the guidelines approved by Senate;
- (c) must show thorough practical and/or academic knowledge of the approved subject and methods of research, and evidence of independent critical thinking in the handling and interpretation of material already known or newly discovered;
- (d) may embody such original work of others as may be pertinent;
- (e) must contain correct and proper acknowledgements of all sources;
- (f) may include the candidate's own published material on the same subject, if the prior permission of Senate has been obtained;
- (g) must include in the title page a signed declaration that the work has not previously been submitted in whole or in part for the award of any degree;
- (h) must include an acknowledgement that it is the candidate's own work and that any contributions to and quotations in the dissertation have been cited and referenced.

FGM3.3 The dissertation must be submitted in portable document format (pdf). It must be accompanied by a provision in writing, signed by the candidate, allowing the University to reproduce for the purpose of research either the whole or a portion of the contents in any manner whatsoever. (This includes provision for the University to place the dissertation on the Worldwide Web; the onus is therefore on the candidate to deal with any copyright, should any part of the dissertation have been published in a journal prior to submission.)

FGM3.4 The dissertation must consist of the original work of the candidate with such acknowledged extracts from the work of others as may be pertinent. The candidate shall declare the extent to which it represents his/her own work, both in concept and execution.

FGM3.5 No dissertation, or part thereof, which has previously been submitted for examination for any degree at any university, may be submitted for, or may be accepted for, a master's degree in the Faculty.

FGM3.6 Candidates are required to upload the dissertation via the PeopleSoft student system. A quick reference guide regarding the process is available from the Faculty Office.

FGM3.7 Except on the recommendation of the supervisor and with the approval of the Faculty Board, a candidate whose dissertation has been returned for revision must submit a revised dissertation for examination no later than one calendar year after the date of original submission. Such resubmission must comply with the submission dates set out above. A student who is required to revise and resubmit is required to register as soon as supervision is resumed.

### **Upgrading and downgrading**

FGM4.1 Senate may, on the recommendation of the Faculty Board and the candidate's supervisor, upgrade a candidate's registration from a research master's to a PhD on grounds of the quality and development of the candidate's work.

FGM4.2 Where a postgraduate diploma and coursework master's are offered in the same disciplinary area, a student registered for a postgraduate diploma who wishes to upgrade to the coursework master's shall do so before graduating with the diploma to avoid having to do additional master's level content. A coursework master's student wishing to exit with a postgraduate diploma (where an approved postgraduate diploma exists with material in common with the master's) shall do so before submitting his/her dissertation.

### **Minimum requirements for award of degree**

FGM5 In the case of examination by coursework and dissertation, a candidate must obtain at least 50% for each coursework component (or each individual course, where coursework includes more than one course) and for the dissertation, in order to qualify for the degree or diploma. The rules for some programmes may specify additional sub-minima.

### **Corrections and failing a dissertation**

FGM6.1 The candidate shall not be permitted to graduate until any corrections and alterations required by Senate have been made to his/her dissertation. No candidate shall be invited more than once to revise and resubmit his/her dissertation.

FGM6.2 A candidate whose dissertation is failed will not be allowed to present him/herself as a candidate for the degree of master again for examination in the same field of study, but may, with the permission of Senate, be admitted to another field of study.

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# **RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES**

## **POSTGRADUATE DIPLOMAS**

### **POSTGRADUATE DIPLOMA IN ADDICTIONS CARE**

**[MG024][SAQA ID: 83606]**

**Convener:**

Mr G Hendricks (Department of Psychiatry and Mental Health)

*The key objective of the Diploma is to enhance the knowledge and practical skills of professionals working in the addictions field. The qualification aims to produce graduates who have a thorough knowledge of scientific, evidence-based treatment approaches to working with patients with substance use disorders, and who are able to critically evaluate and debate developments in the addictions field. Much emphasis is placed on the development and consolidation of clinical skills, so that graduates can provide competent, holistic care to patients with substance use disorders.*

**Admission requirements**

FPA1.1 To be eligible for consideration for admission, a candidate shall

- (a) have an approved Bachelor's degree in health sciences or in the humanities (e.g. social work or psychology); and be registered as an independent practitioner with the relevant professional body (e.g. HPCSA, SACSSP); or have approved prior experience and training. Applicants who wish to be considered on the basis of Recognition of Prior Learning (RPL) will be required to submit a personal portfolio reflecting, amongst others, their experience of working in the field of addiction treatment; past attendance at relevant courses for which they may have obtained certificates and diplomas; and evidence of critical thinking skills in writing and reading;
- (b) have submitted a letter of support from his/her employer granting the applicant study leave for the weeks requiring block attendance, and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context;
- (c) have proven proficiency in written and spoken English (this may be tested if necessary); and
- (d) have an acceptable level of computer literacy, and access to a computer and the internet.

FPA1.2 Preference shall be given to candidates who are currently working in an addiction treatment setting or in a mental healthcare setting which provides opportunities to work effectively with patients with substance use problems. Those who are not working in such settings will be required to complete an internship at an approved addiction treatment facility. Applicants who are required to complete an internship will need to submit a letter of support from their employer granting the applicant leave to complete his/her internship.

FPA1.3 Applicants may be asked to attend an interview.

**Structure and duration of Diploma**

FPA2 The Diploma may be completed over one year full-time or two years part-time. It consists of blocks, which total six to seven weeks of contact time during the programme.

Additional time should be set aside for self-study, practical work and the completion of assignments. Written examinations are scheduled for mid- and end-of-year examination periods. Students are expected to practise their clinical skills in their current work environment.

### Curriculum outline

**FPA3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<b>PRY4008W</b>	Evidence-based Treatment Approaches .....	15	8
<b>PRY4009F</b>	Screening and Assessment of Addictive Disorders.....	15	8
<b>PRY4010S</b>	Case Management and Service Monitoring .....	15	8
<b>PRY4011F</b>	Managing Co-occurring Mental Disorders.....	15	8
<b>PRY4012S</b>	Ethics and Professional Development.....	15	8
<b>PRY4013F</b>	Understanding Addictive Disorders .....	15	8
<b>PRY4015F</b>	Managing Children and Adolescents with Addictive Disorders ...	15	8
<b>PRY4016S</b>	Working with the Family and Social Networks .....	15	8
<b>PRY4023F/S</b>	Integrated Assessment.....	0	8
	Total NQF credits.....	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment, progression and readmission

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPA4.1 Students are assessed by means of assignments and final examinations. Assessments may be of a practical, written and/or oral nature.

FPA4.2 Students are required to attend at least 70% of lectures and group supervision sessions. Attendance is monitored through signing of attendance registers. Students are also required to submit all supervisors' reports, as well as the specified number of case reports, before the final mark for the relevant course will be released. Should this not be done by the due date, the student will fail the course.

FPA4.3 Students who obtain 45% – 49% in an examination may be reassessed before the final mark is submitted for approval of the Faculty Examinations Committee, and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

FPA4.4 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails any course twice, or fails three or more courses, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

FPA4.5 Students are expected to obtain a subminimum of 50% in the final written examination in each course in order to pass the course. Where a supplementary examination is granted, the mark obtained in the supplementary examination constitutes the final mark for the course.

### Distinction

FPA5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any course). All courses must be passed at first attempt.

## **CLINICAL DEVELOPMENTAL PAEDIATRICS**

**[MG035PED01][SAQA ID: 94793]**

### **Convener:**

Assoc Prof K Donald (Division of Developmental Paediatrics, Department of Paediatrics and Child Health)

### **Admission requirements**

FPB1.1 To be eligible for consideration for admission, a candidate shall

- (a) have an approved Bachelor of Medicine and Bachelor of Surgery (MBChB) or an equivalent qualification as a medical doctor, experience working in paediatrics, and be registerable with the Health Professions Council of South Africa;
- (b) have submitted a letter of support from his/her employer granting the applicant study leave for the weeks requiring block attendance, and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context;
- (c) have proven proficiency in written and spoken English (this may be tested if necessary); and
- (d) have an acceptable level of computer literacy, and access to a computer and the internet.

FPB1.2 Preference shall be given to the candidates who are currently working in the field of developmental paediatrics and have demonstrated a need for this training to the benefit of their home setting.

FPB1.3 Applicants may be asked to attend an interview or to take part in a telephonic or Skype interview.

### **Duration of programme**

FPB2 The Diploma may be completed over one year full-time or two years part-time. It consists of blocks which total 12 months of contact time for the entire Diploma. Additional time should be set aside for self-study, practical work and the completion of assignments. Written examinations are scheduled for the end-of-year.

### **Structure and duration of Diploma**

FPB3 The Diploma is offered over 12 months on-site (full-time) or 24 months (part-time).

### **Curriculum outline**

#### **FPB4 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED4039W	Clinical Management in Developmental Paediatrics.....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits .....	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### **Assessment, progression and readmission**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPB5.1 Submission of completed logbook of clinical cases by the due date, failing which the student shall not be permitted to write the final examination for PED4039W.

FBD5.2 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails any course twice, or fails more than one course, a recommendation may be made to the Faculty Examinations Committee to refuse readmission.

FBD5.3 Where a supplementary examination is granted, the mark obtained in the supplementary examination constitutes the final mark for the course.

**Distinction**

FPB6 The Diploma may be awarded with distinction if the student obtains 75% – 100% for all courses with not less than 70% for any individual course. All courses must be passed at first attempt.

**CLINICAL HEPATOLOGY**

**[MG043MDN26][SAQA ID: 98988]**

**Conveners:**

Assoc Prof C W N Spearman and Assoc Prof M W Sonderup (Division of Hepatology, Department of Medicine)

*The key objective of the Diploma is to enhance the knowledge and practical skills of qualified medical professionals to enable them to diagnose, appropriately manage and refer patients with acute and chronic liver diseases without the immediate supervision of a specialist hepatologist or gastroenterologist with an interest in hepatology. This may be particularly relevant in resource-limited health districts where specialist input is not immediately available.*

**Admission requirements**

FPC 1.1 To be eligible for consideration for admission, a candidate shall

- (a) have a Bachelor of Medicine and a Bachelor of Surgery (MBChB) or equivalent;
- (b) submit proof of experience in working in the field of internal medicine. If original documentation is not in English, then an English translation must be provided;
- (c) submit proof of registration with the Health Professions Council of South Africa (HPCSA). Practitioners who have not qualified in South Africa will need to submit proof of limited registration with the HPCSA by the time they register;
- (d) submit a letter of support from his/her employer granting the applicant study leave for the one-year period of training and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context;
- (e) submit a letter motivating their application and a curriculum vitae;
- (f) have proven proficiency in written and spoken English (this may be tested if necessary);
- (g) have an acceptable level of computer literacy, and access to a computer and the internet; and
- (h) submit proof of adequate funding for the one-year period of training.

FPC1.2 All candidates will write a screening Clinical MCQ (multiple choice question) Paper as a part of the application process, to assess their level of clinical expertise and English.

FPC1.3 The applicant may be asked to attend an interview.

*[Note: If a candidate who was not qualified in South Africa is considered suitable for admission to the Diploma, he/she will be required to have his/her medical qualification/s verified by the ECFMG.]*

### Structure and duration of Diploma

FPC2 This is a one-year, full-time Diploma designed as a clinical apprenticeship. The training is largely patient-based in the ward and clinics, but also includes tutorials, histopathology and hepatobiliary radiology meetings.

### Curriculum outline

#### FPC3 The curriculum is as follows:

Number	Course	NQF Credits	HEQSF Level
MDN4037W	Clinical Management in Hepatology .....	100	8
MDN4038W	Essay: Transition and Translation of Knowledge .....	20	8
	Total NQF credits .....	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment, progression and readmission

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPC4.1 Students are assessed by means of clinical assessments, assignments, a logbook and final examinations. Assessments may be of a practical, written and/or oral nature.

FPC4.2 Students who obtain 45% – 49% in an examination may be reassessed before the final mark is submitted for approval of the Faculty Examinations Committee, and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

FPC4.3 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once.

FPC4.4 Where a student fails any course twice, or fails more than one course, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

FPC4.5 Students are expected to obtain a subminimum of 50% in the coursework and in the final written examination in each course in order to pass the course.

FPC4.6 Where a supplementary examination is granted, the mark obtained in the supplementary examination constitutes the final mark for the course.

### Distinction

FPC5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any course). All courses must be passed at first attempt.

## CLINICAL PAEDIATRIC CARDIOLOGY

**[MG031PED04]**

### Convener:

Dr R De Decker (Department of Paediatrics and Child Health)

*The key objective of the postgraduate diploma is to allow practising doctors to develop foundation skills in clinical paediatric cardiology. This will enable the accurate diagnosis, effective resuscitation, triage and initial management of children with congenital and acquired heart disease safely and effectively in resource-limited areas, without the immediate supervision of a paediatrician or subspecialist paediatric cardiologist. The qualification aims to strengthen and*

*deepen their knowledge in the field of paediatric cardiology, thereby building capacity to improve child health in Africa. This empowers these working professionals to undertake advanced reflection and development in this sub-area of their practice by means of training which is targeted at current thinking and practice methods in the area of paediatric cardiology, and allows these skilled workers to use their knowledge gained to lobby for improving child health.*

### **Admission requirements**

FPD1.1 To be eligible for consideration for admission, a candidate shall

- (a) have an approved Bachelor of Medicine and Bachelor of Surgery degree (MBChB) or equivalent qualification as a medical doctor, proven experience working in the field of paediatrics, and be registered as a medical practitioner with the HPCSA for the entire duration of the course or an equivalent Health Professions authority in the foreign candidate's country of origin;
- (b) have submitted a letter of support from his/her employer(s) granting the applicant study leave for the time requiring full-time attendance;
- (c) have proven proficiency in written and spoken English, including medical terminology (this may be tested if necessary); and
- (d) have an acceptable level of computer literacy, and access to a computer and the internet.

FPD1.2 Preference shall be given to candidates who are currently working in the field of paediatrics and have demonstrated a need for this training to the benefit of their medical practice.

FPD1.3 Applicants may be asked to attend an interview or to take part in a telephonic or Skype interview.

FPD1.4 Written assurance must be given that the candidate will be able to return to his/her clinical practice of origin before the onset of the course, or show that the candidate will be accepted into clinical practice where the newly attained skills are required and will be implemented.

### **Duration and structure of programme**

FPD2.1 The Diploma may be completed over one year full-time or two years part-time. It consists of three courses, which total 12 months of contact time for the entire Diploma. Additional time should be set aside for self-study, practical work and the completion of assignments.

FPD2.2 Students are expected to be fully immersed in those routine clinical activities of the cardiology department at Red Cross War Memorial Children's Hospital that add experiential learning content, including shared after-hours on-call duties.

### **Curriculum outline**

**FPD3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED4034W	Clinical Management in Paediatric Cardiology.....	40	8
PED4035W	Echocardiography: Principles and Practice.....	50	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
Total NQF credits.....			<b>120</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## 28 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

### Assessment, progression and readmission

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

- FPD4.1 Students are assessed by means of clinical assessment, assignments, a logbook and final examinations. Assessments may be of a practical, written and/or oral nature.
- FPD4.2 Students who obtain 45% – 49% in an examination may be reassessed before the final mark is submitted for approval by the Faculty Examinations Committee, and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.
- FPD4.3 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails any course twice, or fails more than one course, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.
- FPD4.4 Unless otherwise indicated, students are expected to obtain a subminimum of 50% in the coursework and in the final written examination in each course in order to pass the course.
- FPD4.5 Where a supplementary examination is granted, the mark obtained in the supplementary examination constitutes the final mark for the course.

### Distinction

- FPD5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any course). All courses must be passed at first attempt.

## CLINICAL PAEDIATRIC CRITICAL CARE

**[MG037PED05][SAQA ID: 94788]**

### Convener:

Prof AC Argent (Department of Paediatrics and Child Health)

*The key objective of the diploma is to allow practising doctors to develop skills in the management of children with a life threatening illness or injury, or following major elective surgery. The qualification aims to produce graduates who are trained in the recognition and management of critically ill children, thereby building capacity to improve child health in Africa. This enables and empowers these working professionals to undertake advanced reflection and development in this sub-area of their practice by means of training which is targeted at current thinking, practice and research methods in the area of paediatric critical care, and allows these skilled workers to use their knowledge gained to lobby for improving child health.*

### Admission requirements

- FPE1.1 To be eligible for consideration for admission, a candidate shall
  - (a) have an approved Bachelor of Medicine and Bachelor of Surgery (MBChB) or equivalent qualification as a medical doctor, experience working in paediatrics, and be registerable with the Health Professions Council of South Africa;
  - (b) have submitted a letter of support from his/her employer granting the applicant study leave for the weeks requiring block attendance, and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context;
  - (c) have proven proficiency in written and spoken English (this may be tested if necessary); and

- (d) have an acceptable level of computer literacy, and access to a computer and the internet.

FPE1.2 Preference shall be given to candidates who are currently working in the field of paediatric critical care and have demonstrated a need for this training to the benefit of their home setting.

FPE1.3 Applicants may be asked to attend an interview or to take part in a telephonic or Skype interview.

#### **Duration of programme**

FPE2 The Diploma may be completed over one year full-time or two years part-time. It consists of blocks which total six months of contact time for the entire Diploma. Additional time should be set aside for self-study, practical work and the completion of assignments. Written examinations are scheduled for the end-of-year.

#### **Curriculum outline**

##### **FPE3 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>PED4041W</b>	Clinical Management in Paediatric Critical Care .....	90	8
<b>PED4032W</b>	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits.....	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

#### **Assessment, progression and readmission**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPE4.1 Students are assessed by means of clinical assessment, assignments, a logbook and final examinations. Assessments may be of a practical, written and/or oral nature.

FPE4.2 Students who obtain 45% – 49% in an examination may be reassessed before the final mark is submitted for approval of the Faculty Examinations Committee, and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

FPE4.3 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails any course twice, or fails more than one course, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

FPE4.4 Unless otherwise indicated, students are expected to obtain a subminimum of 50% in the coursework and in the final written examination in each course in order to pass the course.

FPE4.5 Where a supplementary examination is granted, the mark obtained in the supplementary examination constitutes the final mark for the course.

#### **Distinction**

FPE5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any course). All courses must be passed at first attempt.

## CLINICAL PAEDIATRIC DIABETES

[MG032PED20][SAQA ID: 94846]

### Convener:

Dr S Delpot (Paediatric Endocrine & Diabetes Unit)

*The purpose of this qualification is to allow practising doctors to develop foundation skills in clinical paediatric diabetes management to ensure safe practice.*

### Admission requirements

FPF1.1 To be eligible for consideration for admission the candidate requires a Bachelor of Medicine and Bachelor of Surgery (MBChB) or equivalent qualification as a medical doctor, experience working in the field of paediatrics, and must be registerable with the Health Professions Council of South Africa.

FPF1.2 Preference will be given to candidates currently working in the field of paediatric diabetes.

### Structure and duration of Diploma

FPF2 The Diploma programme requires full-time study over a period of 1 year. The candidate will be required to participate in all activities within the diabetes unit, complete a logbook of cases seen in both outpatient and inpatient settings and complete a portfolio of 25 cases.

### Curriculum outline

#### FPF3 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PED4036W	Clinical Management of Paediatric Diabetes .....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
Total NQF credits .....			<b>120</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment, progression and readmission

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPF4.1 Students are assessed by means of clinical assessment, assignments, a logbook and final examinations. Assessments may be of a practical, written and/or oral nature.

FPF4.2 Students who obtain 45% – 49% in an examination may be reassessed before the final mark is submitted for approval of the Faculty Examinations Committee, and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

FPF4.3 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails any course twice, or fails more than one course, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

FPF4.4 Where a supplementary examination is granted, the mark obtained in the supplementary examination constitutes the final mark for the course.

**Distinction**

FPF5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any course.) All courses must be passed at first attempt.

**CLINICAL PAEDIATRIC ELECTROPHYSIOLOGY AND EPILEPSY**

[MG033PED21][SAQA ID: 94794]

**Convenor:**

Prof J Wilmshurst (Department of Paediatrics & Child Health, Paediatric Neurology)

*The key objective of the Diploma is to allow practising doctors to develop foundation skills in clinical electrophysiology and epilepsy to ensure safe practice. The qualification aims to produce graduates who are trained in the discipline to strengthen and deepen their knowledge in the field of paediatric EEG and epilepsy, thereby building capacity to improve child health in Africa. This enables and empowers these working professionals to undertake advanced reflection and development in this sub-area of their practice by means of training which is targeted at current thinking, practice and research methods in the area of paediatric EEG and epilepsy, and allows these skilled workers to use the knowledge gained to lobby for improving child health.*

**Admission requirements**

FPG1.1 To be eligible for consideration for admission, a candidate shall

- (a) have an approved Bachelors of Medicine and Bachelor of Surgery (MBChB) or equivalent qualification as a medical doctor, experience working in paediatrics, and be registerable with the Health Professions Council of South Africa;
- (b) have submitted a letter of support from his/her employer granting the applicant study leave for the weeks requiring block attendance, and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context;
- (c) have proven proficiency in written and spoken English (this may be tested if necessary); and
- (d) have an acceptable level of computer literacy, and access to a computer and the internet.

FPG1.2 Preference shall be given to candidates who are currently working in the field of paediatric epilepsy and have demonstrated a need for this training to the benefit of their home setting.

FPG1.3 Applicants may be asked to attend an interview or to take part in a telephonic or Skype interview.

**Duration and structure of the programme**

FPG2 The Diploma may be completed over one year full-time or two years part-time. It consists of blocks which total six months of contact time for the entire Diploma. Additional time should be set aside for self-study, practical work and the completion of assignments. Written examinations are scheduled for the end-of-year.

**Curriculum outline****FPG3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED4037W	Clinical Management of Paediatric Epilepsy and Electrophysiology.....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits.....	<b>120</b>	

## 32 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment

*[Note: These rules must be read in conjunction with the General Rules in the Front Section of this Handbook.]*

FPG4.1 Students are assessed continuously through course-related tasks and formal assessments – some conducted under examination conditions.

FPG4.2 *Coursework assessment:*

- i. Graded course assignments (written and/or oral). Each course assignment is an opportunity for students to synthesise learning objectives and concepts covered in the individual courses. In-course assignments are weighted and contribute to the overall assessment per course.
- ii. Ongoing assessment of performance through regular clinical supervision/tutorial sessions and an assignment.

### Distinction

FPG5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any course). All courses must be passed at first attempt.

## CLINICAL PAEDIATRIC EMERGENCY CARE

**[MG036PED22][SAQA ID: 94596]**

### Convener:

Dr H Buys (Department of Paediatrics and Child Health)

*The key objective of the Diploma is to develop foundational skills in practicing doctors in both routine and complex paediatric emergency care conditions in children, including those from vulnerable populations affected by the neglected diseases of poverty.*

### Admission requirements

FPH1.1 To be eligible for consideration for admission, a candidate

- (a) shall be a qualified medical doctor (MBChB or equivalent qualification);
- (b) must have at least 12 months of general paediatrics or general emergency care experience;
- (c) if applying via the African Paediatric Fellowship Programme, must be referred by a tertiary African centre allied to the programme and have demonstrated the need for clinical training in this discipline;
- (d) if a doctor qualified in South Africa, must be practising in an outreach setting;
- (e) must be registrable with the Health Professions Council of South Africa and registered thus by the time of registration
- (f) must be proficient in written and spoken English (this may be assessed if necessary via an interview process); and
- (g) must have an acceptable level of computer literacy.

FPH1.2 Candidates should be identified by their department heads as potential paediatric emergency care doctors for the care of children and guaranteed employment in that capacity on their return.

Since the qualification is designed as an apprenticeship, training is based on a close trainer-to-trainee ratio.

FPH1.3 Applicants may be asked to attend an interview either in person or telephonically.

**Duration and structure of the Diploma**

FPH2 The Diploma may be completed over one year full-time or two years part-time. It consists of 6 related modules which total 12 months of contact time for the entire Diploma. Additional time should be set aside for self-study.

The Diploma places much emphasis on the practical application of theory. Students are expected to practise their clinical skills in their current work environment.

**Curriculum outline****FPH3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED4040W	Clinical Management in Paediatric Emergency Care.....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits.....	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Assessment, progression and readmission**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPH4.1 Assessment is both formative and summative. A student who fails two formative oral, case-based assessments will not obtain a DP and may be required to withdraw. Formative assessment is built on continuous feedback on both knowledge and clinical competence.

FPH4.2 Each course is made up of individual, discrete modules. Unless indicated otherwise, students must pass each module in order to pass the course.

FPH4.3 Students are required to maintain a logbook of clinical procedures and to submit this by the due date.

FPH4.4 Students are required to submit all supervisors' reports before the final mark for the relevant course will be released. Should this not be done by the due date, the student will fail the course.

FPH4.5 Students may be permitted to repeat a module they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails a course twice, or fails three or more courses, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

**Distinction**

FPH5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any module). All modules must be passed at first attempt.

## CLINICAL PAEDIATRIC GASTROENTEROLOGY

[MG034PED15][SAQA ID: 96447]

### Conveners:

Dr R de Lacy (Division of Paediatric Gastroenterology, Department of Paediatrics and Child Health) and Dr E Goddard

*This course is intended to train suitable candidates to practise clinical paediatric gastroenterology in order to enable the diagnosis, resuscitation, triage and management of children with disease. It does not aim to train the candidate to become a paediatric gastroenterologist, but rather to practice safely and effectively in resource limited areas without the immediate supervision of a paediatric gastroenterologist.*

### Admission requirements

FPI1.1 To be eligible for consideration for admission, a candidate

- (a) shall have a Bachelor of Medicine and Bachelor of Surgery (MBChB) or equivalent qualification as a medical doctor, experience working in the field of paediatrics, and demonstrate an interest in paediatric gastroenterology;
- (b) if applying via the African Paediatric Fellowship Programme, must be referred by a tertiary African centre allied to the programme and have demonstrated the need for clinical training in this discipline;
- (c) if a doctor qualified in South Africa, must be practising in an outreach setting;
- (d) must be registrable with the Health Professions Council of South Africa and registered thus by the time of registration
- (e) shall submit a letter of support from his/her employer granting the applicant study leave where applicable;
- (f) shall submit proof that he/she will return back to the home institution to a post in the government/public sector to fulfil a healthcare need;
- (g) shall have proven proficiency in written and spoken English (this may be tested if necessary); and
- (h) shall have an acceptable level of computer literacy, and access to a computer and the internet.

FPI1.2 Applicants may be asked to attend or have a telephonic interview.

### Structure and duration of Diploma

FPI2 The Diploma may be completed over one year full-time or two years part-time. The training is based at the Red Cross War Memorial Children's Hospital. There are two courses – one clinical and a long essay – and the clinical course consists of lectures, tutorials, case studies and practical workplace experience. During the training period, the student must demonstrate the ability to understand the coursework. The logbook must be completed concurrently with the clinical training. The long essay will be submitted after the clinical course has been completed.

### Curriculum outline

FPI3 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PED4038W	Clinical Management in Paediatric Gastroenterology .....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits .....	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Assessment, progression and readmission**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

- FPI4.1 Each course is made up of individual, discrete modules. Unless indicated otherwise, students must pass each module in order to pass the course.
- FPI4.2 Students are required to maintain a logbook of clinical procedures and to submit this by the due date.
- FPI4.3 Students are required to submit all supervisors' reports before the final mark for the relevant course will be released. Should this not be done by the due date, the student will fail the course.
- FPI4.4 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails a course twice, or fails three or more courses, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.
- FPI4.5 Regular assessments of level of competency achieved throughout the course, undertaken at 3-monthly intervals. Students are required to attend at least 70% of group supervision sessions.
- FPI4.6 Students who obtain 45% – 49% for the course may be reassessed before the final mark is submitted for approval to the Faculty Examinations Committee, and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

**Distinction**

- FPI5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any course.) All courses must be passed at first attempt.

## **CLINICAL PAEDIATRIC HAEMATOLOGY & ONCOLOGY**

### **[MG029PED19]**

**Convenor:**

Assoc Prof A Davidson (Haematology/Oncology Service, Department of Paediatrics and Child Health)

*The purpose of the qualification is to train practising doctors to develop foundational skills in treating and managing children with both complex haematologic disorders and malignancy, particularly those from vulnerable populations affected by the neglected diseases of poverty.*

**Admission requirements**

- FPJ1 (a) To be eligible for consideration, the applicant shall be a qualified medical doctor (MBChB or equivalent qualification) and have approved experience working in paediatrics. (All doctors must be registered with the HPCSA by the time they start the programme.)
- (b) Applicants who are screened via the African Paediatric Fellowship Programme must be referred by a tertiary African centre allied to the programme, and must have demonstrated the need for clinical training in this discipline.
- (c) Doctors from within South Africa (practicing in "outreach settings") must be working in the field of paediatrics.

## 36 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

### Structure and duration of Diploma

FPJ2 The Diploma shall be completed over one year full-time. The student is attached to the paediatric haematology-oncology service at the Red Cross Children's War Memorial Hospital, and will also spend at least a week in the Department of Radiation Oncology and the F4 Bone Marrow Transplant Unit at Groote Schuur Hospital. Each student will complete a long essay relevant to the application and translation of the knowledge they have acquired to their own practice on returning home. Satisfactory completion of a logbook and satisfactory performance in three formative assessments are DP requirements for the final clinical examination which consists of a case-based oral assessment and the formal evaluation of the long essay.

### Curriculum outline

#### FPJ3 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PED4031W	Clinical Management in Paediatric Haematology and Oncology..	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits .....	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment, progression and readmission

*[Note: these rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPJ4.1 Each course is made up of individual, discrete modules. Unless otherwise indicated, students must pass each module in order to pass the course.

FPJ4.2 Students are required to maintain a logbook of clinical procedures and to submit this by the due date.

FPJ4.3 Students are required to submit all supervisors' reports before the final mark for the relevant course will be released. Should this not be done by the due date, the student will fail the course.

FPJ4.4 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails a course twice, or fails three or more courses, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

FPJ4.5 Regular assessments of level of competency achieved throughout the course, undertaken at 3-monthly intervals. Students are required to attend at least 70% of group supervision sessions.

FPJ4.6 Students who obtain 45% – 49% for the course may be reassessed before the final mark is submitted for approval to the Faculty Examinations Committee, and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

### Distinction

FPJ5 The Diploma may be awarded with distinction if the student obtains 75% – 100% for all the courses with not less than 70% for any individual course.

## CLINICAL PAEDIATRIC NEPHROLOGY

[MG040PED08][SAQA ID: 94946]

### Convenor:

Dr P Gajjar (Division of Paediatric Nephrology, Department of Paediatrics and Child Health)

*The aim is to train suitable candidates to practice clinical paediatric nephrology in order to enable them to manage basic and complex paediatric nephrology in children, including those from vulnerable populations affected by diseases of poverty.*

### Admission requirements

FPK1 Bachelor of Medicine and Bachelor of Surgery (MBChB) or equivalent qualification as a medical doctor, with work experience in the field of paediatrics. Successful applicants must be registered with the Health Professions Council of South Africa by the time they start their training.

### Selection criteria

FPK2.1 Interested applicants from outside of South Africa will be screened through the African Paediatric Fellowship Programme. They must meet the inclusion and exclusion criteria set out by the APFP: (See <http://www.scah.uct.ac.za/apfp/>). Applicants must be supported by a tertiary African centre allied to the APFP;

- (b) have a letter of support from their employers granting them study leave where applicable;
- (c) submit proof of funding by the APFP and the referring centre;
- (d) provide proof that they will return to the home institution to a post in the government/public sector to fulfil a healthcare need;
- (e) have proven proficiency in written and spoken English (this may be tested if necessary); and
- (f) have an acceptable level of computer literacy, and access to a computer and the internet.

FPK2.2 South African trained doctors must submit proof of the need to gain the skills provided by the Diploma programme, with the aim to facilitate better care of tertiary renal conditions at a secondary level institution.

FPK2.3 All applicants may be asked to attend a telephonic or Skype interview.

### Structure and duration of Diploma

FPK3 The training is based at the Red Cross Children's War Memorial Hospital. It is a one-year full-time or two-year part-time programme.

### Curriculum outline

FPK4 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PED4044W	Clinical Management in Paediatric Nephrology .....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits.....	<b>120</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

## **CLINICAL PAEDIATRIC PHYSIOTHERAPY**

**[MG028AHS20][SAQA ID: 94787]**

### **Convener:**

Assoc Prof B Morrow

*The key objective of this Diploma is to train and educate physiotherapists in current knowledge and skills in different areas of paediatric care in a hospital setting, in order to enable them to deliver safe, effective and appropriate evidence-based healthcare practice as an independent practitioner within the multidisciplinary paediatric team.*

Convener: Assoc Prof B Morrow (Department of Paediatrics and Child Health)

### **Admission requirements**

FPL1.1 To be eligible to consideration for admission, a candidate shall

- (a) have an approved Bachelor's degree in Physiotherapy or equivalent, with some clinical experience in paediatric management;
- (b) be registered as an independent practitioner with the relevant professional body (e.g. HPCSA);
- (c) demonstrate the need to develop his/her clinical skills in this field. To this purpose, applicants will be required to submit a personal portfolio reflecting, amongst others, their experience of working in the field of clinical paediatrics and past attendance at relevant courses for which they may have obtained certificates and diplomas;
- (d) have submitted a letter of support from his/her employer granting the applicant study leave for the duration of clinical block attendance and undertaking to provide support, as needed, to enable the applicant to complete assigned tasks and assignments within the work context;
- (e) have proven proficiency in written and spoken English (this may be tested if necessary); and
- (f) have an acceptable level of computer literacy, and access to a computer and the internet.

FPL1.2 Preference shall be given to candidates who are working in a clinical paediatric setting.

FPL1.3 Applicants may be asked to undergo an interview.

### **Structure and duration of Diploma**

FPL2.1 The Diploma may be completed over one year full-time or two years part-time. It consists of two modules – a clinical course and a long essay. A logbook must be completed concurrently with the clinical course. The essay is submitted after the clinical course has been completed. A practical clinical examination, with oral component, is scheduled at the end of the clinical placement.

FPL2.2 The Diploma places emphasis on the practical application of theory and clinical skills. Students are expected to practise their clinical skills in different clinical areas within Red Cross War Memorial Children's Hospital throughout the year and, where applicable, at satellite institutions. Completion of six months of supervised paediatric clinical practice is a course requirement

### **Curriculum outline**

**FPL3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<b>AHS4158W</b>	Clinical Management in Paediatric Physiotherapy.....	90	8
<b>PED4032W</b>	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits.....	<b>120</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

**Assessment, progression and readmission**

[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]

FPL4.1 Students are assessed by means of continuous assessment, review of the logbook, and final examination. Assessments may be of a practical, written and/or oral nature.

FPL4.2 Students are required to attend at least 70% of group supervision sessions. They are required to submit all supervisors' reports, as well as the specified number of case reports, before the final mark for the relevant course will be released. Should this not be done by the due date, the student will fail the course.

FPL4.3 Students who obtain 45% – 49% in an examination may be reassessed before the final mark is submitted for approval by the Faculty Examinations Committee; and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

FPL4.4 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a student fails any course twice, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

**Distinction**

FPL5 The Diploma may be awarded with distinction (75% – 100% average with not less than 70% for any course). All courses must be passed at first attempt.

**CLINICAL PAEDIATRIC PULMONOLOGY**

**[MG039PED13][SAQA ID: 94790]**

**Convener:**

Dr M Zampoli (Division of Paediatric Pulmonology, Department of Paediatrics and Child Health)

*The key objective of the Diploma is to allow suitable practising doctors to develop foundation skills in clinical paediatric pulmonology to enable effective care in resource-limited areas without the immediate supervision of a paediatric pulmonologist. The qualification aims to produce graduates who are trained in the discipline to strengthen and deepen their knowledge in the field of paediatric pulmonology with a focus on common and priority childhood respiratory illnesses, thereby building capacity to improve child health in Africa. This enables and empowers these working professionals to undertake advanced reflection and development in this sub-area of their practice by means of training which is targeted at current thinking practice and research methods in the area of paediatric pulmonology and allows these skilled workers to use their knowledge gained to lobby for improving child health.*

**Admission requirements**

FP1.1 To be eligible for consideration for admission, a candidate shall

- (a) have an approved Bachelor of Medicine and Bachelor of Surgery (MBChB) or equivalent qualification as a medical doctor; experience working in the field of paediatrics; and be registerable with the Health Professions Council of South Africa;
- (b) have submitted a letter of support from his/her employer granting the applicant study leave for the weeks requiring block attendance, and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context;
- (c) have proven proficiency in written and spoken English (which may be tested if necessary); and
- (d) have an acceptable level of computer literacy, and access to a computer and the internet.

**FPM1.2** Preference shall be given to candidates who demonstrate an interest in the field of paediatric pulmonology, and have demonstrated a need for this training to the benefit of their home setting.

**FPM1.3** Applicants may be asked to attend an interview or to take part in a telephonic or Skype interview.

**Duration of programme**

**FPM2** The Diploma may be completed over one year full-time or two years part-time. Additional time should be set aside for self-study, practical work and the completion of assignments. Oral examinations are scheduled for the end-of-year or a suitable time to coincide with completion of the training period.

**Curriculum outline****FPM3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED4043W	Clinical Management in Paediatric Pulmonology .....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
	<b>Total NQF credits .....</b>	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Assessment, progression and readmission**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

**FPM4.1** Students are assessed by means of assignments and final examinations. Assessments may be of a practical or oral nature.

**FPM4.2** Students are required to attend at least 70% of supervised clinical exposure and clinical meetings. They are required to submit a completed logbook before the final mark for the relevant course will be released. Should this not be done by the due date, the student will fail the course.

**FPM4.3** Students who obtain 45% – 49% in an examination may be reassessed before the final mark is submitted for approval of the Faculty Examinations Committee and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

FPM4.4 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails any course twice, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

#### **Distinction**

FPM5 The Diploma may be awarded with distinction if a student obtains an average of 75% – 100% in all courses with no less than 70% for an individual course, all passed at first attempt.

### **CLINICAL PAEDIATRIC RHEUMATOLOGY**

**[MG038PED18][SAQA ID: 96438]**

#### **Convener:**

Assoc Prof C Scott (Division of Paediatric Rheumatology, Department of Paediatrics and Child Health)

*The qualification aims to teach candidates competency in the management of paediatric rheumatic conditions of children and adolescents with specific reference to the socio-economic, health and cultural context of Africa.*

#### **Admission requirements**

FPN1.1 Applicants must have a Bachelor of Medicine and Bachelor of Surgery (MBChB) degree or equivalent qualification as a medical doctor, experience working in the field of paediatrics, and be registerable with the Health Professions Council of South Africa.

FPN1.2 The candidate must demonstrate the need to develop his/her skills in the area of paediatric rheumatology.

FPN1.3 Applicants may be asked to undergo a telephonic interview.

#### **Structure and duration of Diploma**

FPN2.1 The training is based at the Red Cross Children's War Memorial Hospital. It is a one-year full-time or two-year part-time programme.

#### **Curriculum**

**FPN3 The curriculum is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED4042W	Clinical Management in Paediatric Rheumatology .....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
<b>Total NQF credits.....</b>			<b>120</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

#### **Assessment, progression and readmission**

*[Note: these rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPN4.1 Students who obtain 45% – 49% in an examination may be reassessed before the final mark is submitted to the Faculty Examinations Committee and/or may be granted a supplementary examination at the discretion of the Faculty Examinations Committee.

FPN4.2 Students may be permitted to repeat a course they have failed at the convener's

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discretion. No course may be repeated more than once. Where a candidate fails any course twice, or fails three or more courses, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

FPN4.3 Where a supplementary examination is granted, the mark obtained in the supplementary examination constitutes a final mark for the course.

### Distinction

FPN5 The Diploma may be awarded with distinction if the student obtains 75% – 100% for all courses with not less than 70% for any individual course. All courses must be passed at first attempt.

## COMMUNITY AND GENERAL PAEDIATRICS [MG027PED16][SAQA ID: 86173]

### Conveners:

Assoc Prof M Hendricks and Assoc Prof A Westwood (Department of Paediatrics and Child Health)

*[Note: This programme will be offered only if there are a sufficient number of applicants who meet the entrance criteria.]*

### Admission requirements

FPO1 (a) To be considered for admission to this programme, candidates shall have

- (i) an undergraduate medical degree from this University or another university recognised by the Senate for this purpose;
- (ii) registration as a medical practitioner with the Health Professions Council of South Africa;
- (iii) fluency in English, both written and spoken;
- (iv) plans to pursue a career in community and general paediatrics; and
- (v) computer access and internet connectivity.

(b) In addition to meeting the minimum requirements above, preference will be given to

- (i) registered paediatric specialists who work at a secondary healthcare level;
- (ii) registered medical officers who have at least two years' experience in the field of paediatrics and child health at a regional level;
- (iii) doctors in the above categories who work at secondary or a regional level of care; and
- (iv) doctors who are members of health district clinical specialist teams.

### Duration of programme

FPO2 A student must be registered for the Diploma for at least two years of part-time study. The maximum registration period is four years. Retrospective registration is not allowed.

### Curriculum outline

FPO3 The curriculum is as follows: All students are required to complete the following courses:

Number	Course	NQF Credits	HEQSF Level
PED4002F	Epidemiology.....	14	8
PED4003F	Organisation and Management in Child Healthcare.....	14	8
PED4004S	Biostatistics.....	12	8
PED4005S	Child Health Policies .....	14	8
PED4006F	Optimising Clinical Care for Long-term Health Conditions .....	16	8
PED4007W	Experiential Learning .....	30	8

Number	Course	NQF Credits	HEQSF Level
<b>PED4008F</b>	Advocacy and Children's Rights.....	10	8
	Plus a choice of any one of the following electives: .....	0	0
<b>PED4009S</b>	Health Information Systems.....	10	8
<b>PED4010S</b>	Communication, Education and Training.....	10	8
	<b>Total NQF credits:.....</b>	<b>120</b>	

[Notes: See note on page 4 regarding HEQSF levels and NQF credits. It is possible to register for a minimum of two courses on an occasional basis.]

#### **Assessment, progression and readmission**

[Note: These rules must be read in conjunction with the General Rules in the front section of this handbook.]

- FPO4.1 Students are assessed by means of unit submissions, portfolio reports, assignments and attendance of lectures during face-to-face contact sessions. Assessments will be of a practical and written nature.
- FPO4.2 Students are required to attend at least 60% of lectures and to communicate online with their tutors regarding unit submissions. Students are required to submit all portfolio reports and assignments before the final mark for the relevant course will be released. Should this not be done by the due date, the student will not be allowed to undertake the next course module.
- FPO4.3 Successful completion of all courses and an approved portfolio reflecting experiential learning to be submitted by the due date are required for successful completion of the Diploma.
- FPO4.4 Students who obtain less than 50% for an assignment or portfolio report will be permitted to repeat it. Students need to obtain a minimum of 50% in individual courses and the overall assessment to pass the Diploma.

## **COMMUNITY EYE HEALTH**

**[MG0019CHM03][SAQA ID: 66519]**

#### **Convener:**

D Minnies (Division of Ophthalmology, Department of Surgery)

*This Diploma programme is based on planning, implementing, and managing an eye care programme for a one million population (0,5 million – 2 million) "service unit" (district, region, province) specific to the student's own country.*

#### **Admission requirements**

- FPP1.1 An approved undergraduate degree or equivalent qualification from this University or from another university recognised by Senate for the purpose.
- FPP1.2 Submission of a suitable Portfolio of Evidence may be deemed adequate for acceptance through Recognition of Prior Learning, where academic qualifications alone are not sufficient.

#### **Structure and duration of Diploma**

- FPP2 The Diploma is offered over one academic year, comprised of an initial 12-week online period, 7 weeks on-campus, and a further 20 weeks off-campus period doing practical work and assignments).

#### **Curriculum outline**

**FPP3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM4000F	Community Eye Health for Vision 2020 .....	20	8
CHM4001F	Health Promotion and Human Resource Development for Vision 2020 .....	10	8
CHM4002F	Management for Vision 2020 .....	20	8
CHM4003W	Implementation of Vision 2020 .....	70	8
	<b>Total NQF credits .....</b>	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Assessment, progression and readmission**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

**FPP4** Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once. Where a candidate fails any course twice, or fails more than one course, a recommendation may be made to the Faculty Examinations Committee to refuse readmission.

**Distinction**

**FPP5** The Diploma may be awarded with distinction if the student obtains 75% – 100% for all courses with not less than 70% for any individual course. All courses must be passed at first attempt.

**DISABILITY STUDIES**

**[MG016AHS06][SAQA ID: 67416]**

**Convenor:**

Dr J McKenzie (Division of Disability Studies, Department of Health and Rehabilitation Sciences)

*The programme will be of benefit to disability practitioners in national, provincial and local governance structures, disability activists, service providers in NGOs, civil society, public and private sectors including health professionals, social workers, teachers, human resource managers, policy makers and staff of higher education institutions across different faculties. This programme develops an understanding of disability as an issue of diversity with deep psychological roots that results in social injustice because of power and privilege that favours the non-disabled norm. The course will enable students to critically engage with research in the light of the transformative aims of the disability practitioner, and to become familiar with the discipline of Disability Studies with conceptual understanding and the ability to communicate critical thinking and reasoning in academically rigorous ways. Students will learn how to monitor the capacity of government, civil society and development agencies to implement strategies that lead to the equalisation of opportunity and social justice for disabled people. They will be able to understand theories of development and how disability inclusion can occur within these processes. In some cases, applicants may be allowed to register as occasional students (for a maximum of two courses), provided they meet the entrance requirements outlined below.*

**Admission requirements**

**FPQ1.1** An applicant may be considered for admission on the basis of

- having obtained an approved degree from this University or another institution approved by Senate for the purpose; or
- approved prior experience and training. Applicants who wish to be considered on the basis Recognition of Prior Learning (RPL) will be required to submit a

personal portfolio reflecting, amongst others, their experience in the field of disability and/or development, and any relevant work experience and past attendance of relevant courses for which they may have obtained certificates or diplomas. Assessments to identify critical thinking skills in writing and reading may be conducted and students may be required to attend short courses held by the Division of Disability Studies before or during registration for the Diploma.

FPQ1.2 Where relevant, the applicant should also submit a letter of support from his/her employer, granting the applicant study leave for the weeks requiring block attendance, and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context.

FPQ1.3 Students will be expected to participate in online learning and support activities and must therefore arrange to have access to the internet and exhibit a minimum level of computer literacy.

#### **Structure and duration of Diploma**

FPQ2.1 The Diploma comprises four taught courses over a period of one year. There are two teaching blocks per year of up to two weeks each. Full-time attendance in all teaching blocks is required. Participation in seminars and group projects is compulsory and will be monitored.

FPQ2.2 All courses must be completed in a minimum of one year and a maximum of two years.

#### **Credit/exemption and DP requirement**

FPQ3 Students with a first degree who have a pass mark of 60% for an approved research methods course at NQF level 8 may apply for credit and exemption from AHS4091F Developing Critical Research Literacy.

#### **Curriculum outline**

**FPQ4 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<b>AHS4089F</b>	Introduction to Disability as Diversity .....	30	8
<b>AHS4091F</b>	Developing Critical Research Literacy .....	30	8
<b>AHS4118S</b>	Monitoring Disability in Society .....	30	8
	Plus one elective course from the two courses below: .....	0	0
<b>AHS4117S</b>	Critical Priorities in Disability and Development .....	30	8
<b>AHS4163S</b>	Disability Studies in Education .....	30	8
<b>Total NQF credits.....</b>		<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

#### **Assessment and progression rules**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPQ5 (a) Each course has specified coursework assessment activities that make up 50% of the total mark for the year. An integrated, final assessment consisting of a written paper and/or an oral or group presentation is done at the end of each course and the mark for this assessment constitutes an examination mark, which is weighted 50% of the mark for each course.

(b) A student who does not achieve a coursework mark of at least 45% will not qualify to write the final examination for that course, except at the programme convener's discretion.

- (c) Students who fail a course may be permitted to repeat the course once at the programme convener's discretion. Students who fail a course more than once, or who fail more than one course, may be asked to withdraw from the Diploma.
- (d) A student who fails a course with 47% – 49% may be granted a supplementary examination.

### **Eligibility to apply for MPhil by dissertation in Disability Studies**

FPQ6 Students who wish to apply for admission to the MPhil by dissertation in Disability Studies must obtain 60% for all courses and an overall mark of 65% in this postgraduate diploma, unless exempted from this requirement by the Selection Committee.

### **Distinction**

FPQ7 To be awarded the degree with distinction, an overall average of 75% must be obtained with not less than 70% for any course. All courses must be passed at first attempt.

## **EMERGENCY CARE**

**[MG042]**

### **Convener:**

Dr P Hodgkinson (Department of Surgery)

### **Admission requirements**

PPR1 To be eligible for consideration an applicant shall

- (a) hold a minimum of a NQF Level 7 degree. It is open to medical practitioners, nurses and paramedics;
- (b) be registered with a relevant professional body (such as the HPCSA or Nursing Council);
- (c) be able to converse and write in medical English, and
- (d) pass a basic computer literacy examination provided by the Division upon shortlisting.

### **Duration of programme**

PPR2 The diploma is offered over one year of full-time study.

### **Curriculum outline**

#### **FPR3 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>CHM4016F</b>	Introduction to Postgraduate Studies .....	10	8
<b>CHM4017F</b>	Clinical Research Methods .....	15	8
<b>CHM4018F</b>	Concepts of Emergency Care .....	20	8
<b>CHM4019W</b>	Adult Emergency Care .....	25	8
<b>CHM4020W</b>	Paediatric Emergency Care.....	20	8
<b>CHM4021W</b>	Research Assignment.....	30	8
<b>Total NQF credits .....</b>		<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### **DP requirement**

FPR4 Satisfactory completion of the first semester modules is a requirement to be allowed to continue into the second semester.

**Assessment**

FPR5 Assessment is done (*inter alia*) by means of assignments, skills sessions, and oral and written examinations.

**Progression rules**

FPR6 Except by permission of the Senate, a candidate registered for a PG Dip Emergency Medicine may be refused readmission if he/she:

- (a) fails half or more of the coursework courses for which he/she is registered in any year of study;
- (b) fails a core coursework course more than once;
- (c) has not completed the coursework within the first three years of first registration for the degree;
- (d) has not submitted a final research proposal by the beginning of the third year of study since first registration for the degree.

**FAMILY MEDICINE**

**[MG015PPH09][SAQA ID: 67417]**

**Convener:**

Dr T Ras (Division of Family Medicine, School of Public Health and Family Medicine)

*[Note: This programme does not fulfil the criteria for registration as a family physician with the HPCSA. Successful applicants are admitted to the programme every second year.]*

**Admission requirements**

FPS1 To be eligible for consideration an applicant shall

- (a) be a graduate of medicine of this University or another university recognised by Senate for this purpose; or
- (b) be a professional nurse trained by an institution accredited by the SA Nursing Council, and who has completed an accredited course qualifying the applicant as a clinical nurse practitioner in South Africa (\*see provisions below); and
- (c) be registered by, and in good standing with, the Health Professions Council of South Africa as a medical doctor or with the South African Nursing Council as a professional nurse and clinical nurse practitioner; and
- (d) have submitted the names and contact details of at least two contactable referees, one of whom should be his/her current or most recent employer; and
- (e) successfully have undergone a formal interview process;
- (f) be practising in an approved setting for the duration of his/her registration for the Diploma; and
- (g) have basic computer skills, access to a home computer and internet access.

*[\*Note: Admission of Clinical Nurse Practitioners (CNPs) and PHC-trained facility/operational managers:*

*A limited number of CNPs who fulfil the admission requirements as specified above will be considered for entry to specific individual courses indicated below as occasional students. Occasional students who meet entry criteria may be considered for admission to the full qualification, but have to adhere to the policy that: (a) no more than 50% of the courses successfully completed as an occasional student will count toward the full qualification; (b) at least 50% of the courses have to be successfully completed while registered for the full qualification; and (c) registration for the full qualification must be for at least one year.]*

**Duration of Diploma**

FPS2 A student shall be registered for a minimum of two years of part-time, on-site study.

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*[Note: Year 1 is not a prerequisite for year 2. These two year offerings are offered alternately. The combination of courses a student registers for in the first or second year therefore depends on which combination is offered in that year. The overall assessment will always take place at the end of the second year.]*

### Curriculum outline

A phased process is being embarked on in keeping with a move toward a national postgraduate diploma in family medicine. This includes more practice and district-based learning (relative to on-campus learning); strengthening course content around national core competencies; adding a community-orientated primary care course.

#### FPS3 The curriculum outline is as follows: Year 1

Number	Course	NQF Credits	HEQSF Level
PPH4004F	Principles of Family Medicine*	16	8
PPH4005S	Evidence-based Medicine	13	8
PPH4007S	Ethics*	12	8
PPH4011S	Clinical Medicine B	18	8

#### Year 2

Number	Course	NQF Credits	HEQSF Level
PPH4006S	Clinical Medicine A	21	8
PPH4028F	Child and Family Health	20	8
PPH4029H	Prevention and Promotion and Chronic Illness*	21	8
PPH4054S	Integrated assessment	0	8
<b>Total NQF credits:</b>		<b>121</b>	

*[Note: See note on page 4 regarding HEQSF levels and NQF credits.*

*\* Courses currently open to occasional students as explained above.]*

### Assessment

*[Note: These rules must be read in conjunction with the General Rules in the relevant front section of this handbook.]*

FPS4.1 The following assessment rules apply:

- The year mark for each course is made up of marks obtained for assignments and assessments on modules within each course.
- All individual courses must be passed with 50% before a student may be admitted to the final, integrated examination.

FPS4.2 A student who is permitted to re-register after failing the final integrated examination may be permitted to re-take the examination after six months if he/she failed no more than two components of the examination at first attempt, or after one year if he/she failed three or more components at first attempt.

### Progression and readmission

FPS5 Except with the permission of Senate, on the recommendation of the Division of Family Medicine, a candidate who fails three courses, or who fails the same course more than once, shall not be permitted to continue with the programme.

### Distinction

FPS6 The Diploma may be awarded with distinction if the student obtains an average of 75% – 100%, with not less than 70% for any course. All courses must be passed at first attempt.

## HEALTH ECONOMICS

[MG017][SAQA ID: 62993]

**Convenor:**

Assoc Prof E Sinanovic (Department of Public Health and Family Medicine)

**Admission requirements**

FPT1 This programme is designed for graduates in the social or health sciences. The minimum entry requirements are as follows:

- (a) An approved undergraduate degree in economics, health sciences or the social sciences, or an approved equivalent; and
- (b) Proficiency in English, both written and spoken.

**Duration of Diploma**

FPT2 The Diploma is offered over 24 months on a part-time basis. Students may not be registered beyond four years.

**Curriculum outline**

**FPT3 The curriculum outline is as follows: Year 1**

Number	Course	NQF Credits	HEQSF Level
PPH4018F	Introduction to Health Economics.....	15	8
PPH4019F	The Economics of Health Systems.....	15	8
PPH4020S	Priority Setting and Healthcare Decision-Making.....	15	8
PPH4021S	Key Features of Economic Evaluation.....	15	8

**Year 2**

Number	Course	NQF Credits	HEQSF Level
PPH4022F	Economic Evaluation for Healthcare Decision-Making.....	15	8
PPH4023F	Strategic Purchasing 1 .....	15	8
PPH4024S	Strategic Purchasing 2 – Influencing Providers .....	15	8
PPH4025S	Strengthening Progress to Universal Coverage .....	15	8
PPH4054S	Integrated assessment.....	0	8
<b>Total NQF credits:</b> .....		<b>120</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

**Minimum requirements for progression and re-registration**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPT4 A student who fails to meet the following minimum requirements may be refused permission to renew his/her registration for the Diploma:

- (a) In each year of study, the student shall complete at least half the courses for which he/she is registered, with the exception of the final year of study, in which the student will be expected to complete the requirements for the Diploma.
- (b) The student must be able to complete all requirements for the Diploma within four years.
- (c) Students shall complete the first-year courses before progressing to the second-year courses. The programme convenor will consider deviations on a case-by-case basis.
- (d) Students are required to attend the contact blocks in order to qualify to write the overall assessments.

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### Assessment

FPT5.1 Students are assessed on the basis of written assignments throughout the programme. There are two assignments per course, each of which must be passed in order to pass the diploma. If a student fails an assignment (mark of less than 50%), he/she may submit a rewritten assignment, but a maximum mark of 50% will be awarded.

FPT5.2 In addition, each student needs to attend four contact weeks (two each year if completing the diploma over a two-year period, or a minimum of four if completing the diploma over a three- or four-year period), and each of these includes an assessment of participation in class activities. The final integrated assessment mark is calculated as an average across these ten components (eight courses weighted at 10% each and four contact weeks weighted at 20%).

FPT5.3 Students must pass each course, the contact week assignments, and the overall assessment in order to pass the diploma.

### Distinction

FPT6 The Diploma may be awarded with distinction (an average of 75% – 100%, with not less than 70% for any course). All courses must be passed at first attempt.

## HEALTH MANAGEMENT

**[MG009]**

### Convener:

Dr M Shung-King (Department of Public Health and Family Medicine)

### Admission requirements

FPU1 (a) An approved undergraduate degree or equivalent qualification from this University or another university recognised by the Senate for the purpose.  
(b) At least two years' relevant management experience.

*[Note: This programme is offered primarily to senior managers within the South African public health care system, with only a limited number of places for other candidates.]*

### Duration of programme

FPU2 This programme is offered on a part-time basis. It consists of three eight- to nine-day blocks, and one three- to four-day block in the first twelve months, and an additional four months to complete the project.

### Curriculum outline

#### FPU3 The curriculum outline is as follows

Number	Course	NQF Credits	HEQSF Level
PPH4057S	Critical Health Management Practices (Course 3) .....	25	8
PPH4058F	Leading Health System Improvement (Course 2) .....	25	8
PPH4059F	Health System Intervention Project (Course 4) .....	45	8
PPH4060F	Working in Complex Health Systems (Course 1) .....	25	8
<b>Total NQF credits:</b> .....		<b>120</b>	

### Attendance

FPU4 All students are required to attend the residential sessions for each course. Should a student fail to attend the sessions, his/her registration may be cancelled.

**Assessment**

FPU5 Students are assessed continuously through assignments and work-related tasks. Late submissions of the main assignment task for any course are subject to a penalty, unless approval has been sought and received from the convener.

The pass marks for courses PPH4060F (course 1), PPH4058F (course 2) and PPH4057S are:

- i. An average of 50% across all the course assessments with a subminimum of 45% for the primary written assignment;
- ii. Students with a mark of between 40 and 44% for the written assignment are eligible for resubmission once only per course (for a maximum of two courses).

The pass mark for the final course, PPH4059F(course 4) is:

- i. An average of 50% across all the course assessments, with a subminimum requirement of 50% for the written assignment at the end of the course;
- ii. Students with a mark of between 40 and 49% for the written assignment are eligible for resubmission only once

**Progression and readmission**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPU6

- (a) A student who has failed two consecutive course will not be allowed to continue further in the programme;
- (b) A student who failed any course will be allowed to register for the subsequent course, provided that the resubmitted written assignment (of the failed courses) has been handed in prior to the start of the subsequent course, or that sufficient progress of the resubmission has been demonstrated.

**Distinction**

FPU7 The Diploma may be awarded with distinction (based on an average of 75% - 100%) with no less than 70% for any individual course.

**HEALTH PROFESSIONAL EDUCATION**

**[MG026PPH10][SAQA ID: 83666]**

**Convener:**

L Pienaar (Department of Health Sciences Education)

**Minimum admissions requirements**

FPV1 To be eligible for consideration, an applicant shall

- (a) have an approved qualification in a health sciences or related profession;
- (b) be registered with a relevant professional body where appropriate;
- (c) have at least six months teaching experience in an academic or healthcare context, and must be currently teaching in a healthcare context, be proficient in English, both written and spoken;
- (d) have basic computer literacy
- (e) have reliable and continuous computer access and internet connection;
- (f) have submitted, where applicable, a letter of support from his/her employer granting the applicant study leave for the weeks requiring block attendance and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context;
- (g) Recognition of Prior Learning (RPL). Applicants who have relevant certificates or diplomas of training in the health field, but not at the HEQSF level of a three year degree (7), and who have experience of teaching health workers and health professionals, may be considered on the basis of RPL. They are required to submit a prescribed personal portfolio of evidence reflecting, amongst others,

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their teaching and/or facilitation experience, past attendance of relevant courses for which certificates or diplomas have been attained, and evidence of critical thinking skills in writing and reading. Support for completion of the portfolio will be available and, if selected, support will continue as necessary.

### Structure and duration of Diploma

FPV2 The programme is offered over one year full-time or two years part-time. There are three on-campus blocks of up to one week each at the beginning, middle, and end of the year. Full attendance is required for the on-campus block periods. Reduced attendance will be considered only in exceptional circumstances. A full-time student may be registered for no longer than two years and a part-time student for no longer than four years. *Exceptions:* occasional students may be considered for one or two courses in any order during the year.

### Curriculum outline

#### FPV3 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
	Core courses: .....	0	0
<b>HSE4000F</b>	Teaching and Learning Theories in Health Professional Education.....	30	8
<b>HSE4001F</b>	Learning and Teaching Practice .....	30	8
<b>HSE4002S</b>	Assessment in Health Professional Education.....	30	8
	.....	0	0
	And must choose one (1) elective from the offerings below: .....	0	0
<b>HSE4003S</b>	Curriculum Development and Course Design .....	30	8
<b>HSE4005S</b>	Academic Literacy for Health Professional Education.....	30	8
<b>HSE4006S</b>	Technology Assisted Learning and Teaching.....	30	8
<b>HSE4004S</b>	Integrated Assessment .....	0	8
	<b>Total NQF credits .....</b>	<b>120</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

### Progression and readmission rules

FPV4 (a) Except with permission of the programme convener, a student who is permitted to do the programme on a part-time basis shall be required to complete two courses successfully each year.  
(b) Except with permission of the programme convener, a student registered for the diploma on a full-time basis shall be required to complete all four courses successfully in one year.  
(c) All four courses are compulsory. Students need to pass each course before proceeding to the next course. All four courses need to be passed before taking the integrated examination at the end of the programme.  
(d) A student who fails a course with 47% – 49% may be granted a re-examination. A student who fails a course with less than 47% will need to repeat the course.  
(e) Except by permission of Senate, a student may be refused permission to renew his/her registration for the programme if she/he fails the same course twice or fails two courses.

### DP requirements

FPV5 To be eligible to write the final examination, students are required to have  
(a) successfully completed the relevant portfolio tasks specified for each course;  
(b) obtained a pass of 50% for the summative assignments of all four courses;  
(c) attended 100% of block week activities. Absence is permitted only with approval

of the programme convener.

#### **Assessment**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this handbook.]*

FPV6.1 Students are required to pass all courses before they may sit the final integrated assessment. A re-examination may be awarded at the discretion of the course and programme convener to students who fail a course with 47% – 49%.

FPV6.2 The final integrated examination consists of four components: a written examination, a teaching portfolio, an oral examination on the teaching portfolio, and a simulated teaching event. Students are required to achieve a minimum of 45% in each of the four components of the final examination. An overall pass mark of 50% is required. A student who fails the final integrated examination with 45%-49% may be granted a re-examination at the discretion of the programme convener. A student who fails the final integrated examination with less than 45% may be awarded a supplementary examination at the discretion of the Faculty Examination Committee.

#### **Distinction**

FPV7 To be awarded the Diploma with distinction, an overall average of 75% must be obtained with no less than 70% for any course. All courses must be passed at first attempt.

## **HEALTHCARE TECHNOLOGY MANAGEMENT**

**[MG010HUB10][SAQA ID: 4585]**

#### **Convener:**

Dr J Fortuin Abrahams (Department of Human Biology)

*This programme aims to build capacity and broaden technology-related competencies in support of quality healthcare delivery that is affordable, equitable and sustainable. It covers the Assessment, Innovation and Management (AIM) of Healthcare Infrastructure and Technology (HIT) and related areas. Health system planners, health technology policy makers, health economists, health service and hospital managers, clinical and hospital engineering practitioners, built-environment professionals, medical physicists, radiographers, clinical technologists, nurses, health informaticists and healthcare technology/medical device innovators would all benefit and could use the Diploma as a platform for a new direction in their careers.*

#### **Admission requirements**

FPW1.1 An applicant shall not be admitted as a candidate unless he/she

- (a) has an approved undergraduate degree or equivalent qualification from this University or another university recognised by Senate for this purpose; or has in any other manner attained a level of competence which, in the opinion of Senate, is adequate for the purposes of admission as a candidate for the Diploma;
- (b) has preferably worked in a healthcare environment for at least three years; and
- (c) is proficient in written and spoken English and is computer-literate.

FPW1.2 A formal Recognition of Prior Learning (RPL) process has been introduced, requiring competent completion of the National Benchmark Tests and the submission of a portfolio of evidence in support of the application for admission (details available on request), as well as a motivation as to why the candidate wishes to study this programme and how the applicant and his/her employing institution would benefit.

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### Duration of Diploma

FPW2 The Diploma is offered on a part-time basis, with one two-week on-site teaching block and one-week examination block in each semester. Students may not be registered for more than three years.

### Curriculum outline

FPW3 The curriculum outline is as follows:

#### Coursework

Number	Course	NQF Credits	HEQSF Level
HUB4027F	Healthcare Technology Assessment .....	13	8
HUB4028F	Healthcare Technology Planning and Acquisition .....	13	8
HUB4030F	Project Management .....	13	8
HUB4065F	Medical Devices and Instrumentation Overview.....	13	8
HUB4066F	Medical Devices Innovation and Entrepreneurship .....	13	8
HUB4068S	Asset Management of Healthcare Technology and Infrastructure.13	13	8
HUB4069S	Health Facility Design, Planning and Assessment .....	13	8
HUB4073S	Health Informatics, e-Health and Management Information Systems .....	13	

#### Project

Number	Course	NQF Credits	HEQSF Level
HUB4032W	Project in Healthcare Technology Management.....	16	8
	Total NQF credits: .....	120	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment and progression

FPW4.1 Should candidates elect to complete the Diploma over more than one year, they must complete at least four courses in their first year of study and eight courses by the end of their second year.

FPW4.2 Students are assessed on the basis of class tests, written examination and assignments, and must pass each course (with 50% or more) and the project in order to graduate.

### Distinction

FPW5 The Diploma may be awarded with distinction if the student obtains an average of greater than 75% with not less than 70% for any course. All courses must be passed at first attempt.

## **INTERDISCIPLINARY PAIN MANAGEMENT**

### **[MG055AAE03]**

#### **Convenor:**

Assoc Prof R Parker (Department of Anaesthesia and Perioperative Medicine)

*The program will be of benefit to healthcare professionals working at all levels of care (primary to quaternary care) who treat people with pain. This programme seeks to train evidence-informed health professionals who are able to implement contextually relevant patient-centred biopsychosocial approaches in a comprehensive primary healthcare approach to manage complex pain conditions. The programme will enable students to critically engage with the evidence underpinning pain management approaches and facilitate their application of knowledge to practice through reflection. Students will understand the biopsychosocial model of pain and be able to apply this using the Comprehensive Primary Healthcare Approach working in Interdisciplinary teams. Graduates will be able to function effectively in the following four (4) domains in order to deliver effective evidence-informed health care to people with pain: The Multidimensional Nature of Pain, Assessment and measurement of Pain and its effects, Comprehensive Pain Management and Evidence-informed Pain Management*

#### **Admission requirements**

This program is designed for health professionals working with acute and chronic pain at all levels of care. The programme will be available to doctors, nurses, physiotherapists, occupational therapists and psychologists (all have at least an NQF 8 qualification) involved in treating people with pain. The programme convenor may ask candidates to enrol and successfully pass the courses “Introduction to postgraduate studies” and “The multidimensional nature of pain” prior to being allowed to register for the full programme should they not meeting the prerequisite physiology requirements.

FPX1.1 An applicant may be considered for admission on the basis of

- being registered with a relevant professional body
- being proficient in English, both written and spoken
- having basic computer literacy evidenced by successfully passing a computer skills test
- having reliable and continuous computer access and internet connection
- having submitted, where applicable, a letter of support from his/her employer granting the applicant study leave for the weeks requiring block attendance and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context
- working in a setting which allows them to engage in the management of people with pain (acute or chronic).
- having at least one year’s experience working in a clinical health professional setting.
- having completed an accredited undergraduate course in physiology obtaining a minimum of 60% for the course.

#### *Profession specific requirements*

- Doctors: MBChB or equivalent and registration with professional body
- Nurses: a 4 year Bachelor of Nursing or equivalent and registration with professional body.
- Physiotherapists: a 4 year BSc(Physiotherapy) degree and registration with professional body.
- Occupational Therapists: a 4 year BSc(Occupational Therapy) degree and registration with professional body.

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- Psychologists: registered as a clinical or counselling psychologist with the HPCSA or equivalent professional body. Advantageous to have worked in a medical setting.
- Applicants with basic NQF 7 degrees with minimal anatomy and physiology may be required to enrol and successfully pass the courses “Introduction to postgraduate studies” and “The multidimensional nature of pain” prior to being allowed to register for the full program

### Structure and duration of Diploma

FPX2.1 The Diploma comprises seven taught courses which can be completed full time over a period of one year or part-time over a period of two years. There are two teaching blocks per year of up to two weeks each. Full-time attendance in all teaching blocks is required. Participation in seminars and group projects is compulsory and will be monitored.

FPX2.2 All coursework must be completed in a minimum of one year and a maximum of two years.

### Credit/exemption and DP requirement

FPX3 Students must participate in 80% of online activities to obtain DP for each course.

### Curriculum

#### FPX4 The curriculum outline is as follows:

Code	Name	Credits	Level
CHM4016F	Introduction to postgraduate studies	10	8
CHM4017F	Clinical Research Methods	10	8
AAE4003F	The Multidimensional Nature of Pain	25	8
AAE4004F	Neuroanatomy and Neurophysiology of Nociception and Pain	15	8
AAE4005F	Assessment and Measurement of Pain and its Effects	15	8
AAE4006S	Comprehensive Pain Management	30	8
AAE4007S	Pain Management in Complex Conditions	15	8
<b>Total NQF credits</b>		<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment and progression rules

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPX5 (a) Each course has specified coursework and final assessment activities. A student who does not achieve a coursework mark of at least 45% will not qualify to write the final assessment for that course, except at the programme convener’s discretion.

(b) A student who fails a course with 47% – 49% may be granted a supplementary assessment.

(c) Students who fail a course may be permitted to repeat the course once at the programme convener’s discretion. Students who fail a course more than once, or who fail more than one course, may be asked to withdraw from the Diploma.

### Distinction

FPX6 To be awarded the diploma with distinction, an overall average of 75% must be obtained with not less than 70% for any course. All courses must be passed at first attempt.

## **MATERNAL AND CHILD HEALTH**

**[MG018][SAQA ID:66629]**

### **Convenor:**

J Shea (Child Health Unit, Department of Paediatrics and Child Health)

### **Admission requirements**

FPY1 This programme is designed for health professionals working in the field of maternal and child health. The minimum entry requirements are:

- An approved undergraduate degree or equivalent in the health sciences.
- At least two years' work experience in maternal and child health services.
- Proficiency in English, both written and spoken.
- A satisfactory level of computer literacy, computer-access and internet connectivity.

*[Note: Preference is given to health professionals resident in Southern Africa who are pursuing a career in MCH management. Applicants who wish to be considered on the basis of the Recognition of Prior Learning (RPL) will be required to submit a personal portfolio of learning.]*

### **Duration of Diploma**

FPY2 The Diploma is offered over twenty-four months on a part-time basis. Students may not be registered beyond four years.

### **Curriculum outline**

#### **FPY3 The curriculum outline is as follows: Year 1**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>PED4017F</b>	Health and Development.....	12	8
<b>PED4018F</b>	Epidemiology.....	14	8
<b>PED4020S</b>	Foundations of Maternal and Child Health.....	12	8
<b>PED4022S</b>	The Psychosocial Context of Maternal and Child Health .....	12	8
<b>PED4025W</b>	Introduction to Maternal and Child Health .....	12	8
PED4029F/S	Organisational and Academic Communication.....	12	8

#### **Year 2**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>PED4021F</b>	Priorities in Maternal and Child Health.....	20	8
<b>PED4026W</b>	Maternal Mental Health.....	12	8
<b>PED4030F/S</b>	Organisation and Management of Health Services .....	14	8
<b>PED4028S</b>	Integrated Assessment.....	0	8
	Total NQF credits:.....	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### **Minimum requirements for re-registration**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this handbook.]*

FPY4 A student who fails to meet the following minimum requirements may be refused permission to renew registration for the programme:

- In each year of study, successful completion of all the courses for which student is registered.
- In the final year of study, completion of all the requirements for the programme.
- Completion of all the requirements for the programme within four years.
- Completion of first year courses before registration for second year courses.

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*[Note: The programme conveners will consider curriculum changes on an individual basis.]*

### Assessment

FPY5 Coursework assessment includes the following:

- (a) Unit submissions: a series of reflective learning exercises and questions within each course provides opportunities for students to establish dialogue with tutors and other students about the course content. Discussion forum posts and synchronous online learning are weighted and contribute to the overall course assessment.
- (b) Graded course assignments: each course assignment is an opportunity for students to synthesise learning objectives and concepts covered in each course in response to a health issue within their health district. Course assignments are weighted and contribute to the overall assessment.
- (c) An integrated written examination takes place at the end of the diploma programme. The purpose of this assessment is to gauge understanding and application of the concepts in the programme.

### Distinction

FPZ6 The diploma may be awarded with distinction if the student obtains 75% – 100% for all courses, including the integrated assessment, with no less than 70% for any individual course. All courses must be passed at first attempt.

## NEONATOLOGY

**[MG030][SAQA ID: 97664]**

### Conveners:

Assoc Prof M C Harrison and Dr N Rhoda (Division of Neonatal Medicine, Department of Paediatrics and Child Health

*The Diploma aims to provide training for postgraduate students from within South Africa and countries across Africa. The goal of the Diploma is to enhance the capacity of health professionals to manage and deliver neonatal services and programmes at the primary levels of care. This is important as it will reduce the pressure on the very limited tertiary beds available in neonatology within the countries across the region and ultimately have a significant impact on neonatal mortality.*

### Admission requirements

FPZ1.1 To be eligible for consideration for admission, a candidate shall

- (a) have an approved MBChB degree from an accredited national or international institution with at least two years' work experience in neonates, and be registered as an independent practitioner with the relevant professional body (e.g. HPCSA);
- (b) have a written undertaking from the relevant referring institute that the candidate will receive adequate support for the implementation of the neonatal programme, also granting the candidate study leave for the weeks requiring block attendance;
- (c) have proven proficiency in written and spoken English (at FET exit level, as demonstrated by a Matric, National Senior Certificate or equivalent level of English). Fluency in English may be tested if necessary; and
- (d) have an acceptable level of computer literacy, and access to a computer and the internet.

FPZ1.2 Preference shall be given to candidates who are currently working in a neonatal unit which provides adequate neonatal care. Those who are not working in such settings will be required to provide evidence of their relevant neonatal experience. Candidates from Africa will be screened via the African Paediatric Fellowship Programme (APFP) and must be referred from a tertiary African centre allied to the programme. Funding will be

covered between APFP and the referring centre. A maximum of four trainees will be admitted per year.

FPZ1.3 Candidates must have two years' neonatal experience, and must have been involved in neonatal care for the past five years.

FPZ1.4 Applicants may be asked to attend an interview or to take part in a telephonic or Skype interview.

**Duration of programme**

FPZ2 The Diploma will be completed over one year of full-time study.

**Curriculum outline**

**FPZ3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED4033W	Clinical Management in Neonatology.....	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
Total NQF credits.....			<b>120</b>

**NURSING**

**Programme Convener:**

**Admission requirements**

FPAA1.1 (a) A four-year diploma or degree in accordance with South African Nursing Council (SANC) regulation R425;  
 (b) Proof of registration with the SANC as a professional nurse;  
 (c) Evidence of professional indemnity/insurance; and  
 (d) Proficiency in written and spoken English.

FPAA1.2 Applicants who have a two-year certificate in accordance with SANC regulation 2175 (enrolled nurse) and a two-year nursing qualification in accordance with SANC regulation 683 (bridging) who wish to be considered on the basis of Recognition of Prior Learning (RPL) are required to submit a prescribed personal portfolio of evidence reflecting, amongst others, their nursing work experience, past attendance of relevant courses for which they have obtained certificates or diplomas, and evidence of critical thinking skills in writing and reading.

FPAA1.3 An applicant is also required to submit a letter of support from his/her employer granting the applicant study leave for the weeks requiring block attendance, and undertaking to provide support to enable the applicant to complete assigned tasks and assignments within the work context.

FPAA1.4 Applicants wishing to apply for the Advanced Midwifery and Neonatal Care and Critical Care Nursing (Neonate) specialisations are also required to submit proof of registration with the South African Nursing Council as a midwife.

FPAA1.5 Applicants wishing to apply for the Child Nursing, Critical Care Nursing (Child) or Critical Care Nursing (Neonate) programmes are required to have a minimum of 12 months' recent clinical experience in that speciality. Such experience must have been obtained within three years before application for admission to the Diploma programme.

**Duration of programme**

FPAA2 A student must be registered for the programme for at least one year of full-time or two years of part-time study. The maximum registration period is three years. Retrospective registration is not allowed.

**Advanced Midwifery and Neonatal Care (qualification)****[MG043AHS01]****Curriculum outline****FPAA3.1 Advanced Midwifery and Neonatal Care**

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4123F	Clinical Sciences for Advanced Midwifery.....	20	8
AHS4124W	Advanced Midwifery Practice A .....	35	8
AHS4125W	Advanced Midwifery Practice B .....	35	8
<b>Total NQF credits .....</b>		<b>120</b>	

**Child Nursing (qualification)****[MG045AHS03]****FPAA3.2 Child Nursing**

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4128W	Child Nursing Practice B .....	35	8
AHS4129F	Clinical Sciences for Child Nursing .....	20	8
AHS4157W	Child Nursing Practice A .....	35	8
<b>Total NQF credits .....</b>		<b>120</b>	

**Critical Care Nursing (Child) (qualification)****[MG046AHS04]****FPAA3.3 Critical Care Nursing (Child)**

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4129F	Clinical Sciences for Child Nursing .....	20	8
AHS4130W	Critical Care Child Nursing Practice A .....	35	8
AHS4131W	Critical Care Child Nursing Practice B.....	35	8
<b>Total NQF credits .....</b>		<b>120</b>	

**Critical Care Nursing (General) (specialisation within PG Dip Nursing)****[MG012AHS05]****FPAA3.4 Critical Care Nursing (General)**

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4132F	Clinical Sciences for Critical Care Nursing (General) .....	20	8
AHS4133W	Critical Care Nursing (General) Practice A .....	35	8
AHS4134W	Critical Care Nursing (General) Practice B .....	35	8
<b>Total NQF credits .....</b>		<b>120</b>	

**Critical Care Nursing (Neonate) (specialisation within PG Dip Nursing)****[MG012AHS18]**

FPAA3.5 Critical Care Nursing (Neonate) [This is not registerable with the SANC.]

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4129F	Clinical Sciences for Child Nursing .....	20	8
AHS4135W	Neonatal Critical Care Nursing Practice A .....	35	8
AHS4136W	Neonatal Critical Care Nursing Practice B .....	35	8
	<b>Total NQF credits.....</b>	<b>120</b>	

**Dermatology Nursing (qualification)****[MG025AHS17]**

FPAA3.6 Dermatology Nursing [This qualification is not a registerable with the SANC.]

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4137F	Clinical Sciences for Dermatology Nursing .....	20	8
AHS4138W	Dermatology Nursing Practice A .....	35	8
AHS4139W	Dermatology Nursing Practice B .....	35	8
	<b>Total NQF credits.....</b>	<b>120</b>	

**Diabetes Mellitus Nursing and Education (qualification)****[MG052AHS19]**

FPAA3.7 Diabetes Mellitus Nursing and Education [This qualification is not registerable with the SANC.]

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4140F	Clinical Sciences for Diabetes Nursing .....	20	8
AHS4141W	Diabetes Nursing Practice A .....	35	8
AHS4142W	Diabetes Nursing Practice B .....	35	8
	<b>Total NQF credits.....</b>	<b>120</b>	

**Nephrology Nursing (qualification)****[MG049AHS11]**

FPAA3.8 Nephrology Nursing

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4143F	Clinical Sciences for Nephrology Nursing .....	20	8
AHS4144W	Nephrology Nursing Practice A .....	35	8
AHS4145W	Nephrology Nursing Practice B .....	35	8
	<b>Total NQF credits.....</b>	<b>120</b>	

**Neuroscience Nursing (specialisation within PG Dip Nursing)****[MG012AHS12]**

FPAA3.9 Neuroscience Nursing [This specialisation is not registerable with the SANC.]

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4146F	Clinical Sciences for Neuroscience Nursing .....	20	8
AHS4147W	Neuroscience Nursing Practice A .....	35	8
AHS4148W	Neuroscience Nursing Practice B .....	35	8
	<b>Total NQF credits.....</b>	<b>120</b>	

**Nursing Education (qualification)****[MG053AHS013]****FPAA3.10 Nursing Education [In abeyance]**

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4084S	Principles of Mentorship .....	15	8
AHS4085S	Evaluating, Teaching and Learning.....	15	8
AHS4101S	Nursing Clinical Didactics.....	15	8
AHS4102W	Curriculum Design in Nursing Education .....	30	8
	<i>A one-semester course in Adult Education offered in the Faculty of Humanities to be approved by the programme convener.....</i>	15	8
	<b>Total NQF credits .....</b>	<b>120</b>	

**Nursing Management (in abeyance)(qualification)****[MG054AHS14]****FPAA3.11 Nursing Management [In abeyance]**

Number	Course	NQF Credits	HEQSF Level
AHS4049H	Fundamentals of Nursing Management.....	20	8
AHS4060S	Financial Management in the Health Services .....	15	8
AHS4070H	Healthcare and Nursing Management .....	20	8
AHS4083F	Nursing Management Portfolio Development.....	25	8
AHS4122W	Professional Development Studies .....	30	8
	<b>Total NQF credits .....</b>	<b>120</b>	

**Ophthalmic Nursing (qualification)****[MG051AHS15]****FPAA3.12 Ophthalmic Nursing**

Number	Course	NQF Credits	HEQSF Level
AHS4122W	Professional Development Studies .....	30	8
AHS4149F	Clinical Sciences for Ophthalmic Nursing .....	20	9
AHS4150W	Ophthalmic Nursing Practice A.....	35	8
AHS4151W	Ophthalmic Nursing Practice B .....	35	8
	<b>Total NQF credits .....</b>	<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Clinical requirements**

FPAA4 (a) Students who have clinical requirements related to their chosen specialisation will gain clinical experience at clinical facilities recognised by the South African Nursing Council as learning sites for this purpose.

(b) Students will not be able to register with the regulatory body for Nursing and Midwifery (the South African Nursing Council) until all clinical requirements have been met.

(c) In order to complete the Diploma, international students are required to meet all the clinical requirements of the individual courses. Such students will not, however, be able to register with the South African Nursing Council on completion of the programme.

**Minimum requirements for re-registration**

FPAA5 Except by permission of Senate, a student may be refused permission to renew his/her registration for the programme:

(a) unless, in each year of study, he/she completes at least half of the total

courses for which he/she is registered;

- (b) if he/she fails the same course during more than one examination cycle (a cycle being an examination and, if awarded, a re-evaluation); or
- (c) if he/she fails to complete all course requirements of the programme within three years of study.

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

## **Assessment**

FPAA6.1 In order to be considered for a supplementary examination, a student must achieve at least 40% for the fundamental course (Professional Developmental Studies) and at least 45% for all other courses. If the student is not eligible for a supplementary examination, the student may (subject to other rules in this section) re-register for the course in a subsequent year.

FPAA6.2 If a student fails the supplementary examination, he/she may (subject to other rules in this section) re-register for the relevant course in a subsequent year. Should a student be granted a supplementary examination, the maximum mark obtainable is 50%.

## **Distinction**

FPAA7 The Diploma may be awarded with distinction (an average of 75% – 100%, with not less than 70% for any course, subject to all courses being passed at first attempt).

## **OCCUPATIONAL HEALTH**

**[MG007][SAQA ID: 4593]**

### **Convenor:**

Dr S Adams (Department of Public Health and Family Medicine)

*[Note: There is a new intake into this Diploma biennially. The next intake is in 2019.]*

### **Admission requirements**

FPAB1 A degree in medicine of this University or another university recognised by Senate for the purpose.

### **Duration and attendance of the Diploma**

FPAB2.1 Every student must be registered for the programme for at least two years (part-time). Retrospective registration is not allowed.

FPAB2.2 All students are required to attend the programme for four one-week blocks (the last block being the examination) over the two-year period.

### **Curriculum**

FPAB3 **PPH7008W POSTGRADUATE DIPLOMA IN OCCUPATIONAL HEALTH**

**NQF credits:** 120 at HEQSF level 8

**Course outline:** Content includes occupational health risk assessment and management, occupational medicine and work ability, and occupational health services management. Relevant legislation, ethics and standards pertaining to these

three focus areas are covered. The practical activities include workplace visits, audiometry and spirometry, chest radiograph interpretation for pneumoconiosis, and clinical case studies.

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment

FPAB4.1 The examination comprises three written papers covering occupational health risk assessment and management, occupational medicine and work ability, and occupational health services management, as well as an oral examination for selected candidates. Examinations are “closed book” and count for 50% of the total mark, with the remaining 50% allocated to formative assessment during the programme. This comprises three portfolio reports (workplace assessment, work-related clinical case, and a needs assessment and design of an occupational health service) demonstrating competence in a practical setting, as well as inter-block quizzes and assignments to consolidate key learning areas of the previous block.

FPAB4.2 Students must complete all inter-block quizzes and assignments *and* obtain 50% for each of the three portfolio reports to fulfill the DP requirement. To graduate, a student must pass the formative and summative component with an overall mark of 50% or more and obtain at least 50% in two of the three examination papers.

FPAB4.3 There are no supplementary examinations, but students may be permitted to take the examination in one subsequent session.

FPAB4.4 In addition to the above, the external examiner retains the discretion to alter any mark based on an assessment of the student’s performance across the Diploma as a whole.

FPAB5 The Diploma may be awarded with distinction provided an overall average of more than 75% is obtained at first attempt, with a subminimum of 70% on each of the formative assessment and examination components.

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

## PAEDIATRIC RADIOLOGY\*

**[MG020]**

### Convener:

Dr N Wiesenthaler (Department of Radiation Medicine)

\* Since the level of this Diploma is higher than the level 8 required of a postgraduate diploma, application has been made to restructure the Diploma as a professional master’s degree. It is therefore not yet HEQSF-aligned and does not yet have a SAQA registration number.

### Admission requirements

FPAC1 (a) A degree in medicine of this University or another university recognised by Senate for the purpose;

(b) Successful completion of four years of specialist training in an accredited general radiology training programme;

(c) Registration with the Health Professions Council of South Africa as a

- diagnostic radiologist;
- (d) Demonstrated proficiency in written and spoken English; and
- (e) Basic computer literacy.

### **Duration of programme**

FPAC2 Every student must be registered for the programme for one year of full-time study. Retrospective registration is not allowed.

### **Objectives and structure of programme**

FPAC3 RAY4006W Postgraduate Diploma Paediatric Radiology

NQF credits: 200 at HEQSF level 8

**Course outline:** The Diploma is designed to complement and expand basic specialist training in diagnostic radiology. It aims to provide a detailed knowledge and in-depth experience of paediatric imaging in the context of Africa's unique disease burden, and to empower a radiologist to conduct optimal paediatric imaging in either a general radiology service or a dedicated paediatric service. The content has been specifically designed in modular format to provide broad knowledge of paediatric imaging, appropriate for the general radiologist in our local context. Content is thus defined by the local burden of disease and the spectrum of currently available imaging modalities. Students undergo one-on-one clinical supervision. There are weekly hour-long structured tutorials based on reading assignments which are complemented by 30 hours per week of supervised clinical service delivery. There are five weekly hour-long multidisciplinary clinical meetings for detailed case presentation and discussion which cover the disciplines of paediatric neuro-radiology, oncology, uro-radiology, general surgery and thoracic imaging, and monthly hour-long paediatric orthopaedics multidisciplinary meetings.

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### **DP requirement and assessment**

FPAC4 *Continuous coursework assessment:*

- (a) A Due Performance Certificate reflecting clinical service delivery, with targets clearly defined (40% of total year mark) before admission to the final assessment.
- (b) Weekly clinical (oral) case presentations and assessments at the end of each of the six modules (12% of total year mark).
- (c) Written clinical case reports (12% of total year mark).

*Final summative assessment:*

- (d) A one-hour, short-answer spot-film test at the end of each of the six clinical modules (15% of the total mark). If a student fails to achieve a minimum pass mark of 50%, he/she may be granted an opportunity to repeat the module test.
- (e) A final three-hour written examination on current paediatric practice, paediatric radiological pathology, and related journal articles (21% of the final mark). If a candidate fails to achieve a minimum pass mark of 50%, he/she may be granted one opportunity to repeat the examination once.

### **Distinction**

FPAC5 The Diploma may be awarded with distinction (75% – 100%, with no course less than 70% – subject to all courses being passed at first attempt).

## PALLIATIVE MEDICINE

### [MG011][SAQA ID: 24401]

#### Convener:

Dr L Gwyther (Department of Public Health and Family Medicine)

*Note: The Faculty also offers an MPhil specialisation in Palliative Medicine by coursework and dissertation. The Diploma or an approved equivalent is an entrance requirement for admission to the MPhil.*

#### Admission requirements

FPAD1 An approved bachelor's degree appropriate to the field of palliative care, obtained at this University or another university recognised by Senate for the purpose.

#### Structure and duration of Diploma

FPAD2.1 Every student must be registered for the Diploma programme for at least one year part-time. Retrospective registration is not allowed.

FPAD2.2 There are two compulsory contact sessions of five days per semester.

#### Curriculum outline

##### FPAD3 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PPH4032H	Principles of Palliative Care .....	60	8
<i>Plus a choice of two elective courses, depending on the student's background:</i>			
PPH4030S	Clinical Palliative Care; or.....	60	8
PPH4031S	Paediatric Palliative Care.....	60	8
<b>Total NQF credits .....</b>		<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

#### Assessment and progression

FPAD4.1 Students are required to successfully complete written assignments on coursework, a portfolio project, a written examination and a communication skills assessment.

FPAD4.2 A pass mark of 50% is required in each assessment component. If any coursework assessment component is failed, the student will be offered additional teaching and a repeat of this assessment. If more than one assessment component is failed, the student will be required to repeat the relevant course.

FPAD4.3 Except with permission of Senate, a student may not repeat more than one course, and may repeat a single course only once.

#### Distinction

FPAD5 The Diploma may be awarded with distinction if a student obtains an average of 75% – 100% with not less than 70% for any course. All courses must be passed at first attempt.

## PESTICIDE RISK MANAGEMENT

### [MG021PPH05]

#### Convenor:

Assoc Prof H-A Rother (Department of Public Health and Family Medicine)

*This Diploma is aimed at pesticide regulators, inspectors (health, labour, customs and environment), and disposal and waste management managers in Africa and other developing countries, but will also be suitable for a range of researchers, academics, NGO staff, United Nations staff and pesticide laboratory staff who are working in the field of pesticide/chemical management. The programme is structured around the International Code of Conduct on Pesticide Management (the Code) published by the Food and Agriculture Organisation of the United Nations (FAO) and the World Health Organisation (WHO). The Code offers a holistic and comprehensive guideline for managing all aspects related to pesticides through a life-cycle management approach.*

#### Admission requirements

FPAE1 (a) An approved undergraduate degree in agriculture, health, toxicology, chemistry, social science or other relevant field from this University or from another university recognized by Senate for this purpose;

(b) Experience in a relevant pest/pesticide or chemicals management field; applicants must submit a letter of motivation highlighting these skills and current employment;

(c) Demonstrated proficiency in written and spoken English (TOEFL required where appropriate);

(d) Reliable and continuous computer connectivity (applicants must complete Vula exercises to demonstrate their connectivity);

(e) Demonstrated computer literacy (applicants are required to write Vula tests);

(f) Proven ability to write technical reports and assessments;

(g) Numeracy literacy (applicants will be required to write a numeracy test); and

(h) Completion of a chemistry foundation course (applicants will be required to write a chemistry test).

#### Duration of Diploma programme

FPAE2 This blended programme is offered as a two-year, part-time, flexible-learning programme with a substantial distance-learning component, using internet-based education technology. Students are required to be on-campus for two weeks at the beginning of the programme. They will be required to be in weekly electronic contact. Students may not be registered beyond three years.

#### Curriculum

##### FPAE3 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PPH4033F/S	Pesticide Risk Management .....	20	8
PPH4034F/S	Health and Safety Management.....	20	8
PPH4035F/S	Management of Environmental Risk.....	20	8
PPH4051F/S	Alternatives and Risk Reduction Strategies .....	20	8
	And shall choose another two <i>elective courses</i> from the courses below:		
PPH4040F/S	Containers and Contaminated Site Management.....	20	8
PPH4041F/S	Chemical Conventions .....	20	8
PPH4042F/S	Public Health and Pesticides .....	20	8
PPH4054S	Integrated Assessment.....	0	8
	<b>Total NQF credits:.....</b>	<b>120</b>	

## 68 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

### Minimum requirements for progression and re-registration

FPAE4 A student who fails to meet the following minimum requirements may be refused permission to renew his/her registration for the Diploma (students are required to pass a course with a minimum of 50% before proceeding to the next course):

- (a) In each year of study, the student shall pass, with a minimum of 50%, at least half of the courses registered, with the exception of the final year of study, in which the student will be expected to complete the requirements for the Diploma.
- (b) Students may be allowed to repeat a course they have failed once, at the convener's discretion. Where a candidate fails any course twice, or fails more than one course, a recommendation may be made to the Faculty Examinations Committee to refuse readmission.
- (c) The student must be able to complete all requirements for the Diploma within three years.
- (d) Students shall complete the core courses before progressing to the elective courses. The programme convener will consider deviations on a case-by-case basis.

### Distinction

FPAE5 The Diploma may be awarded with distinction to candidates who average 75% or above for all courses including the integrated assessment (when applicable), with not less than 70% for any course, subject to all courses being passed at first attempt.

## PSYCHOTHERAPY

[MG022PRY04][SAQA ID: 87347]

### Convener:

G Hendricks (Department of Psychiatry and Mental Health)

*The primary purpose of the Diploma is to enhance the integration of psychotherapeutic skills and knowledge into the scope of practice of mental health and other health practitioners. The course will focus on the provision of foundational knowledge and skills in counselling and psychotherapy, and to expose them to current quality evidence-based treatment in counselling and psychotherapy. This programme involves some work-based learning and clinical supervision.*

### Admission requirements

FPAF1.1 All applicants are required to have the following:

- (a) A health or mental health university degree at HEQSF level 7 or above;
- (b) A professional qualification that allows candidates to work in a range of health settings (e.g. a degree such as a BPsych (registered counsellor), medicine, psychiatric nursing, clinical social work, or psychiatry)
- (c) Basic knowledge, skills and experience in working therapeutically with clients; and
- (d) Registration (or eligibility to register) with the relevant professional board (e.g. the HPCSA).

FPAF1.2 In addition to meeting the minimum requirements above, selection will be based on

- (a) academic merit;
- (b) evidence of proficiency in spoken and written English for postgraduate academic studies;
- (c) evidence of an interest and/or involvement in lifelong learning activities (e.g. conferences, workshops, short courses);
- (d) evidence of self-awareness and reflexivity: the candidate should demonstrate an ability to analyse his/her strengths and limitations, and how he/she intends to address these in the programme; and

(e) any additional evidence the candidate offers in respect of the application, including his/her motivation for admission.

*[This course will only be offered if a minimum number of students are enrolled.]*

FPAF1.3 Admission to the Diploma programme will be finally assessed on an individual basis and by means of a panel interview.

#### **Duration of programme**

FPAF2 The programme is offered over 12 months on a part-time basis. Students can enrol for individual courses as well. To be eligible to be awarded the diploma students must successfully complete all five courses and pass an integrated assessment (with a minimum mark of 50%) and coursework. Students may be considered for a supplementary examination if they fail a course or the integrated assessment.

#### **Curriculum outline**

**FPAF3 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
PRY4018F/S	Introduction to Psychodynamic Concepts in Psychotherapy .....	25	8
PRY4019F/S	Basic Therapeutic Competencies .....	30	8
PRY4020F/S	Introduction to Cognitive Behavioural Therapy .....	25	8
PRY4021F/S	Ethical Practice in Psychotherapy .....	15	8
PRY4022F/S	Evidence Based Practice .....	25	8
PRY4023F/S	Integrated assessment.....	0	
<b>Total NQF credits.....</b>		<b>120</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

#### **Assessment**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPAF4.1 Students are assessed through formal written assessments – and an integrative oral under examination conditions.

**FPAF4.2 Coursework assessment:**

Graded course assignments (written and/or oral): each course assignment is an opportunity for students to synthesise learning objectives and concepts covered in the individual courses.

#### **Distinction**

FPAF5 The Diploma may be awarded with distinction if a student obtains an average of 75% – 100% in all courses with no less than 70% for an individual course, all passed at first attempt.

**TB-HIV MANAGEMENT****[MG041]****Convener:**

Dr S Coovadia (Department of Medicine)

*The key objective of the Diploma is the professional development of primary care and community-level clinicians and other professional HCWs in the management of TB/HIV co-infected patients in a primary healthcare (PHC) setting. The qualification aims to produce graduates that have a thorough knowledge of updated information on diagnostic tools and an understanding of current diagnostic and treatment policies. In addition, graduates should obtain basic research understanding and skills to enable them to report on basic operational research projects, including assessing clinic recorded data, in a PHC setting.*

**Admission requirements**

To be eligible for consideration for admission, a candidate shall

FPAG1 To be eligible for consideration for admission, a candidate shall

- (a) have an approved bachelor's degree in health sciences (e.g. MBChB, four-year Bachelor of Nursing or equivalent);
- (b) be registered with the relevant professional body (e.g. HPCSA or SANC) or have approved prior experience or learning. Applicants who wish to be considered on the basis of Recognition of Prior Learning (RPL) will be required to submit a personal portfolio reflecting, amongst others, their experience of working in the field of TB/HIV management, past attendance at relevant courses for which they may have obtained certificates and diplomas, and evidence of critical thinking skills in writing and reading;
- (c) have proven proficiency in written and spoken English (this may be tested if necessary); and
- (d) have an acceptable level of computer literacy, and access to a computer and the internet.

**Structure and duration of Diploma**

FPAG2 The Diploma may be completed over one and a half years full-time or two years part-time. It consists of five semester courses. Coursework is done online, and additional time should be set aside for self-study, practical work, and the completion of assignments. Written examinations are scheduled for the mid- and end-of-year examination periods.

**Curriculum outline****FPAG3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN4030F	Clinical management of HIV in a primary healthcare setting .....	20	8
MDN4031S	Clinical management of TB in a primary healthcare setting .....	20	8
MDN4032F	TB-HIV co-infection and infection prevention and control .....	35	8
MDN4033S	Operational Research.....	33	8
MDN4034F	Biostatistics.....	15	8
MDN4035F	Integrated assessment 1 .....	0	8
MDN4036S	Integrated assessment 2 .....	0	8
<b>Total NQF credits .....</b>		<b>123</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Assessment, progression and readmission**

*[Note: These rules must be read in conjunction with the General Rules in the front section of this Handbook.]*

FPAG4.1 Students must participate in at least 75% of specified e-learning activities and in online discussion forums. They must participate in 60% of the synchronous learning activities.

FPAG4.2 The Diploma has two components: TB-HIV Management and Infection Control (courses 1 – 3), and TB-HIV Operation Research (courses 4 & 5.) Each component will have a written integrated summative assessment held on-site at UCT. Students must obtain a pass mark for each of the courses in each component in order to qualify to write the integrated assessment concerned. Students who obtain a grade of <50% in one or more of the integrated assessments may be allowed a second attempt to sit the integrated assessment/s when these are held in the following year.

FPAG4.3 Students may be permitted to repeat a course they have failed, at the convener's discretion. No course may be repeated more than once.

FPAG4.4 Where a student fails any course twice, or fails three or more courses, a recommendation will be made to the Faculty Examinations Committee to refuse readmission.

**HONOURS DEGREES****BACHELOR OF MEDICAL SCIENCE HONOURS (BMedScHons)**

*[See table below for programme and plan codes. Those qualifications that are registerable with the HPCSA – Biokinetics, Exercise Science and Dietetics – have been registered with SAQA as named qualifications (see table below; and see page 13 for explanatory note regarding named qualifications vs. specialisations). Qualification/Programme ID (SAQA ID) of the generic BMedScHons is pending.]*

**Minimum generic requirements to be considered for admission**

FHA1 An applicant shall not be admitted as a candidate for the degree programme unless he/she:

- (a) is a graduate; or
- (b) has passed at any university or at any institution recognised by Senate for this purpose such examinations that are, in the opinion of Senate, equivalent to the examination prescribed for a degree at the University; or
- (c) has in any other manner attained a level of competence which in the opinion of Senate is adequate for the purpose of admission as a candidate for the degree; and
- (d) has satisfied Senate that he/she has the necessary background and ability to undertake the honours to undertake the honours study in the subject he/she has selected.

**Intercalated honours for MBChB students**

FHA2.1 MBChB students who wish to apply to interrupt their MBChB studies in order to do a BMedScHons specialising in Applied Anatomy, Biological Anthropology, Bioinformatics, Cell Biology, Physiology, Exercise Science, Human Genetics, Medical Biochemistry or Infectious Disease and Immunology, shall generally be required:

- (a) to have passed third year MBChB with an average of at least a 70% in the following courses, with no less than 60% for any single course:

- CEM1011F or CEM1111S and CEM1011X, Chemistry (the latter two chemistry courses are taken by Intervention Programme students);
- PHY1025F Physics;
- HUB1006F and HUB1007S, Introduction to Integrated Health Sciences I and II or (for Intervention Programme Students) HUB1010S and HUB1011F, Fundamentals of Integrated Health Sciences I and II;
- HUB2017H, LAB2000S and LAB3009H, Integrated Health Systems I and II;
- AAE2001S/CHM2001S/HUB2020S/LAB2002S/MDN2001S/OBS 2001S/ PED2001S/PPH2002S/PRY2001S/RAY2004S Special Study Module; and
- LAB3020W, Molecular Medicine.

*OR*

- (b) to have passed third-year MBChB courses with an average of at least 70%, as well as an approved third-year level Bachelor of Science course; and
- (c) to have undergone a successful interview with a selection committee.

FHA2.2 MBChB students doing an intercalated honours degree who wish to continue with MBChB after completing the honours programme shall be required, whilst registered for the BMedScHons programme, also to register for and pass MDN3003H Introduction to Clinical Practice II.

FHA2.3 On completing the honours programme, the student returns to the remaining years of the MBChB after graduating with the BMedScHons.

*[Note: A student in the MBChB who holds a BMedScHons may be admitted concurrently to a research master's degree in the clinical years of the MBChB on recommendation of the faculty and with permission of Senate Executive Committee. The Faculty may require the student to spread the load of the clinical years of the MBChB to enable progress on the master's. A student thus enrolled for a research master's may be eligible to upgrade his/her registration to PhD, depending on the quality and development of his/her master's dissertation. The student will then be formally registered with a topic and supervisor, approved by the Doctoral Degrees Board. The student will graduate with the MBChB when the requirements for that degree have been met, and will continue thereafter on the PhD for as many years as is required.]*

**Honours specialisations/qualifications on offer**

FHA3 The honours study programmes that may be on offer are listed below. For the specific admission requirements, see the outlines of the individual programmes provided in the next section.

Discipline	Qualification code	Plan code	Department	SAQA registration number
Applied Anatomy	MH002	HUB16	Human Biology	Awaited
Bioinformatics	MH002	LAB02	Integrative Biomedical Sciences	Awaited
Biokinetics	MH004	HUB09	Human Biology	21532

Discipline	Qualification code	Plan code	Department	SAQA registration number
Biological Anthropology	MH002	HUB03	Human Biology	Awaited
Dietetics	MH005	HUB12	Human Biology	21528
Exercise Science	MH003	HUB08	Human Biology	21531
Forensic Genetics	MH002	LAB29	Pathology	Awaited
Human Genetics	MH002	LAB12	Pathology	Awaited
Infectious Diseases and Immunology	MH002	MDN20	Pathology	Awaited
Medical Biochemistry	MH002	LAB14	Integrative Biomedical Sciences	Awaited
Medical Cell Biology	MH002	HUB07	Human Biology	Awaited
Medical Physics	MH002	RAY02	Radiation Medicine	Awaited
Pharmacology	MH002	MDN15	Medicine	Awaited
Physiology	MH002	HUB13	Human Biology	Awaited
Radiobiology	MH002	RAY05	Radiation Medicine	Awaited
Structural Biology	MH002	LAB08	Integrative Biomedical Sciences	Awaited

#### Duration of programme

FHA4 (a) Except as provided in (b) and (c) below, a student shall during one academic year of full-time study attend and by examination complete an honours programme in the discipline selected.

(b) The BMedScHons in Nutrition and Dietetics is a full time degree programme over two years.

(c) In exceptional circumstances, Senate may permit graduates whom it deems worthy on academic grounds, but who do not have an adequate undergraduate background, to undertake a full time honours programme over two years. In such cases, students may be required to complete, in the first year, courses chosen to strengthen their background, and may undertake a portion of the honours programme, provided that this portion does not

exceed 30% of the full programme.

### **Assessment**

FHA5 The honours examination consists of such written papers and include such practical and oral tests as may be prescribed by Senate from time to time.

### **Award of degree**

FHA6 This degree may be awarded in the first class.

*[In all cases, see note on page 11 regarding HEQSF levels and NQF credits.]*

## **Applied Anatomy**

### **[MH002HUB16]**

#### **Convener:**

Dr L J Friedling (Department of Human Biology)

#### **Admission requirements**

FHA7 A BSc degree or an equivalent degree in the biological sciences, preferably with Anatomy as a major subject, or an MBChB degree; or an approved degree in the health and rehabilitation sciences.

#### **Assessment**

FHA8 Submission of any written assignments for the BMedSchHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

#### **Curriculum**

FHA9 **HUB4002W** BMedSchHons Applied Anatomy

**NQF credits:** 120 at HEQSF level 8

**Convener:** Dr L J Friedling

**Course entry requirements:** None.

**Co-requisites:** HUB4077W and HUB4078

**Course outline:** This specialisation introduces students to an academic or research career in Applied Anatomy or Biological Anthropology. It consists of two general modules, four specialisation-specific modules and a research project. There is an introductory intensive seven-week laboratory techniques course which includes statistics. Students also attend a scientific communication module that focuses on scientific writing and comprehension. In addition, they attend four specialisation-specific modules, each of which cover a specific field and run over a three-week period. Students are assessed during each module and there is an examination at the end of the first semester. Three modules should be within Applied Anatomy or Biological Anthropology, and one can be from any of the following honours specialisations: Bioinformatics, Cell Biology, Human Genetics, Infectious Diseases and Immunology, Medical Biochemistry and Physiology. The research project begins in April and ends in September. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and sit a final comprehension examination.

**DP requirements:** Completion and attendance of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examination. In order to pass the academic year, students must obtain an overall average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final

examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

## **Bioinformatics**

### **[MH002LAB02]**

#### **Convener:**

Prof N Mulder (Computational Biology Division, Department of Integrative Biomedical Sciences)

#### **Admission requirements**

FHA10 A BSc degree or an equivalent degree in computer science, in biological sciences (with some computing) or in mathematics/statistics; or an MBChB degree with some computing experience.

#### **Assessment**

FHA11 Submission of any written assignments for the BMedScHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

#### **Curriculum**

FHA12 **IBS4005W** BMedScHons Bioinformatics

**NQF credits:** 120 at HEQSF level 8

**Convener:** Prof N Mulder

**Course entry requirements:** None.

**Co-requisites:** IBS4006W and IBS4007W

**Course outline:** This specialisation introduces students to an academic career in bioinformatics. It consists of a techniques course and general modules (for all specialisations), four specialisation-specific modules, and a research project. Students with a computer science background do a biology laboratory techniques course, while those with a biology background learn programming and basic computational techniques. Students also attend a scientific communication module to train them in scientific writing and comprehension. They attend four specialisation-specific modules, each of which covers a specific field over a three-week period. Three of the modules chosen should be within Bioinformatics, and one can be from any of the following honours specialisations: Cell Biology, Human Genetics, Infectious Diseases and Immunology, or Medical Biochemistry. The research project begins in April and ends in October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and sit a final comprehension examination.

**DP requirements:** Completion and attendance of all academic assignments.

**Assessment:** Evaluation is based on performance in the research project, in coursework, and in examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim modules and final examination. The final mark is made up as follows: computer programming/biology techniques (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); research project (35%); oral presentation of research project (5%); programme modules final examination (16%); and final comprehension examination (5%).

## **Biokinetics**

**[MH004HUB09][SAQA ID: 21532]**

**Convener:**

Dr J Kroff (Department of Human Biology)

*The objective of this programme is to provide the theoretical and practical basis for the controlled use of physical activity in the prevention of disease and as the primary therapeutic modality during final-phase rehabilitation. Students are first taught practical and clinical competencies in the assessment of various conditions, and then how to apply this knowledge in the management of these conditions in clinical practice. Presentation skills necessary to disseminate exercise “messages” to the athlete and lay public are developed. On graduating with the BMedScHons in Biokinetics, a one-year internship must be completed (in an accredited Biokinetics practice) before students can register with the Health Professions Council of South Africa as biokineticists.*

**Admission requirements**

FHA13 (a) An appropriate undergraduate degree (e.g. BSc/BCom/BA) specialising in Human Movement Science or Sports Science.

(b) Other prerequisites include: an above-average academic record and evidence of an interest in and/or experience of the scientific aspects of sport medicine and exercise rehabilitation.

*There are only a limited number of places in the Biokinetics programme. The closing date for applications is 31 July. An internship period that meets the conditions laid down by the Health Professions Council of South Africa will be required before a candidate can apply for registration as a biokineticist (independent practice).*

**Curriculum**

FHA14 **HUB4043W BMedScHons Biokinetics**

**NQF credits:** 120 at HEQSF level 8

**Convener:** Dr Jacolene Kroff

**Course entry requirements:** None.

**Co-requisites:** HUB4079W and HUB4080W

**Course outline:** This curriculum comprises lectures, practicals, thematic seminars and tutorials arranged into several different modules. Content includes muscle physiology and biochemistry, anatomy and biomechanics, physiological aspects of human performance, intermediary metabolism and endocrinology, respiratory and cardiovascular systems, neurophysiology, orthopaedic injuries and conditions, chronic diseases and disabilities, health promotion and research methodology. The clinical portion of the biokinetics modules includes clinical rotations and ward rounds in the various programmes run by the Sports Science Institute of South Africa, and in the private biokinetics practice at Vincent Pallotti Hospital in Pinelands, and at Victoria Hospital in Wynberg. In addition, each student is required to complete a research project.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** This includes two written theory papers, an oral examination, class tests, and assignments during and upon the completion of each module. Students are also expected to complete a practical competency examination at two different times during the year in addition to the final Biokinetics clinical examination. The final mark is made up as follows: biokinetics (including tests, evaluations, clinical examinations, rotations) (29%); additional modules (tests/evaluations) (20%); research project (33%); and final examination 1 and 2 (written) (18%).

## **Biological Anthropology**

### **[MH002HUB03]**

#### **Convenor:**

Dr L J Friedling (Department of Human Biology)

#### **Admission requirements**

FHA15 A BSc degree or an equivalent degree in the biological sciences, preferably with Anatomy as a major subject; or an MBChB degree; or an approved degree in the health and rehabilitation sciences.

#### **Assessment**

FHA16 Submission of any written assignments for the BMedScHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

#### **Curriculum**

FHA17 **HUB4001W** BMedScHons Biological Anthropology

**NQF credits:** 120 at HEQSF level 8

**Convenor:** Dr L J Friedling

**Co-requisites:** HUB4081W and HUB4082W

**Course entry requirements:** None.

**Course outline:** This specialisation introduces students to an academic or research career in biological anthropology. It consists of five modules and a research project. There is an intensive seven-week laboratory techniques course aimed at teaching basic anatomy in the anatomical sciences. Students also attend a scientific communication module to train them in scientific writing, and four specialisation-specific modules. Each module covers a specific field and generally runs over a three-week period. Three modules should be from the anatomy specialisation and one module can be from any of the following honours specialisations: Applied Anatomy or Bioinformatics, Biological Anthropology, Cell Biology, Human Genetics, Infectious Diseases and Immunology, or Medical Biochemistry and Physiology. The research project begins in April and ends in September. Students choose their research project from a variety of projects on offer by researchers within Applied Anatomy or Biological Anthropology. During that period, students become integrated into research groups and participate in weekly research discussions and seminars. Towards the end of the year students are required to write a research project and a final examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

## **Clinical Pharmacology**

**[MH002]**

### **Convener:**

Dr L Wiesner (Division of Clinical Pharmacology, Department of Medicine)

### **Admission requirements**

FHA18 A BSc degree with a major in pharmacy, chemistry, biochemistry, or physiology; or other appropriate majors in the life sciences.

Applicants may be invited to an interview

### **Assessment**

FHA19 Submission of any written assignments for the BMedScHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

### **Curriculum**

FHA20 MDN4004W BMedScHons Clinical Pharmacology

**NQF credits:** 120 at HEQSF level 8

**Convener:** Dr L Wiesner

**Co-requisites:** MDN4040W and MDN4041W

**Course outline:** This specialisation extends over one year and is designed for graduates with a BSc degree in the life, chemical or pharmaceutical sciences. There is comprehensive training in laboratory skills; in the theory of drug action and toxicity in humans; and in the pharmacological aspects of drug development. Students undertake an original research project. The academic year begins with an intensive laboratory techniques course, which exposes the student to a variety of techniques used to evaluate new drug candidates and includes teaching on the theoretical principles underpinning these techniques. This is followed by nine theoretical modules covering both core and more specialised areas of pharmacology. Students choose their research project from a variety of projects offered by research groups within the Division. The research project begins in April and ends in October. During that period, students become integrated into the research groups and participate in weekly discussion meetings and research seminars. Towards the end of the year, students are required to write up their research in the form of a research project.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Students are assessed throughout the year in tests and assignments on the various practical and theoretical sections. Projects are evaluated by both assessment of the written research project and an oral presentation of results. The final mark is made up as follows: theory (40%); laboratory component (10%); and research project (50%).

**Dietetics****[MH005HUB12][SAQA ID: 21528]****Convenor:**

Assoc Prof NP Steyn (Department of Human Biology)

*This is a named qualification, not a specialisation. On successful completion of this qualification, South African students complete a compulsory community service year, after which they register as dietitians with the Health Professions Council of South Africa (HPCSA). Postgraduate students in the natural and other health sciences may register for individual nutrition theory courses listed below.*

**Admission requirements**

FHA21 (a) An approved undergraduate degree, typically a BSc majoring in physiology, biochemistry, mammalian zoology or biological/molecular sciences, with at least second-year human physiology or equivalent. Biochemistry, microbiology, genetics, statistics and psychology are recommendations, but not prerequisites.

(b) Proof of proficiency in Afrikaans and/or Xhosa is a strong recommendation.

(c) Proof of having worked in a dietetics environment, having done job shadowing, and having done voluntary community service are strong recommendations.

*[Note: Applicants should note that the Division of Human Nutrition assists with identifying job shadowing opportunities in the Cape Metropole, and that a limited number of student places (12-16) are available and selection is highly competitive.]*

**Hepatitis B immunisation**

FHA22 Candidates who register for the BMedScHons in Dietetics are required to produce proof of having received a full course of Hepatitis B immunisation by the end of May of their first year of registration.

**Programme structure and outline**

FHA23 The qualification is designed to train students as entry-level dietitians. The programme includes core knowledge and skills aimed at meeting the outcome criteria set by the Professional Board for Dietetics. At the same time, students are trained in advanced (honours degree level) critical thinking, reasoning, application and research skills.

**Curriculum outline**

**FHA24 First year: The first year involves mainly coursework, although exposure to clinical practice starts in the first month and continues throughout the year.**

Number	Course	NQF Credits	HEQSF Level
	Nutrition Science courses (each running for three consecutive weeks):	0	
HUB4046F	Nutrition Science I .....	10	8
HUB4047F	Nutrition Science II .....	10	8
HUB4048F	Nutrition Science III .....	10	8
	Community Nutrition courses (each running for three consecutive weeks):	0	
HUB4049H	Community Nutrition I.....	10	8
HUB4050H	Community Nutrition II.....	10	8
HUB4051H	Community Nutrition III .....	10	8
	Clinical Nutrition courses (each running for three consecutive weeks):	0	
HUB4052S	Clinical Nutrition I .....	10	8
HUB4053S	Clinical Nutrition II.....	10	8
HUB4054S	Clinical Nutrition III.....	10	8
	Dietetics Practice(weekly for the whole year):.....	0	0
HUB4055W	Dietetics Practice.....	30	8

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Number	Course	NQF Credits	HEQSF Level
	Food Service Management(weekly for the whole year):.....0	0	0
<b>HUB4056W</b>	Food Service Management .....30	8	8
	Food Science(weekly for duration of first semester):.....0	0	0
<b>HUB4057F</b>	Food Science.....15	8	8
	Nutrition Rights(integrated throughout the year): .....0	0	0
<b>HUB4058W</b>	Nutrition Rights .....5	8	8
	Research Theory(weekly for the whole year):.....0	0	0
<b>HUB4059H</b>	Research Theory .....15	8	8
	Total credits per year ..... <b>185</b>		

*[Note: Teaching methods focus on problem-based learning and include lectures, tutorials, group-work, work-based learning, field visits and structured self-directed learning.]*

As a part of the research theory course, each student develops a research protocol that is submitted for ethics approval. All students, irrespective of whether they completed microbiology as a part of their undergraduate programme, are expected to attend a microbiology module presented by the Division. All students are expected to complete Afrikaans and isiXhosa conversational courses during their internship year.

### FHA25 Second year: The following courses are offered on a rotational basis:

Number	Course	NQF Credits	HEQSF Level
<b>HUB4061W</b>	Community Internship .....35	8	8
<b>HUB4062W</b>	Clinical Internship .....45	8	8
<b>HUB4063W</b>	Food Service Management Internship .....30	8	8
<b>HUB4064W</b>	Research Project .....30	8	8
	Total credits per year ..... <b>140</b>		

### Courses available for non-degree study purposes

FHA26 Nutrition-related courses open to postgraduate students in natural and other health sciences on application to the Head of Division and provided they comply with prerequisites:

- HUB4046F Nutrition Science I
- HUB4047F Nutrition Science II
- HUB4048F Nutrition Science III
- HUB4049H Community Nutrition I
- HUB4050H Community Nutrition II
- HUB4051H Community Nutrition III
- HUB4052S Clinical Nutrition I
- HUB4053S Clinical Nutrition II
- HUB4054S Clinical Nutrition III

*[Note: Completion of any these courses by postgraduate students in natural and other health sciences would not make them eligible to practice in nutrition and dietetics.]*

### Fieldwork

FHA27 Students are responsible for their own transport to internship placements within an approximately 50km radius from the medical campus. Internship placements may involve a period at the UCT Vredenburg site (accommodation but not transport is provided).

### DP requirement

FHA28 In order to qualify for the examination: (i) in a first-year course, a student is required to obtain a minimum year mark of 50% for continuous coursework assessment; (ii) in

a second-year course, a student is required to obtain a minimum year mark of 50% for continuous practice assessment. Additional DP requirements are specified for each course (*see course outlines*).

#### **Assessment and progression rules**

FHA29.1 Continuous coursework and a final summative assessment of each of the first-year courses take place throughout and at the conclusion of each course/group of related courses. The coursework assessment includes tests, assessment of tutorial participation, group-work, seminar presentations and practical assignments, practical tests and portfolios.

The final summative assessment in Nutrition Science (June examination), Community Nutrition (November examination), Clinical Nutrition (November examination), Food Service Management (November examination) and Food Science (June examination) involves an integrated examination for the sets of courses, moderated by an external examiner.

A summative assessment for Dietetics Practice involves a practical examination (November examination).

FHA29.2 Except by permission of Senate, students are required to pass all first-year courses before they may continue with the second year.

FHA29.3 Coursework assessment of the three second-year internship courses (Community Nutrition, Clinical Nutrition and Food Service Management) takes place for the duration of each placement and involves assessment not only of general competency, but also of patient management and counselling, of educational talks, of educational materials, of case studies, of management and food service skills, of participation in ward rounds, and of the portfolio.

Summative assessment of the three internship courses takes place at the end of the second year. It involves an integrated examination moderated by an external examiner for each of the three said courses, and an oral portfolio examination in both clinical and community nutrition, and in food service management.

FHA29.4 The research project mark comprises marks for the protocol, for the literature review, for the execution of the research, and for the write-up and presentation of the results.

FHA29.5 Students are required to pass all courses in order to qualify for graduation.

FHA29.6 Students who do not meet the DP requirement of a year mark of 50% in the formative assessment of a course may be reassessed to achieve a 50% year mark, and thereby gain access to the examination in the course (or pass the course in the case of Nutrition Rights and Research Methods). Students who achieve at least 40% in the examination but who fail a course (final mark of less than 50%) may be reassessed before the final mark is submitted to the Faculty Examinations Committee for approval. Students who pass a course (final mark of at least 50%) but obtain less than 40% in the examination will need to complete a reassessment. Students who achieve 50% or more for the reassessment will be allocated 50% as the final course mark. Students who achieve less than 50% for the reassessment will fail the course.

**Exercise Science**  
[MH003HUB08][SAQA ID: 21531]

**Convener:**

Dr T Kohn (Division of Exercise Science and Sports Medicine, Department of Human Biology)

**Admission requirements**

FHA30 (a) BSc majoring in a biological science; or an MBChB; or a BSc in Nutrition and Dietetics; or a BSc in Physiotherapy; or a BSc in Occupational Therapy; or an approved equivalent degree.

(b) Undergraduate degree to include one senior full course in physiology or biochemistry.

(c) An above-average academic record.

(d) Evidence of interest in and/or experience of the scientific aspects of sport.

**Curriculum**

FHA31 HUB4041W BMedSchHons Exercise Science

**NQF credits:** 120 at HEQSF level 8

**Convener:** Prof M Lambert

**Co-requisites:** HUB4085W and HUB4086W

**Course entry requirements:** None

**Course outline:** This qualification is aimed at introducing students to an academic or research career in exercise science. It consists of modules and a research project. The academic year begins with a laboratory techniques course, which is a practical module aimed at teaching students basic and advanced molecular and biochemical techniques. Students complete a module on research methodology and fundamental concepts of exercise science. In addition, students attend six modules. Each module covers a specific field in exercise science. The research project begins in April and ends in October. During that period, students become integrated into research groups and participate in weekly research discussions and seminars. Towards the end of the year, students are required to write a research project and final examination. This specialisation is administered at the Sports Science Institute and is separate from the other Honours specialisations within biomedical sciences.

**DP requirements:** None

**Assessment:** Evaluation is based on performance in research projects, in coursework, and in examination. The final mark is made up as follows: laboratory techniques (15%); programme modules (tests/evaluations) (25%); research project (33%); oral presentation of research project (2%); and final examination (25%).

## Forensic Genetics

### [MH002LAB29]

#### Convenor:

Prof C Dandara (Department of Pathology)

The programme is aimed at introducing students to an academic or research career in human genetics particularly as it relates to the use of DNA in solving crime. The stream will be aligned with the BMedScHons in Human Genetics

#### Admission requirements

FHA32 A BSc or an equivalent degree with a major in any of the biological sciences, or an MBChB degree. Special entry premised on prior learning and experience may be considered under special circumstances. *The human genetics honours programme is designed to articulate with other honours programmes in the faculty, particularly those in Medical Cell Biology (HUB4000W), Medical Biochemistry (IBS4000W), Bioinformatics (IBS4005W) or Applied Anatomy (HUB4002W), and students will be able to select optional topics from these and other faculty programmes.*

#### Assessment

FHA33 Submission of any written assignments for the BMedScHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

#### Curriculum

FHA34 **PTY4002W** BMedScHons Forensic Genetics

**NQF credits:** 120 at HEQSF level 8

**Convenor:** Prof C Dandara

**Course entry requirements:** None.

**Co-requisites:** PTY4007W and PTY4009W

**Course outline:** This specialisation consists of two general modules, four specialisation-specific modules and a research project. There is a seven-week laboratory course teaching basic knowledge in the discipline along with statistics. Students also attend a scientific communication module that trains them in scientific writing and comprehension. They attend four compulsory specialisation-specific modules, each covering a specific field over a three-week period. The research project begins in April and ends in October. Students choose their research projects from a variety of projects on offer by researchers within the Division of Human Genetics. During that period students become integrated into research groups and participate in weekly research discussions, seminars and journal clubs. Towards the end of the year students are required to write and present a research project and sit a final examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in research projects, in coursework, and in an examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (interim tests/evaluations) (14%); programme modules (final examination) (16%); research project (or case reports) (35%); oral presentation of research project (5%); and final comprehension examination (research paper) (5%).

## **Human Genetics**

### **[MH002MDN20]**

#### **Convener:**

Prof C Dandara (Department of Pathology)

*The programme is aimed at introducing students to an academic or research career in human genetics (particularly as it relates to human diseases). The human genetics honours programme is designed to articulate with other honours programmes in the faculty, particularly those in Medical Cell Biology (HUB4000W), Medical Biochemistry (IBS4000W), or Applied Anatomy (HUB4002W), and students will be able to select optional topics from these and other faculty programmes.*

#### **Admission requirements**

FHA35 A BSc or an equivalent degree with a major in any of the biological sciences; or an MBChB degree. Special entry premised on prior learning and experience can be considered under special circumstances.

*Note: Applications may include motivation letters*

#### **Assessment**

FHA36 Submission of any written assignments for the BMedScHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

#### **Curriculum**

FHA37 **PTY4000W** BMedScHons Human Genetics

**NQF credits:** 120 at HEQSF level 8

**Convener:** Prof C Dandara

**Course entry requirements:** None.

**Co-requisites:** PTY4003W and PTY4004W

**Course outline:** This specialisation consists of two general modules, four programme modules and a research project. There is a seven-week laboratory course teaching basic knowledge in the discipline along with statistics. Students also attend a scientific communication module that trains them in scientific writing and comprehension. In addition, they attend four programme modules, each covering a specific field and over a three-week period. Three of the modules are compulsory; the fourth can be chosen from any of the following honours programmes: Applied Anatomy or Biological Anthropology, Bioinformatics, Medical Cell Biology, Human Genetics, Infectious Diseases and Immunology, Medical Biochemistry and Physiology. The research project begins in April and ends in October. Students choose their research projects from a variety of projects on offer by researchers within the division of Human Genetics. They become integrated into research groups and participate in weekly research discussions, seminars and journal clubs. Towards the end of the year students are required to write and present a research project and sit a final examination.

**DP requirements:** Attendance and completion of all coursework.

**Assessment:** Evaluation is based on performance in research projects, in coursework, and in an examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (interim tests/evaluation) (14%); programme modules (final examination) (16%);

research project (35%); oral presentation of research project (5%); and final comprehension examination (research paper) (5%).

## **Infectious Diseases and Immunology**

### **[MH002LAB20]**

#### **Convener:**

Assoc Prof W Horsnell (Division of Immunology, Department of Pathology)

#### **Admission requirements**

FHA38 A BSc or equivalent degree majoring in a biological science, completion of molecular medicine course in 3<sup>rd</sup> year of MBChB or an MBChB degree

#### **Assessment**

FHA39 Submission of any written assignments for the BMedScHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

#### **Curriculum**

FHA40 **PTY4001W** BMedScHons Infectious Diseases and Immunology

**NQF credits:** 120 at HEQSF level 8

**Co-requisites:** PTY4005W and PTY4006W

**Convener:** Assoc Prof W Horsnell

#### **Programme outline:**

This specialisation consists of a laboratory techniques module, a specialist lecture course, training in generic research skills and a research project.

The specialisation begins with an intensive laboratory techniques module. This is a practical course aimed at teaching students basic and advanced molecular, immunological and biochemical techniques. Students then attend four modules that cover different specialist fields, each module runs over a three-week period. Students can select at least three advanced modules from the Infectious Diseases and Immunology stream covering immunology, virology, microbiology and vaccinology. They also have the option to select a module from any of the following honours streams: Applied Anatomy/Biological Anthropology, Medical Cell Biology, Human Genetics, Medical Biochemistry, Bioinformatics, Exercise Science and Physiology. Students also attend courses in generic research skills covering scientific communication, bioinformatics and statistics. A major component of the degree is the research project; the majority of students will conduct their projects in the Institute of Infectious Diseases and Molecular Medicine under the supervision of senior scientists of the Faculty. The research project begins in April and ends in October. During that period, students become integrated into the research groups and participate in weekly discussion meetings and research seminars. Towards the end of the year, students are required to write a research project and final examination.

**Course entry requirements:** A BSc or equivalent degree majoring in a biological science or an MBChB degree

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examinations. In order to pass the academic year students must obtain an overall final average of at least 50% with a minimum score of 50% for the research project and a minimum score of 45% for the combined programme, interim module marks and final examination marks.

The final mark for the course is broken down by the following contributions:

laboratory techniques (test and examination) (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

## **Medical Biochemistry**

### **[MH002LAB14]**

#### **Convener:**

A/Prof V Leaner (Department of Integrative Biomedical Sciences)

#### **Admission requirements**

FHA41 A BSc or equivalent degree with a major in any of the biological, life, biochemical or molecular sciences or chemistry; or an MBChB degree.

#### **Assessment**

FHA42 Submission of any written assignments for the BMedSchHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

#### **Curriculum**

FHA43 **IBS4000W** BMedSchHons Medical Biochemistry

**NQF credits:** 120 at HEQSF level 8

**Convener:** A/Prof V Leaner

**Course entry requirements:** None

**Co-requisites:** IBS4008W and IBS4009W

**Course outline:** This specialisation introduces students to an academic or research career in medical biochemistry, molecular medicine/biology, and structural biology/rational drug design. It aims to prepare students for relevant master's and PhD programmes and career directions in professional scientific research and service careers in biomedical and biotechnology fields. The specialisation consists of two general modules, four specialisation-specific modules, and a research project. The first general module is a laboratory methods course teaching basic and more advanced molecular and biochemical methods as well as applied bioinformatics and applied statistics. The second general module is a science and communication module which trains in scientific writing and comprehension. In addition, the students attend four specialisation-specific modules; three in Medical Biochemistry and one from the Applied Anatomy or Biological Anthropology, Bioinformatics, Medical Cell Biology, Human Genetics, Infectious Diseases and Immunology, or Physiology specialisations. The research project begins in April and ends in October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write and present a research project report and sit a final examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework, and in examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% average for the programme modules, tests and final examinations. The final mark is made up as follows: laboratory methods (tests and examination) (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

## Medical Cell Biology

### [MH002HUB07]

#### Convenor:

Dr R Ballo (Department of Human Biology)

#### Admission requirements

FHA44 A BSc degree or equivalent degree in the biological sciences, preferably with biochemistry, genetics or molecular and cell biology as a major subject; or an MBChB degree; or an approved degree in the health and rehabilitation sciences.

#### Assessment

FHA45 Submission of any written assignments for the BMedScHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

#### Curriculum

FHA46 **HUB4000W** BMedScHons Medical Cell Biology

**NQF credits:** 120 at HEQSF level 8

**Convenor:** Dr R Ballo

**Course entry requirements:** A BSc degree or equivalent degree in the biological sciences, preferably with molecular and/or cell biology, biochemistry or genetics as a major subject; or an MBChB degree; or an approved degree in the health and rehabilitation sciences.

**Course outline:** This specialisation introduces students to a career in academia, research or industry. It consists of: two general modules, four specialisation-specific modules and a research project. The first general module is a six-week laboratory techniques course covering basic laboratory principles and techniques as well as statistics and bioinformatics. The second general module on scientific communication which trains students in scientific writing, comprehension and communication. The following three specialisation specific modules are compulsory for Medical Cell Biology: Advanced Cell Biology; Gene Expression in Development and Disease; and Regenerative Medicine. The fourth specialisation-specific module can be from any of the following honours specialisations: Applied Anatomy/ Biological Anthropology, Bioinformatics, Human/Forensic Genetics, Infectious Diseases and Immunology, Medical Biochemistry, or Physiology. The research project begins in April and ends in October. Projects in Medical Cell Biology include cancer-related research (anti-cancer therapies and transcription factors), developmental biology and stem cell research and regenerative medicine. Students are integrated into research groups and participate in weekly research laboratory meetings, journal clubs and seminars.

**DP requirements:** Attendance at all classes, tutorials and laboratory activities is compulsory and completion of all academic tasks, including presentations, seminars, essays and write-ups is required.

**Assessment:** Assessments include course work activities, presentations, writing tasks, tests and exams. Module exams are written in June and a comprehension exam is written in November. In order to pass the academic year, students must obtain an overall final course average of at least 50%, with sub-minima of 50 % for the research project and 45% for the six modules (including in course assessments and final exams). The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension

examination (5%).

## **Medical Physics**

**[MH002RAY02]**

**Convener:**

C Trauernicht (Department of Radiation Medicine)

### **Admission requirements**

FHA47 A BSc degree with a major in Physics. Selection criteria include a pass of 60% in Physics III, or equivalent; and a pass of 60% in Mathematics II or equivalent. Applicants may be required to submit referee reports. Places in the programme are limited and preference may be given to UCT graduates who meet the programme entry requirements.

### **Assessment**

FHA48 All core modules (Physics of Radiotherapy, Physics of Nuclear Medicine, Physics of Radiology, Radiation Protection and Treatment Planning), as well as the project have to be passed with at least 50 %. A minimum mark of 45% is required for each of the remaining modules, but an average mark of 50% has to be obtained to be able to graduate

## **Curriculum**

**FHA49**

Number	Course	NQF Credits	HEQSF Level
RAY4010W	Quantum Mechanics .....	9	8
RAY4011W	Nuclear Physics and Radiation Interactions .....	9	8
RAY4012W	Computational Physics .....	9	8
RAY4017W	Radiation Protection .....	9	8
RAY4014W	The Physics of Diagnostic Radiology.....	9	8
RAY4016W	The Physics of Radiotherapy .....	9	8
RAY4015W	The Physics of Nuclear Medicine.....	9	8
RAY4018W	Treatment Planning.....	9	8
RAY4019W	Radiobiology and Life Sciences .....	9	8
HUB4045F	Introduction to Medical Imaging and Image Processing .....	12	8
RAY4020W	Research Project .....	30	8
	Total.....	123	

## **Physiology**

**[MH002HUB13]**

**Convener:**

Assoc Prof D Lang (Department of Human Biology)

### **Admission requirements**

FHA50 A BSc degree or an equivalent degree in the biological sciences, preferably with physiology as a major subject; or an MBChB degree; or an approved degree in the health and rehabilitation sciences.

### **Assessment**

FHA51 Submission of any written assignments for the BMedSchHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be

deducted from the final mark awarded for the assignment.

### Curriculum

FHA52 **HUB4040W** BMedScHons Physiology

**NQF credits:** 120 at HEQSF level 8

**Convener:** Assoc Prof D Lang

**Course entry requirements:** None.

**Co-requisites:** HUB4087W and HUB4088W

**Course outline:** This specialisation is aimed at introducing students to an academic or research career in Physiology. It consists of two general modules, four specialisation-specific modules and a research project. The academic year begins with an intensive, seven-week laboratory techniques course, which is a practical module aimed at teaching students basic information in the discipline along with statistics. Bioinformatics is required for students taking the molecular medicine specialisations. Students also attend a scientific communication module that runs throughout the academic year and trains them in scientific writing and comprehension. In addition, students need to attend four specialisation-specific modules. Each module covers a specific field and generally runs over a three-week period. Students are assessed during each module and there is an examination at the end of the first semester. Three of the modules chosen should be in Physiology and one module may be from any of the following honours specialisations: Applied Anatomy/Biological Anthropology, Bioinformatics, Cell Biology, Human Genetics, Infectious Disease and Immunology, and Medical Biochemistry. The research project begins in April and ends in October. Students choose their research project from a variety of projects on offer by researchers within Physiology. During that period, students become integrated into research groups and participate in weekly research discussions and seminars. Towards the end of the year, students are required to write a research project report and sit a final comprehension examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examination. In order to pass the academic year, students must obtain an overall final course average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme modules and final examination. The final mark is made up as follows: computer programming/biology (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); research project (35%); oral presentation of research project (5%); programme modules final examination (16%); and final comprehension examination (5%).

### Radiobiology

**[MH002RAY05]**

#### Convener:

Dr A Hunter (Department of Radiation Medicine)

#### Admission requirements

FHA53 A BSc degree in the biological sciences. At the discretion of the course convener, those with a BSc in radiation sciences may be considered if their degrees have a strong biological component.

#### Assessment

FHA54 Submission of any written assignments for the BMedScHons after the due date will

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result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

### Curriculum

**FHA55** **RAY4000W** BMedScHons Radiobiology

**NQF credits:** 120 at HEQSF level 8

**Convener:** Dr A Hunter

**Course entry requirements:** None.

**Co-requisites:** RAY4021W and RAY4022W

**Course outline:** This specialisation aims to introduce students to an academic or research career in biological aspects of oncology with emphasis on radiation biology and radiotherapy. The course prepares students for further postgraduate studies in relevant areas of the biomedical sciences as well as professional service careers in radiobiology. The course consists of a series of two- to three-week modules over one year covering core aspects of radiobiology and scientific aspects of oncology. Students are also required to conduct a research project and literature review. During the year, students are expected to participate in departmental meetings, including seminars and journal clubs.

**Modules:** Techniques; General Radiobiology; Cellular Radiobiology; Normal Tissue Radiobiology; Radiobiological Modelling; Radiosensitizers and Protectors; Special Radiation Modalities; Chemotherapeutic Drugs and Targeted Agents; Medical Radiation Physics; Cancer Biology; Tumour Microenvironment, Metabolism and Functional Imaging; and Clinical End-points in Oncology.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** The final mark is made up as follows: class tests at completion of each module (15%); four written papers at mid-year (25%); and two written papers at the end of the year (15%); techniques (10%), scientific communication (10%) and a research project (30 credits) (25%).

### Structural Biology

**[MH002LAB08]**

### Admission requirements

**FHA556** A BSc or equivalent degree with a major in any of the biochemical or molecular sciences; or chemistry; or physics, computer science or mathematics; or an MBChB degree.

### Assessment

**FHA57** Submission of any written assignments for the BMedScHons after the due date will result in a late submission penalty of a maximum of 2% per day, which will be deducted from the final mark awarded for the assignment.

### Curriculum

**FHA58** **IBS4002W** BMedScHons Structural Biology

**NQF credits:** 120 at HEQSF level 8

**Convener:** Prof B T Sewell

**Course entry requirements:** None.

**Co-requisites:** IBS4010W and IBS4011W

**Course outline:** Structural biology deals with the three-dimensional structure and dynamic properties of biological macromolecules (proteins, nucleic acids and complexes) at atomic resolution, in order to provide a structural explanation for biological function, role, activity, toxicity, and selectivity. This programme is aimed at introducing students to an academic or research career in biochemical,

biophysical and molecular medicine/biology in broad terms – specialising in structural biology. The programme consists of two general modules, four further modules of which at least three are specialisation-specific and a structural biology-related research project. There is a seven-week Laboratory Methodology course, teaching basic and more advanced molecular and biochemical techniques, applied bioinformatics, and applied statistics. A Science and Communication module teaches scientific writing, critique, presentation and comprehension. Students choose a research project from a variety within the Division of Medical Biochemistry and laboratories (such as the SBRU, IDM, ICGB, EMU, and CPGR). Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write and present a research project report and sit a specialisation-specific scientific comprehension examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examinations. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the programme modules, tests and final examinations. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules: tests/evaluations (14%); programme modules: final examinations (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

## MASTER'S DEGREES

### MASTER OF MEDICINE

*Notes:*

- (a) *The Master of Medicine trains medical doctors to become specialists in one of a range of disciplines. Qualified specialists wishing to undergo subspecialty training must apply for the MPhil degree for subspecialty training.*
- (b) *Foreign-qualified doctors hold limited registration with the HPCSA, which must be renewed annually. Foreign-qualified doctors may not be able to complete all the training and examination requirements during the time that they are allowed to undergo training, and may therefore not obtain a qualification at the end of their training. They must establish clearly from the Department concerned what they may expect during and as an outcome of their training. Foreign-qualified doctors are not allowed to register as specialists in South Africa upon successful completion of the MMed degree.*

#### Minimum generic admission requirements

FMA1.1 A person shall not be admitted as a candidate for the MMed degree unless he/she:

- (a) is a graduate in medicine of this University or a university recognised by Senate for this purpose;
- (b) has, after graduating in medicine, as a minimum requirement, completed the prescribed intern period and community service (or an HPCSA-approved equivalent) and is registered with the Health Professions Council of South Africa as a medical practitioner; and
- (c) has been appointed against an HPCSA-approved training number.

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FMA1.2 Some disciplines have additional admission requirements, such as completion of the Primary and/or I Colleges of Medicine examination or additional clinical experience (*see outlines of programmes*). Applicants who do not meet the additional admission requirements are considered at the discretion of the discipline concerned.

### Specialities offered

FMA2 Training is offered in the following branches of medical practice:

Speciality	Qualification Code	Academic Plan Code	Department	SAQA Registration Number
Anaesthesia	MM001	AAE01	Anaesthesia and Perioperative Medicine	Awaited
Cardiothoracic Surgery	MM001	CHM01	Surgery	Awaited
Clinical Pharmacology	MM001	MDN03	Medicine	Awaited
Dermatology	MM001	MDN04	Medicine	Awaited
Diagnostic Radiology	MM001	RAY06	Radiation Medicine	Awaited
Emergency Medicine	MM001	CHM02	Surgery	Awaited
Family Medicine	MM001	PPH09	Public Health & Family Medicine	Awaited
Medical Genetics	MM001	LAB15	Medicine	Awaited
Medicine	MM001	MDN12	Medicine	Awaited
Neurology	MM001	MDN14	Medicine	Awaited
Neurosurgery	MM001	CHM04	Surgery	Awaited
Nuclear Medicine	MM001	RAY03	Radiation Medicine	Awaited
Obstetrics and Gynaecology	MM001	OBS03	Obstetrics and Gynaecology	Awaited

Speciality	Qualification Code	Academic Plan Code	Department	SAQA Registration Number
Occupational Medicine	MM001	PPH08	Public Health	Awaited
Ophthalmology	MM001	CHM05	Surgery	Awaited
Orthopaedic Surgery	MM001	CHM06	Surgery	Awaited
Otorhinolaryngology	MM001	CHM07	Surgery	Awaited
Paediatric Surgery	MM001	CHM08	Surgery	Awaited
Paediatrics	MM001	PED11	Paediatrics and Child Health	Awaited
Pathology (Anatomical)	MM001	LAB01	Pathology	Awaited
Pathology (Chemical)	MM001	LAB03	Pathology	Awaited
Pathology (Clinical)	MM001	LAB22	Pathology	Awaited
Pathology (Forensic)	MM001	LAB07	Pathology	Awaited
Pathology (Haematological)	MM001	LAB10	Pathology	Awaited
Pathology (Microbiological)	MM001	LAB23	Pathology	Awaited
Pathology (Virological)	MM001	LAB21	Pathology	Awaited
Plastic and Reconstructive Surgery	MM001	CHM09	Surgery	Awaited
Psychiatry	MM001	PRY09	Psychiatry and Mental Health	Awaited
Public Health Medicine	MM001	PPH11	Public Health and Family Medicine	Awaited
Radiation Oncology	MM001	RAY04	Radiation Medicine	Awaited

Speciality	Qualification Code	Academic Plan Code	Department	SAQA Registration Number
Surgery	MM001	CHM10	Surgery	Awaited
Urology	MM001	CHM12	Surgery	Awaited

### Registration

FMA3 A candidate for the degree of a Master of Medicine offered by the University

- (a) must renew his/her registration as a student annually\*; and
- (b) may not register for the degree, or renew his or her registration for the degree, unless he or she
  - (i) simultaneously holds an appointment as a registrar (except those who are registered for the purposes of completing the dissertation component only) on the joint staff of the University and a health authority or an associated health authority against an approved HPCSA training number; or
  - (ii) simultaneously holds an appointment as a supernumerary registrar with the health authority or associated health authority;
- (c) who has completed the required minimum period of training for his or her intended specialty, but who has not yet met the requirements for the degree, shall be required to renew his/her registration until he/she has completed such requirements.

*[Note: \* Retrospective registration is not allowed.]*

### Nature and duration of training

FMA4.1 An MMed candidate must complete and undertake the examinations and assessments for the prescribed Parts 1 and 2 for the specialty or an equivalent recognised by the Senate for the purpose within the time period stipulated in the programme- or qualification-specific rules; and must, for Part 3, undertake research under the guidance of a supervisor appointed by the Senate and submit a minor dissertation acceptable to the Senate.

FMA4.2 Training takes place over four to five years full-time, depending on the discipline. In some disciplines, following specific motivation to Senate and the health authority, a registrar may be allowed additional full-time training time to complete the requirements of the portfolio and/or the dissertation. Registration as a student may therefore continue beyond clinical training for the purposes of completing the dissertation. In the event of special leave, pregnancy or illness, the training programme may be extended for an individual registrar to ensure that he/she completes the requisite period of training.

FMA4.3 Recognition of training time as a registrar in an accredited satellite facility may be granted only for the period stipulated by the HPCSA according to the discipline and facility.

## Assessment

FMA5.1 (a) The examination consists of three parts. The examination in each of Parts 1 and 2, which may consist of more than one subcomponent, consists of one or more written paper/s together with such practical/laboratory and/or oral examination/s as may be required by the specific discipline and may include assessment of a portfolio of learning (see FMA8.2 below). Assessment of Part 3 comprises examination of the minor dissertation by two examiners, at least one of whom shall be an external examiner.

(b) Only candidates who have successfully completed Parts 1, 2 and Part 3 (the minor dissertation) and who have had sufficient programme-specific training time signed off by the Head of Department and the Dean, are eligible to graduate with the MMed degree. They may subsequently apply to the Health Professions Council of South Africa for registration as specialists.

FMA5.2 The candidate may be granted credit for the examination of Part 1 and/or Part 2 if he/she has passed a similar, approved examination at another university or institution recognised by the Senate for the purpose. If the Senate permits a candidate to take both Parts 1 and 2 examinations concurrently, the candidate will be granted credit for Part 2 only if he/she has also obtained credit for Part 1.

*[Note: Candidates are generally required to complete the examinations of the relevant College of Medicine of South Africa. Some disciplines may have internal Part 1 examinations. Candidates are required to pay examination, travel and accommodation costs when writing Colleges of Medicine of South Africa examinations outside of Cape Town.]*

## Dissertation

FMA6.1 The dissertation must be on a topic in the same or a related branch of the medical speciality in which the candidate is registered and must be based on a study for which the work was completed while the candidate was registered as a postgraduate student.

FMA6.2 The minor dissertation may be awarded with either a pass or with distinction (75% - 100%), except in the case of the MMed in Public Health Medicine and the MMed in Occupational Medicine, for which a percentage mark is allocated.

FMA6.3 Candidates who have already obtained a degree by dissertation or thesis will not be permitted to graduate with an MMed degree by using the same dissertation/thesis. They will need to seek permission from the HPCSA to be exempt from doing the MMed dissertation. If granted approval, they will register as specialists without completing the dissertation component of the MMed and without graduating with the MMed degree.

## Progression and readmission

FMA7.1 A candidate for the degree of a Master of Medicine may be refused permission to renew his or her registration if he or she fails to meet the minimum requirements for renewal of registration provided for in rule FMA8 and/or in the programme- or qualification-specific rules. Continued registration as a specialist trainee is subject to sufficient academic and clinical progress, in accordance with the prescriptions of the relevant MMed specialty training programme and the relevant regulations of the

Health Professions Council of South Africa.

FMA7.2 Should an MMed candidate not annually meet the minimum performance requirements set out in the programme- or qualification-specific rules, the Head of Department may make a recommendation to the Faculty Examinations Committee that the student's registration not be renewed for the following year, or may be renewed but subject to certain conditions.

*[Note: The programme- or qualification-specific rules are made known to the students by the programme convener and/or the faculty office at the time of annual registration. It is the responsibility of the MMed student to obtain and adhere to the rules.]*

### Minimum requirements for readmission

FMA8.1 A MMed student may be refused permission to renew his or her registration for the degree, or may have his/her registration for the degree cancelled, if

- (a) he or she has failed to acquire and demonstrate
  - (i) appropriate clinical skills and knowledge as evidenced by in-course assessment and the contents of his/her logbook and/or portfolio of learning;
  - (ii) academic achievement in terms of prescribed coursework, where this is relevant; and
  - (iii) adequate progress in preparing his/her dissertation, as defined in the MOU between student and supervisor.
- (b) he or she has otherwise failed to meet minimum readmission requirements as laid down in FMA8 and programme- or qualification-specific rules;
- (c) he or she is shown to the satisfaction of the Senate to have failed to acquire and demonstrate clinical professionalism\*, including but not limited to punctuality, integrity, reliability and adherence to the principles of good clinical performance;
- (d) he or she has been found to be impaired, in terms of the definition for such impairment of the Health Professions Council of South Africa\*.

*[\*Note: See HPCSA stipulations and policy and process to investigate impairment or unprofessional conduct in Faculty Handbook.]*

FMA8.2 In respect of most programmes an MMed candidate shall be required

- (a) to successfully complete the MMed Part 1 training examination or its approved equivalent within the first 12 months<sup>1</sup> of training;
- (b) to have obtained approval of a research topic for the MMed Part III (minor dissertation) and to have signed an MOU with his/her supervisor setting out the conditions of the candidate's research towards his/her minor dissertation within 24 months<sup>2</sup> of first registration;
- (c) to have completed a UCT Human Research Ethics Committee (HREC)-approved research protocol and obtained an interim research report from his/her supervisor indicating satisfactory progress within 24 months<sup>3</sup> of first registration;
- (d) to have achieved the following outcomes before attempting the Part 2 examination:
  - (i) to have completed a minimum of 30 months' clinical training before attempting the Part 2 examination<sup>4</sup>;
  - (ii) to have completed a logbook and/or portfolio of clinical

experience in terms of the prescribed requirements before attempting the Part II examination<sup>5</sup>;

And for some Departments

(iii) to have submitted the part 3 (minor dissertation) for examination

[Notes:

(a) *Candidates are referred to the programme- specific rules for their speciality in the event that these requirements differ from the generic requirements above. Examples of differences in respect of some disciplines are explained in the following footnotes to the rules under FMA8.2:*

- 1. Obstetrics & Gynaecology, Virology, Medical Microbiology, Chemical Pathology: 18 months; Anatomical Pathology: 24 months; Clinical Pathology: A separate Part 1 examination 1A, 1B, 1C & 1D) is written at the end of a 16 month training period in Part 1A – 1C, and a six-month period in 1D. The candidate will be eligible to continue with training in the next discipline after successful completion of the Part 1 examination for the previous discipline. Failure to pass the Part 1 examination must be followed by a six month-extension in that particular discipline (2 months in the case of Virology) as well as a repeat examination. Candidates will be permitted to repeat only one Part 1 examination during their entire training course. Forensic Pathology candidates must write the Part 1 after 12 months in Forensic Pathology, 12 months in Anatomical Pathology, and within 6 months of the completion of the rotations – i.e. within 30 months.*
- 2. Medicine: 12 months; Medical Microbiology, Chemical Pathology, Clinical Pathology: 30 months; Obstetrics and Gynaecology, Chemical Pathology, Clinical Pathology: 30 months*
- 3. Medicine: 18 months; Obstetrics and Gynaecology: 36 months: 18 months' training in Obstetrics and 18 months' training in Gynaecology; Anatomical Pathology and Chemical Pathology: 42 months; Clinical Pathology: 54 months.*
- 4. Obstetrics and Gynaecology: Portfolio of experience must be completed three months before the Part 2 examinations.*

*Please see specific rules for the MMed in Public Health Medicine, the MMed in Occupational Medicine and the MMed in Family Medicine under the discipline-specific sections that follow these general rules.*

(b) *A candidate may be permitted to submit his/her dissertation within a maximum period of two years of completing his/her registrar training, though the candidate may no longer hold a registrar post or HPCSA training number.*

(c) *MMed students who are not training for the purposes of registering as specialists in South Africa may be exempt from completing the MMed Part 3 minor dissertation. The programme convener will consider each case on merit.*

(d) *Department of Medicine: Supernumerary MMed in Medicine students with a non-South African medical qualification are required to successfully complete the Diploma in Internal Medicine examination of the College of Physicians of South Africa within 24 months of first registration.]*

## **Anaesthesia** [MM001AAE01]

### **Convener:**

Prof J Swanevelder (Department of Anaesthesia and Perioperative Medicine)

### **Additional admission requirements**

FMA9 Applicants must have six months of anaesthetic experience plus an approved qualification (DA or FCA Part 1).

### **Duration of training**

FMA10 Four years of clinical training, plus one year of research and completion of the dissertation.

### **Curriculum**

#### **FMA11 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
AAE7003W	MMed Anaesthesia Part 1 .....	60	9
AAE7004W	MMed Anaesthesia Part 2 .....	60	9
AAE7002W	Anaesthesia minor dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Cardiothoracic Surgery** [MM001CHM01]

### **Convener:**

Prof P Zilla (Department of Surgery)

### **Additional admission requirements**

FMA12 Applicants must have completed the primary examination of the College of Surgeons of South Africa. The intermediate examination is a recommendation.

### **Duration of training**

FMA13 Five to six years for clinical training, including research and completion of the dissertation.

### **Curriculum**

Please refer to the College of Cardiothoracic Surgeons of South Africa at: [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za)

#### **FMA14 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7004W	MMed Surgical Disciplines Part 1 .....	60	9
CHM7010W	MMed Surgical Disciplines Part 2A .....	30	9
CHM7019W	MMed Cardiothoracic Surgery Part 2B .....	30	9
CHM7020W	Cardiothoracic Surgery Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## Clinical Pharmacology

### [MM001MDN03]

#### Convenor:

Prof M Blockman (Department of Medicine)

#### Additional admission requirements

FMA15 Applicants for the four-year (full-time) postgraduate MMed in Clinical Pharmacology must have an MBChB as well as two years' clinical experience since their internship.

FMA16 All applicants short-listed will be interviewed and will require confidential referee reports.

#### Duration of training

FMA17 Four years, including research and completion of the dissertation.

#### Curriculum outline

##### FMA18 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
MDN7034W	MMed Clinical Pharmacology Part 1 .....	60	9
MDN7035W	MMed Clinical Pharmacology Part 2 .....	60	9
MDN7036W	Clinical Pharmacology Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## Dermatology

### [MM001MDN04]

#### Convenor:

Dr R Lehloenya (Department of Medicine)

#### Additional admission requirements

FMA19 Applicants should have at least two years of supervised medical practice (which may include the internship and community service), plus a further minimum of one year of medical practice or medical research in a field related to dermatology.

#### Duration of training

FMA20 Four years, including research, completion of the dissertation, and maintenance of a portfolio of learning and experience.

#### Curriculum outline

##### FMA21 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
MDN7026W	MMed Dermatology Part 1 .....	60	9
MDN7027W	MMed Dermatology Part 2 .....	60	9
MDN7025W	Dermatology Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Diagnostic Radiology**

### **[MM001RAY06]**

#### **Convener:**

Prof S Beningfield (Division of Radiology in the Department of Radiation Medicine)

#### **Duration of training**

FMA22 Five years, including research and completion of the dissertation.

#### **Curriculum outline**

##### **FMA23 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
RAY7017W	MMed Radiology Part 1 .....	60	9
RAY7020W	MMed Radiology Part 2 .....	60	9
RAY7021W	Radiology Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Emergency Medicine**

### **[MM001CHM02]**

#### **Convener:**

Prof L Wallis (Department of Surgery)

#### **Duration of training**

FMA24 Training takes place over a period of four years, full-time.

#### **Curriculum outline**

##### **FMA25 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7056W	MMed Emergency Medicine Part 1 .....	60	9
CHM7057W	MMed Emergency Medicine Part 2 .....	60	9
CHM7058W	Emergency Medicine Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Supernumerary Registrars**

FMA26 Supernumerary registrars are subject to the same rules and regulations as any other registrar in the programme.

#### **DP requirements**

- FMA27 Satisfactory completion of a logbook and/or portfolio of clinical experience in terms of the prescribed requirements before attempting the Part 2 examination
- FMA28 Completion of the Level 1 Emergency Ultrasound certification prior to registration for Part 2 examination.
- FMA29 Completion of Part 3 – minor dissertation – prior to registration for Part 2 examination

**Progression rules**

(to be read in conjunction with FMA7.1 to FMA8.2: Progression and readmission [to an MMed Programme])

FMA30 Except by permission of the Senate, a candidate registered for a MMed in Emergency Medicine may be refused readmission if he/she:

- fails to complete the Part 1 examination within 18 months from first registration;
- fails to complete the Part 2 examination within 60 months from first registration;

**Family Medicine**

**[MM001PPH09]**

**Conveners:**

Assoc Prof D Hellenberg and Dr T Ras (Department of Public Health and Family Medicine)

**Additional admission requirements**

FMA31.1 In addition to the general MMed admission requirements, applicants

- will be interviewed by a panel consisting of representatives of both Metro District Health Service (MDHS) and UCT Division of Family Medicine.
- will be required to read and critically appraise an article taken from a peer-reviewed medical journal and report their summary to the panel as a part of the interview process;
- are required to submit contact details for references from their current or most recent employer and one other referee; and

FMA31.2 are required to submit proof of registration as a medical practitioner with the HPCSA and a letter of good standing with the Council, and proof of completion of internship and community service. Foreign-trained doctors will require equivalent experience and HPCSA registration.

**Duration of training and examination**

FMA32.3 The Part I exam is internal and it is written at the end of the 2nd year of registration (24 months). It can be re-written once only. The final mark is a composite of the final examination (50%) and coursework (50%). Coursework, clinical skills and academic skills considered essential to practising in primary care settings are examined.

FMA32.2 Part II can be attempted after 36 months of training, if the portfolio (or documented prior learning) indicates that certain core areas have been covered: Primary Care; Emergency care; Obstetrics and gynaecology; General Surgery; Internal medicine (adult and paediatric); Psychiatry; Anaesthesia

**Readmission criteria:**

FMA33 Except by permission of the Senate a student who transgresses the following rules may be excluded from the programme:

- a student may not fail the Part 1 examination twice;
- a student may not fail two end-of-rotation assessments;
- A student may not fail one end-of-rotation assessment more than once.

**Curriculum outline****FMA34.1 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PPH7072W	MMed Family Medicine Part 1 .....	60	9
PPH7073W	MMed Family Medicine Part 2 .....	60	9
PPH7074W	Family Medicine Minor Dissertation .....	60	9
<b>Total NQF credits.....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

FMA35.2 During their rotation, registrars will rotate through community health centres, district and secondary hospitals. Registrars need to complete a portfolio, including a logbook of clinical experience which outlines the minimum experience they must obtain during their clinical rotations.

## **Medical Genetics**

### **[MM001LAB15]**

#### **Convener:**

Dr K Fiegen (Department of Medicine)

#### **Additional admission requirements**

FMA36 Preference will be given to applicants who have at least twelve months' experience in paediatrics and/or obstetrics and gynaecology and/or internal medicine. This experience should be obtained in a secondary or tertiary healthcare facility.

#### **Duration of training**

FMA37 Four years, including research and completion of the dissertation.

#### **Curriculum outline**

##### **FMA38 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7066W	MMed Medical Genetics Part 1 .....	60	9
MDN7067W	MMed Medical Genetics Part 2 .....	60	9
MDN7068W	Medical Genetics Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Medicine**

### **[MM001MDN12]**

#### **Convener:**

Assoc Prof P J Raubenheimer (Department of Medicine)

#### **Duration of training**

FMA39 Four years, including research and completion of the dissertation.

#### **Curriculum outline**

##### **FMA40 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7005W	MMed Medicine Part 1 .....	60	9
MDN7006W	MMed Medicine Part 2 .....	60	9
MDN7007W	Medicine Minor Dissertation .....	60	10
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Neurology**

### **[MM001MDN14]**

#### **Convenor:**

Assoc Prof A Bryer (Department of Medicine)

#### **Additional admission requirements**

FMA41 Applicants for MMed Neurology must preferably have at least one year's experience (excluding internship and community service) in general medicine. Preference will be given to applicants who have completed Part 1 of the FCN(SA).

#### **Duration of training**

FMA42 Four years, including research and completion of the dissertation.

#### **Curriculum outline**

##### **FMA43 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7028W	MMed Neurology Part 1 .....	60	9
MDN7029W	MMed Neurology Part 2 .....	60	9
MDN7030W	Neurology Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Neurosurgery**

### **[MM001CHM04]**

#### **Convenor:**

Prof A G Fiegen (Division of Neurosurgery, Department of Surgery)

#### **Additional admission requirements**

FMA44 The FCS primary examination with neuroanatomy is a requirement for entry to the training programme, and the FCS intermediate examination is a recommendation. Candidates without this requirement will be considered for admission at the discretion of the Head of the Division of Neurosurgery.

#### **Duration of training**

FMA45 Five to six years, including research and completion of the dissertation.

#### **Curriculum outline**

##### **FMA46 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7004W	MMed Surgical Disciplines Part 1 .....	60	9
CHM7010W	MMed Surgical Disciplines Part 2A .....	30	9
CHM7026W	MMed Neurosurgery Part 2B .....	30	9
CHM7027W	Neurosurgery Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## Nuclear Medicine

### [MM001RAY03]

#### Convener:

Dr T Kotze (Department of Radiation Medicine)

#### Additional admission requirements

FMA47 (a) Grade 12 Higher Grade Mathematics and Physics/Physical Science with a distinction pass in each, or an excellent pass in Physics at tertiary level.  
 (b) MBCb or equivalent.  
 (c) One year as a nuclear medicine medical officer in an accredited training institution

#### Duration of training

FMA48 Four years, including research and completion of the dissertation.

#### Curriculum outline

FMA49 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
RAY7012W	MMed Nuclear Medicine Part 1 .....	60	9
RAY7013W	MMed Nuclear Medicine Part 2 .....	60	9
RAY7014W	Nuclear Medicine Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

[See note on page 11 regarding HEQSF levels and NQF credits.]

## Obstetrics and Gynaecology

### [MM001OBS03]

#### Convener:

Prof Z M van der Spuy and Dr L Schoeman (Department of Obstetrics and Gynaecology)

#### Additional admission requirements

FMA50 Adequate clinical experience, the ability to run a labour ward independently with consultant cover and sufficient surgical experience in obstetric surgery as defined by the Department of Obstetrics and Gynaecology. This is assessed on the basis of referees' reports and of documentation of experience. Successful completion of the Part 1 examination is a recommendation.

*(Most registrars join the programme having completed their internship, their community service training and a further six to twelve months in a medical officer post in obstetrics and gynaecology.)*

#### Duration and requirements of training

FMA51.1 A minimum of four years for clinical training with a possible additional year for clinical experience, research, and completion of a dissertation.

FMA51.2 A candidate shall be required to successfully complete the MMed Part 1 A and B examinations or the approved equivalent within the first 18 months of training

FMA51.3 The candidate must complete a UCT Human Research Ethics Committee-approved research protocol and obtain an interim research report from his/her supervisor indicating satisfactory progress within 36 months of first registration. A minimum of 18 months of

clinical experience in obstetrics and 18 months in gynaecology is required at registrar level before the Part 2 examination may be attempted.

FMA51.4 A portfolio of clinical experience must be completed three months before the Part 2 examination

### Curriculum outline

FMA52 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
<b>OBS7016W</b>	MMed Obstetrics and Gynaecology Part 1A.....	20	9
<b>OBS7015W</b>	MMed Obstetrics and Gynaecology Part 1B.....	40	9
<b>OBS7006W</b>	MMed Obstetrics and Gynaecology Part 2 .....	60	9
<b>OBS7007W</b>	Obstetrics and Gynaecology Minor Dissertation.....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Occupational Medicine

**[MM001PPH08]**

#### Convenor:

Prof M F Jeebhay (Department of Public Health and Family Medicine)

#### Duration of training

FMA53.1 Training takes place over a minimum period of four years full-time, including research and completion of the dissertation.

FMA53.2 Recognition of training time as a registrar in a satellite department may be granted for a maximum period of one year.

FMA54 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
<b>PPH7056W</b>	MMed Occupational Medicine Part 1 .....	60	9
<b>PPH7057W</b>	MMed Occupational Medicine Part 2 .....	60	9
<b>PPH7058W</b>	Occupational Medicine Minor Dissertation .....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Progression and assessment

FMA55 (a) The candidate shall be required

- i. to successfully complete the MMed Part 1 training examination or its approved equivalent within the first 24 months of training;
- ii. to have obtained approval of a research topic for the MMed Part 3 (minor dissertation) and to have signed an MOU with his/her supervisor setting out the conditions of the candidate's research towards his/her minor dissertation within 30 months of first registration;
- iii. to have completed a UCT Human Research Ethics Committee (HREC)- approved research protocol and obtained an interim research report from his/her supervisor indicating satisfactory progress within 42 months of first registration;

- iv. to have achieved the following outcomes before attempting the Part 2 examination:
  - aa. to have completed a minimum of 36 months' clinical training before attempting the Part II examination;
  - bb. to have completed a portfolio of learning in terms of the prescribed requirements before attempting the Part 2 examination.
- (b) In addition to the assessment regime described under rule FMA5.1 of the General MMed rules,
  - i. the examination in Part 1 comprises successful completion of assessments for selected courses in the Epidemiology stream of the Master of Public Health, the Postgraduate Diploma in Occupational Health and the Postgraduate Diploma in Health Management.
  - ii. Assessment of Part 3 comprises examination of the minor dissertation by two external examiners

## **Ophthalmology**

**[MM001CHM05]**

### **Convenor:**

Prof C Cook (Department of Surgery)

### **Additional admission requirements**

FMA56.1 Candidates are required to have completed the primary examination of the College of Ophthalmology of South Africa.

FMA56.2 The Diploma of the College of Ophthalmology is a recommendation.

### **Duration of training**

FMA57 Four years, including research and completion of the dissertation.

### **Curriculum outline**

#### **FMA58 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7032W	MMed Ophthalmology Part 1 .....	60	9
CHM7069W	MMed Ophthalmology Part 2A .....	30	9
CHM7030W	MMed Ophthalmology Part 2B .....	30	9
CHM7031W	Ophthalmology minor dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Orthopaedic Surgery**

**[MM001CHM06]**

### **Convenor:**

Prof R Dunn (Division of Orthopaedic Surgery, Department of Surgery)

### **Additional admission requirements**

FMA59 Applicants must have passed the primary and intermediate examinations of the College of Surgeons of South Africa.

**Duration of training**

FMA60 Five years, including completion of the minor dissertation.

**Curriculum outline****FMA61 The curriculum outline is as follows**

Number	Course	NQF Credits	HEQSF Level
CHM7004W	MMed Surgical Disciplines Part 1 .....	60	9
CHM7010W	MMed Surgical Disciplines Part 2A.....	30	9
CHM7035W	MMed Orthopaedic Surgery Part 2B.....	30	9
CHM7036W	Orthopaedic Surgery Minor Dissertation .....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Otorhinolaryngology**

**[MM001CHM07]**

**Convener:**

Prof J Fagan (Division of Otorhinolaryngology, Department of Surgery)

**Additional admission requirements**

FMA62.1 Applicants must have passed the primary and intermediate examinations of the College of Surgeons. Only in exceptional cases and at the discretion of the Head of Division may a registrar be appointed to the Division prior to completion of the intermediate examination of the Colleges of Medicine of South Africa.

FMA62.2 Applicants are required to have completed at least 12 months' approved training in any of the surgical disciplines, excluding otorhinolaryngology, but including not less than three months of intensive care and not less than six months of training in surgical disciplines.

**Duration of training**

FMA63 Four years, including research and completion of the dissertation.

**Curriculum outline****FMA64 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7004W	MMed Surgical Disciplines Part 1 .....	60	9
CHM7010W	MMed Surgical Disciplines Part 2A.....	30	9
CHM7040W	MMed Otorhinolaryngology Part 2B .....	30	9
CHM7041W	Otorhinolaryngology minor dissertation .....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

## **Paediatric Surgery**

### **[MM001CHM08]**

#### **Convener:**

Prof A Numanoglu (Department of Surgery)

#### **Additional admission requirements**

FMA65 Applicants must have completed the primary and intermediate examinations of the relevant College of Medicine of South Africa.

#### **Duration of training**

FMA66 Four years, including research and completion of the dissertation.

#### **Curriculum outline**

##### **FMA67 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7059W	MMed Paediatric Surgery Part 1 .....	60	9
CHM7060W	MMed Paediatric Surgery Part 2 .....	60	9
CHM7010W	MMed Surgical Disciplines Part 2A.....	30	9
CHM7061W	Paediatric Surgery Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>210</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Paediatrics**

### **[MM001PED11]**

#### **Convener:**

Assoc Prof A Davidson (Department of Paediatrics and Child Health)

#### **Duration of training**

FMA68 Four years, including research and completion of the dissertation.

#### **Curriculum outline**

##### **FMA69 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7004W	MMed Paediatrics Part 1 .....	60	9
PED7006W	MMed Paediatrics Part 2 .....	60	9
PED7007W	Paediatrics Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Pathology (Anatomical)**

**[MM001LAB01]**

**Convenor:**

Prof D Govender (Department of Clinical Laboratory Sciences)

**Structure and duration of training**

FMA70.1 The programme covers a minimum of four years' training in anatomical pathology, including cytology. Irrespective of what earlier training may have been undertaken, candidates must write and pass Part 1 (PTY7010W) of the examination within 24 months of commencing formal training in anatomical pathology. Progression beyond 24 months is dependent on successful completion of Part 1. An additional (fifth) year is required for completion of research and a dissertation.

FMA70.2 The candidate must complete a UCT Human Research Ethics Committee-approved research protocol and obtain an interim research report from his/her supervisor indicating satisfactory progress within 42 months' of first registration

**Curriculum outline**

**FMA71 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PTY7010W	MMed Anatomical Pathology Part 1A .....	60	9
PTY7006W	MMed Anatomical Pathology Part 2 .....	60	9
PTY7007W	Anatomical Pathology Minor Dissertation.....	60	9
<b>Total NQF credits.....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Pathology (Chemical)**

**[MM001LAB003]**

**Convenor:**

Prof A D Marais (Department of Clinical Laboratory Sciences)

**Structure and duration of training**

FMA72.1 This course requires a minimum of 42 months in chemical pathology, and may be extended to a maximum of 60 months. The candidate is required to pass the Part 1 and Part 2 examinations in chemical pathology. A minor dissertation (Part 3) must be completed during the training programme.

FMA72.2 The candidate shall be required to successfully complete the MMed Part 1 examination or its approved equivalent within the first 18 months of training.

**Curriculum outline**

**FMA72 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PTY7015W	MMed Chemical Pathology Part 1 .....	60	9
PTY7016W	MMed Chemical Pathology Part 2 .....	60	9
PTY7017W	Chemical Pathology Minor Dissertation .....	60	9
<b>Total NQF credits.....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Pathology (Clinical)****[MM001LAB22]****Convener:**

Dr F Omar (Department of Pathology)

**Structure and duration of training**

FMA74.1 Training entails sixteen months of approved training in each of the following pathology disciplines: chemical pathology, haematology, medical microbiology; and six months in virology. At the end of each training period, the Part 1 examination in that discipline must be written. The examination includes written, practical and oral examinations. Eligibility for the practical and oral examinations is contingent on passing the prior written examination. The candidate shall be eligible to proceed to training in the next discipline after successful completion of the Part 1 examination for the previous discipline. Failure to pass the Part 1 examination must be followed by a six month extension in that particular discipline (2 months in virology) and by a repeat examination. Candidates are permitted to repeat only one Part 1 examination during their entire training programme.

FMA74.2 A further six months of training in pathology disciplines may be divided among chemical pathology, haematology, medical microbiology, virology and immunology, according to the candidate's choice, provided such choice is acceptable to the Heads of the Divisions concerned. The MMed Part 2 examination includes chemical pathology, haematology, medical microbiology and virology. It may also include immunology. The examination includes written, practical and oral examinations. Eligibility for the practical and oral examinations is contingent on the candidate's passing the prior written examination. A minor dissertation must be completed during the training programme.

FMA74.3 The candidate must complete a UCT Human Research Ethics Committee-approved research protocol and obtain an interim research report from his/her supervisor indicating satisfactory progress within 54 months<sup>1</sup> of first registration

**Curriculum outline****FMA75 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PTY7000W	MMed Clinical Pathology Part 1A (Chemical Pathology) .....	18	9
PTY7001W	MMed Clinical Pathology Part 1B (Haematology) .....	18	9
PTY7002W	MMed Clinical Pathology Part 1C (Medical Microbiology) .....	18	9
PTY7003W	MMed Clinical Pathology Part 1D (Virology) .....	6	9
PTY7008W	MMed Clinical Pathology Part 2 .....	60	9
PTY7044W	Clinical Pathology Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Pathology (Forensic)**

**[MM001LAB07]**

### **Convenor:**

Prof L J Martin (Department of Pathology)

### **Structure and duration of training**

FMA76.1 Forensic pathology candidates must write the Part 1 after 12 months in Forensic pathology, 12 months in anatomical pathology and within 6 months of the completion of the rotation – i.e. within 30 months.

FMA76.2 An additional (5th) year is required to do research and complete a minor dissertation

### **Curriculum outline**

**FMA77 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PTY7043W	MMed in Forensic Pathology Part 1.....	60	9
PTY7018W	MMed in Forensic Pathology Part 2.....	60	9
PTY7019W	Forensic Pathology Minor Dissertation.....	60	9
<b>Total NQF credits.....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Pathology (Haematological)**

**[MM001LAB10][SAQA ID: 214190]**

### **Convenor:**

Prof N Novitzky (Department of Pathology)

### **Structure and duration of training**

FMA78 The programme covers a minimum of four years training in haematological pathology, including paediatric haematology, molecular haematology, haemostasis and thrombosis, training in blood transfusion, flowcytometry, and diagnosis of haematological malignancies. An additional (fifth) year is required to do research and complete a minor dissertation.

### **Curriculum outline**

**FMA79 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PTY7024W	MMed Haematological Pathology Part 1C.....	60	9
PTY7021W	MMed Haematological Pathology Part 2 .....	60	9
PTY7022W	Haematological Pathology Minor Dissertation .....	60	9
<b>Total NQF credits.....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Pathology (Microbiological)**

### **[MM001LAB23]**

#### **Convener:**

Prof M Nicol (Department of Clinical Laboratory Sciences)

#### **Structure and duration of training**

FMA80.1 A minimum of four years in medical microbiology, three to six months of which will be in virology. An additional (fifth) year may be required to do research and complete a dissertation, should this not be possible within the four years.

FMA80.2 The candidate shall be required to successfully complete the MMed Part 1 examination or its approved equivalent within the first 18 months of training

#### **Curriculum outline**

##### **FMA81 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
PTY7029W	MMed Medical Microbiology Part 1D .....	60	9
PTY7030W	MMed Medical Microbiology Part 2.....	60	9
PTY7031W	Medical Microbiology Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Pathology (Virological)**

### **[MM001LAB21]**

#### **Convener:**

Dr D Hardie (Department of Clinical Laboratory Sciences)

#### **Structure and requirements of training**

FMA82.1 A minimum period of three and a half years in medical virology and an additional six months in medical microbiology or immunology. An additional (fifth) year is required to do research and complete a dissertation.

FMA82.2 The candidate shall be required to successfully complete the MMed Part 1 examination or its approved equivalent within the first 18 months of training

#### **Curriculum outline**

##### **FMA83 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
PTY7034W	MMed Virological Pathology Part 1.....	60	9
PTY7032W	MMed Virological Pathology Part 2.....	60	9
PTY7033W	Virological Pathology Minor Dissertation.....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Plastic and Reconstructive Surgery**

**[MM001CHM09]**

### **Convenor:**

Assoc Prof D Hudson (Department of Surgery)

### **Additional admission requirements**

FMA84 Applicants must have passed the primary and intermediate examinations of the College of Surgeons of South Africa.

### **Duration of training**

FMA85 Four years, including research and completion of the dissertation.

### **Curriculum outline**

#### **FMA86 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<b>CHM7004W</b>	MMed Surgical Disciplines Part 1 .....	60	9
<b>CHM7010W</b>	MMed Surgical Disciplines Part 2A.....	30	9
<b>CHM7012W</b>	MMed Plastic and Reconstructive Surgery Part 2B.....	30	9
<b>CHM7013W</b>	Plastic and Reconstructive Surgery Minor Dissertation.....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Psychiatry**

**[MM001PRY09]**

### **Conveners:**

Assoc Prof Adnams, Assoc Prof S Kaliski and Dr P Milligan (Department of Psychiatry and Mental Health)

### **Duration of training**

FMA87 Four years, including research and completion of the dissertation.

### **Curriculum outline**

#### **FMA88 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<b>PRY7007W</b>	MMed Psychiatry Part 1 .....	60	9
<b>PRY7008W</b>	MMed Psychiatry Part 2.....	60	9
<b>PRY7009W</b>	Psychiatry Minor Dissertation.....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## Public Health Medicine

### [MM001PPH11]

#### Convener:

Prof L London (Department of Public Health and Family Medicine)

#### Duration of training

FMA89.1 Training takes place over a minimum period of four years full-time, including research and completion of the minor dissertation.

FMA89.2 Recognition of training time as a registrar in a satellite department may be granted for a maximum period of one year.

#### FMA90 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PPH7033W	MMed Public Health Medicine Part 1	60	9
PPH7034W	MMed Public Health Medicine Part 2	60	9
PPH7035W	Public Health Medicine Minor Dissertation	60	9
<b>Total NQF credits</b>			<b>180</b>

[See note on page 11 regarding HEQSF levels and NQF credits.]

#### Progression and assessment

FMA91 (a) The candidate shall be required

- i. to successfully complete the MMed Part 1 training examination or its approved equivalent within the first 24 months of training;
- ii. to have obtained approval of a research topic for the MMed Part 3 (minor dissertation) and to have signed an MOU with his/her supervisor setting out the conditions of the candidate's research towards his/her minor dissertation within 30 months of first registration;
- iii. to have completed a UCT Human Research Ethics Committee (HREC)- approved research protocol and obtained an interim research report from his/her supervisor indicating satisfactory progress within 42 months of first registration;
- iv. to have achieved the following outcomes before attempting the Part 2 examination:
  - aa. to have completed a minimum of 36 months' clinical training before attempting the Part II examination;
  - bb. to have completed a portfolio of learning in terms of the prescribed requirements before attempting the Part 2 examination.

(b) In addition to the assessment regime described under rule FMA5.1 of the General MMed rules,

- i. the examination in Part 1 comprises successful completion of assessments for selected courses in the Epidemiology stream of the Master of Public Health, the Postgraduate Diploma in Occupational Health, the Postgraduate Diploma in Health Economics and the Postgraduate Diploma in Health Management.
- ii. Assessment of Part 3 comprises examination of the minor dissertation by two external examiners

## Radiation Oncology

### [MM001RAY04]

#### Convenor:

Prof J Parkes (Department of Radiation Medicine)

#### Duration of training

FMA92 Four years (including clinical training, research and completion of the minor dissertation).

#### Curriculum outline

##### FMA93 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
RAY7009W	MMed Radiation Oncology Part 1 .....	60	9
RAY7010W	MMed Radiation Oncology Part 2 .....	60	9
RAY7011W	Radiation Oncology Minor Dissertation .....	60	9
Total NQF credits.....		180	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## Surgery

### [MM001CHM10]

#### Convenor:

Prof D Kahn (Department of Surgery)

#### Additional admission requirements

FMA94 Applicants must have passed the primary examination of the College of Surgeons of the College of Medicine of South Africa (CMSA).

#### Duration of training

FMA95 Four years, including research and completion of the dissertation.

#### Curriculum outline

##### FMA96 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
CHM7004W	MMed Surgical Disciplines Part 1 .....	60	9
CHM7008W	MMed Surgery Part 2B .....	30	9
CHM7010W	MMed Surgical Disciplines Part 2A.....	30	9
CHM7009W	Surgery Minor Dissertation .....	60	9
Total NQF credits.....		180	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Urology**

**[MM001CHM12]**

**Convener:**

Assoc Prof J M Lazarus (Department of Surgery)

**Additional admission requirements**

FMA97 Applicants must have passed the primary and intermediate examinations of the College of Surgeons of South Africa.

**Duration of training**

FMA98 Five years, including research and completion of the dissertation.

**Curriculum outline**

FMA99 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
CHM7004W	MMed Surgical Disciplines Part 1.....	60	9
CHM7010W	MMed Surgical Disciplines Part 2A.....	30	9
CHM7044W	MMed Urology Part 2B.....	60	9
CHM7045W	Urology minor dissertation.....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

## **MASTER OF MEDICAL SCIENCE (MMedSc)**

*The MMedSc is available by dissertation only in Dietetics and in Nutrition, or by coursework and dissertation in Genetic Counselling*

*[MMedSc (by dissertation) in Dietetics: Qualification code: MM053. Plan code: HUB20. SAQA registration number: awaited. MMedSc (by dissertation in Nutrition: Qualification code: MM051. Plan code: HUB21. SAQA registration number: awaited.*

*MMedSc (by coursework and dissertation) in Genetic Counselling: Qualification code MM166. Plan code: LAB09. SAQA registration number: awaited.]*

### **MMedSc in Genetic Counselling (by coursework and dissertation)**

**[MM166LAB09]**

**Convener:**

Dr T Wessels (Department of Pathology)

*Also see General Rules for Master's Degree Studies in the relevant front section of this handbook.*

**Admission requirements**

FMB1 An applicant shall not be admitted as a candidate for the degree programme unless he/she:

- (a) has an approved Bachelor's and Honour's degree in health sciences or appropriate allied health sciences of the University or any other university recognised by Senate for the purpose;
- (b) has an MBChB degree of the University or any other university recognised by Senate for the purpose;
- (c) is a registered nurse and midwife who has a four-year diploma in nursing and midwifery plus at least one post-basic diploma and relevant experience. Such

candidates will be expected to submit a full portfolio, a curriculum vitae, and may be required to complete a prerequisite programme and/or an entry examination;

(d) has approved prior experience and training. Applicants who wish to be considered on the basis of Recognition of Prior Learning (RPL) will be required to submit a personal portfolio reflecting, amongst others, their experience of working in the field of human genetics. Applications from students with other qualifications will be assessed on a case by case basis;

(e) has experience of working in a clinical genetic environment/field;

(f) is potentially registerable with the HPCSA or equivalent healthcare professional body;

(g) has proven proficiency in written and spoken English (this may be tested if necessary); and

(h) has basic computer literacy and reliable and continuous access to a computer and internet access.

*[Notes: Proficiency in Xhosa and Afrikaans is recommended. Selected applicants who meet all the criteria will be interviewed personally or telephonically.*

*Offers will be made to as many as possible black, coloured and male applicants who qualify for offers in order to obtain demographic representation of the student body. If applications are received from black or coloured students after the due date and after selection has been completed, they will be interviewed, and if they meet the criteria, will be considered.]*

### Curriculum outline

**FMB2 The prescribed courses are the following:**

Number	Course	NQF Credits	HEQSF Level
PTY5002W	Genetic Counselling Practice .....	80	9
PTY5003F/S	Principles of Genetic Counselling (Coursework).....	10	9
PTY5004F/S	Principles of Genetic Counselling (Applied Learning) .....	10	9
PTY5005F/S	Medical Genetics I.....	12	9
PTY5006F/S	Medical Genetics II .....	12	9
PTY5001W	Genetic Counselling Minor Dissertation.....	60	9
<b>Total NQF credits.....</b>		<b>184</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment and progression

FMB3.1 Coursework, case reports, clinical cases, journal reviews, seminar presentation, and the minor dissertation all count towards assessment of taught courses.

Students are expected to attend all taught courses and clinical sessions (attend at least 80% of all classroom activities).

FMB3.2 Any student whose performance is not satisfactory may be required to withdraw from the programme. Assessment of each course is in proportion to the number of credits of the programme. Theoretical aspects are assessed by means of assignments, written tests and examinations. The examination papers and marked scripts are moderated by an external examiner.

Clinic tests and examinations are conducted in the clinics by means of counselling sessions with patients.

Student performance over the three-month clinic rotation is evaluated by clinical

supervisors. Students are individually supervised in the clinic for one hour per week when the facilitator observes and gives immediate verbal feedback to the student after a counselling session with a patient. Feedback is provided within a week of the clinic test and at the end of block evaluation.

#### **Minor dissertation**

FMB4 A research proposal must be submitted and approved by the Department of Pathology Research Committee and the Faculty of Health Sciences Ethics Committee before the student is permitted to progress into the second year of the programme. The proposal should be approximately 2 000 words in length indicating the purpose, design and scope of the research project.

#### **Distinction**

FMB5 The degree by coursework and dissertation may be awarded with distinction where a candidate obtains an overall average mark of 75% for both components, with no less than 70% for each component.

## **MASTER OF PHILOSOPHY**

*The Master of Philosophy degree is offered:*

- (a) *by coursework and dissertation in a range of disciplines;*
- (b) *by coursework/clinical training and an optional dissertation in a range of subspecialities registerable with the Health Professions Council of South Africa;*
- (c) *by dissertation only.*

*For qualification and plan codes of study programmes falling under (a), see the table below. All these coursework programmes are specialisations within the generic MPhil qualification (MM006), except for the named qualifications with SAQA registration numbers. Application is being made to the Department of Higher Education and Training to register all clinical study programmes as named qualifications. Those that have been approved to date and have been allocated SAQA registration numbers appear in the table below. The University is awaiting SAQA registration numbers of the other qualifications.*

#### **Structure of the degree programme**

FMC1 A candidate shall undertake advanced study, or an approved research project, or both, under the guidance of a supervisor appointed by Senate.

#### **Fields of study**

FMC2.1 A Master of Philosophy programme by coursework and dissertation (that is not subspeciality training) is offered in:

Specialisation	Qualification Code	Academic Plan Code	Department	SAQA ID
Biokinetics	MM006	HUB22	Human Biology	Awaited
Biomedical Forensic Science	MM006	LAB23	pathology	Awaited
Clinical Paediatric Surgery	MM006	CHM20	Surgery	Awaited
Clinical Pharmacology	MM006	MDN03	Medicine	Awaited
Clinical Research Administration	MM006	PED12	Paediatrics and Child Health	Awaited
Emergency Medicine (Clinical Emergency	MM006	CHM17	Surgery	Awaited

Care)				
Emergency Medicine (African Emergency Care)	MM006	CHM18	Surgery	Awaited
Emergency Medicine (Patient Safety and Clinical Decision-making)	MM006	CHM19	Surgery	Awaited
Intellectual Disability	MM006	PRY06	Psychiatry and Mental Health	Awaited
Liaison Mental Health	MM006	PRY07	Psychiatry and Mental Health	Awaited
Maternal and Child Health	MM006	PED02	Paediatrics and Child Health	Awaited
Occupational Health	MM006	PPH06	Public Health and Family Medicine	Awaited
Paediatric Forensic Pathology	MM006	LAB28	Pathology	Awaited
Paediatric Pathology	MM006	LAB19	Pathology	Awaited
Palliative Medicine	MM006	MDN19	Public Health and Family Medicine	Awaited
Sport and Exercise Medicine	MM006	HUB14	Human Biology	Awaited

FMC2.2 Candidates may also be accepted for an MPhil by dissertation only in any discipline.

FMC2.3 The MPhil (MM016) is also used to offer a range of subspeciality training programmes. Those candidates who choose to register for, and who successfully complete Part 2 (dissertation), will be awarded the degree.

### Duration of programme

FMC3 The duration of MPhil programmes by coursework and dissertation ranges between two to three years full-time, and two to five years part-time. The period of registration for the MPhil dissertation is generally two to three years. Candidates registered for subspeciality training are generally registered for at least two years full-time. (*See further notes on duration of specific MPhil programmes under the relevant specialisation outlines below.*)

### General examination rules

FMC4.1 Unless specified otherwise, the examination consists:

- in the case of the MPhil by dissertation only, of a dissertation of 180 credits on an approved research project demonstrating understanding of the methods of research;
- in the case of the MPhil by coursework and dissertation (excluding subspeciality training), of written papers in the prescribed course or courses, a clinical and/or oral examination, and a minor dissertation of 60 NQF credits on an approved research project (unless specified otherwise under the specific programme outline);
- in the case of subspeciality training, of examinations set by the relevant College of Medicine. Credit is given towards Part 1 of the MPhil degree for examinations passed at the College. If a candidate chooses to continue with Part 2, and successfully completes the dissertation, the MPhil degree is awarded.

FMC4.2 In the case of programmes by coursework and dissertation, a candidate is required to obtain at least 50% in each of the coursework and dissertation components.

### **Distinction**

FMC5 The degree may be awarded with distinction if the candidate obtains 75% or more for each of the coursework and dissertation components.

## **MPhil by coursework and dissertation**

### **Biokinetics**

#### **[MM006HUB22]**

##### **Convener:**

Dr J Kroff (Department of Human Biology)

##### **Admission requirements**

FMC6 A candidate shall not be admitted to the programme unless he/she holds a BSc(Med)(Hons) in Exercise Science (Biokinetics) or an approved equivalent.

##### **Structure and duration of training**

FMC7 This is a full contact programme, comprising lectures, tutorials, self-directed learning, supervised clinical internship and clinical teaching, and a dissertation. The duration of the programme is two years.

##### **Curriculum outline**

FMC8 Students will be required to complete eight courses (four courses in year one and four courses in year two) and submit a dissertation. All the courses are compulsory and more than 50% of the work towards the dissertation must be completed in year one.

##### **Curriculum**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>HUB4072F</b>	High Performance Athlete .....	15	8
<b>HUB5016F</b>	Physical Activity and Epidemiology .....	15	9
<b>HUB5017F</b>	Research Methods and Statistics for Physical Activity .....	15	9
<b>HUB5018F</b>	Biokinetics in the Workplace.....	15	9
<b>HUB5020S</b>	Advanced Strength and Conditioning for Athletic Performance...15	15	9
<b>HUB5021S</b>	Biokinetics and Neuromuscular Disorders .....	15	9
<b>HUB5022S</b>	Nutrition and Ergogenic Aids.....	15	9
<b>HUB5023S</b>	Advanced Clinical Exercise Physiology.....	15	9
<b>HUB5024W</b>	Biokinetics Minor Dissertation.....	60	9
<b>Total NQF credits .....</b>		<b>180</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

##### **DP requirements**

FMC9 (a) Students are required to obtain an average of at least 50% for the assignments for each course in order to write the examination in that course.  
 (b) Candidates are required to complete all courses for each semester before they may commence the courses for the following semester.  
 (c) Students must attend all lectures during the 'block week' and at least 80% of the lectures for each course.

**Assessment and examinations**

FMC10 Students are required to complete three assignments and an examination for each course. The assignment and examination each contribute 50% to the total mark. The examination takes place at the end of the semester. The dissertation is externally examined.

**Biomedical Forensic Science****[MM006LAB23]****Convener:**

Prof L J Martin (Department of Pathology)

**Admission requirements**

FMC11 An applicant shall not be admitted as a candidate for the degree programme unless he/she:

- (a) holds a BSc(Hons) degree and has completed biochemistry, chemistry, microbiology, biology, genetics or physical anthropology or equivalent at honours level;
- (b) holds an approved four year Bachelor of Science degree or an approved postgraduate diploma; or a qualification deemed by Senate to be equivalent; or
- (c) has in any other manner attained a level of competence which in the opinion of Senate is adequate for the purpose of admission as a candidate for the degree.

**Duration of programme**

FMC12 A candidate shall not be awarded the degree unless he/she has been registered for the programme for at least two academic years.

**Curriculum outline****FMC13 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PTY6003F/S	Forensic Anthropology and Anatomy .....	18	9
PTY6004F/S	Forensic Pathology .....	20	9
PTY6005F/S	Forensic Toxicology.....	20	9
PTY6006F/S	Molecular Forensics .....	20	9
PTY6007F/S	Applied Forensic Science.....	18	9
PTY6010F/S	Forensic Statistics.....	12	9
PTY6011F/S	Forensic Research Methods.....	12	9
PTY6002W	Biomedical Forensic Science minor dissertation.....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**DP requirement**

FMC14 Students are required to attend all practical sessions, submit all coursework as required, and obtain a mark of not less than 50% in all class assignments and in all theory and practical tests.

**Assessment and progression**

FMC15 (a) Each course convener will determine the appropriate form of assessment in that course. Such assessment will consist of some combination of home assignments, a semester project and final examination. The coursework component carries 50% of the final mark. The examination carries 50% of the assessment weight. Each course is written off at the end of its semester, and a pass mark of 50% is required

overall. An external examiner is appointed for each course and has the discretion to amend the final mark based on an assessment of the candidate's performance across the course (or course components) as a whole.

- (b) Candidates may be allowed to repeat a course they have failed, at the convener's discretion. No course may be repeated more than twice. Where a candidate fails any course twice, or any three courses, a recommendation will be made to the Faculty Examination Committee to refuse re-admission. (If a failed course is repeated and passed, it is still counted as one fail. No supplementary examinations are offered.)
- (c) Students are required to develop a research proposal using the prescribed format.
- (d) The dissertation is marked by two examiners, both external to the University.

## **Clinical Paediatric Surgery**

**[MM006CHM20]**

### **Convener:**

Prof A Numanoglu (Department of Surgery)

*Note: The aim of this degree is to provide a certification of a degree of competence in paediatric surgery, predominantly to trainees from Africa, who have come for a period of training/subspecialist experience in paediatric surgery. Graduates will be trained to have the competence to manage paediatric surgical conditions of neonates and children, with specific reference to the cultural context of Africa and the disease profile, in an ethical way taking into account resource limitations. The programme will be directed specifically to ensure that it is relevant to the African context.*

### **Application and admission requirements**

FMC16 To be eligible for consideration an applicant must:

- (a) have an MBChB or equivalent qualification;
- (b) be registered as a medical practitioner with the HPCSA; and
- (c) have previous approved experience in general surgery.

### **Duration of programme**

FMC17 Candidates shall be registered for two years of full-time studies.

### **Curriculum outline**

**FMC18 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7067W	MPhil Clinical Paediatric Surgery Part 1 .....	120	9
CHM7068W	Clinical Paediatric Surgery Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### **Assessment**

FMC19 One final examination of all coursework, including written, oral and clinical components. The dissertation is externally examined.

## **Clinical Pharmacology**

### **[MM006MDN03]**

#### **Convenor:**

Dr L Wiesner (Division of Clinical Pharmacology, Department of Medicine)

*The Division of Clinical Pharmacology has a research focus on drug recovery, specifically on in-vitro assays for new drugs, the development of new drug assays and the interpretation of highly variable drug assay data in animals and humans. The Division attracts postgraduate master's and doctoral students from a variety of backgrounds, including students with BSc(Hons) in life sciences and pharmacists with a professional four-year undergraduate degree. Their research is in pre-clinical drug development, often involving mathematical modelling of pharmacokinetic data. The BSc(Hons) students have no insight into important clinical research concepts, while the pharmacy students often struggle with relevant basic scientific concepts. Both groups of students have usually had no training in the development of drug assays or mathematical modelling, both of which are increasingly important components of our research. In the National Research and Development Strategy of 2002 section 5.6 "Science and Technology for poverty reduction", one of the key research issues identified is "developing novel therapeutic regimes". This master's degree addresses this directly by training researchers for the development of new drugs. Drug development also falls under biotechnology, which was identified as a critical new technology area requiring development in the national strategy. This master's degree was therefore introduced to offer coursework together with a research dissertation to equip postgraduate students with the skills they need to research these vital components of drug discovery. The primary purpose of this master's degree is to educate and train researchers in the clinical pharmacology of drug development, so that they can contribute to new knowledge in the field of drug discovery.*

#### **Application and admission requirements**

FMC20 To be eligible for consideration an applicant must have:

- (a) an approved BSc Honours or professional health sciences bachelor's degree with a minimum of 96 credits at HEQSF level 8; and
- (b) undergraduate training in science and a basic understanding of the scientific methods and relevant mathematics.

#### **Duration of programme**

FMC21 Candidates shall be registered for two years of full-time study.

#### **Curriculum outline**

FMC22 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
<b>MDN7058S</b>	Drug Development .....	20	9
<b>MDN7059S</b>	Drug Assays.....	30	9
<b>MDN7060F</b>	Pharmacometrics .....	30	9
<b>MDN7061F</b>	PK-PD Principles.....	10	9
<b>MDN7062W</b>	Clinical Pharmacology Minor Dissertation .....	90	9
<b>Total NQF credits .....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

#### **Assessment**

FMC23 Assessment is on the basis of coursework and assignments.

## Clinical Research Administration

### [MM006PED12]

#### Convener:

J Shea (Department of Paediatrics and Child Health)

*The Clinical Research Administration specialisation aims to develop capacity for and expertise in conducting clinical research, specifically the organisation and management clinical trials. The target market includes individuals involved in clinical research activities within academic institutions and in the private sector, clinical research managers and co-ordinators and individuals involved in regulatory affairs and in monitoring clinical trials.*

#### Admission requirements

FMC24 To be eligible for consideration a candidate must

- (a) hold an approved undergraduate degree;
- (b) have a minimum of two to three years' experience in clinical research;
- (c) be proficient in spoken and written English;
- (d) have plans to pursue a career in clinical research; and
- (e) furnish evidence of computer access and internet connectivity.

#### Duration of programme

FMC25 A candidate shall be registered for two years of part-time study.

#### Curriculum outline

FMC26 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PED4004S	Biostatistics.....	12	8
PED4017F	Health and Development .....	12	8
PED4018F	Epidemiology.....	14	8
PED4019F	Information, Education and Communication.....	10	8
PED4030F/S	Organisation and Management of Health Services.....	14	9
PED5002F	Introduction to Clinical Research .....	8	9
PED5005S	Research Methods for Health Professionals I.....	10	9
PED5006F	The Process of Clinical Trials.....	8	9
PED5007F	Partnerships with Human Subjects .....	8	9
PED5008S	Good Clinical Practice.....	10	9
PED5009S	Introduction to Clinical Research Monitoring .....	8	9
PED5010S	Monitoring Clinical Trials .....	8	9
PED5013F	Research Methods for Health Professionals II .....	10	9
PED5012W	Maternal and Child Health Minor Dissertation .....	60	9
<b>Total NQF credits .....</b>		<b>192</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

## Emergency Medicine

### [MM006]

#### Convener:

Dr P Hodkinson (Division of Emergency Medicine, Department of Surgery)

*Note: This is a degree by coursework and dissertation. There are three specialisations:*

- The Clinical Emergency Care specialisation for doctors, nurses and paramedics in

- *emergency care, which has a 60-credit dissertation.*
- *The African Emergency Care specialisation for qualified doctors, which has a 90-credit dissertation.*
- *The Patient Safety and Clinical Decision-making specialisation for doctors, nurses and paramedics. Two specialisations are available: specialisation A with a 60-credit dissertation and specialisation B with a 90-credit dissertation.*

*[Also see General Rules for Master's Degree Studies in the relevant front section of this handbook.]*

#### **Admission requirements**

FMC27.1 A candidate shall not be admitted to the programme unless he/she holds a minimum of a NQF Level 8 degree. The Clinical Emergency Care and Patient Safety specialisations are open to medical practitioners, nurses and paramedics. The African Emergency Care specialisation is open to medical practitioners only.

FMC27.2 Applicants must be registered with a relevant professional body (such as the HPCSA or Nursing Council). Applicants must be able to converse and write in medical English and must be able to pass a basic computer literacy examination provided by the Division upon shortlisting. For the Clinical Emergency Care specialisation, candidates must have at least two years' worth of emergency care experience after internship and must have completed at least two of the Advanced Life Support Courses (ACLS, APLS, PALS, ATLS, FEC).

#### **Duration of programme**

FMC28 The degree is offered over two years of part-time study.

#### **Curriculum outline**

FMC29 The following specialisations are offered

<b>FMC30.1 Clinical Emergency Care specialisation [Plan code: MM006CHM17]</b>		<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>Number</b>	<b>Course</b>		
	<i>Year 1 - Compulsory courses:</i> .....	0	0
<b>CHM6005F</b>	Clinical Research Methods I .....	15	9
<b>CHM6007F</b>	Emergency Care I.....	15	9
<b>CHM6008S</b>	Emergency Care II.....	15	9
<b>CHM6013S</b>	Education and Training in Emergency Care.....	15	9
	<i>Year 2 - Compulsory courses:</i> .....	0	0
<b>CHM6009S</b>	Healthcare Systems .....	15	9
<b>CHM6010F</b>	Resuscitation and Critical Care .....	15	9
<b>CHM6016W</b>	Emergency Medicine Minor Dissertation.....	60	9
	<i>Plus two elective courses from the following:</i> .....	0	0
<b>CHM6012F</b>	Disaster Medicine .....	15	9
<b>CHM6028S</b>	Management and Leadership in Healthcare .....	15	9
<b>CHM6029S</b>	Disaster Medical Response Training.....	15	8
<b>CHM6030S</b>	Ambulatory Care and Travel Medicine .....	15	9
	<b>Total NQF credits.....</b>	<b>180</b>	

<b>FMC31.2 African Emergency Care specialisation [Plan code: MM006CHM18]</b>		<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>Number</b>	<b>Course</b>		
	<i>Year 1 - Compulsory courses:</i> .....	0	0
<b>CHM6005F</b>	Clinical Research Methods I .....	15	9
<b>CHM6018S</b>	African Emergency Care .....	15	9
	<i>Year 2 - Compulsory courses:</i> .....	0	0
<b>CHM6009S</b>	Healthcare Systems .....	15	9

Number	Course	NQF Credits	HEQSF Level
CHM6012F	Disaster Medicine .....	15	9
CHM6019W	Emergency Medicine Minor Dissertation.....	90	9
	<i>Plus two elective courses from the following: .....</i>	0	0
CHM6013S	Education and Training in Emergency Care.....	15	9
CHM6028S	Management and Leadership in Healthcare.....	15	9
CHM6029S	Disaster Medical Response Training .....	15	8
CHM6030S	Ambulatory Care and Travel Medicine .....	15	9
	<b>Total NQF credits .....</b>	<b>180</b>	

FMC31.3 MM006CHM21]	Patient Safety and Clinical Decision-making (A specialisation) [Plan code:		
Number	Course	NQF Credits	HEQSF Level
	<i>Year 1 - Compulsory courses: .....</i>	0	0
CHM6005F	Clinical Research Methods I.....	15	9
CHM6009S	Healthcare Systems.....	15	9
CHM6031F	Patient Safety and Flow .....	15	9
	<i>Year 2 - Compulsory courses: .....</i>	0	0
CHM6026S	Critical Thinking in Emergency Care.....	15	9
CHM6032S	Continuous Quality Improvement .....	15	9
CHM6016W	Emergency Medicine Minor Dissertation.....	60	9
	<i>Plus three elective courses from the following: .....</i>	0	0
CHM6013S	Education and Training in Emergency Care.....	15	9
CHM6028S	Management and Leadership in Healthcare.....	15	9
CHM6029S	Disaster Medical Response Training .....	15	8
CHM6030S	Ambulatory Care and Travel Medicine .....	15	9
	<b>Total NQF credits .....</b>	<b>180</b>	

FMC31.4 MM006CHM25]	Patient Safety and Clinical Decision-making (B specialisation) [Plan code:		
Number	Course	NQF Credits	HEQSF Level
	<i>Year 1 - Compulsory courses: .....</i>	0	0
CHM6005F	Clinical Research Methods I.....	15	9
CHM6009S	Healthcare Systems.....	15	9
CHM6031F	Patient Safety and Flow .....	15	9
	<i>Year 2 - Compulsory courses: .....</i>	0	0
CHM6032S	Continuous Quality Improvement .....	15	9
CHM6026S	Critical Thinking in Emergency Care.....	15	9
CHM6019W	Emergency Medicine Minor Dissertation.....	90	9
	<i>Plus one elective course from the following: .....</i>	0	0
CHM6013S	Education and Training in Emergency Care:.....	15	9
CHM6029S	Disaster Medical Response Training .....	15	8
CHM6028S	Management and Leadership in Healthcare.....	15	9
CHM6030S	Ambulatory Care and Travel Medicine .....	15	9
	<b>Total NQF credits .....</b>	<b>180</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

#### DP requirements

FMC32 Satisfactory completion of a self-reflection portfolio of clinical experiences submitted to the Division at specified times, as outlined in the Portfolio Guideline.

**Assessment**

FMC33 Assessment is done (*inter alia*) by means of assignments, skills sessions, and written and oral examinations.

**Progression rules**

FMC34 Except by permission of the Senate, a candidate registered for a MPhil in Emergency Medicine may be refused readmission if he/she:

- (a) fails half or more of the coursework courses for which he/she is registered in any year of study;
- (b) fails a core coursework course more than once;
- (c) has not submitted a portfolio in compliance with the “*Self-reflection Portfolio Guideline*” before the start of every new academic year;
- (d) has not submitted, by the beginning of the second academic year of study, an initial, abbreviated dissertation proposal in terms of the guidelines for the programme;
- (e) has not completed the coursework within the first three years of first registration for the degree;
- (f) has not submitted a final research proposal by the beginning of the third year of study since first registration for the degree;
- (g) has had a dissertation proposal rejected three times by the Emergency Medicine Research Committee (EMDRC) as a result of his/her not following the recommendations of the Committee and/ or those of the internal (Divisional) supervisor; and/or
- (h) has not completed the required dissertation within four years of first registration for the degree.

**Health Innovation**

**[MM006HUB30]**

**Convenor:**

Prof T Douglas (Department of Human Biology)

*This programme aims to equip students with the tools to design, implement and evaluate appropriate interventions to improve health and to conduct health-related research at all points of the innovation chain.*

**Admission requirements**

FMC35 An applicant shall not be admitted as a candidate for the MPhil in Health Innovation unless he/she

- (a) holds an approved Honours-equivalent degree; or
- (b) holds an approved four year Bachelor's degree or an approved postgraduate diploma; or
- (c) holds a qualification deemed by Senate to be equivalent.

**Duration of programme**

FWC36 A candidate shall not be awarded the degree unless he/she has been registered for the programme for at least one academic year.

**Curriculum outline****FMC37 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
HUB5031F	Health Innovation & Design (A) .....	21	9
HUB5032S	Health Innovation & Design (B) .....	21	9
AHS4089F	Introduction to Disability as Diversity .....	30	8

Number	Course	NQF Credits	HEQSF Level
HUB5033F	Health Innovation & Entrepreneurship.....	12	9
PPH7016F	Public Health and Society.....	12	9
PPH7022S	Evidence-based Health Care.....	12	9
HUB5029W	Health Innovation Minor Dissertation.....	60	9
	Electives in Public Health, Disability Studies or Biomedical Engineering, chosen in consultation with the Programme Convener.....	34	9
	<b>Total NQF credits .....</b>	<b>180</b>	<b>0</b>

*[Note: Students who have taken equivalent courses at another institution and as a part of another degree will be expected to take alternative courses to ensure that the required number of credits at the appropriate level are completed for the degree. See note on page 4 regarding HEQSF levels and NQF credits.]*

#### DP requirements

FMC38 Students are required to pass all courses taken in the first year of the programme to register for a second year and to progress to the dissertation.

#### Progression rules

FMC39 Except by permission of Senate, a student who does not meet the following requirements may be refused permission to re-register in the following year of study:

- all courses in the first year must be passed; and
- a written and oral presentation of a research proposal must be approved by the relevant committee of the Department of Human Biology in the second semester of the first year.

#### Distinction

FMC40 The degree may be awarded with distinction if the student obtains an average mark of 75% for both the coursework and the dissertation components, with no less than 70% for each component.

### Intellectual Disability

[MM006PRY06]

#### Convener:

Prof C Adnams (Department of Psychiatry & Mental Health)

*This is a programme by coursework and dissertation. The programme includes topics that are covered by experiential learning (on-site experience in health institutions providing physical and mental healthcare services for persons with intellectual disability), seminars, tutorials, case studies and academic presentations.*

#### Admission requirements

FMC41 To be eligible for consideration, the candidate must

- have an approved degree in medicine; or
- have obtained an approved master's degree in clinical psychology; or
- have an approved professional health degree qualification with approved prerequisite experience that is recognised by Senate as being equivalent to the above (e.g. occupational therapy, physiotherapy, speech-language therapy, nursing); and
- be registered with the Health Professions Council of South Africa or the equivalent professional body.

**Duration of programme**

FMC42 A candidate shall be registered for two years of full-time study or three years of part-time study.

**Curriculum outline****FMC43 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PRY7023W	MPhil Intellectual Disability Part 1 .....	90	9
PRY7024W	Intellectual Disability Minor Dissertation.....	90	9
<b>Total NQF credits.....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**DP requirements and progression rule**

FMC44 Students must obtain a pass mark (50%) in the Part 1 coursework assessments in the first year to be eligible to write the Part 1 examination. Part-time students will be evaluated primarily by means of coursework assignments. They will be required to perform at similar levels but will be provided with an extra year to achieve comparable professional levels of competence. Students must have passed all the coursework requirements and the Part 1 examination before submitting their dissertations.

**Assessment**

FMC45.1 Continuous assessment of performance through regular supervision, case presentation and discussion. Formal feedback is given every six months. At the end of the programme, candidates will have been assessed formally by means of in-course assessments, a three-hour written Part 1 examination, an oral examination (5%), and the presentation and examination of a dissertation 50%.

FMC45.2 Part-time candidates will undergo the same in-course assessment and examination procedures, but will be allowed an extra (third) year to complete coursework and dissertation requirements.

**Liaison Mental Health**

**[MM006PRY07]**

**Convenor:**

Assoc Prof J Hoare (Department of Psychiatry and Mental Health)

*This is a programme by coursework and dissertation. It includes seminars, supervision and demonstrations for registered psychiatrists, clinical psychologists, occupational therapists, social workers and other mental health professionals who wish to gain special expertise in liaison mental health.*

**Admission requirements**

FMC46.1 To be eligible for consideration, a candidate must

- (a) have a Master of Medicine in Psychiatry of the University or another university recognised for this purpose, or a qualification recognised by Senate as an equivalent (such as the fellowship in psychiatry from the College of Medicine of South Africa); or
- (b) have a Master's degree in clinical psychology of the University or another university recognised for this purpose, or a qualification deemed to be equivalent; or

- (c) have a professional four-year qualification in a mental health discipline such as social work, occupational therapy, or nursing; or
- (d) have a professional qualification with requisite experience deemed to be equivalent to any of the above; and
- (e) be registered with the relevant professional board.

FMC46.2 All candidates must be practising in or have the intention to practise in the mental health field.

**Duration of programme**

FMC47 A candidate shall be registered for two years of full-time or three years of part-time study.

**Curriculum outline**

FMC48 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PRY7020W	MPhil Liaison Mental Health Part 1 .....	120	9
PRY7021W	Liaison Mental Health Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>0</b>	<b>0</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**DP requirements and progression rule**

FMC49 Students are required to attend at least 90% of seminars and academic activities in the Department, and will have to achieve a pass mark (50%) in the Part 1 coursework assessments in the first year in order to be eligible to write the Part 1 examination. They will be allowed to submit their dissertations only once they have passed all coursework requirements and the Part 1 examination.

**Assessment**

FMC50.1 Continuous assessment of performance through regular supervision sessions and through oral and observed clinical examinations every six months. At the end of the programme, candidates will have been assessed formally by means of:  
(a) in-course assessment reports;  
(b) a three-hour written Part 1 examination; and  
(c) the presentation and examination of a dissertation.

FMC50.2 Part-time candidates will undergo the same in-course assessment and examination procedures but will be allowed an extra (third) year to complete coursework and dissertation requirements.

**Maternal and Child Health**

**[MM006PED02]**

**Convener:**

J Shea (Department of Paediatrics and Child Health)

*This is a programme by coursework and dissertation.*

*The Maternal & Child Health (MCH) specialisation aims to improve the health status of mothers and children living in rural and peri-urban districts of Southern Africa by developing the capacity of health personnel to plan, manage, implement, and evaluate maternal and child health services. The*

programme is designed for those wishing to pursue a career in MCH management at the district and regional levels.

### Admission requirements

FMC51 To be eligible for consideration, a candidate must

- (i) hold an approved undergraduate degree or postgraduate diploma in the health sciences;
- (ii) have at least two years' work experience in maternal and child health services;
- (iii) be proficient in spoken and written English; and
- (iv) furnish evidence of computer access and internet connectivity.

*[Notes: Selected professionally qualified graduates in other fields of healthcare, such as nursing physiotherapy, occupational therapy, and nutrition and dietetics, may be admitted as candidates for this programme. Students who have completed the Postgraduate diploma in Maternal & Child Health are permitted to upgrade to the Master's before graduating and may receive credits and exemption for equivalent level 8 courses done.]*

### Duration of programme

FMC52 A candidate shall be registered for two years of part-time study.

### Curriculum outline

FMC53 The curriculum outline is as follows: Year 1:

Number	Course	NQF Credits	HEQSF Level
PED4025W	Introduction to Maternal and Child Health .....	12	8
PED4017F	Health and Development .....	12	8
PED4018F	Epidemiology .....	14	8
PED4019F	Information, Education and Communication .....	10	8
PED4020S	Foundations of Maternal and Child Health .....	12	8
PED4022S	The Psychosocial Context of Maternal and Child Health .....	12	8
PED5011S	Integrated Maternal and Child Health Final Assessment .....	0	9

### Year 2:

Number	Course	NQF Credits	HEQSF Level
PED4004S	Biostatistics .....	12	8
PED5005S	Research Methods for Health Professionals I .....	10	9
PED5013F	Research Methods for Health Professionals II .....	10	9
PED4030F/S	Organisation and Management of Health Services .....	14	9
PED4021F	Priorities in Maternal and Child Health .....	20	8
PED5012W	Maternal and Child Health minor dissertation .....	60	9
<b>Total NQF credits:</b>			<b>188</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Minimum requirements for re-registration

*[Note: These rules must be read in conjunction with the General Rules in the front section of this handbook.]*

FMC54 A student who fails to meet the following minimum requirements may be refused permission to renew registration for the programme:

- (a) In each year of study, successful completion of all the courses for which the student is registered;
- (b) In the final year of study, completion of all the requirements for the programme;

- (c) Completion of all the requirements for the programme within four years; and
- (d) Completion of first-year courses before registration for second-year courses.

*[Note: The programme conveners will consider curriculum changes on an individual basis.]*

#### **Assessment**

FMC55 Coursework assessment is continuous and is done on the basis of discussion forum posts, synchronous online discussion and assignments. Candidates are required to achieve at least 50% in the coursework and for the dissertation. Students cannot progress to the second year until all first-year courses have been successfully completed.

*Coursework assessment includes the following:*

- (a) Unit submissions: a series of reflective learning exercises and questions within each course provides opportunities for students to establish dialogue with tutors and other students about the course content. Discussion forum posts and synchronous online learning are weighted and contribute to the overall course assessment.
- (b) Graded course assignments: each course assignment is an opportunity for students to synthesise learning objectives and concepts covered in each course in response to a health issue within their health district. Course assignments are weighted and contribute to the overall assessment.
- (c) An integrated written examination takes place at the end of the diploma programme: the purpose of this assessment is to gauge understanding and application of the concepts across the programme.

#### **Distinction**

FMC56 The diploma may be awarded with distinction if the student obtains 75% – 100% for all courses, including the integrated assessment, with no less than 70% for any individual course. All courses must be passed at first attempt.

### **Occupational Health**

**[MM006PPH06]**

#### **Convener:**

Prof M F Jeebhay (Department of Public Health and Family Medicine)

#### **Admission requirements**

FMC57 A candidate shall not be admitted to the programme unless he/she

- (a) holds an MBChB degree, an honours degree or a four-year bachelor's degree in an approved discipline; and
- (b) has access to relevant places of work and/or experience in occupational health clinical practice, management, inspection or auditing.

#### **Structure and duration of programme**

FMC58 A candidate shall be registered for at least two years of part-time study, and is required to attend three one-week blocks (occupational health risk assessment and management, occupational medicine and work ability, and occupational health services management) and complete required coursework in research methods (literature review, protocol development, data analysis) over the two-year period as well as the final coursework examination block.

#### **FMC59 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>PPH7059W</b>	MPhil Occupational Health Part 1 .....	120	9

Number	Course	NQF Credits	HEQSF Level
PPH7060W	Occupational Health Minor Dissertation.....	60	9
	<b>Total NQF credits.....</b>	<b>180</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

#### Assessment

FMC60 Assessment of coursework is by means of written assignments / portfolios, quizzes, written and oral examination. A pass of 50% is required for the course. In addition, the examiners retain the discretion to alter any mark based on assessment of the candidate's performance during the course (or course components) as a whole. External examination of the minor dissertation.

### **Paediatric Forensic Pathology** [MM006LAB28]

#### Convener:

Prof R O C Kaschula and Prof L J Martin (Department of Pathology)

*Note: Africa has the highest proportion of its population being less than 15 years of age and has very limited expertise in paediatric pathology. There is only one comprehensive children's hospital south of the Sahara. The programme is designed to provide needed expertise that will facilitate effective administration of justice for children and about children. The objective of the qualification is to provide in-depth knowledge and skills in relevant aspects of childhood disease and developmental disorders that will enable Forensic pathologists to make confident recommendations to law courts and issue accurate reports on deaths in foetuses, infants and children. The research component of the course is aimed at enabling graduates to undertake analytical studies that are relevant to the diverse causes of infant and childhood deaths.*

*This is a programme by coursework and dissertation.*

#### Admission requirements

FMC61 To be eligible for consideration an applicant must

- (a) have an MMed in Forensic Pathology or approved equivalent; and
- (b) be registration with the Health Professions Council of South Africa.

#### Duration of programme

FMC62 Candidates shall be registered for two years full-time study.

#### Curriculum outline

**FMC63 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PTY7040W	MPhil Paediatric Forensic Pathology Part 1.....	120	9
PTY7041W	Paediatric Forensic Pathology Minor Dissertation.....	60	9
	<b>Total NQF credits.....</b>	<b>180</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

#### DP requirements and progression rule

FMC64 Students are required:

- (a) to attend at least 90% of lectures, tutorials and practicals; and
- (b) to pass all formative assessments of the coursework component in order to gain entrance to the final coursework examination.

**Assessment**

FMC65 Coursework assessment is done by means of assignments, practicals, written and oral examinations. The dissertation is externally examined.

**Paediatric Pathology**

**[MM006LAB19]**

**Convener:**

Prof D Govender (Department of Pathology)

**Admission requirements**

FMC66 A candidate shall not be admitted to the programme unless he/she has trained and been registered as an anatomical pathologist.

**Duration of programme**

FMC67 The programme is offered either on a full-time basis with students working in paediatric and perinatal pathology for 24 months, or on a part-time basis over 36 months with students attending periodic intensive training sessions of two to four weeks. This includes completion of the dissertation.

**Curriculum outline**

FMC68 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PTY7011W	MPhil Paediatric Pathology Part 1 .....	120	9
PTY7012W	Paediatric Pathology Minor Dissertation.....	60	9
<b>Total NQF credits .....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Assessment**

FMC69 Part 1 comprises a year mark made up as follows: essays (four assignments) (25%), two written papers (25%), a practical examination including an autopsy (40%), and an oral examination (10%). Part 2 comprises a short dissertation. Both parts have to be passed with 50% each.

**Palliative Medicine**

**[MM006MDN19]**

**Convener:**

Dr L Gwyther (Department of Public Health and Family Medicine)

**Admission requirements**

FMC70 A Postgraduate Diploma in Palliative Medicine from this University or an approved equivalent recognised by Senate for the purpose.

**Duration of programme**

FMC71 A candidate shall be registered for at least two years of part-time study.

### Curriculum outline

**FMC72 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PPH7080H	Advanced Palliative Care Research Methods.....	90	9
PPH7048W	Palliative Medicine minor dissertation.....	90	9
	<b>Total NQF credits.....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Assessment

FMC73 Assessment of coursework is by means of written assignments. A pass of 50% is required in each component.

## Sport and Exercise Medicine

### [MM006HUB14]

#### Convener:

Dr J Swart (Department of Human Biology)

*This is a programme by coursework, clinical work and dissertation. The objective is to provide a thorough understanding of the effects of physical activity on the human body and mind, and to emphasise how this knowledge can be applied to the management of common medical problems in physically active people; to prevent, treat and rehabilitate injuries and other medical problems arising from exercise and sport; to assist in the rehabilitation of those suffering from various chronic illnesses related to lifestyle factors; to promote the physical health, well-being and productivity of the community; and to achieve peak sporting performance in all classes of sports persons. Research methodology, including statistics and critical scientific thinking, are integral features of the programme, while teaching and lecturing skills are also purposely developed.*

#### Admission requirements

FMC74 A candidate shall not be admitted to the programme unless he/she:

- (a) is a graduate in medicine of the University or any other university recognised by Senate for the purpose;
- (b) has provided satisfactory evidence of an interest in sport and exercise;
- (c) is registered with the Health Professions Council of South Africa (or an equivalent registering body outside South Africa) as a medical practitioner; and
- (d) has at least one year's experience after qualifying as a medical practitioner.

#### Duration of programme and progression rule

FMC75 A candidate shall be registered for at least three years of part-time study. The research work for Part 2 can be conducted over the first three years of study, during Parts 1A, 1B and 1C. However, students are expected to complete Part 2 by the end of the fourth year of study. Only in exceptional cases will work for Part 2 be continued after the fourth year of study.

### Programme outline

**FMC76 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
HUB5006W	MPhil Sport and Exercise Medicine Part 1A .....	60	9
HUB5025W	MPhil Sport and Exercise Medicine Part 1B.....	40	9
HUB5026W	MPhil Sport and Exercise Medicine Part 1C.....	40	9

Number	Course	NQF Credits	HEQSF Level
HUB5007W	Sport and Exercise Medicine minor dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>200</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

#### **Examination/Assessment**

##### **FMC77.1 Part 1A (Basic Sciences):**

**Year Marks:** During the first year of study, class tests and assignments make up the year mark (30% of the final mark for Part 1A).

**Written examinations:** At the end of the first year, written examinations (two papers) are completed which make up 70% of the final of the final mark for Part 1A. Students are admitted to the second year of study only if the final mark is 50% or more.

##### **FMC77.2 Part 1B (Exercise-Related Injuries) and Part 1C (General Sport and Exercise Medicine):**

**Year Marks:** The year mark for each Part (exercise-related injuries and general sport and exercise medicine, in two different years) is made up from marks obtained for the class tests, assignments and seminars during each year. The year mark contributes 30% towards the final mark for Parts 1B and 1C.

**Written examinations:** In October/November of the second and third years, (exercise-related injuries and general sport and exercise medicine, in two different years) a paper is written which contributes 30% to the final mark of Parts 1B and 1C.

**Clinical examinations:** In October/November of each year (exercise-related injuries and general sport and exercise medicine, in two different years) a clinical examination (clinical cases) and objective structured clinical examination (OSCE) are conducted which contribute 40% of the final marks for Parts 1B and 1C. Students are required to obtain 50% or more for each component of the clinical examination (clinical cases and OSCE) in Parts 1B and 1C.

##### **FMC77.3 Part 2: Minor dissertation**

Students are required to pass the minor dissertation with 50% or more to successfully complete Part 2.

#### **Distinction**

**FMC78** A distinction is awarded to candidates who have obtained 75% or more for each of Parts 1A, 1B, 1C and Part 2.

#### **MPhil Programmes in Subspeciality Disciplines**

[For qualification and specialisation codes, see table below. Discussion is under way to review the use of the MPhil degree for subspecialisations.]

*This programme trains medical specialists to become subspecialists in one of a range of disciplines. The admission and training requirements for subspeciality training are determined by the Medical & Dental Professional Board. Candidates usually write the examination offered by the relevant College of Medicine and, upon successful completion of such examination, are granted credit towards Part 1 of the relevant MPhil degree. Candidates who register for the MPhil Part 2 and successfully complete the dissertation part of the degree are awarded the MPhil degree. Part 2 candidates are encouraged to design their research projects in one of two ways: as a project whose scope meets the requirements of the MPhil degree, or as a project which would offer sufficient scope for upgrading to PhD studies. Foreign-qualified doctors hold limited registration with the HPCSA, which must be renewed annually. Foreign-qualified doctors may not be able to complete all the training and examination requirements during the time that they are allowed to undergo training,*

*and may therefore not obtain a qualification at the end of their training. They must establish clearly from the Division and Department concerned what they may expect during, and as an outcome of, their training. Foreign-qualified doctors are not allowed to register as specialists in South Africa upon successful completion of the MPhil (subspeciality) degree.*

### Admission requirements

FMD1 A candidate shall not be admitted to the programme, unless he/she:

- (a) submits proof that he/she, prior to commencing with education and training in the relevant subspeciality, has complied with all the requirements for registration as a specialist in the base or one of the base specialities listed against the relevant subspeciality;
- (b) has been appointed against an HPCSA-approved training number.

*(See [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za) for the base subspecialities that are required for admission to the various subspeciality programmes.)*

### Subspecialities offered

FMD2 Training is offered in the following subspecialties:

Specialisation	Qualification code	Academic plan code	Department	SAQA ID NUMBER
Addictions Mental Health	MM016	PRY01	Psychiatry & Mental Health	Awaited
Advanced Hepatology & Transplantation	MM016	MDN23	Medicine	Awaited
Allergology	MM016	MDN22	Medicine	Awaited
Cardiology	MM016	MDN02	Medicine	Awaited
Child & Adolescent Psychiatry	MM016	PRY02	Psychiatry and Mental Health	Awaited
Clinical Haematology	MM016	LAB04	Medicine	Awaited
Critical Care	MM016	AAE02	Anaesthesia	Awaited
Developmental Paediatrics	MM016	PED01	Paediatrics and Child Health	Awaited
Endocrinology	MM016	MDN05	Medicine	Awaited
Forensic mental Health	MM016	PRY03	Psychiatry & Mental Health	Awaited
Geriatric Medicine	MM016	MDN08	Medicine	Awaited
Gynaecological Oncology	MM016	OBS01	Obstetrics and Gynaecology	Awaited
Infectious Disease and HIV Medicine	MM016	MDN09	Medicine	Awaited
Maternal and Foetal Medicine	MM016	OBS02	Obstetrics and Gynaecology	Awaited
Medical Gastroenterology	MM016	MDN06	Medicine	Awaited

Neonatology	MM016	PED03	Paediatrics and Child Health	Awaited
Nephrology	MM016	MDN13	Medicine	Awaited
Neuropsychiatry	MM016	PRY08	Psychiatry & Mental Health	Awaited
Paediatric Cardiology	MM016	PED04	Paediatrics and Child Health	Awaited
Paediatric Critical Care	MM016	PED05	Paediatrics and Child Health	Awaited
Paediatric Endocrinology	MM016	PED06	Paediatrics and Child Health	Awaited
Paediatric Gastroenterology	MM016	PED15	Paediatrics and Child Health	Awaited
Paediatric Infectious Diseases	MM016	PED07	Paediatrics and Child Health	Awaited
Paediatric Nephrology	MM016	PED08	Paediatrics and Child Health	Awaited
Paediatric Neurology	MM016	PED09	Paediatrics and Child Health	Awaited
Paediatric Oncology	MM016	PED10	Paediatrics and Child Health	Awaited
Paediatric Pulmonology	MM016	PED13	Paediatrics and Child Health	Awaited
Paediatric Rheumatology	MM016	PED18	Paediatrics and Child Health	Awaited
Pulmonology	MM016	MDN16	Medicine	Awaited
Reproductive Medicine	MM016	OBS04	Obstetrics and Gynaecology	Awaited
Rheumatology	MM016	MDN18	Medicine	Awaited
Surgical Gastroenterology	MM016	CHM11	Surgery	Awaited
Trauma Surgery	MM016	CHM24	Surgery	Awaited
Vascular Surgery	MM016	CHM24	Surgery	Awaited

## Registration

FMD3.1 All subspecialist trainees must register with the University as MPhil students at the start of each year by completing the relevant forms for submission to the Faculty Office, and must register annually with the Health Professions Council of South Africa. Retrospective registration is not allowed.

FMD3.2 On successful completion of training, the head of discipline and the Dean are required to confirm in writing that all the training requirements have been met. Senior registrars are not eligible to apply for registration with the Health Professions Council as specialists without such written confirmation. Registrars who failed to register by the due date of a year will not have their training time for that year signed off by the Dean.

#### **Duration of training**

FMD4 Training takes place over a period of 18 months – three years, full-time – depending on the subspeciality.

#### **DP requirement and assessment**

FMD5.1 Senior registrars are required to submit a satisfactory logbook of clinical cases and, in some specialities, in-course clinical/progress assessments prior to writing the examination – refer to programme-specific outlines.

FMD5.2 The Part 2 minor dissertation is a requirement for those senior registrars who wish to graduate with the MPhil. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the College of Medicine examination and completion of the required clinical training.

FMD5.3 The minor dissertation must be on a topic in the same branch of the medical subspeciality in which the candidate is registered, and must be completed while the candidate is registered as a postgraduate student.

FMD5.4 The Part 2 minor dissertation may be awarded with either pass (50% - 74%) or distinction (75% – 100%).

#### **Outlines of, and additional entrance criteria for, individual MPhil subspeciality programmes:**

##### **Addictions Mental Health**

**[MM016PRY01]**

###### **Convenor:**

Dr H Temmingh (Department of Psychiatry and Mental Health)

###### **Admission requirements**

FMD6 A candidate shall not be admitted to the programme unless he/she holds a Master of Medicine in Psychiatry of the University or another university recognised for this purpose, or a qualification recognised by Senate as an equivalent (such as the fellowship in psychiatry from the College of Medicine of South Africa);

###### **Duration of programme**

FMD7 A candidate shall be registered for two years of full-time or three years of part-time study.

###### **Curriculum outline**

**FMD8 The prescribed courses are:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>PRY7016W</b>	MPhil Addictions Mental Health Part 1 .....	120	9

Number	Course	NQF Credits	HEQSF Level
PRY7017W	Addictions Mental Health minor dissertation.....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

## **Advanced Hepatology and Transplantation**

**[MM150MDN23]**

### **Conveners:**

Assoc Prof C W N Spearman and Assoc Prof M Sonderup (Department of Medicine)

### **Duration of training**

FMD9 Three years of clinical training, one year of research and completion of the dissertation.

### **Curriculum outline**

FMD10 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
MDN7056W	MPhil Advanced Hepatology and Transplantation Part 1.....	120	9
MDN7057W	Advanced Hepatology and Transplantation minor dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

## **Allergology**

**[MM026MDN22]**

### **Conveners:**

Prof M Levin (Department of Paediatrics and Child Health) and Dr JG Peter (Department of Medicine)

*Candidates who are accepted for subspeciality training in this training unit are required to register for an MPhil degree. Admission requirements for subspeciality training are determined by the Medical & Dental Professional Board. Candidates usually write the examination offered by the relevant College of Medicine and, upon successful completion of such examination, are granted credit towards Part 1 of the MPhil in Allergology. Candidates who register for the MPhil Part 2 and successfully complete the dissertation part of the degree are awarded the MPhil degree. Part 2 candidates are encouraged to design their research projects in one of two ways: as a project whose scope meets the requirements of the MPhil degree, or as a project which would offer sufficient scope for upgrading to PhD studies.*

### **Duration of training**

FMC8 Two years of clinical training plus one year of research and completion of the dissertation.

### **Curriculum outline**

FMD11 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
MDN7053W	MPhil Allergology (Adult) Part 1; or		
PED7043W	MPhil Allergology (Paediatric) Part 1; plus .....	120	9
MDN7054W	Allergology Minor Dissertation; or		

Number	Course	NQF Credits	HEQSF Level
PED7044W	Allergology Minor Dissertation .....	60	9
	<b>Total NQF credits: .....</b>	<b>180</b>	0

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Cardiology** [MM016MDN02]

### **Convener:**

Prof M Ntsekhe (Department of Medicine)

### **Duration of training**

FMD12 Three years of clinical training and completion of the research dissertation.

### **Curriculum outline**

#### **FMD13 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7017W	MPhil Cardiology Part 1.....	120	9
MDN7038W	Cardiology minor dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Child and Adolescent Psychiatry** [MM016PRY02]

### **Convener:**

Prof P J de Vries (Division of Child & Adolescent Psychiatry, Department of Psychiatry and Mental Health)

### **Admission requirements**

FMD14 To be eligible for consideration, a candidate must have:

- (a) a Master of Medicine in Psychiatry of the University or another university recognized for this purpose, or a qualification recognized by the Senate as an equivalent (such as the Fellowship in Psychiatry from the Colleges of Medicine of South Africa) AND
- (b) six months of supervised training in child and adolescent psychiatry or approved, equivalent experience.

### **Duration of programme**

FMD15 A candidate shall be registered for two years' full-time study or the approved part-time equivalent. In order to meet HPCSA requirements, psychiatrists need to spend at least 12 months of their overall training in full-time training. An additional year is required for the dissertation.

**Programme outline****FMD16 The prescribed courses are:**

Number	Course	NQF Credits	HEQSF Level
PRY7006W	MPhil in Child & Adolescent Psychiatry Part 1 .....	120	9
PRY7010W	MPhil in Child & Adolescent Psychiatry Part 2 .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

**Assessment**

FMD17 For registration with the Health Professions Council of South Africa in the subspecialty of Child & Adolescent Psychiatry, psychiatrists must pass the examination for the Certificate in Child & Adolescent Psychiatry set by the College of Medicine of South Africa. The examination consists of a three-hour written paper, a clinical examination, and an oral examination.

FMD18 There is ongoing assessment of performance through regular supervision sessions and at seminars. There is also continuous in-course evaluation by means of observed clinical interviews, and an oral examination every six months. Following these assessments, there is a critical evaluation of the candidate's progress. At the end of the programme, candidates are formally assessed by means of:

- Certificate of Child & Adolescent Psychiatry examination as set by the Colleges of Medicine of South Africa (CMSA)
- in-course assessment reports
- presentation and external examination of a dissertation.

**Clinical Haematology****[MM016LAB04]****Convener:**

Prof N Novitzky (Department of Clinical Laboratory Sciences)

**Duration of training**

FMD19 Three years of clinical and laboratory training, one year of research and completion of the minor dissertation.

**Curriculum outline****FMD20 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7069W	MPhil Clinical Haematology Part 1 .....	120	9
MDN7065W	Clinical Haematology minor dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Critical Care**

**[MM016AAE02]**

**Convenor:**

Assoc Prof I Joubert (Department of Anaesthesia)

**Duration of training**

FMD21 Two years of full-time clinical training, plus one year of research and completion of the dissertation.

**Curriculum**

**FMD22 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
AAE7005W	MPhil in Critical Care Part 1 .....	120	9
AAE7006W	Critical Care Minor Dissertation .....	60	9
	Total NQF credits.....	<b>180</b>	

## **Development Paediatrics**

**[MM016PED01]**

**Convenor:**

Dr K Donald (Department of Paediatrics and Child Health)

**Duration of training**

FMD23 Two years of clinical training, one year of research and completion of the dissertation.  
(Total 2 years).

**Curriculum outline**

**FMD24 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7029W	MPhil Developmental Paediatrics Part 1 .....	120	9
PED7030W	Developmental Paediatrics Minor Dissertation.....	60	9
	Total NQF credits.....	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Endocrinology**

**[MM016MDN05]**

**Convenor:**

Prof N Levitt (Department of Medicine)

**Duration of training**

FMD25 Two years of clinical training, one year of research and completion of the dissertation.

### Curriculum outline

**FMD26 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7021W	MPhil Endocrinology Part 1 .....	120	9
MDN7041W	Endocrinology Minor Dissertation.....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### Forensic Mental Health

**[MM016PRY03]**

#### Convener:

Assoc Prof S Z Kaliski (Department of Psychiatry and Mental Health)

*This is a programme by coursework and dissertation that includes seminars, supervision and demonstrations for registered psychiatrists..*

#### Admission requirements

FMD27.1 To be eligible for consideration, a candidate must have  
 a Fellowship from the College of Psychiatry or equivalent postgraduate medical qualification  
 (a) a master's degree in clinical psychology of the University or another university recognised for this purpose, or a qualification deemed to be equivalent; or  
 (b) a professional four-year qualification in a mental health discipline such as social work, occupational therapy or nursing; or  
 (c) an LLB degree of the University or another university recognised for this purpose, or a qualification deemed to be equivalent; or  
 (d) a professional qualification with requisite experience deemed to be equivalent to any of the above.

FMD27.2 All candidates must be practising in, or have the intention to practise in, the psycholegal field.

#### Duration of programme

FMD28 A candidate shall be registered for two years of full-time or three years of part-time study.

### Curriculum outline

**FMD29 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PRY7013W	MPhil Forensic Mental Health Part 1 .....	120	9
PRY7014W	Forensic Mental Health Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

#### DP requirements and progression rule

FMD30 Students are required to attend at least 90% of seminars and academic activities in the

Department and have to obtain a pass mark (50%) in the Part 1 coursework assessments in the first year in order to be eligible to write the Part 1 examination. They will be allowed to submit their dissertations only once they have passed all coursework requirements and the Part 1 examination.

#### **Assessment**

FMD31.1 Assessment consists of the following:

- Ongoing assessment of performance through regular supervision sessions and through oral and observed clinical examinations every six months. At the end of the programme, candidates will have been assessed formally by means of in-course assessment reports;
- A three-hour written Part 1 examination; and
- The presentation and examination of a dissertation.

FMD31.2 Part-time candidates undergo the same in-course assessment and examination procedures but are allowed an extra (third) year to complete coursework and dissertation requirements.

### **Geriatric Medicine**

**[MM016MDN08]**

#### **Convenor:**

Assoc Prof S Kalula (Department of Medicine)

#### **Duration of training**

FMD32 Two years of clinical training, one year of research and completion of the dissertation.

#### **Curriculum outline**

**FMD33 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7043W	MPhil Geriatric Medicine Part 1.....	120	9
MDN7044W	Geriatric Medicine Minor Dissertation.....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

### **Gynaecological Oncology**

**[MM016OBS01]**

#### **Conveners:**

Prof L Denny (Department of Obstetrics and Gynaecology) and Dr N Mbatani

#### **Duration of training**

FMD34 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD35 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<b>OBS7010W</b>	MPhil Gynaecological Oncology Part 1 .....	120	9
<b>OBS7011W</b>	Gynaecological Oncology Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Infectious Disease and HIV Medicine****[MM016MDN09]****Convener:**

Assoc Prof M Mendelson (Department of Medicine)

**Duration of training**

FMD36 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD37 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<b>MDN7050W</b>	MPhil Infectious Diseases and HIV Medicine Part 1 .....	120	9
<b>MDN7051W</b>	Infectious Diseases & HIV Medicine Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Maternal and Foetal Medicine****[MM016OBS02]****Conveners:**

Assoc Prof J Anthony and Dr C Stewart (Department of Obstetrics &amp; Gynaecology)

**Duration of training**

FMD38 Three years of clinical training, one year of research and completion of a research component.

**Curriculum outline****FMD39 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<b>OBS7013W</b>	MPhil Maternal and Foetal Medicine Part 1 .....	120	9
<b>OBS7014W</b>	Maternal and Foetal Medicine Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## Medical Gastroenterology

### [MM016MDN06]

#### Convenor:

Prof S Thomson (Department of Medicine)

#### Duration of training

FMD40 Three years of clinical training, one year of research and completion of the dissertation.

#### Curriculum outline

##### FMD41 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
MDN7022W	MPhil Medical Gastroenterology Part 1 .....	120	9
MDN7042W	Medical Gastroenterology Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## Neonatology

### [MM016PED03]

#### Convenor:

Assoc Prof M C Harrison (Department of Paediatrics & Child Health)

#### Duration of training

FMD42 Two years of clinical training and completion of the dissertation.

#### Curriculum outline

##### FMD43 The curriculum outline is as follows:

Number	Course	NQF Credits	HEQSF Level
PED7010W	MPhil Neonatology Part 1 .....	120	9
PED7020W	Neonatology Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## Nephrology

### [MM016MDN13]

#### Convenor:

Prof B Rayner (Department of Medicine)

#### Duration of training

FMD44 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD45 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7020W	MPhil Nephrology Part 1 .....	120	9
MDN7040W	Nephrology Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Neuropsychiatry****[MM016PRY08]****Convener:**

Assoc Prof J A Joska (Department of Psychiatry and Mental Health)

*This is a programme by coursework and dissertation. It includes seminars, supervision and demonstrations for registered psychiatrists who wish to gain special expertise in neuropsychiatry.***Duration of programme**

FMD46 A candidate shall be registered for two years of full-time or for four years of part-time study at a minimum of 50% weekly effort.

**Curriculum outline****FMD47 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PRY7018W	MPhil Neuropsychiatry Part 1 .....	120	9
PRY7019W	Neuropsychiatry Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Paediatric Cardiology****[MM016PED04]****Convener:**

Dr J Lawrenson (Department of Paediatrics &amp; Child Health)

**Duration of training**

FMD48 Three years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD49 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7012W	MPhil Paediatric Cardiology Part 1 .....	120	9
PED7022W	Paediatric Cardiology Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Paediatric Critical Care**

### **[MM016PED05]**

#### **Convenor:**

Prof AC Argent (Department of Paediatrics & Child Health)

#### **Duration of training**

FMD50 Two years of clinical training, one year of research and completion of the dissertation.

#### **Curriculum outline**

##### **FMD51 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7027W	MPhil Paediatric Critical Care Part 1 .....	120	9
PED7028W	Paediatric Critical Care Minor Dissertation .....	60	9
	<b>Total NQF credits.....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Paediatric Endocrinology**

### **[MM016PED06]**

#### **Convenor:**

Dr S Delport (Department of Paediatrics & Child Health)

#### **Duration of training**

FMD52 Two years of clinical training, research and completion of the dissertation.

#### **Curriculum outline**

##### **FMD53 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7023W	MPhil Paediatric Endocrinology Part 1 .....	120	9
PED7024W	Paediatric Endocrinology Minor Dissertation .....	60	9
	<b>Total NQF credits.....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Paediatric Gastroenterology**

### **[MM016PED15]**

#### **Convenor:**

Dr E Goddard (Department of Paediatrics & Child Health)

#### **Duration of training**

FMD54 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD55 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7039W	MPhil Paediatric Gastroenterology Part 1 .....	120	9
PED7040W	Paediatric Gastroenterology Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Paediatric Infectious Diseases****[MM016PED07]****Convener:**

Prof B Eley (Department of Paediatrics &amp; Child Health)

**Duration of training**

FMD56 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD57 The curriculum outline is as follows**

Number	Course	NQF Credits	HEQSF Level
PED7033W	MPhil Paediatric Infectious Diseases Part 1 .....	120	9
PED7034W	Paediatric Infectious Diseases Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Paediatric Nephrology****[MM016PED08]****Conveners:**

Dr P Gajjar (Department of Paediatrics &amp; Child Health) and Dr P Nourse

**Duration of training**

FMD58 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD59 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7009W	MPhil Paediatric Nephrology Part 1 .....	120	9
PED7019W	Paediatric Nephrology Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Paediatric Neurology**

### **[MM016PED09]**

#### **Convenor:**

Prof J Wilmshurst (Department of Paediatrics & Child Health)

#### **Duration of training**

FMD60 Two years of clinical training and completion of the dissertation.

#### **Curriculum outline**

##### **FMD61 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>PED7025W</b>	MPhil Paediatric Neurology Part 1.....	120	9
<b>PED7019W</b>	Paediatric Nephrology minor dissertation.....	60	9
	<b>Total NQF credits.....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Paediatric Oncology**

### **[MM016PED10]**

#### **Convenor:**

Assoc Prof A Davidson (Department of Paediatrics & Child Health)

#### **Duration of training**

FMD62 Two years of clinical training, one year of research and completion of the dissertation.

#### **Curriculum outline**

##### **FMD63 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>PED7011W</b>	MPhil Paediatric Oncology Part 1 .....	120	9
<b>PED7021W</b>	Paediatric Oncology Minor Dissertation .....	60	9
	<b>Total NQF credits.....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Paediatric Pulmonology**

### **[MM016PED13]**

#### **Convenor:**

Prof H Zar (Department of Paediatrics & Child Health)

#### **Duration of training**

FMD64 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD65 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7035W	MPhil Paediatric Pulmonology Part 1 .....	120	9
PED7036W	Paediatric Pulmonology Minor Dissertation.....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Paediatric Rheumatology****[MM016PED18]****Convener:**

Prof C Scott (Department of Paediatrics and Child Health)

**Duration of training**

FMD66 Two years of clinical training and completion of the dissertation.

**Curriculum outline****FMD67 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
PED7041W	MPhil Paediatric Rheumatology Part 1 .....	120	9
PED7042W	Paediatric Rheumatology Minor Dissertation.....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Pulmonology****[MM016MDN16]****Convener:**

Prof K Dheda (Department of Medicine)

**Duration of training**

FMD68 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD69 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
MDN7015W	MPhil Pulmonology Part 1.....	120	9
MDN7037W	Pulmonology Minor Dissertation.....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Reproductive Medicine**

### **[MM016OBS04]**

#### **Convener:**

Prof S Dyer (Department of Obstetrics & Gynaecology)

#### **Duration of training**

FMD70 Two years of clinical training, one year of research and completion of the dissertation.

#### **Curriculum outline**

##### **FMD71 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>OBS7008W</b>	MPhil Reproductive Medicine Part 1 .....	120	9
<b>OBS7009W</b>	Reproductive Medicine Minor Dissertation .....	60	9
	<b>Total NQF credits.....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Rheumatology**

### **[MM016MDN18]**

#### **Convener:**

Prof A Kalla (Department of Medicine)

#### **Duration of training**

FMD72 Two years of clinical training, one year of research and completion of the dissertation.

#### **Curriculum outline**

##### **FMD73 The curriculum outline is as follows:**

<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>MDN7018W</b>	MPhil Rheumatology Part 1 .....	120	9
<b>MDN7039W</b>	Rheumatology minor dissertation.....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **Surgical Gastroenterology**

### **[MM016CHM11]**

#### **Convener:**

Prof D Kahn (Department of Surgery)

#### **Duration of training**

FMD74 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD75 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM6003W	MPhil Surgical Gastroenterology Part 1 .....	120	9
CHM6004W	Gastroenterology Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Trauma Surgery****[MM016CHM24]****Convener:**

Assoc Prof A Nicol (Department of Surgery)

**Duration of training**

FMD76 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD78 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7070W	MPhil Trauma Surgery Part 1 .....	120	9
CHM7071W	Trauma Surgery Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]***Vascular Surgery****[MM016CHM13]****Convener:**

Dr N Naidoo (Department of Surgery)

**Duration of training**

FMD79 Two years of clinical training, one year of research and completion of the dissertation.

**Curriculum outline****FMD80 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM7052W	MPhil in Vascular Surgery Part 1 .....	120	9
CHM7053W	Vascular Surgery Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## **MPhil by dissertation [MM021]**

*[Qualification code: MM021. Qualification/Programme ID (SAQA ID) is pending.]*

*The MPhil by dissertation can be done in a range of disciplines, including Public Mental Health, Biomedical Engineering, Psychiatry, Maternal & Child Health, Disability Studies and Public Health. Each specialisation has a different plan code, and these are available from the Faculty Office.*

*Also see “General rules for master’s students” and “Guidelines for Master’s and Doctoral Students”.*

### **Admission requirements**

FME1 A candidate shall not be admitted to the programme, unless he/she:

- (a) has an approved four-year tertiary degree from this University or another University recognised by Senate for the purpose; or
- (b) has passed at this University or at any institution recognised by Senate for the purpose such examinations that are, in the opinion of Senate, equivalent to the examination prescribed for an honours degree at the University; or
- (c) has in any other manner attained a level of competence which, in the opinion of Senate, is adequate for the purpose of admission as a candidate for the degree.

### **Pre- or co-requisites**

FME2.1 Students registered for an MPhil by dissertation in Disability Studies AHS6007W may be required to attend a research methods or critical research literacy course.

FME2.2 Students registered for an MPhil in Public Mental Health by dissertation are required to complete the following co-requisite course: PRY6002F Advanced Mental Health Research (*see outline under section titled “Other courses offered”*).

FME2.3 Students registered for the MPhil in Biomedical Engineering by dissertation may be required to do certain co-requisite courses.

FME3 Candidates who are, after a reasonable period of training and assessment, deemed by the divisional supervisors concerned to be making insufficient progress, may be asked to withdraw from the programme.

## **MASTER OF SCIENCE IN MEDICINE**

*The MSc(Medicine) is offered by dissertation in a large range of disciplines.*

### **MSc(Medicine) by dissertation**

**[MM095][SAQA ID: 3409]**

*The MSc(Medicine) by dissertation can be completed in (amongst others) Anatomical Pathology, Anatomy, Bioinformatics, Biological Anthropology, Biomaterials, Cardiothoracic Surgery, Cardiovascular Biomechanics, Cell Biology, Chemical Biology, Chemical Pathology, Clinical Pharmacology, Clinical Science & Immunology, Computational Biomechanics, Dermatology, Emergency Medicine, Exercise Science, Forensic Medicine, Genetic Counselling, Global Surgery, Haematology, Human Genetics, Infection Management, Mechanobiology, Medical Biochemistry, Medical Cell Biology, Medical Microbiology, Medical Physics, Medical Virology, Medicine, Musculoskeletal Science, Neuroscience (Neurosurgery), Neuroscience (Physiology), Neuroscience (Psychiatry), Nuclear Medicine, Obstetrics & Gynaecology, Paediatrics, Physiology, Psychiatry, Public Health, Radiobiology, Radiotherapy, Sports Injuries, Surgery, Trauma Science, Trichology & Cosmetic Science, or Urology.*

**Admission requirements**

FMF1 A person shall not be admitted as a candidate for the degree programme unless:

- (a) he/she holds a Bachelor of Medical Science Honours degree of the Faculty; or
- (b) he/she holds a qualification deemed by Senate to be equivalent; or
- (c) he/she has in any other manner attained a level of competence which in the opinion of Senate is adequate for the purpose of admission as a candidate for the degree; or
- (d) he/she has satisfied Senate that he/she has the necessary background and training to undertake an approved programme of work for the degree of master in the Faculty.

**Duration of programme**

FMF2 A candidate shall not be awarded the degree unless he/she has been registered for at least one academic year.

**Pre- and co-requisites**

FMF3 Candidates registered for an MSc(Medicine) specialising in Exercise Science who have not completed the BMedScHons in Exercise Science will be required successfully to complete the following components of the BMedScHons in Exercise Science: a six-month coursework component for the first half of each year of registration; four class tests; and the laboratory practicals, including a Science elective.

**Assessment**

FMF4.1 A candidate who is required to do coursework must pass each coursework component as well as the full dissertation with at least 50%.

FMF4.2 The examiners may, in addition, require a candidate to present himself/herself for an oral examination.

**Progression**

FMF5 A candidate may be refused readmission if he/she, if registered for an MSc(Medicine) specializing in Emergency Medicine,

- (a) has not submitted, by the beginning of the second academic year of study, an initial, abbreviated dissertation proposal in terms of the guidelines for the programme;
- (b) has not submitted a final research proposal by the beginning of the third year of study since first registration for the degree;
- (c) has had a dissertation proposal rejected three times by the Emergency Medicine Research Committee (EMDRC) as a result of his/her not following the recommendations of the Committee and/ or those of the internal (Divisional) supervisor; and/or
- (d) has not completed the required dissertation within five years of first registration for the degree.

*Note: These degrees are registered on the National Qualifications Framework as named degrees (as opposed to falling under generic qualification titles).*

## MASTER OF PUBLIC HEALTH (MPH) [MM012]

Prof L Myer (also Epidemiology specialisation) (Department of Public Health & Family Medicine)

**Assistant conveners:** Prof C Cook (Community Eye Health specialisation); Prof L Gilson (Health Systems specialisation); Dr J E Ataguba (Health Economics specialisation); Assoc Prof C Colvin (General and Social & Behavioural Science specialisations)

### Admission requirements

FMG1.1 (a) A candidate for the General, Epidemiology, Social and Behavioural Science, Health Systems or Community Eye Health specialisation shall not be admitted to the programme unless he/she

- (i) holds an approved degree in medicine or a health profession other than medicine with at least a four-year degree from this University or another university recognised by Senate for the purpose; or
- (ii) holds an approved honours or equivalent four-year degree from this University or another university recognised by Senate for the purpose; and
- (iii) has attained at least a C-grade pass in higher-grade Senior Certificate Mathematics or an equivalent recognised by Senate for the purpose; and
- (iv) is proficient in written and spoken English.

(b) In addition, a candidate will be required to submit evidence of previous academic performance, work history, research output or involvement in research, and a 500 word typed essay setting out:

- (i) his/her reasons for doing the programme; and
- (ii) the ways in which he/she envisages (or hopes) the programme will improve his/her work skills and/or effectiveness at work.

FMG1.2 (a) A candidate for the Health Economics specialisation shall not be admitted to the programme unless he/she:

- (i) holds an approved degree in economics, health sciences or social sciences from this University or another university recognised by Senate as equivalent;
- (ii) holds an honours or equivalent four-year degree from this University; or another university recognised by Senate for the purpose;
- (iii) has attained at least a C-grade pass in higher-grade matriculation mathematics or an equivalent recognised by Senate for the purpose; and
- (iv) is proficient in written and spoken English.

(b) In addition, a candidate will be required to submit evidence of previous academic performance, work history, and research output or involvement in research, and a 500 word typed essay setting out (i) his/her reasons for doing the course, and (ii) the ways in which he/she envisages (or hopes) the programme will improve his/her work skills and/or effectiveness at work.

**Duration of programme**

FMG2 A candidate shall be registered for a minimum of 12 months and a maximum of four years.

**Curriculum outline**

FMG3 The following specialisations are offered:

**FMI3.1 General specialisation**

**[MM012PPH07]**

**Convener:**

Assoc Prof C Colvin

**Compulsory courses:**

Number	Course	NQF Credits	HEQSF Level
PPH7016F	Public Health and Society.....	12	9
PPH7018F	Introduction to Epidemiology.....	12	9
PPH7021F	Biostatistics I .....	12	9
PPH7070S	Quantitative Research Methods.....	12	9

**And one or two of:**

Number	Course	NQF Credits	HEQSF Level
PPH7041S	Health Policy and Planning, .....	12	9
PPH7093F	Introduction to Health Systems .....	12	9
PPH7094S	Health Systems Research and Evaluation.....	12	9

*(If two are taken, one will be an elective.)*

**Plus another four or five elective courses (e.g. if both courses were selected above, four elective courses must be selected) subject to the discretion of the relevant conveners, from the courses below:**

Number	Course	NQF Credits	HEQSF Level
PPH7092S	Biostatistics II .....	12	9
PPH7095F	Biostatistics III.....	12	9
PPH7022S	Evidence-based Healthcare.....	12	9
PPH7029F	Advanced Epidemiology .....	12	9
PPH7039F	Theory and Application of Economic of Evaluation in Healthcare	12	9
PPH7050F	Microeconomics for the Health Sector .....	12	9
PPH7053F	Public Health and Human Rights .....	12	9
PPH7054S	Gender and Health .....	12	9
PPH7063S	Epidemiology of Infectious Diseases .....	12	9
PPH7065S	Epidemiology of Non-communicable Diseases.....	12	9
PPH7071F	Qualitative Research Methods.....	12	9
PPH7077S	The Economics of Health Systems .....	12	9
PPH7089F	Public Health Practicum .....	12	9
/S			
PPH7091S	Qualitative Data Analysis .....	12	9
PPH7015W	Public Health Minor Dissertation .....	60	9
<b>Total NQF credits:</b>			<b>180</b>

**FMG3.2 Epidemiology specialisation****[MM012PPH02]****Compulsory courses:**

Number	Course	NQF Credits	HEQSF Level
PPH7092S	Biostatistics II.....	12	9
PPH7095F	Biostatistics III .....	12	9
PPH7016F	Public Health and Society .....	12	9
PPH7018F	Introduction to Epidemiology .....	12	9
PPH7021F	Biostatistics I.....	12	9
PPH7029F	Advanced Epidemiology .....	12	9

**And any two or all three of the following:**

Number	Course	NQF Credits	HEQSF Level
PPH7022S	Evidence-based Healthcare .....	12	9
PPH7063S	Epidemiology of Infectious Diseases .....	12	9
PPH7065S	Epidemiology of Non-communicable Diseases .....	12	9

**And one of the following as appropriate:**

Number	Course	NQF Credits	HEQSF Level
PPH7041S	Health Policy and Planning .....	12	9
PPH7093F	Introduction to Health Systems .....	12	9
PPH7094S	Health Systems Research and Evaluation .....	12	9
PPH7090F	Seminars in Epidemiology ( <i>with approval of specialisation convener</i> ) .....	12	9
/S			

*With the approval of the specialisation convener, the candidate may choose an elective from other courses offered on the programme.*

**Plus:**

Number	Course	NQF Credits	HEQSF Level
PPH7015W	Public Health Minor Dissertation .....	60	9
	<b>Total NQF credits.....</b>	<b>180</b>	

**FMG3.3 Health Systems specialisation****[MM012PPH12]****Compulsory courses:**

Number	Course	NQF Credits	HEQSF Level
PPH7016F	Public Health and Society .....	12	9
PPH7018F	Introduction to Epidemiology .....	12	9
PPH7041S	Health Policy and Planning .....	12	9
PPH7071F	Qualitative Research Methods.....	12	9
PPH7077S	The Economics of Health Systems.....	12	9
PPH7093F	Introduction to Health Systems .....	12	9
PPH7094S	Health Systems Research and Evaluation .....	12	9

**Plus three courses from the list below (or approved alternatives):**

Number	Course	NQF Credits	HEQSF Level
PPH7039F	Theory and Application of Economic Evaluation in Healthcare...	12	9
PPH7053F	Public Health and Human Rights .....	12	9
PPH7054S	Gender and Health .....	12	9
PPH7063S	Epidemiology of Infectious Diseases.....	12	9
PPH7065S	Epidemiology of Non-communicable Diseases .....	12	9
PPH7089F	Public Health Practicum.....	12	9

Number /S	Course	NQF Credits	HEQSF Level
<b>PPH7091S</b>	Qualitative Data Analysis.....	12	9
<b>Plus:</b>			
<b>Number</b>	<b>Course</b>	<b>NQF Credits</b>	<b>HEQSF Level</b>
<b>PPH7015W</b>	Public Health Minor Dissertation .....	60	9
	<b>Total NQF credits .....</b>	<b>180</b>	

### **FMG3.4 Health Economics specialisation**

**[MM012EC007]**

**Compulsory courses:**

Number	Course	NQF Credits	HEQSF Level
<b>PPH7039F</b>	Theory and Application of Economic Evaluation in Healthcare ...	12	9
<b>PPH7041S</b>	Health Policy and Planning .....	12	9
<b>PPH7050F</b>	Microeconomics for the Health Sector .....	12	9
<b>PPH7064F</b>	Quantitative Methods for Health Economists.....	12	9
<b>PPH7070S</b>	Quantitative Research Methods.....	12	9
<b>PPH7077S</b>	The Economics of Health Systems.....	12	9

and two approved elective courses from those offered in:

- the Master of Public Health Programme;
- various departments in the Faculties of Commerce and Humanities; or
- other universities.

It is important for candidates to confirm the timetable and their eligibility for the elective course that they have chosen and to obtain approval both from the department offering the elective courses and from the convener of the MPH Health Economics specialisation.

**The MPH electives are:**

Number	Course	NQF Credits	HEQSF Level
<b>PPH7016F</b>	Public Health and Society.....	12	9
<b>PPH7018F</b>	Introduction to Epidemiology.....	12	9
<b>PPH7021F</b>	Biostatistics I .....	12	9
<b>PPH7022S</b>	Evidence-based Healthcare.....	12	9
<b>PPH7053F</b>	Public Health and Human Rights .....	12	9
<b>PPH7071F</b>	Qualitative Research Methods.....	12	9
<b>PPH7089F/S</b>	Public Health Practicum.....	12	9
<b>PPH7091S</b>	Qualitative Data Analysis.....	12	9
<b>PPH7093F</b>	Introduction to Health Systems .....	12	9
<b>PPH7094S</b>	Health Systems Research and Evaluation.....	12	9

**Plus:**

Number	Course	NQF Credits	HEQSF Level
<b>PPH7087W</b>	Health Economics Minor Dissertation.....	90	9
	<b>Total NQF credits .....</b>	<b>180</b>	

**FMG3.5 Community Eye Health specialisation****[M012CHM03]****Compulsory courses:**

Number	Course	NQF Credits	HEQSF Level
PPH7092S	Biostatistics II.....	12	9
CHM6022F	Community Eye Health I.....	12	9
CHM6023F	Community Eye Health II .....	12	9
PPH7018F	Introduction to Epidemiology .....	12	9
PPH7021F	Biostatistics I.....	12	9
PPH7022S	Evidence-based Healthcare .....	12	9
PPH7065S	Epidemiology of Non-communicable Diseases .....	12	9
PPH7070S	Quantitative Research Methods.....	12	9
PPH7093F	Introduction to Health Systems .....	12	9
PPH7041S	Health Policy and Planning .....	12	9

Number	Course	NQF Credits	HEQSF Level
<i>An approved elective from those offered in the MPH .....</i>		12	9

**Plus:**

Number	Course	NQF Credits	HEQSF Level
PPH7015W	Public Health Minor Dissertation.....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

**FMG3.6 Social and Behavioural Sciences specialisation****[MM012PPH14]****Convenor:**

Assoc Prof C Colvin

**Compulsory courses:**

Number	Course	NQF Credits	HEQSF Level
PPH7016F	Public Health and Society .....	12	9
PPH7053F	Public Health and Human Rights .....	12	9
PPH7071F	Qualitative Research Methods.....	12	9
PPH7018F	Introduction to Epidemiology.....	12	9
PPH7091S	Qualitative Data Analysis.....	12	9
PPH7054S	Gender and Health.....	12	9
<i>Plus another 4 elective courses, subject to the discretion of the relevant conveners, from the courses below: .....</i>			
PPH7041S	Health Policy and Planning .....	12	9
PPH7093F	Introduction to Health Systems .....	12	9
PPH7094S	Health Systems Research and Evaluation .....	12	9
PPH7021F	Biostatistics I .....	12	9
PPH7092S	Biostatistics II.....	12	9
PPH7095F	Biostatistics III .....	12	9
PPH7041S	Health Policy and Planning .....	12	9
PPH7022S	Evidence-based Healthcare .....	12	9
PPH7029F	Advanced Epidemiology .....	12	9
PPH7039F	Theory and Application of Economic Evaluation in Healthcare...	12	9
PPH7050F	Microeconomics for the Health Sector.....	12	9
PPH7070S	Quantitative Research Methods.....	12	9
PPH7063S	Epidemiology of Infectious Diseases .....	12	9

Number	Course	NQF Credits	HEQSF Level
PPH7065S	Epidemiology of Non-communicable Diseases.....	12	9
PPH7077S	The Economics of Health Systems .....	12	9
PPH7089F/S	Public Health Practicum .....	12	9
PPH7015W	Public Health Minor Dissertation .....	60	9
	<b>Total NQF credits: .....</b>	<b>180</b>	

[See note on page 11 regarding HEQSF levels and NQF credits.]

### Attendance

FMG4 Any candidate who misses the block teaching at the beginning of a course may not join that course afterwards.

### Progression and readmission

FMG5 Candidates may be allowed to repeat a course they have failed, at the convener's discretion. No course may be repeated more than twice. Where a candidate fails any compulsory course twice, or any three courses, a recommendation will be made to the Faculty Examinations Committee to refuse readmission. (If a failed course is repeated and passed, it is still counted as one fail. Failing any elective twice will be counted as two courses failed. No supplementary examinations are offered.)

### Assessment

FMG6.1 The following requirements apply to the General, Social & Behavioural Science, Epidemiology, Health Systems, and Community Eye Health specialisations:

- (a) Students are required to pass a minimum of ten courses and the dissertation to qualify for the degree.
- (b) Each course convener will determine the appropriate form of assessment in that course. Such assessment will consist of some combination of home assignments, a semester project and final examination. The examination carries 50% of the assessment weight. Each course is written off at the end of its semester. A pass mark of 50% is required overall, with a 45% subminimum for each of the examination and the semester components. An external examiner is appointed for each course and has the discretion to amend the final mark based on an assessment of the candidate's performance across the course (or course components) as a whole.
- (c) Students are required to develop a research proposal using the prescribed format.
- (d) The dissertation is marked by two examiners, both external to the University. The standard *aimed for* will be that of a manuscript publishable as a single paper in a peer-reviewed journal, supplemented by a literature review. Publication is not a requirement.

FMG6.2 The following requirements apply to the Health Economics specialisation:

- (a) Students are required to pass a minimum of eight courses and the dissertation to qualify for the degree.
- (b) The first year of study is dedicated to coursework. Assessment of the coursework component involves a combination of assignments and a final examination per course. The examination makes up 50% of the coursework mark; while the assignments account for the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the examination and semester marks. The external examiner

retains the discretion to amend the final mark based on assessment of the candidate's performance across the course (or course components) as a whole.

- (c) Students are required to develop a research proposal by the second semester of the first year. The dissertation accounts for 50% of total marks; while the coursework component accounts for the remaining 50% (assignments 25% and examination 25%).
- (d) The dissertation will be marked by two examiners, both external to the University. The standard *aimed for* will be that of a manuscript publishable as a single paper in a peer-reviewed journal, supplemented by a literature review and policy brief. Publication is not a requirement.

### **Distinction**

FMG7 The degree may be awarded with distinction to candidates who average 75% or above on coursework plus dissertation, with a 70% subminimum on each component.

## **MSc IN AUDIOLOGY AND MSc IN SPEECH-LANGUAGE PATHOLOGY**

**[MM008AHS02 and MM009AHS10]**

### **Convenor:**

Dr M Harty (Division of Communication Sciences and Disorders)

### **Admission requirements**

FMH1 An applicant must have a BSc Logopaedics or BSc Audiology/BSc Speech Pathology from the University or an equivalent qualification from this or another university recognised by Senate for the purpose.

### **Duration of programme**

FMH2 (a) The MSc by dissertation must be completed in a maximum period of three years full-time or five years part-time.  
 (b) A candidate who has not submitted the required dissertation within five years will not be permitted to register for another year unless the head of the Division concerned recommends accordingly on grounds of satisfactory progress.

### **Prerequisite for MSc by dissertation**

FMH3 Students registering for the dissertation are required to have completed a postgraduate-level course in research methodology prior to the submission of the research proposal or, at the latest, within the first six months following registration for the MSc.

### **Dissertation**

FMH4 **AHS5000W AUDIOLOGY DISSERTATION OR  
AHS5001W SPEECH-LANGUAGE PATHOLOGY DISSERTATION**

**NQF credits:** 180 at HEQSF level 9

- (a) The dissertation of a maximum of 50 000 words constitutes the full weighting of the degree (*see general rules for Master's Degree Studies in the relevant front section of this handbook for requirements in regard to the dissertation*).
- (b) A draft article in the format of a relevant journal must be submitted prior to graduation.

**Distinction**

**FMH5** The degree by dissertation may be awarded with distinction if a candidate obtains an average of 75%, with not less than 70% for any course.

**MSc IN BIOMEDICAL ENGINEERING****MSc in Biomedical Engineering by dissertation**

**[MM054HUB05][SAQA ID: 21427]**

**Convener:**

Assoc Prof T Franz (Department of Human Biology)

**Admission requirements**

**FMI1** A person shall not be admitted as a candidate for the degree programme unless:

- (a) he/she holds a four-year degree in Engineering or an Honours degree in Mathematical, Physical or Computer Sciences; or
- (b) he/she holds a qualification deemed by Senate to be equivalent; or
- (c) he/she has in any other manner attained a level of competence which in the opinion of Senate is adequate for the purpose of admission as a candidate for the degree; and
- (d) he/she has satisfied Senate that he/she has the necessary background and training to undertake an approved programme of work for the degree of master in the Faculty.

**Duration of programme**

**FMI2** A candidate shall not be awarded the degree unless he/she has been registered there for at least one academic year.

**Prerequisites and co-requisites**

**FMI3** Candidates will be required to complete the following courses before proceeding to the full dissertation:

**Curriculum**

Number	Course	NQF Credits	HEQSF Level
<b>HUB2022F</b>	Anatomy for Biomedical Engineers.....	18	6
<b>HUB2025H</b>	Physiology for Biomedical Engineers.....	12	6
<b>HUB4075W</b>	Biomedical Engineering Overview .....	8	9
	Plus two of the following courses (Students may not receive credit for both HUB5031F and HUB6009F): .....	0	0
<b>HUB4007F</b>	Biomechanics of the Musculoskeletal System.....	12	8
<b>HUB4045F</b>	Introduction to Medical Imaging and Image Processing .....	12	8
<b>HUB4071F/S</b>	Applied Electrophysiology* .....	12	8
<b>HUB6009F</b>	Medical Device Design Part I .....	21	9
<b>HUB5031F</b>	Health Innovation & Design .....	21	9
	Total NQF credits: .....	0	0

*[Students may be exempted from these courses if they have completed equivalent courses at this or another institution. Students may be required by their supervisor and the programme convener to take additional courses, in preparation for their dissertation. See note on p4 regarding HEQSF levels and NQF credits.]*

*\*HUB4071F/S Applied Electrophysiology will run either in first semester or second semester but not both. The course may not be offered in 2017.]*

## **MSc in Biomedical Engineering by coursework and dissertation**

**[MM055HUB05][SAQA ID: 21427]**

### **Convener:**

Assoc Prof T Franz (Department of Human Biology)

### **BIOMEDICAL ENGINEERING**

*Also see General Rules for Master's Degree Studies on page 17 of this handbook.*

#### **Admission requirements**

FMJ1 An applicant shall not be admitted as a candidate for the MSc in Biomedical Engineering unless he/she:

- (a) holds a degree of Bachelor of Science in Engineering or an Honours degree in a quantitative discipline; or
- (b) holds a qualification deemed by Senate to be equivalent; or
- (c) has in any other manner attained a level of competence which in the opinion of Senate is adequate for the purpose of admission as a candidate for the degree; and
- (d) has satisfied Senate that he/she has the necessary background and training to undertake an approved programme of work for the degree of master in the Faculty.

#### **Duration of programme**

FMJ2 A candidate shall not be awarded the degree unless he/she has been registered for the programme for at least one academic year.

#### **Curriculum outline for degree by coursework and dissertation**

##### **FMJ3 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
<i>Compulsory courses:</i>			
<b>HUB2022F</b>	Anatomy for Biomedical Engineers .....	18	6
<b>HUB2025H</b>	Physiology for Biomedical Engineers .....	12	6
<b>HUB4075W</b>	Biomedical Engineering Overview.....	8	9
<b>HUB5031F</b>	Health Innovation and Design .....	21	9
<b>HUB6009F</b>	Medical Device Design Part I.....	21	9
<b>HUB6010S</b>	Medical Device Design Part II.....	21	9
<b>HUB6007W</b>	Biomedical Engineering Minor Dissertation .....	90	9
<i>Plus two of the following elective courses:</i>			
<b>HUB4007F</b>	Biomechanics of the Musculoskeletal system .....	12	8
<b>HUB4045F</b>	Introduction to Medical Imaging and Image Processing .....	12	8
<b>HUB4071F/S</b>	Applied Electrophysiology* .....	12	8
<b>Total NQF credits .....</b>			<b>185</b>

*[See note on page 4 regarding HEQSF levels and NQF credits.*

*\*HUB4071F/S Applied Electrophysiology will run either in first semester or second semester but not both. The course may not be offered in 2017.]*

#### **Prerequisites and co-requisites**

FMJ4 Students may be required by their supervisor and the programme convener to take additional course(s) offered in the Faculties of Health Science or Engineering, in

preparation for their dissertation.

FMJ5 HUB6009F is a pre-requisite for HUB6010S.

#### **Distinction**

FMJ6 The degree may be awarded with distinction if a student obtains an average of 75% or more with not less than 70% for any single course.

### **MSc IN EXERCISE AND SPORTS PHYSIOTHERAPY [MM034AHS16]**

#### **Convener:**

Dr T Burgess (Division of Physiotherapy, Department of Health and Rehabilitation Sciences)

*This is a degree by coursework and dissertation offered by the Division of Physiotherapy in the Department of Health and Rehabilitation Sciences and the MRC/UCT Research Unit for Exercise Science and Sports Medicine of the Department of Human Biology. The objectives of this programme are to provide a thorough understanding of the effects of physical activity, exercise and sports on the human body and mind, and to emphasise how this knowledge can be applied to the evidence-based management of common problems of physically active people and sportspersons of all ages and abilities; to develop knowledge and competence in the evidence-based assessment, prevention, treatment and rehabilitation of injuries arising from physical activity, exercise and sports; to develop skills to promote physical health and wellness of inactive and active people; and to provide a thorough understanding of the role of the sports physiotherapist in the multidisciplinary sports team to contribute to the enhancement of exercise and sports performance.*

#### **Admission requirements**

FMK1 A candidate shall not be admitted to the programme unless he/she:

- (a) is a graduate in physiotherapy of the University or of any other university recognised by Senate for the purpose;
- (b) is registered with the Health Professions Council of South Africa as a physiotherapist, or as a physiotherapy student who should provide evidence of appropriate registration with an equivalent registering body outside of South Africa; and
- (c) has provided satisfactory evidence of an interest in exercise and sports.

*[Note: Preference will be given to applicants with at least two years' post-qualification clinical experience. Successful completion of either the Sports Physiotherapy (SPT1) certificate or the Orthopaedic Manual Therapy (OMT1) certificate is an advantage.]*

#### **Duration of programme**

FMK2 A candidate shall be registered for a minimum of three years, and a maximum period of five years of part-time study.

#### **Curriculum outline**

FMK3 The programme consists of taught courses and a dissertation. The two sections, Exercise Physiology and Exercise and Sports Physiotherapy, will be offered in alternate years. Research Methodology I and II are offered every year. The candidate is expected to attend three one-week modules in exercise physiology and research methods in the Exercise Physiology year of study; and four one-week modules in exercise and sports physiotherapy, integrated management of exercise and sports-related conditions and research methods in the Exercise and Sports Physiotherapy year of study. The candidate is also expected to attend examinations in October for the Exercise Physiology and Exercise and Sports Physiotherapy sections and Research Methodology I and II respectively. The courses are taught through lectures, tutorials, clinical case discussions,

workshops, and self-study of prescribed readings and course materials. Candidates are expected to complete their dissertations in the third year of study.

**FMK4 The prescribed courses are:**

Number	Course	NQF Credits	HEQSF Level
AHS5032H	Research Methodology I .....	12	9
AHS5033W	Exercise and Sports Physiotherapy .....	36	9
AHS5051W	Research Methodology II .....	12	9
AHS5052W	Management of Exercise and Sports-related Conditions .....	12	9
HUB5010W	Exercise Physiology .....	48	9
AHS5034W	Exercise and Sports Physiotherapy Minor Dissertation; or		
HUB5012W	Exercise and Sports Physiotherapy Minor Dissertation .....	60	9
<b>Total NQF credits.....</b>		<b>180</b>	

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

**Assessment**

FMK5 A student who does not satisfactorily complete one of the courses may, with permission of the programme convener, be allowed to repeat that course the following year (for Research Methodology 1 and 2), or when the course is offered again in alternate years (for Exercise Physiology, Exercise and Sports Medicine, and Exercise and Sports Physiotherapy).

**Distinction**

FMK6 The degree may be awarded with distinction if a student obtains an average of 75% or more, across all components.

**MSc IN NURSING [MM002 and MM017]**

Programme Convener: TBA

*[MSc in Nursing by coursework and dissertation: Degree code: MM017. Plan code: M017AHS07. MSc in Nursing by dissertation: Degree code: MM002. Plan code: MM002AHS07.]*

*Note: The qualification is HEQSF-aligned but the Qualification/Programme ID (SAQA ID) is pending.*

**Admission requirements**

*MSc Nursing by dissertation*

FML1.1 To be eligible for consideration, a candidate shall:

- (a) have a four-year Bachelor's degree in Nursing; or
- (b) have a qualification recognised by Senate as equivalent to the above; and
- (c) be registered with the South African Nursing Council (SANC) as a nurse if the dissertation has a clinical component. Limited registration with the SANC is required for applicants from outside South Africa if the dissertation has a clinical component; and
- (d) submit evidence of successful study in an approved postgraduate-level course in research methodology (or the equivalent) within the past three years. (Applicants who do not meet this requirement will be required to successfully complete a postgraduate-level course in research methodology before submission of the dissertation for examination); and
- (e) submit, with the application, a brief outline (approximately 500 – 1 000

words) indicating the purpose, design and scope of the proposed research project.

*Basic computer literacy is a requirement*

### **MSc Nursing by coursework and dissertation**

**[MM017AHS07]**

FML1.2 To be eligible for consideration, a candidate shall:

- (a) have a four-year Bachelor's degree in Nursing; or
- (b) a Postgraduate Diploma in Nursing; or
- (c) have a qualification recognised by Senate as equivalent to the above; and
- (d) be registered with the SANC as a nurse if the dissertation has a clinical component. Limited registration with the South African Nursing Council is required for applicants from outside South Africa if the dissertation has a clinical component.

*Note: Basic computer literacy is a requirement.*

### **MSc Nursing by coursework and dissertation: alternative access through recognition of prior learning**

FML1.3 The University allows a limited number of applicants to be admitted via this route: a registered nurse or midwife who does not meet the requirements in FMK1.2 may be considered for admission through recognition of prior learning. Such a candidate shall:

- (a) have a four-year diploma in Nursing and Midwifery (preference will be given to applicants who have achieved at least an average of 70% in the final-year courses);
- (b) submit for evaluation a full portfolio of prior learning, a curriculum vitae and supporting letters of reference; and may, in addition, be required to:
- (c) attend an interview with the programme convener; and
- (d) successfully complete a prerequisite learning course or courses before registering.

*Note: Basic computer literacy is a requirement.*

### **Duration of programme**

FML2 (a) The MSc in Nursing by coursework and dissertation, or by dissertation only, must be completed within two years full-time or four years part-time.

(b) A candidate who has not submitted the required dissertation within four years will not be permitted to register for another year unless the head of the Division recommends accordingly on grounds of satisfactory progress.

### **Structure of MSc degree by coursework and dissertation**

FML3 The programme comprises coursework (courses must total a 90-credit weighting) plus a minor dissertation (90 credits) of a maximum of 25 000 words. Taught core courses provide the candidate with a base for critically examining nursing practice by achieving a sound understanding of the principles and methods of research and professional issues. Elective courses reflect the interests and areas of practice of

individual candidates. The programme is constructed as follows:

### Curriculum

#### Obligatory core courses:

Number	Course	NQF Credits	HEQSF Level
AHS5014F	Research Methods (or equivalent).....	15	9
AHS5022F/S	Theoretical Foundations of Nursing Practice .....	22	9

#### Plus:

Number	Course	NQF Credits	HEQSF Level
AHS5024W	Nursing Minor Dissertation.....	90	9
<b>Total NQF credits:.....180</b>			

#### \*Examples of elective courses:

Code	Name	Credits	Level
AHS5018S	Research Methods II [ <i>Offered by the division of Occupational Therapy</i> ].....	15	9
PPH7053S	Public Health and Human Rights [ <i>Offered by the Department of Public Health and Family Medicine</i> ].....	12	9

[See note on page 11 regarding HEQSF levels and NQF credits.]

### Assessment of MSc by coursework and dissertation

FML5 *Coursework:* Essays, project reports and reflective journals all count towards assessment of taught courses. Each course is assessed in a manner appropriate to the course content and objectives.

*Minor Dissertation (AHS5024W):* The minor dissertation (25 000 words) is externally examined and must be passed with at least a 50% final mark. Students registered for the minor dissertation must obtain approval for their research study from the Faculty Human Research Ethics committee:

- (a) in the case of full-time students, within six months of the date of second year registration;
- (b) in the case of part-time students, within twelve months from the date of second year registration.

*To pass, a candidate must obtain an average of at least 50% for the coursework marks and a pass mark of at least 50% for the minor dissertation.*

### MSc in Nursing by dissertation

[MM002AHS07]

#### Programme Convener:

Assoc Professor S Duma

#### AHS5007W Nursing Dissertation

**NQF credits:** 180 at HEQSF level 9

- (a) The dissertation of a maximum of 50 000 words constitutes the full weighting of the degree. *See general rules for Master's Degree Studies in the relevant front section of this handbook.*
- (b) Students registering for the dissertation are required to have completed a postgraduate-level course in research methodology within the first six months following registration for the MSc or, at the latest, prior to submission of the research proposal.

### **Ethics approval**

FML6 Students registered for the MSc Nursing by dissertation must obtain approval for their research study from the Faculty Human Research Ethics committee:

- (a) in the case of full-time students, within six months of the date of first registration;
- (b) in the case of part-time students, within twelve months from the date of first registration.

### **Due performance requirement**

FML7 In addition to supervision, at least 50% attendance at tutorials (offered at least six times per year) is required. The proposal for the minor dissertation study must be submitted for departmental review within six months of registration for the dissertation.

### **Distinction requirements for MSc in Nursing**

FML8 (a) The degree by dissertation may be awarded with distinction (75% – 100%).  
(b) In the case of a degree by coursework and dissertation, the degree shall be awarded with distinction where a candidate obtains an average mark of 75% for both components; and obtains at least 70% for each component.

## **MSc IN OCCUPATIONAL THERAPY**

**[MM005 and MM018]**

**Programme Convener:** Dr H Buchanan

*[MSc in Occupational Therapy by coursework and dissertation: Degree code: MM018. Plan code: MM018AHS09.]*

*[MSc in Occupational Therapy by dissertation: Degree code: MM005. Plan code: M005AHS09. SAQA registration no. 3437.]*

### **Admission requirements**

FMM1 Except by permission of Senate, a candidate must have a Bachelor of Science in Occupational Therapy or an approved equivalent.

Candidates must have obtained an average of 65% in the final year of their undergraduate programme to be accepted for the MSc in Occupational Therapy by dissertation.

### **Duration of programme**

FMM2 (a) The MSc in Occupational Therapy degree by coursework (part time) is offered over two years, followed by a minor dissertation, and must be completed within five years of commencement of study. Not all courses are offered every year; some are offered every second year.  
(b) The MSc by dissertation must be completed in a minimum period of one year full time and a maximum period of three years full time or five years part time.  
(c) Individual courses for non-degree purposes may be taken, provided a maximum of two such courses are taken.

### Outline for MSc in Occupational Therapy by coursework and dissertation

FMM3 This programme consists of six courses plus a minor dissertation. Three or four courses are offered per year (usually two per semester). The literature and emphasis of the coursework are updated annually to reflect national, regional and international professional trends and developments. A focus on professional epistemology, axiology and ontology is offered with the intention of promoting critical professional reasoning and theorising. The combined content of the respective courses offers the student opportunities to consider the philosophy and practice of occupational therapy in the African context from multiple perspectives. An occupational science emphasis promotes rigorous engagement with the theory and assumptions underpinning core professional constructs and intervention approaches. The purpose of the programme is to develop critical thinkers at the forefront of the profession who are able to offer leadership in Africa towards contextually relevant practice and research.

### Curriculum outline

#### [MM018AHS09]

##### Programme Convener:

Dr H Buchanan (Department of Health and Rehabilitation Sciences)

FMM4 The curriculum outline is as follows:

##### All students shall register for the following core courses:

Number	Course	NQF Credits	HEQSF Level
AHS5014F	Research Methods .....	15	9
AHS5015F	Human Occupation: Theory and Critique .....	15	9
AHS5016F	Human Occupation: Identities and Practices.....	15	9
AHS5018S	Research Methods II.....	15	9
AHS5011W	Occupational Therapy Minor Dissertation .....	90	9

##### And shall choose another two courses based on their area of interest from the courses below:

Number	Course	NQF Credits	HEQSF Level
AHS5044S	Occupational Therapy in Primary Healthcare .....	15	8
AHS5045S	Occupation-based Community Development Practice.....	15	9
AHS4089F	Introduction to Disability as Diversity .....	30	8
<b>Total NQF credits:.....</b>			<b>180</b>

[See note on page 4 regarding HEQSF and NQF credits.]

### DP requirement for MSc by coursework and dissertation

FMM5 Attendance of teaching commitments for all courses taken per semester. In exceptional circumstances, students will be permitted to miss a maximum of 10% of the lectures for a course with prior arrangement. Lectures are offered on a block release basis. Contact hours range between 36 and 40 hours per course.

### Assessment of MSc by coursework and dissertation

FMM6 (a) Each course convener will determine the appropriate form of assessment in that course. Such assessments could consist of some combination of assignments a semester project poster presentations oral assessments and a final examination. The examination carries 50% of the assessment weight. A pass mark of 50% is required for each course with a 40% subminimum for each of the assessments that contribute to the course

marks.

- (b) No supplementary examinations are offered. A deferred examination may be granted where applicable e.g. on medical grounds.
- (c) Candidates may be allowed to repeat a course they have failed at the convener's discretion. No course may be repeated more than once.
- (d) A candidate failing a core course twice or who fails any two courses will be asked to withdraw from the programme.
- (e) The minor dissertation will be marked by two examiners both external to the University. A pass mark of 50% is required.

## **MSc in Occupational Therapy by dissertation**

**[M005AHS09]**

### **Programme Convener:**

Dr H Buchanan (Department of Health and Rehabilitation Sciences)

### **AHS5027W Occupational Therapy Dissertation**

**FMN1 NQF credits:** 180 at HEQSF level 9

- (a) The dissertation of a maximum of 50 000 words (excluding references and appendices) comprises the full weight of the degree. *See general rules for Master's degree studies in the relevant front section of this handbook.*
- (b) The student may only proceed with the project upon approval of the research proposal by the Departmental research and postgraduate committees, and the Faculty of Health Sciences Research Ethics Committee.

### **Recommendation for MSc by dissertation**

**FMN2** It is recommended that students registering for the dissertation complete a postgraduate-level course in research methodology prior to submission of the research proposal or, at the latest, within the first six months following registration for the MSc.

## **MASTER OF NURSING IN CHILD NURSING [MM035]**

**Programme Convener: TBA**

*[Master of Nursing in Child Nursing; Degree code: MM034. Plan code: MM034AHS03.]*  
*[The qualification is HEQSF-aligned but the Qualification/Programme ID (SAQA ID) is pending.]*

### **Admission requirements**

**FMO1.1** Master of Nursing in Child Nursing. To be eligible for consideration, a candidate shall

- (a) have a four-year degree in Nursing;
- (b) have a qualification recognised by Senate as equivalent to above;
- (c) have an appropriate postgraduate diploma at HEQSF level 8 Nursing;
- (d) be registered with the South African Nursing Council (SANC) as a general and specialist nurse; and
- (e) have at least two years' clinical nursing experience in child nursing post-SA Nursing Council registration;
- (f) if from outside South Africa, submit proof of registration as a nurse within their home countries. Limited registration with the SANC is required for any programme which has a clinical learning component;

- (g) have an approved level of basic computer literacy and evidence of English literacy.

*Note: The University's diversity in admissions policy is applied to South Africans in respect to designated groups. South Africans have an advantage, with a proportion of SADC applicants, thereafter applicants from Africa, non-SADC and other international applicants.*

FMO1.2 Alternative access through recognition of prior learning. The University allows 10% of applicants to be admitted via this route: a registered nurse or midwife who does not meet the requirements in FMN1 may be considered for admission through recognition of prior learning. Such candidates shall

- (a) have a four-year diploma in Nursing and Midwifery;
- (b) have at least a postgraduate diploma at HEQSF level 8;
- (c) submit for evaluation a full portfolio of prior learning, a curriculum vitae and supporting letters of reference; and may, in addition, be required to
- (d) attend an interview with the programme convener;
- (e) have an approved level of basic computer literacy and evidence of English literacy; and
- (f) successfully have completed a prerequisite learning course or courses before being allowed to register.

### Duration of programme

FMO2 The Master of Nursing in Child Nursing programme must be completed within a minimum of two years full-time or a maximum of four years.

### Structure of Master of Nursing in Child Nursing degree

FMO3 This is a Professional Master's programme structured to prepare specialist clinician nurses in paediatric disciplines. It includes a significant attachment to a clinical subspecialist team and significant clinical responsibilities in clinical services. The programme includes coursework (4 courses with a total of 135 credit weighting) and research-related independent study (45 credits). Taught courses are designed to enable students to explore and develop advanced specialist nursing practice in local contexts and will be aligned to additional interdisciplinary clinical teaching and learning. Advanced specialist nursing practice requires a complex and integrated knowledge base; an understanding of discipline-specific theory, clinical research and methods; and the ability to deal with complex issues in the real world context of a re-engineered Health Service in South Africa. This level of practice also requires the ability to retrieve, interpret and manage complex and disparate data, and link this intentionally to clinical practice settings to ensure continuity of care, anticipate risk and improve health outcomes. The programme design is geared to these and the development of skills, competencies, critical thinking, moral decision making and clinical leadership to this level. The programme is constructed as follows:

### Curriculum

FMO4 The curriculum outline is as follows:

#### Year 1 courses:

Number	Course	NQF Credits	HEQSF Level
AHS5050W	Clinical Research.....	30	9
AHS5047W	Clinical Leadership.....	30	9
AHS5049W	Advanced Child Nursing Practice A .....	35	9

**Year 2 courses:**

Number	Course	NQF Credits	HEQSF Level
AHS5048W	Advanced Child Nursing Practice B.....	40	9
AHS5046W	Research-related Independent Study .....	45	9
<b>Total NQF credits:.....</b>			<b>180</b>

*[See note on page 11 regarding HEQSF and NQF credits.]*

**Assessment**

FMO5 Coursework: Formative assessment for all courses. Portfolio of evidence – intentionally designed to capture this learning. Summative assessment for: Advanced Child Nursing Practice B – Practical examination at end of year 2. Summative assessment for independent learning/research component – literature search and of current evidence: to develop a locally usable best practice guideline.

**DP requirement**

FMO6 Attendance of at least two thirds of contact time for lectures and tutorials of each course as well as formative assignments as specified in each course.

**Distinction**

FMO7 The degree shall be awarded with distinction where a candidate obtains an overall average mark of 75% with at least 70% for each course.

**MASTER OF PAEDIATRIC NEUROSURGERY**

**[MM036CHM27]**

**Convener:**

Dr L Padayachy (Division of Neurosurgery, Department of Surgery)

**Admission requirements**

FMP1 To be eligible for consideration a candidate must have

- a specialist qualification in neurosurgery registered with the HPCSA; and
- demonstrated a particular interest in and commitment to paediatric neurosurgery, either through attendance of relevant courses and workshops or appropriate journal publications.

**DP requirements**

FMP2 Completion of each course module with a minimum pass mark of 50%. Completion of appropriate clinical and theatre case logbook. Submission of the research component may be made once the clinical coursework has been successfully completed.

**Assessment**

FMP3 Ongoing clinical assessment of performance through regular and interactive supervision sessions. Written and oral examinations will be undertaken during each course.

**Duration of training**

FMP4 All candidates shall be registered for a minimum of two years.

**Curriculum outline****FMP5 The curriculum outline is as follows:**

Number	Course	NQF Credits	HEQSF Level
CHM6036W	Basic Anatomy & Physiology in Paediatric Neurosurgery.....	50	9
CHM6037W	Management of Clinical Conditions in Paediatric Neurosurgery ..	45	9

Number	Course	NQF Credits	HEQSF Level
<b>CHM6038W</b>	Surgical & Critical Care Management in Paediatric Neurosurgery .....	40	9
<b>CHM6039W</b>	Final Integrated Clinical Examination.....	0	9
<b>CHM6040W</b>	Research report.....	45	9
<b>Total NQF credits.....</b>		<b>180</b>	

[See note on page 11 regarding HEQSF and NQF credits.]

## **MSc IN PHYSIOTHERAPY**

**[MM004AHS08]**

**Convenor:** Prof J Jelsma (Department of Health and Rehabilitation Sciences)

*[MSc in Physiotherapy by dissertation: Degree code: MM004. Plan code: MM004AHS08. Qualification/Programme ID (SAQA ID) is pending.]*

### **Admission requirements**

FMQ1 A candidate shall not be admitted to the programme unless he/she

- (a) holds a Bachelor of Science degree in Physiotherapy;
- (b) is registered as a physiotherapist or physiotherapy student with the Health Professions Council of South Africa (or provides evidence of appropriate registration with an equivalent registering body outside of South Africa); and
- (c) has submitted a study synopsis of approximately 500 words outlining the proposed research.

### **Duration of programme**

FMQ2 The MSc by dissertation must be completed in a minimum period of one year full-time and a maximum period of three years full-time, or five years part-time.

### **Structure of programme**

*AHS5019W Physiotherapy Dissertation*

FMQ3 **NQF credits:** 180 at HEQSF level 9

- (a) The dissertation of a maximum of 50 000 words constitutes the full weighting of the degree (*see general rules for Master's Degree Studies in the relevant front section of this handbook*).
- (b) Candidates are expected to present the research proposal at a Divisional research meeting in the first year of registration.
- (c) Candidates are required to spend a minimum of one month at UCT for each year of registration to ensure regular contact with the supervisor.
- (d) Candidates are expected to attend and complete an approved course in Research Methods and Biostatistics, either at UCT or elsewhere, and to submit evidence of the successful completion prior to submission of the dissertation for examination.

## DOCTORAL DEGREES

### DOCTOR OF PHILOSOPHY

[Degree code: MD001. For plan codes, please see list of plans at the back of this handbook.]

*This is a degree by full thesis. Rules for this degree are published in Handbook No 3 of the series. PhD degrees are offered in a large range of disciplines including Anaesthesia, Anatomical Pathology, Anatomy, Audiology, Bioinformatics, Biological Anthropology, Biomaterials, Biomedical Engineering, Biomedical Forensic Science, Cardiothoracic Surgery, Cardiovascular Biomechanics, Cell Biology, Chemical Biology, Chemical Pathology, Clinical Pharmacology, Clinical Science and Immunology, Computational Biomechanics, Dermatology, Dietetics, Disability Studies, Emergency Medicine, Exercise Science, Family Medicine, Forensic Medicine, Forensic Pathology, Forensic Toxicology, Genetic Counselling, Haematological Pathology, Haematology, Health Communication, Health Economics, Health Innovation, Health Sciences Education, Healthcare Technology Management, Human Genetics, Maternal and Child Health, Medical Biochemistry, Medical Cell Biology, Medical Microbiology, Medical Physics, Medical Virology, Medicine, Nephrology, Neuropsychiatry, Neuroscience (Neurosurgery), Neuroscience (Physiology), Neuroscience (Psychiatry), Neurosurgery, Nuclear Medicine, Nursing, Nutrition, Obstetrics and Gynaecology, Occupational Therapy, Ophthalmology, Orthopaedic Surgery, Otorhinolaryngology, Paediatrics, Physiology, Physiotherapy, Psychiatry, Public Health, Radiology, Radiotherapy, Speech-Language Pathology, Surgery, and Urology.*

**NQF credits:** 360 at HEQSF level 10

#### Prerequisites or co-requisites

**FDA1** Candidates admitted to a PhD in Exercise Science who have not completed the BMedSc (Hons) in Exercise Science at UCT will be required to complete and pass the coursework component of the honours programme during the first year of registration. Candidates admitted to a PhD in Disability Studies or a PhD in Nursing may be required to attend a research methods or critical research literacy course as a pre- or co-requisite.

### DOCTOR OF MEDICINE

[Qualification code: MD002. Qualification/Programme ID (SAQA ID) is pending.]

*This is a doctoral degree by thesis. The degree of Doctor of Medicine (MD) is offered in a range of disciplines, including Anaesthesia, Cardiology, Cardiothoracic Surgery, Emergency Medicine, Medicine, Neurosurgery, Obstetrics and Gynaecology, Orthopaedic Surgery, Otorhinolaryngology, Paediatrics, Pathology, Physiology, Psychiatry, and Surgery.*

#### Admission requirements

**FDB1** The degree of Doctor of Medicine may be conferred on graduates in medicine of any university, or on the holders of an equivalent qualification recognised by Senate for the purpose, provided that graduates of universities other than the University of Cape Town shall have performed at the University of Cape Town the work which is the subject of the thesis.

#### Required period of registration

**FDB2** Every candidate must be registered for at least two academic years. Retrospective registration will not be allowed.

**Supervision**

FDB3 A candidate shall undertake doctoral research and such advanced study as may be required, under the guidance of a supervisor or supervisors appointed by Senate.

**Structure of programme**

FDB4.1 This is a degree by thesis.

**NQF credits:** 360 at HEQSF level 10

The thesis may not be more than 80 000 words in length, unless the Dean (acting after consultation with the supervisor) has approved a request by the candidate to exceed this word limit. Where the Dean allows a longer thesis, he/she may stipulate a maximum number of words for the thesis.

FDB4.2 Every candidate for the degree of Doctor of Medicine must submit:

- (a) evidence of meeting the requirements above; and
- (b) a statement of about 500 words indicating the purpose, design and content included in the second or any subsequent year of the curriculum for the degree (MBChB).

FDB4.3 Candidates are required to submit the thesis online via PeopleSoft. It must be accompanied by the following: an abstract; and IP assessment; a written provision, signed by the candidate, allowing the University to reproduce for the purpose of research either the whole or a portion of the contents in any manner whatsoever (this includes the provision for the University to place the thesis on the Worldwide Web; the onus is therefore on the candidate to deal with any copyright, should any part of the thesis have been published in a journal prior to submission).

FDB4.4 The thesis must show evidence of original investigation at doctoral level and give a full statement of the literature of the subject with accurate references. Any change in the scope or direction of the programme from that outlined under FDB4.2(b) above must immediately be communicated to the Faculty Office.

FDB4.5 The thesis must also be accompanied by an abstract for possible publication in the interests of research.

FDB4.6 The thesis must consist of the original work of the candidate with such acknowledged extracts from the work of others as may be pertinent. The candidate shall declare the extent to which it represents his/her own work, both in concept and in execution.

FDB4.7 Published work may be incorporated in the thesis, but a collection of published works will not be accepted as a thesis unless it shows coherence of academic style and scientific content. No publication may, without the prior permission of the University, contain a statement that the published material was or is to be submitted in part or in full for this degree.

FDB4.8 No thesis, published memoir or work will be accepted which has been already accepted for the purposes of obtaining a degree.

FDB4.9 The dates for the receipt of the work by the Faculty Office are 15 February for the June graduation, and 15 August for the December graduation.

**Oral examination**

FDB5 Every candidate for the degree of Doctor of Medicine may be required to present himself/herself for a *viva voce* examination in the field of research on which the

candidate's research was based.

## DOCTOR OF SCIENCE IN MEDICINE

*[Degree code: MD004. This degree is not registerable with SAQA since it is not based on a period of study or registration at UCT.]*

*The degree of Doctor of Science in Medicine is the most senior doctorate in the Faculty of Health Sciences and is awarded for substantial, original and scholarly contributions to knowledge in one or more medical field/s. It is awarded rarely and only to persons of exceptional academic merit. It is awarded on the basis of original published work, which must be of international standing, and regarded as seminal. The future of the degree is under review.*

### Admission requirements

FDC1 The degree of Doctor of Science in Medicine may be conferred upon

- (a) graduates of this University in medicine or related fields; or
- (b) graduates in medicine or related fields of other universities, where the school is associated with the University of Cape Town.

### Application (or nomination) for registration as a candidate for the degree

FDC2 Before a person may be registered as a candidate for the degree, he/she must submit

- (a) his/her curriculum vitae;
- (b) one set of copies of the work to be submitted for the degree, and any collateral evidence;
- (c) a detailed synopsis of the contents of the work, including a statement on the nature and value of the contribution;
- (d) a statement affirming that the work is the original work of the applicant, or indicating the extent to which joint work is the original work of the applicant; and
- (e) a statement that the candidate has not submitted this work for an equivalent degree at this or any other university.

### Curriculum

FDC3 The examination shall consist primarily of an assessment of the published work submitted by the candidate, but a candidate shall, if required by Senate, present himself/herself for written or oral examination on the subject of the work presented, and on any work undertaken under supervision. NQF credits      HEQSF level

360      10

*[See note on page 11 regarding HEQSF levels and NQF credits.]*

## OTHER COURSES OFFERED

### HUB2019F INTEGRATED ANATOMICAL AND PHYSIOLOGICAL SCIENCES

#### PART A

*Entrance is limited to 80 students.*

24 NQF credits at HEQSF level 6; 60 lectures, 10 practicals.

**Convenor:** Dr E L van der Merwe

**Course entry requirements:** BIO1000F, BIO1004S and CEM1000W (or equivalent courses).

**Co-requisites:** An average grade of 60% or more for these two courses is recommended.

#### Course outline:

The course introduces the concept of integrating human physiology, anatomy, cell biology and histology. It includes the study of cells and tissues, the basic anatomy and histology of the musculoskeletal, endocrine and digestive systems, and an introduction to embryology and osteology. Physiological concepts include fluid balance, cell signalling, hormone regulation, digestion, absorption and metabolism. The course consists of lectures, practical sessions and tutorials. In the practicals, students work in small groups using computers and specialised equipment to study the physiology and histology of the abovementioned organ systems. At the end of the course, students will be able to describe structure-function relationships of body systems covered in the course; apply concepts and principles taught in lectures and practical sessions to solve theoretical or real-life problems posed in tutorials, tests and examinations; follow and implement instructions in computer-simulated physiology experiments and interpret results; identify micro-anatomical organisation of organs under a microscope or in monographs; identify and name structures in anatomical specimens; and design simple experiments to determine physiologic parameters such as blood type, fluid compartment volumes, enzyme activities etc.

**Lecture times:** Lectures: 8h00- 8h45 Monday to Friday; Practicals: 14h00-17h00 Mondays or Tuesdays

**DP requirements:** Attendance at all practical sessions, 40% average in class tests and an average of 50% for all assignments.

**Assessment:** The breakdown of course marks is as follows: Class tests 30%, practical write-up 15%, assignments or tutorials 5%. Final examinations (50%) as follows: Theory examination 30%, practical examination 20%. A subminimum of 40% is required for the theory and practical examination to pass this course. Supplementary examinations, in the form of written, practical or oral assessment, may be offered to students whose overall score is 45-49%. An oral examination may be required in the case of selected students.

### PTY6001W BASIC AND APPLIED RESEARCH IMMUNOLOGY

15 NQF credits at HEQSF level 9

**Convenor:** Dr M Marakalala; Dr F Kirstein

**Course entry requirements:** MBChB or Hons in immunology or a related field.

**Objective:** To impart key immunology knowledge and skills to students and post-doctoral fellows embarking upon immunology research projects

#### Course outline:

This course aims to give students a basic understanding of research immunology so that they will be able to read and critically assess research reports in immunology. It is primarily intended for students performing or preparing to perform immunology research. Topics include the innate immune response; B and T cell receptor rearrangement and structure; recognition by B, T and natural killer cells; T cell and antibody-mediated immunity; mucosal immunity; allergy and hypersensitivity; immunological assays; genetically modified mice as research tools; cytokine function; immunity to HIV and tuberculosis; and vaccines. Scientific reports will be assigned as a part of the course material.

**Lecture times:** Approximately 24 lectures of 90 minutes each, plus oral presentations by students.

**DP requirements:** Attendance at lectures and attendance at and participation in project presentations and journal clubs. Sit for midterm and final examination.

## **180 OTHER COURSES OFFERED**

**Assessment:** Short tests at the end of each topic that test the student's ability to interpret a published scientific report; oral presentation of a critical assessment of an approved scientific report (journal club); oral presentation and defense of a research project; participation in lecturer-led journal clubs; midterm examination and the final examination. The final examination constitutes 40% of the final mark.

# DEPARTMENTS IN THE FACULTY

## LIST OF DEPARTMENTS, DIVISIONS and UNITS

Department	Division/Unit
Anaesthesia & Perioperative Medicine	N/A
Health & Rehabilitation Sciences	Communication Sciences & Disorders Disability Studies Nursing & Midwifery Occupational Therapy Physiotherapy
Health Sciences Education	Clinical Skills Unit Intervention Programme Unit Education Development Unit
Human Biology	Biomedical Engineering Cell Biology Clinical Anatomy & Biological Anthropology Exercise Science & Sports Medicine Human Nutrition Physiological Sciences
Integrative Biomedical Sciences	Medical Biochemistry & Structural Biology Chemical & Systems Biology Computational Biology
Medicine	Allergology & Clinical Immunology Cardiology Clinical Haematology Clinical Pharmacology Critical Care Medicine Dermatology Endocrinology & Diabetic Medicine General Internal Medicine Geriatric Medicine Hepatology Infectious Disease & HIV Medicine Lipidology Medical Gastroenterology Nephrology & Hypertension Neurology Occupational Medicine Pulmonology Rheumatology
Obstetrics & Gynaecology	General Obstetrics & Gynaecology Gynaecological Oncology Maternal-Fetal Medicine Reproductive Medicine Urologygynaecology
Paediatrics & Child Health	Allergology (Paediatric) Associated Paediatric Disciplines Child and Adolescent Psychiatry Child Nursing Practice Cardiology (Paediatric) Child Health Unit

	Critical Care (Paediatric) Dermatology (Paediatric) Developmental Paediatrics Endocrinology (Paediatric) Gastroenterology (Paediatric) General Paediatrics Haematology/Oncology (Paediatric) Infectious Diseases (Paediatric) Medicine (Paediatric) Neonatology Nephrology (Paediatric) Neurology (Paediatric) Neuropsychology (Paediatric) Pulmonology (Paediatric) Rheumatology (Paediatric)
Pathology	Anatomical Pathology Chemical Pathology Forensic Medicine Haematology Human Genetics Immunology Medical Microbiology Medical Virology Paediatric Pathology
Psychiatry & Mental Health	Addiction Psychiatry/Psychology Child & Adolescent Psychiatry Consultation/Liaison Psychiatry Forensic Psychiatry General Psychiatry Intellectual Disability Psychiatry Neuropsychiatry Psychopharmacology Psychiatric Intensive Care Psychotherapy Public Mental Health
Public Health & Family Medicine	Environmental Health Epidemiology & Biostatistics Family Medicine Health Economics Health Policy & Systems Occupational Medicine Public Health Medicine Social & Behavioural Sciences
Radiation Medicine	Medical Physics Nuclear Medicine Paediatric Radiology Radiation Oncology Radiology
Surgery	Cardiothoracic Surgery Emergency Medicine General Surgery Neurosurgery Ophthalmology Orthopaedic Surgery

Otorhinolaryngology  
Paediatric Surgery  
Plastic, Reconstructive & Maxillo-facial Surgery  
Surgical Gastroenterology  
Urology

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## ANAESTHESIA AND PERIOPERATIVE MEDICINE

D23, New Groote Schuur Hospital

**Professor and Head:**

JLC Swanevelder, MBChB DA SA FCA SA MMed SA FRCA

**Professor:**

RA Dyer, BSc (Hons) *Stell* MBChB *Cape Town* PhD *Cape Town* FCA SA

BM Biccard, MBChB *Cape Town* FFARCSI FCA SA MMedSc *Kwazulu-Natal* PhD *Kwazulu-Natal*

**Associate Professor:**

IA Joubert, MBBCh *Witwatersrand* DA SA FCA SA

**Senior Lecturers Full-time:**

K Bergh, MBChB *Pret* DA FCA SA

K Bester, MBChB *Stell* DA FCA SA

KH Bhagwan, MBChB *Cape Town* DA SA FCA SA

B Brennan, MBChB *Cape Town* DA SA FCA SA

M Casey, MBChB *Pret* Dip PEC SA DA SA FCA SA

E Cloete, MBChB *Pret* DA FCA SA

A De Vaal, MBChB *UFS* DA SA FCA SA

R Duys, MBChB *Cape Town* MRCP UK MMed Anes

A Ernst, MBChB *Pret* DA SA FCA SA

RM Gray, MBChB *Cape Town* DA FCA SA

N Hadebe, MBBCh *Witwatersrand* FCA SA

N Hauser, BSc Physiotherapy *Cape Town* MBChB *Cape Town* DA SA FCA SA MMed Anes

RA Haylett, MBChB *Cape Town* DA SA FCA SA

SAM Heijke, MBChB *Cape Town* FFA SA

M R Hofmeyr, MBChB *Stell* Dip Pec DA SA FCA SA

K Kemp, MBChB *Stell* DA FCA SA

N Khan, MBChB *Cape Town* DA FCA SA

RL Llewellyn, MBChB *Cape Town* FFA SA

A Marais, MBChB *Stell* DA SA MMed Anes FCA SA

H Meyer, MBChB *London* FRCA UK

MGA Miller, MBChB *Stell* FCA SA Cert Critical Care SA

LF Montoya-Pelaez, MBChB *Zimbabwe* FCA SA

TC Ngaka, MBChB *Cape Town* DA SA FCA SA MMed Anes

MB Nejthardt, BSc Hons Physiology *Witwatersrand* MBBCh *Witwatersrand* DA SA FCA SA

RW Nieuwveld, BSc MBBCh *Witwatersrand* FFA SA

G Picken, MBChB *Cape Town* DA SA FCA SA

JL Piercy, BSc Hons *London* MBBS *London* FCA SA Cert Crit Care SA

O Porrill, MBBCh *Witwatersrand* DA SA FCA SA

MK Rademeyer, MBChB *Cape Town* DA SA FCA SA

AR Reed, MBChB *Cape Town* DA SA FRCA UK

F Roodt, MBChB *Cape Town* DA SA FCA SA

F Schneider, MBChB *Cape Town* FRCA UK FANZCA AUS

C Simons, MBChB *Cape Town* DA SA FCA SA

HKS Steinhause, MBChB *Cape Town* DA SA FCA SA

K Timmerman, MBChB *Cape Town* DA SA FCA SA

D van Dyk, MBChB *Cape Town* DA SA FCA SA

J van Nugteren, MBChB *UFS* DA SA FCA SA

D Visu, MBChB *Romania* Dip Obst SA DA SA FCA SA

A Vorster, MBChB *Stell* DA SA FCA SA

GS Wilson, MBChB *Cape Town FCA SA*

**Lecturer Part-time:**

DJB Batty, MBChB *Cape Town FCA SA*

## **COURSES OFFERED**

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### **AAE4003F THE MULTIDIMENSIONAL NATURE OF PAIN**

25 NQF credits at HEQSF level 8

**Convener:** A/Prof R Parker

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course focuses on introducing students to the basic concepts of pain science and the principles used in approaching the clinical problem of pain. Students are introduced to the multidimensional nature of pain by using the biopsychosocial approach as a theoretical framework to understanding pain

**DP requirements:** None

**Assessment:** Two assignments, equally weighted, will make up the coursework mark. The final assessment will consist of a reflective case based essay.

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### **AAE4004F NEUROANATOMY AND NEUROPHYSIOLOGY OF NOCICEPTION AND PAIN**

15 NQF credits at HEQSF level 8

**Convener:** A/Prof R Parker

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

In this course students develop knowledge of the neuroanatomy and neurophysiology of nociception and pain to facilitate critical engagement with advances in the science.

**DP requirements:** None

**Assessment:** Coursework will consist of an essay discussing the multiple variables involved in the processing of pain in the peripheral and central nervous system (40%) and a series of 5, weekly online MCQ/SAQ tests each (20%). The examination percentage is made up of a three-hour MCQ/SAQ paper (40%).

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### **AAE4005F ASSESSMENT AND MEASUREMENT OF PAIN AND ITS EFFECTS**

15 NQF credits at HEQSF level 8

**Convener:** A/Prof R Parker

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

In this course students will develop the knowledge, understanding and skills to use assessment measures appropriate for the person with pain. Students will explore the evidence on the reliability, validity and clinical utility of measures in practice and design appropriate assessments using a patient-centred biopsychosocial approach. Students will develop skills in the use of assessment tools and the development of diagnostic formulations.

**DP requirements:** None

**Assessment:** Two assignments, equally weighted, will make up the coursework mark. The final assessment mark is made up of a final 3000 word essay (50%).

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**AAE4006S** COMPREHENSIVE PAIN MANAGEMENT

30 NQF credits at HEQSF level 8

**Convener:** A/Prof R Parker

**Course outline:**

In this course students develop the knowledge and understanding of evidence-based pharmacological and non-pharmacological treatments used in managing pain within a comprehensive primary health care team using clinical examples. The course includes training in communication skills, treatment planning based on a diagnostic formulation and evidence based treatment selection.

**DP requirements:** None

**Assessment:** Three assignments, weighted (10%, 20% and 20%), will make up the coursework mark. The final assessment mark is made up of a structured practical examination of communication skills (20%) and a final 3000 word essay (30%).

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**AAE4007S** PAIN MANAGEMENT IN COMPLEX CONDITIONS

15 NQF credits at HEQSF level 8

**Convener:** A/Prof R Parker

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

In this course students develop the knowledge and skills to work in interdisciplinary teams to manage patients with complex pain conditions. Students work in teams, creating communities of practice and developing assessment and treatment plans based on comprehensive diagnostic formulations.

**DP requirements:** None

**Assessment:** The coursework will be assessed through the oral examination of a portfolio of cases (50%). The final assessment mark is made up of a reflective 3000 word essay describing the clinical assessment and management of a patient in context (50%).

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**AAE7002W** ANAESTHESIA MINOR DISSERTATION (60 CRED)

60 NQF credits at HEQSF level 9

**Convener:** Prof J Swanevelder

**Course entry requirements:** AAE7004W

**Course outline:**

A minor dissertation is prepared under supervision. The dissertation must be approximately 7 000 words in length and must be on a topic in anaesthesia. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**AAE7003W** MMED IN ANAESTHESIA PART 1

60 NQF credits at HEQSF level 9

**Convener:** Prof J Swanevelder

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist anaesthetists. Candidates follow the curriculum of the College of Anaesthetists of South Africa. They undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final

examination of the College and receive credit towards AAE7003W. The aim of this course is to provide foundational knowledge in a range of basic science disciplines to enable candidates to apply such foundational knowledge to the clinical conditions and management strategies in their area of speciality. Course content includes physics, the principles of clinical measurements, pharmacology, physiology, and chemical pathology as these relate to anaesthetic practice. For the detailed curriculum, see the regulations of the College of Anaesthetists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** None

**Assessment:** Candidates write the College of Anaesthetists examination, comprising 2 three-hour papers in each of Physics, and Physiology and Pharmacology. For more information see [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

#### **AAE7004W MMED IN ANAESTHESIA PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Prof J Swanevelder

**Course entry requirements:** AAE7003W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist anaesthetists. Candidates follow the curriculum of the College of Anaesthetists of South Africa and undergo training in a training unit accredited by the Health Professions Council of South Africa. On successful completion of training, they write the final examination of the College and receive credit towards AAE7004W. The aim of this course is to enable candidates to apply their foundational sciences knowledge to the management of clinical conditions in the practice of anaesthesia. Content includes the principles and practice of anaesthesia and analgesia, including pre- and post-operative treatment, clinical medicine and surgery related to the practice of anaesthesia, critical care medicine, the application of anatomy and pathology to the speciality, the history of its development, theories of narcosis, and molecular mechanisms of anaesthesia. For the detailed updated curriculum, see the regulations of the College of Anaesthetists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** AAE7003W, successful completion of a logbook of clinical procedures, at least three years following full registration by HPCSA, and evidence of an assignment of at least three months to an intensive care unit on a full-time basis.

**Assessment:** Candidates write the Part 2 examination of the College of Anaesthetists. The examination comprises three written papers of three hours each, an oral, and a clinical examination. For full details see [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

#### **AAE7005W MPHIL IN CRITICAL CARE PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof I Joubert

**Course entry requirements:** Registration with the Health Professions Council of South Africa as a specialist in anaesthesia, emergency medicine, internal medicine, obstetrics and gynaecology, orthopaedics, surgery or neurosurgery.

**Objective:** To produce practitioners with expertise capable of independent practice in the subspecialty of critical care.

**Course outline:**

This training programme forms part of the credentialling process of appropriate medical specialists as subspecialists in critical care. Students follow the relevant curriculum of the relevant Colleges of Medicine of South Africa. The aim of training is to provide theoretical knowledge, technical and procedural skills; teach the application of knowledge and skills in daily practice; and provide other means to enable the critical care specialist to diagnose and manage a range of critical medical conditions. This includes respiratory problems, pulmonary and cardiovascular issues, neurological psychiatric disorders, metabolic crises, gastrointestinal crises, haematological disorders, infections, renal disorders, trauma and life support, and theoretical knowledge underpinning clinical applications – which include relevant knowledge in physiology, pathophysiology, and pathology.

The detailed curriculum is available in the relevant regulations of the Colleges of Medicine of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must be registered as a medical specialist as described earlier, must have completed at least eighteen months as a subspecialty trainee in an accredited ICU in a teaching hospital, and must submit positive written reports from the heads of the institutions in which he/she trained.

**Assessment:** Candidates write the relevant clinical examination of the Colleges of Medicine. The examination comprises two written papers of three hours each, and an oral examination.

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**AAE7006W CRITICAL CARE MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof I Joubert

**Course entry requirements:** Registration with the Health Professions Council of South Africa as a specialist in anaesthesia, emergency medicine, internal medicine, obstetrics and gynaecology, orthopaedics, surgery or neurosurgery.

**Objective:** To produce practitioners with expertise capable of independent practice in the subspecialty of critical care.

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant Colleges of Medicine examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in critical care. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyze the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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## HEALTH AND REHABILITATION SCIENCES

*F45, F56 Old Main Building, Groote Schuur Hospital*

**Associate Professor and Head of Department:**  
SA Singh, B(SPHT) UDW MA PhD(SLP) Northwestern

### Communication Sciences and Disorders

*F45, F56 Old Main Building, Groote Schuur Hospital*

**Senior Lecturer and Head:**  
V Norman, BSc(Log) *Cape Town* M(CommPath) *Pret*

**Associate Professor:**  
L Ramma, BA(CommSci&Dis) *Fresno State* MA(Audio) *San Diego* AuD *Florida* PGDip (Health Economics) *Cape Town* MPH *Witwatersrand*

**Senior Lecturers:**  
M Harty, B(CommPath) MA(AAC) PhD *Pret*  
M Pascoe, BSc(Log) MSc(SLP) *Cape Town*, PhD *Sheffield*  
L Petersen, B(Spraak&Audio) *Stell* MSc(Audio) *Cape Town*  
C Rogers, MSc(Audio) *Cape Town*

**Lecturers Full-time:**  
T Cloete, BSc MSc(Audio) *Cape Town*  
O Mahura, BSc(SLP) MSc(SLP) *Cape Town*  
C Rutherford, B(SpLang Th & Audio) *Stell* MHSc and AuD *Florida*

**Senior Clinical Educators Part-time**  
N Keeton, BSc(Audio) MSc(Audio) *Cape Town*  
F Walters, B(SpLang&HearTh) *Stell*

**Clinical Educators Part-time:**  
F Camroodien-Surve, BSc(SLP) *Cape Town* M(ECI) *Pret*  
C Edwardes, BSc(SLP) *Cape Town*  
G Gonsalves, BSc(Audio) *Cape Town*  
T Kuhn, BSc(Log) *Cape Town*  
N Luwaca, BSc(Audio) *Cape Town*  
J le Roux, BSc(Log) *Cape Town* M(ECI) *Pret*

**Intervention Programme Lecturer:**  
A Hansen, BSc(Audio) *Cape Town*

### Disability Studies

*F45, F56 Old Main Building, Groote Schuur Hospital*

**Senior Lecturer and Head:**  
J McKenzie, BSc(Log) BA *Cape Town* MA *York* PGCE *UNISA* PhD *Rhodes*

**Professor**  
T Lorenzo, BSc(OccTher) HDEdAd *Witwatersrand* MSc(CommDisStud) *London* PhD *Cape Town*

## 190 DEPARTMENTS IN THE FACULTY

### **Lecturers:**

A Hansen, BSc(Audio) *Cape Town*

S Gabriels, BSc(Phys) *UWC*

I Nwanze, B(Business Systems) BHons(Computing) *Monash* MPhil (Disability Studies) *Cape Town*

### **Senior Lecturer:**

B Watermeyer, MA(Clin Psych) *Cape Town* DPhil *Stell*

### **Guest Lecturers:**

C Howell BA(Social Work) BA Hons (Social Work) MEd *Witwatersrand*, PhD *Cape Town*

N Mayat, BA(Social Work) *UDW* BA Hons *UNISA* MPhil (Disability Studies) *Cape Town*

R Popplestone, MA *Cape Town*

### **Honorary Professor:**

R McConkey, BA Hons(Psychology) *Queen's University Belfast* PhD *Manchester*

## **Nursing and Midwifery**

*F45, F56 Old Main Building, Groote Schuur Hospital*

### **Senior Lecturer and Head:**

NA Fouché, PhD, MSc(Nursing) AUDNEd *Cape Town*, DipIntNurs Science, RM *Carinus Nursing College*, RN *Andrew Fleming Hospital*

### **Associate Professors:**

S E Clow, PhD *Cape Town* MSc(Nurs) BSocSc(Nurs) *UND* AUDNEd *Cape Town* RN RM CHN

S E Duma, PhD *Cape Town* MCur *UKZN* BCur(NEdNAdmin) *UNISA* RN RM CHN RPsychN

### **Honorary Professors:**

S Ersser, PhD *Kings College University of London* BSc (Hons) *London South Bank University* RGN  
*Guys Hospital London* CertHE *Oxford Brookes University*

N Abrahams, PhD MPhil Public Health *UWC* CHN *PenTech* RN RM

### **Lecturer Full-time:**

Y van der Nest, Dip Nursing Ed & Admin *UJ*, Dip Nephrology Nursing *NMMU*, RN RM CHN  
*Coronation Nursing College*

## **Occupational Therapy**

*F45, F56 Old Main Building, Groote Schuur Hospital*

### **Associate Professor and Head:**

R Galvaan, BSc(OccTher) MSc(OccTher) PhD *Cape Town*

### **Associate Professors:**

E M Duncan, Dip(OccTher) *Pret* BArb *UFS* BA(Hons) *UDW* MSc(OccTher) *Cape Town* PhD *Stell*

E Ramugondo, BSc(OccTher) MSc(OccTher) PhD *Cape Town*

### **Senior Lecturer Full-time:**

H A Buchanan, BSc(OccTher) MSc(OccTher) PhD *Cape Town*

### **Lecturers:**

P Gretschel, B(OccTher) M(ECI) *Pret*

M Motimele, BSc(OccTher) MSc(OccTher) *Cape Town*

L Peters, BSc(OccTher) MSc(OccTher) *Cape Town*

M Ramafikeng, BSc(OccTher) MSc(OccTher) *Cape Town*  
 A Sonday, BSc(OccTher) *UWC M(ECI) Pret*

**Clinical Educators Part-time:**

S Barker, BSc(OccTher) *Cape Town*  
 S Damonse, BSc(OccTher) *UWC*  
 A Ebrahim, BSc(OccTher) *Cape Town; MEd CPUT*  
 J Ferguson, BSc(OccTher) *Cape Town*  
 H Flieringa, BArb *Stell MSc(OccTher) Cape Town*  
 F Gamiieldien, BSc(OccTher) MSc (OccTher) *Cape Town DipBusManagement Varsity College*  
 L Lewis, BSc(OccTher) *Cape Town*  
 T Mohamed, BSc(OccTher) *UWC*  
 L Richards, BSc(OccTher) *Cape Town*

**Physiotherapy**

*F45, F56 Old Main Building, Groote Schuur Hospital*

**Senior Lecturer and Head:**

S Maart, BSc(Phys) MPH *UWC PhD Cape Town*

**Professors:**

S L Amosun, BSc(Phys) PhD *Ibadan SRP UK PGDip(Health Professional Education) Cape Town*  
 J Jelsma, BSc(Phys) *Stell DipTertEd UNISA DipInternResEthics Cape Town MPhil Zimbabwe PhD Leuven*

**Associate Professor:**

R Parker, BSc(Phys) BSc(Med)(Hons) PhD *Cape Town MSc(Pain) Queen Margaret University Edinburgh*

**Senior Lecturers:**

T Burgess, BSc(Phys) BSc(Med)(Hons) PhD *Cape Town MHSc(Bioethics) University of Toronto*  
 G Ferguson, BSc(Phys) MSc *Cape Town PhD Katholieke Universiteit Leuven*  
 N Naidoo, BSc(Phys) *UDW MMS ME Natal*

**Lecturers:**

C Hendricks, BSc(Phys) MSc *UWC*  
 S Manie, BSc(Phys) *UWC MSc Stell*

**Part-time Lecturers:**

K Buchholtz, BSc(Phys) MPhil *Cape Town*  
 L Corten, BSc (Rehab Science and Phys) MSc *Katholieke Universiteit Leuven*

**Assistant Director, Department of Physiotherapy, Groote Schuur Hospital:**

C Davids, BSc(Phys) *UWC*

**Senior Clinical Educators Part-time:**

N Edries, BSc(Phys) MSc *Cape Town*  
 L Rustin, BSc(Phys) MSc *Cape Town*  
 H Talberg, BSc(Phys) MPhil(Ed) *Cape Town*

**Clinical Educators Part-time:**

I Croy, BSc(Phys) *Cape Town*  
 I Du Plessis, BSc(Phys) MSc *Pret*  
 F Harris, BSc(Phys) *UWC*

M Naidoo, BSc(Phys) MSc *UWC*  
D Scott, BSc(Physio) *Cape Town*  
F Solomons, BSc(Phys) *UWC*

**Honorary Professor:**

B Smits-Engelsman, BA *Polytechnic Nijmegen* MA *Utrecht* MED *Maastricht* MSc MA *Avansplus Breda* PhD *Nijmegen*

**Honorary Lecturer:**

P Versveld, BSc(Phys) MSc *Cape Town*

**Intervention Programme Lecturer:**

S Gabriels, BSc(Phys) *UWC*

**COURSES OFFERED**

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**AHS4049H FUNDAMENTALS OF NURSING MANAGEMENT**

20 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof S Duma

**Course outline:**

This course focuses on knowledge, understanding, and application of principles and processes of management in day-to-day public or private health and nursing service management units. Knowledge and understanding of general management and/or organisational theories and management approaches relevant to health and the nursing service are acquired and applied to day-to-day management at all levels. A case-study based approach is used to facilitate teaching and learning in order to enhance integration of theory and practice, and the application thereof. Tutorials are offered to assist students to compile the health service legal framework file required by nurse managers.

**DP requirements:** (a) Attendance of two-thirds of contact time; (b) completion of all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Coursework assessment contributes 50% towards the final mark. The final examination contributes 50% towards the final mark.

**AHS4060S FINANCIAL MANAGEMENT IN THE HEALTH SERVICES**

15 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof S Duma

**Course entry requirements:** None

**Course outline:**

This course aims to empower the student at clinical or managerial level with essential financial management skills in order to meet the challenges of the ever-shrinking health service budget. It focuses on budgeting, budget plans, and cost containment as applied to public or private health and nursing service. Different types of budget and budget proposals are analysed. The student is assisted in planning, implementing, and evaluating cost-effective financial resource management.

**DP requirements:** (a) Attendance of two-thirds of contact time; (b) completion of all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Coursework assessment contributes 40% towards the final mark. The final examination contributes 60% towards the final mark.

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**AHS4070H** HEALTHCARE & NURSING MANAGEMENT

20 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof S Duma**Course entry requirements:** None**Course outline:**

This case-study based course focuses on the acquisition and application of management skills and competencies that are specific to health and nursing service management at all levels within the public and private health sector.

Management skills and competencies in management, problem-solving, conflict management, performance appraisal, labour relations, quality of life, and commissioning of health service facilities are addressed, and students are assisted in their application at different levels of health and nursing management.

Fieldwork includes a situational analysis project in a healthcare service of the student's choice. Seminar presentation will be based on the intervention in respect of an identified health service management problem.

**DP requirements:** (a) Attendance of two-thirds of contact time; (b) completion of all of the time-on-task activities, assignments, and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Coursework assessment contributes 50% towards the final mark. The final examination contributes 50% towards the final mark.

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**AHS4083F** NURSING MANAGEMENT PORTFOLIO DEVELOPMENT

25 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof S Duma**Course entry requirements:** None**Course outline:**

The student is assisted in developing a professional development portfolio according to identified learning needs. The portfolio captures both management-specific skills as well as transferable core skills. Learning contracts are the driving force in the development of the portfolio. Fieldwork includes individualised workplace assessments in various healthcare and nursing management services.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments, and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment of the professional development portfolio leads to the final submission of the portfolio at the end of the programme. The professional development portfolio is externally moderated and contributes 100% towards the final mark.

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**AHS4084S** PRINCIPLES OF MENTORSHIP

15 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof S Duma and Assoc Prof P Mayers**Course entry requirements:** None**Course outline:**

The aim of this course is to adequately prepare professional nurses and midwives for a role as mentor, so as to ensure that students are competent at the end of their programme of education that prepares them to register for licencing purposes with the South African Nursing Council. The course covers an overview of the mentoring role and process. Principles of teaching and learning in a clinical setting are applied in practice. Opportunities are provided for students to evaluate their own performance in facilitating student learning, supervising practice, and for assessing their level of attainment of the outcomes of the programme. Fieldwork takes place in clinical nursing settings.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** This course has both a theoretical and clinical component. Both components must be passed to pass the course. Coursework assessment of both components contributes 40% towards the final mark. The final assessment of both components contributes 60% towards the final mark.

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#### **AHS4085S EVALUATING, TEACHING AND LEARNING**

15 NQF credits at HEQSF level 8

**Convenor:** Dr U Kyriacos

**Course entry requirements:** AHS4086H

**Course outline:**

This is a practical course that enables students to apply didactic principles, the principles of teaching and learning in general, and adult education in particular, to teaching within a classroom setting. It requires reflective journaling and critique of each lesson after the event. This includes the appropriateness of educational theory applicable to the specific lesson plan.

**Fieldwork:** Teaching practice at various nursing education institutions.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Coursework assessment contributes 50% towards the final mark. The final, summative assessment contributes 50% towards the course mark.

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#### **AHS4089F INTRODUCTION TO DISABILITY AS DIVERSITY**

30 NQF credits at HEQSF level 8

**Convenor:** R Poppleston (Disability Services, Transformation Office)

**Course entry requirements:** None

**Course outline:**

The course presents an overview of the contested models and definitions of disability. The students are introduced to issues of power and privilege, as well as theories on identities, oppression and agency. Othering, marginalization and exclusion related to class, gender, race, religion etc. and their intersections with disability are analysed. Students gain an understanding of the postcolonial context and are able to formulate an African perspective on disability. Students are also able to develop a reflexivity which allows them to examine their own responses to social situations, especially those involving disability. At the end of the course, the student is able to: (1) develop critical analysis of disability from micro to macro contexts; (2) explore disability as an issue of justice, diversity and belonging; (3) analyse emotional responses to disability and how unconscious processes mediate disability-related decision making; and (4) analyse intersections of disability with other positionalities; identify issues of power, privilege and oppression, and agency; explain processes of othering, e.g. marginalisation and exclusion.

**DP requirements:** Attendance of at least 90% of block sessions and completion of all required assignments within the prescribed time period, unless otherwise approved by the Diploma convenor. Participation in seminars and group projects is compulsory and will be monitored. Students are required to participate in at least 80% of online teaching and learning support activities as monitored by Vula site statistics. A year mark of at least 45% is required for examination entrance, unless approved otherwise by the programme convenor. Students who obtain a mark between 47% and 49% may be permitted to write a supplementary examination.

**Assessment:** Coursework assessment and online participation will count for 50% of the mark and an integrated oral and written examination presentation for the other 50%

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**AHS4091F DEVELOPING CRITICAL RESEARCH LITERACY**

30 NQF credits at HEQSF level 8

**Convenor:** Dr B Ige, S Gabriels and Dr J McKenzie**Course entry requirements:** None**Course outline:**

This course introduces students to research paradigms and the principles of emancipatory disability research within a critical perspective. Students build on undergraduate research knowledge and/or draw on prior learning to develop a critical understanding of approaches, methods and procedures involved in generating rigorous research. They conceptualise tools for problem definition and research design, and identify frameworks for implementation including information management, development of research tools, analytical skills development, research project management, and writing skills. At the end of the course, students will be able to analyse and synthesise information from various sources, will understand some basic concepts of research and its methodologies, will be able to demonstrate understanding of the ethical dimension of conducting applied research, identify appropriate research topics, apply existing skills and knowledge to identify and formulate new problems, organise and conduct basic quantitative and qualitative research, and write research reports.

**DP requirements:** Attendance of at least 90% of block sessions and completion of all required assignments within the prescribed time period, unless otherwise approved by the programme convenor. Students are required to participate in at least 80% of online teaching and learning support activities as monitored by Vula site statistics. A year mark of at least 45% is required for examination entrance, unless approved otherwise by the programme convenor. Students who obtain a mark between 47% and 49% may be permitted to write a supplementary exam

**Assessment:** Specific research tasks will be set during the coursework (50% of year mark) culminating in a research report and oral presentation for the final assessment (50%).

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**AHS4101S NURSING CLINICAL DIDACTICS**

15 NQF credits at HEQSF level 8

**Convenor:** Dr U Kyriacos**Course entry requirements:** None**Course outline:**

The aim of this course is for students to upgrade their knowledge base in order to teach the practice of nursing. The biological sciences, social and behavioural sciences and nursing knowledge already mastered in the undergraduate courses are contextualised in problem-based nursing care studies. Students also review and critique the literature pertaining to clinical nursing research in their area of interest.

**DP requirements:** (a) Attendance of two-thirds of contact time; (b) completion of all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

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**AHS4102W CURRICULUM DESIGN IN NURSING EDUCATION**

30 NQF credits at HEQSF level 8

**Convenor:** Dr U Kyriacos**Course entry requirements:** None**Course outline:**

Published research in educational theory, with the emphasis on curriculum design and evaluation and on teaching and learning, underpins this course. The course gives students the opportunity to critique and evaluate a curriculum, and to distinguish between product and process curriculum models. Principles of teaching and learning, and strategies such as problem-based learning are interrogated for coherence in curriculum design. The course provides a theoretical foundation for

the management of classroom teaching found in the course AHS4085S Evaluating Teaching and Learning.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

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#### **AHS4117S CRITICAL PRIORITIES IN DISABILITY & DEVELOPMENT**

(ELECTIVE)

30 NQF credits at HEQSF level 8

**Convenor:** Dr J McKenzie

**Course entry requirements:** None

**Course outline:**

The course provides space for critical interrogation of vulnerability and agency related to disability, focusing on transformation and social justice. Relevant ethical frameworks for disability inclusion such as human rights, Ubuntu, and an ethics of care are introduced. Next, students engage with approaches to development, e.g. sustainable livelihoods and ma includes consideration of the sustainable development goals and climate change. At the end of the course, the student is able to demonstrate an understanding of how theoretical models can inform transformative practices; a critical stance toward these theories informed by their own world view, experience and practice; an awareness of the global context of neoliberalism and development as it impacts on social transformation; an understanding of disability as a critical issue within global sustainable development initiatives; knowledge of national and international development strategies and how disability issues can be integrated within these in a mainstreaming and twin track approach; and an understanding of collaboration and strategic partnerships to ensure disability inclusive development.

**DP requirements:** Attendance of least 90% of block sessions and completion of all required assignments within the prescribed time period, unless otherwise approved by the Diploma convenor. Participation in seminars and group projects is compulsory and will be monitored. Students are required to participate in at least 80% of online teaching and learning support activities as monitored by Vula site statistics. A year mark of at least 45% is required for examination entrance, unless approved otherwise by the programme convenor.

**Assessment:** Course work assessment and online participation will make up a 50% year mark and an integrated oral and written examination presentation will make up the other 50%. Students who obtain a mark between 47% and 49% may be permitted to write a supplementary examination.

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#### **AHS4118S MONITORING DISABILITY IN SOCIETY**

30 NQF credits at HEQSF level 8

**Convenor:** Prof T Lorenzo

**Course entry requirements:** None

**Course outline:**

The focus of this course is on approaches to monitoring disability inclusion at different levels of society including community level, in education and at government policy development and implementation level. Students are introduced to international policies such as the United Nations Convention on the Rights of Persons with Disability, and community-based rehabilitation (CBR) to enable them to examine how these have informed national policies and development initiatives in their countries. The course adopts an action-learning approach to understand monitoring as part of the project cycle. Monitoring skills are fostered through opportunities for students to determine the tangible and intangible elements of capacity of an organization, government department and/or educational institution. Students learn to develop indicators related to projects or policy outcomes. Students have an opportunity to explore principles of collaborative partnerships within the classroom and with disability organisations. The course is designed to develop students' capacity to understand different approaches and tools for monitoring disability inclusion and community

participation to build an evidence base for advocacy. It provides conceptual frameworks that inform monitoring and reporting on disability inclusion initiatives and innovations across sectors that contribute to inclusive social, economic and political development.

**DP requirements:** Attendance of at least 90% of block sessions and completion of all required assignments within the prescribed time period, unless otherwise approved by the Diploma convener. Participation in seminars and group projects is compulsory and will be monitored. Students are required to participate in at least 80% of online teaching and learning support activities as monitored via Vula site statistics. A year mark of at least 45% is required for examination entrance, unless approved otherwise by the programme convener. Students who obtain a mark between 47% and 49% may be permitted to write a supplementary examination.

**Assessment:** Action learning activities (50%) and a final assessment comprising a written report and oral examination (50%).

### **AHS4122W PROFESSIONAL DEVELOPMENT STUDIES**

30 NQF credits at HEQSF level 8

**Convener:** TBA

**Course entry requirements:** None

**Course outline:**

This year-long compulsory course for the Postgraduate Diploma in Nursing, all pathways, is based on the primary healthcare approach, and focuses on the intersections between health, equity, and social development, using organisers of chronic and lifestyle related conditions. The course comprises four units: (i) interpersonal and communication skills; (ii) community assessment, leadership and professional development; (iii) research literacy; and (iv) contemporary issues affecting healthcare including health and human rights.

**DP requirements:** Two-thirds of contact time. All time-on-task activities including the community assessment and the Academic Development sessions.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final integrated assessment contributes 60% towards the final mark

### **AHS4123F CLINICAL SCIENCES FOR ADVANCED MIDWIFERY**

20 NQF credits at HEQSF level 8

**Convener:** Assoc Prof S E Clow

**Course entry requirements:** None

**Course outline:**

This course aims to build on prior knowledge of clinical sciences and develop this further in relation to pregnancy and the various life stages from pre-conception, embryo, and foetus through to the neonate, in order to have a firm foundation on which to base clinical practice. This will include: biosciences and their application to pregnancy and the developing foetus, health and illness assessment, developmental assessment and family assessment. This course will also include the use of appropriate technology and the evidence of its use.

**DP requirements:** Two-thirds of contact time, and all of the time-on-task activities and assignments prescribed per course.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

### **AHS4124W ADVANCED MIDWIFERY PRACTICE A**

35 NQF credits at HEQSF level 8

**Convener:** Assoc Prof S E Clow

**Course entry requirements:** None

**Course outline:**

This course subscribes to a midwifery model of care where midwives work in partnership with women and their families to promote healthy pregnancy and normal physiological birth, to support the mother-infant dyad, and to facilitate the family to develop the new relationships brought about

by the birth of a new member. A variety of approaches to offering care in various contexts, and at different levels of the health system, are included to assist the student to develop clinical leadership and advocacy using current evidence. This course will also prepare the student to manage complications of pregnancy and emergencies, to initiate appropriate care, and to work in a multi-professional team. The course examines the philosophical foundations of midwifery, considers various local and international approaches to organising maternity care, as well as the legislative and regulatory framework for midwifery. Using available local, national and international data, key issues affecting maternal and perinatal morbidity and mortality are identified and appropriate midwifery responses are developed.

**DP requirements:** Two-thirds of contact time, and all of the time-on-task activities and assignments prescribed per course.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

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**AHS4125W ADVANCED MIDWIFERY PRACTICE B**

35 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof S E Clow

**Course entry requirements:** AHS4124W

**Course outline:**

The aim of this course is to apply the knowledge of the clinical sciences and midwifery theory base to enhance clinical judgement, and to optimise the experience of pregnancy and childbirth for pregnant women, their babies and their families. In addition to the assessment skills developed in the clinical sciences course, guided practice and simulation will enable students to manage various birth positions and presentations, mast the facilitation of alternative birthing positions, and obtain skills to manage obstetric and neonatal emergencies. A range of clinical learning activities outside traditional institutional settings include childbirth education, postnatal home visits, lactation and support, and others. Teaching ward rounds and student responsibility for patient presentations enhance the capacity to develop a whole person response to the care of the individual/dyad concerned.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical placements to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the course, both components must be passed.

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**AHS4128W CHILD NURSING PRACTICE B**

35 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof M Coetzee

**Course entry requirements:** AHS4157W

**Course outline:**

This course focuses on evidence-based skills refined by evidence-based knowledge and understanding as these are applied in the practice of nursing children, intentionally supportive of the mother-child dyad, and using the primary healthcare approach in each encounter with children and their families. It includes intentional application to actual clinical context in which children are cared for. It ensures the development of skills in communicating with infants, children, parents and families in ways to promote health while working as an active contributory member of the multidisciplinary team.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the course, both components must be passed.

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#### **AHS4129F CLINICAL SCIENCES FOR CHILD NURSING**

20 NQF credits at HEQSF level 8

**Convener:** L Rees

**Course entry requirements:** None

**Course outline:**

The aim of this course is to challenge the student skilfully to assess a child who may require nursing care, and to achieve competency in basic health assessment and development assessment of the child and adolescent, and of the ill and critically ill child and neonate. A family-centred approach is integral to the course. The course includes the full health assessment of the child, i.e. physical, emotional, intellectual, relational and spiritual. These are linked to the developmental phase of the infant, child and adolescent as these relate to health, illness and critical illness. Skills of inspection, palpation and auscultation as these relate to children with specific symptoms are included. Students are mentored in the skill of perpetual observation, using the senses of sight, listening, touch and smell. The approach is grounded in a sound knowledge of normal health and development to guide the practitioner's approach, diagnosis, plan for intervention, and referral. Learning is applied to the student's practice setting throughout. The course includes a clinical practice component.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the prescribed time-on-task activities, assignments and clinical learning activities; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

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#### **AHS4130W CRITICAL CARE CHILD NURSING PRACTICE A**

35 NQF credits at HEQSF level 8

**Convener:** C Davis

**Course entry requirements:** None

**Course outline:**

This course focuses on evidence-based knowledge, understanding, and skills core to the practice of nursing critically ill children, intentionally supportive of the mother-child dyad, and using the primary healthcare approach in each encounter with children and their families. It includes an understanding of pathophysiology related to growth and development of the growing and maturing child, and ensures a developing knowledge base and skill in communicating with infants, children, parents and families in ways that promote health while working as an active, contributory member of the multidisciplinary team.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the prescribed time-on-task activities, assignments and clinical learning activities; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

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#### **AHS4131W CRITICAL CARE CHILD NURSING PRACTICE B**

35 NQF credits at HEQSF level 8

**Convener:** C Davis

**Course entry requirements:** AHS4130W

**Course outline:**

This course teaches evidence-based skills refined by evidence-based knowledge and understanding as these are applied in the practice of nursing critically ill children. Students learn to be intentionally

supportive of the mother-child dyad, and to use the primary healthcare approach in each encounter with children and their families. It includes intentional application to actual clinical context in which children are cared for. It develops skills in communicating with infants, children, parents and families in ways that promote health while the nurse practitioner is working as an active contributory member of a multidisciplinary team.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the course, both components must be passed.

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#### **AHS4132F CLINICAL SCIENCES FOR CRITICAL CARE NURSING (GENERAL)**

20 NQF credits at HEQSF level 8

**Convenor:** Dr N Fouché

**Course entry requirements:** None

**Course outline:**

This course aims to achieve competency in assessment of the critically ill adult. This includes anatomy, pathophysiology, microbiology, medication and technology. The approach is grounded in a sound knowledge of normal health and development and this will guide the practitioner's approach, diagnosis, plan of intervention and referral.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark, and the pass mark is 50%.

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#### **AHS4133W CRITICAL CARE NURSING (GENERAL) PRACTICE A**

35 NQF credits at HEQSF level 8

**Convenor:** Dr N Fouché

**Course outline:**

This course focuses on evidence-based care of the critically ill adult in the ICU. Students are enabled to establish a sound nursing approach to acquire and practise skills, and to develop creative responses to the needs of the critically ill adult and the family/significant others. In keeping with a whole person-based approach, this includes physical, emotional, learning, relational and spiritual aspects of the rehabilitation of adults, and interdisciplinary aspects; community resources and involvement; as well as institutional care and primary, secondary and tertiary prevention. Practical application is expected as students initiate and manage care in their practice settings. Diagnostic procedures and medical intervention are covered at an applied level. Constructive co-operation with other members of the health team is part of the process of equipping the critical care nurse. The course also explores the effects of the economic environment on patient care and the implication for nursing practice, effects of sensory alterations including stressors for patients and staff, sensory overload and deprivation, sleep and rest disturbances in the critical care unit, the dying process and death, immobility in critically ill adults including pain management, wound healing and altered body image, communication and interventions that improve communication, effects of occupational hazards, and legal and ethical aspects of practice.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark and the pass mark is 50%.

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**AHS4134W CRITICAL CARE NURSING GENERAL PRACTICE B**

35 NQF credits at HEQSF level 8

**Convenor:** Dr N Fouché**Course entry requirements:** AHS4133W**Course outline:**

This practice-based course includes guided clinical learning experiences and the development of critical care nursing skills with the aim of developing clinical judgement and to equip the critical care nurse to practise independently in a variety of settings. Students incrementally develop skills as a specialist practitioner alongside other team members within the healthcare system.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of clinical hours to be completed prior to the summative examination in October/November.

**Assessment:** Continuous coursework assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the course, both components must be passed.

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**AHS4135W NEONATAL CRITICAL CARE NURSING PRACTICE A**

35 NQF credits at HEQSF level 8

**Convenor:** H Barlow**Course entry requirements:** None**Course outline:**

This course develops evidence-based knowledge, understanding, and skills core to the practice of nursing neonates who require critical care, intentionally supportive of the mother-infant dyad, and using the primary healthcare approach in each encounter with children and their families. It includes an understanding of pathophysiology related to growth and development of the growing and maturing neonate, and ensures a developing knowledge base and skill in communicating with infants, parents and families in ways that promote health while working as an active contributory member of the multidisciplinary team.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The summative assessment contributes 60% towards the final mark.

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**AHS4136W NEONATAL CRITICAL CARE NURSING PRACTICE B**

35 NQF credits at HEQSF level 8

**Convenor:** H Barlow**Course entry requirements:** AHS4135W**Course outline:**

This course focuses on skills refined by evidence-based knowledge and understanding as these are applied in the practice of nursing critically ill neonates, intentionally supportive of the mother-child dyad, and using the primary healthcare approach in each encounter with children and their families. It aims to ensure the development of skill in communicating with infants, children, parents and families in ways that promote health while working as an active contributory member of the multidisciplinary team.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the course, both components must be passed.

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**AHS4137F CLINICAL SCIENCES FOR DERMATOLOGY NURSING**

20 NQF credits at HEQSF level 8

**Convener:** A Ndyenga

**Course entry requirements:** None

**Course outline:**

This course aims to equip the student with knowledge and understanding of skin anatomy, physiology, pathophysiology and microbiology of the skin, hair and nail in order to make an appropriate diagnosis in patients with skin conditions. It enables the student to apply basic skin care principles and pharmacology in the management of patients with skin conditions. This course emphasises efficient information retrieval and processing skills in order to deal with simple and complex skin problems. In addition, the course intends to empower the student to autonomously request and undertake dermatological investigations, interpret the results for diagnostic purposes, and initiate relevant care based on those results.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Formative assessment contributes 40% toward the final mark. The summative assessment contributes 60% toward the final mark. The pass mark is 50%. Details of the formative assessment are given to the student at the beginning of the course. The summative assessment is externally moderated.

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**AHS4138W DERMATOLOGY NURSING PRACTICE A**

35 NQF credits at HEQSF level 8

**Convener:** A Ndyenga

**Course entry requirements:** None

**Course outline:**

This course is aimed at empowering the student with knowledge, values, attitudes and understanding of their role in the prevention, diagnosis and management of skin conditions and wound care in dermatology patients of different ages and cultural backgrounds in various healthcare settings and in the workplace. It enables the student to promote skin health and prevent common skin disorders. It prepares the student with the ability to recognise, manage appropriately and refer age-related physical and psychosocial needs of the patients; the ability to recognise serious life-threatening skin disorders requiring urgent referral, and interim management thereof. Occupational dermatoses and the legal human rights issues relating to skin disorders in the workplace are explored. The course prepares the student to develop teledermatology skills to provide consultation, diagnoses and treatment, as well as health education over a distance using audio-visual and data telecommunication technologies.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Formative assessment contributes 40% toward the final mark. The summative assessment contributes 60% toward the final mark. The pass mark is 50%. Details of the formative assessment are given to the student at the beginning of the course. The summative assessment is externally moderated.

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**AHS4139W DERMATOLOGY NURSING PRACTICE B**

35 NQF credits at HEQSF level 8

**Convener:** A Ndyenga

**Course entry requirements:** AHS4139W

**Course outline:**

The course builds on the in-depth knowledge of anatomy and physiology of the skin and related organs in order to develop specialist clinical competency skills in the assessment, diagnosis and management of various dermatology conditions, including the recognition of skin signs of serious systemic disorders and serious drug reactions. It equips the students with skills and competencies in the application of different pharmacological preparations and treatment modalities to dermatological patients of different ages and in different healthcare settings. Students are equipped with skills to provide relevant health education and to train other healthcare workers.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Formative assessment contributes 50% towards the final mark. The summative assessment contributes 50% towards the final mark and the pass mark is 50%. in order to pass the course, both components must be passed. Details of the formative assessment are given to the student at the beginning of the course. The summative assessment is externally moderated.

**AHS4140F CLINICAL SCIENCES FOR DIABETES NURSING**

20 NQF credits at HEQSF level 8

**Convenor:** Prof N Levitt and Assoc Prof P Raubenheimer

**Course entry requirements:** None

**Course outline:**

This course builds on foundation clinical knowledge and develops in-depth knowledge specific to the aetiology and pathophysiology of diabetes. Diabetes clinical care is integrated with diabetes education as a part of a therapeutic intervention. Clinical care is based on a sound knowledge of the diabetes disease process that supports a problem-solving approach to clinical decision-making.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Formative assessment contributes 40% towards the final mark. The summative assessment contributes 60% towards the final mark and the pass mark is 50%. Details of the formative assessment are given to the student at the beginning of the course. The summative assessment is externally moderated.

**AHS4141W DIABETES NURSING PRACTICE A**

35 NQF credits at HEQSF level 8

**Convenor:** Dr S Delport, Associate Prof I Ross and Dr A Spitaels

**Course entry requirements:** None

**Course outline:**

This course prepares students to be competent in health promotion and the education of patients and healthcare professionals in the management of diabetes and its complications at primary, secondary and tertiary level. This course focuses on evidence-based diabetes guidelines, and is based on the International Diabetes Federation (IDF) curriculum for diabetes health professional education. It prepares students for leadership in the promotion of health and advocacy for quality of life of people with diabetes and their families. Students will acquire leadership skills, counselling skills, and the ability to apply diabetes management guidelines at all levels of care. The student will be competent in specialist diabetes nursing, using specific and varying treatment modalities and pharmacotherapy. Students will be prepared to integrate different theoretical and clinical frameworks in health promotion and diabetes management throughout the lifespan, and in special situations, which encompass the full range of diabetes management strategies. Clinical targets and the need for individualisation are observed and are applied.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical

learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Formative assessment contributes 40% towards the final mark. The summative assessment contributes 60% towards the final mark and the pass mark is 50%. Details of the formative assessment are given to the student at the beginning of the course. The summative assessment is externally moderated.

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#### AHS4142W DIABETES NURSING PRACTICE B

35 NQF credits at HEQSF level 8

**Convener:** B Majikela-Dlangamandla

**Course outline:**

The aim of this course is to prepare students for advanced clinical practice in this field as a member of the interdisciplinary team, and it includes the interpretation of diagnostic investigations for good clinical decision-making in the comprehensive management of patients who have diabetes.

These specialist nurse practitioners learn to initiate evidence-based nursing interventions to promote diabetes health, such as screening and education programmes and counselling. Students are mentored to take a leadership role in the health services that is patient-centred and promotes behavioural change. This course is based on the International Diabetes Federation Curriculum for diabetes health professionals' education.

**DP requirements:** (a) Attendance of two-thirds of contact time; (b) completion of all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Formative assessment contributes 50% towards the final mark. The summative assessment contributes 50% towards the final mark, and the pass mark is 50%. In order to pass the course, both components must be passed. Details of the formative assessment are given to the student at the beginning of the course. The summative assessment is externally moderated.

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#### AHS4143F CLINICAL SCIENCES FOR NEPHROLOGY NURSING

20 NQF credits at HEQSF level 8

**Convener:** Y van der Nest

**Course entry requirements:** None

**Course outline:**

This course builds on prior knowledge of clinical sciences. Links between the biosciences, technology, and nephrology nursing practice are explored. Application of knowledge of the biosciences and technology will inform clinical decision-making. The intention is the development of a clear understanding of the reasons for every action and the progressive development of skillful practice in health assessment, diagnosis of certain renal conditions, management, and appropriate referral.

**DP requirements:** (a) Attendance of two-thirds of contact time; (b) completion of all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

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#### AHS4144W NEPHROLOGY NURSING PRACTICE A

35 NQF credits at HEQSF level 8

**Convener:** Y van der Nest

**Course entry requirements:** None

**Course outline:**

This course is aimed at the acquisition of knowledge (terms, concepts, and principles), skills and attitudes related to nephrology nursing practice for adults and children in all renal healthcare

settings, to inform clinical judgement and clinical decision-making, and to ensure patient safety. In primary healthcare settings, main concepts include health promotion with the emphasis on promoting renal health, principles of the primary healthcare approach, prevention of renal conditions and end-stage kidney failure, and the rehabilitation and psychosocial considerations for individuals of all ages, families and communities. In secondary and tertiary care settings, main concepts include evidence-based renal nursing care of the end-stage kidney failure patient receiving various modalities of renal replacement therapy. This course prepares the student to engage in exploring the effects of chronic kidney failure on family dynamics in the primary, secondary and tertiary settings.

**DP requirements:** (a) Attendance of two-thirds of contact time; (b) completion of all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark and the pass mark is 50%.

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#### **AHS4145W NEPHROLOGY NURSING PRACTICE B**

35 NQF credits at HEQSF level 8

**Convener:** Y van der Nest

**Course entry requirements:** AHS4144W

**Course outline:**

The aim of this practice-based course is the application of the knowledge of biosciences technology, and to inform clinical judgement and clinical decision-making in nephrology nursing practice in all healthcare settings to ensure patient safety. Emphasis is on the whole person approach, deliverance of quality care, and patient safety. Different education strategies will be explored for the treatment of end-stage kidney failure patients on various modalities of renal replacement therapy. This course equips the nephrology nursing practitioner to apply learnt knowledge and skills in the clinical laboratory setting using simulation, and in the clinical practice under the mentorship of a clinical facilitator. Students incrementally develop skills as a specialist practitioner alongside other team members within the healthcare system to become safe competent practitioners. Students gain experience in providing renal screening, physical examination, and in-service training in primary renal care to primary healthcare workers. In secondary and tertiary renal settings, students use evidence-based studies to holistically nurse renal patients of all ages who are receiving all modalities of renal replacement therapy, including their family. When needed, end-of-life care is provided with sensitivity and cultural relevance.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the course, both components must be passed.

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#### **AHS4146F CLINICAL SCIENCES FOR NEUROSCIENCE NURSING**

20 NQF credits at HEQSF level 8

**Convener:** Dr N Fouché

**Course entry requirements:** None

**Course outline:**

This web-based course, guided by a self-paced workbook, builds on prior knowledge of clinical sciences. Links between the biosciences, technology, and neuroscience nursing practice are explored. Application of knowledge of biosciences and technology will inform clinical decision-making. The intention is the development of a clear understanding of the reasons for every action and the progressive development of skilful practice in health assessment, care planning, management, and appropriate referral. A secondary aim is computer literacy competence.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

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#### AHS4147W NEUROSCIENCE NURSING PRACTICE A

35 NQF credits at HEQSF level 8

**Convenor:** Dr N Fouché

**Course entry requirements:** None

**Course outline:**

This course focuses on evidence-based care of the patient (adult or child/adolescent) with a neurological deficit. Students are enabled to establish a sound nursing approach, to acquire and practise skills, and to develop creative responses to the needs of these patients and the family/significant others. In keeping with a whole person-based approach, this includes physical, emotional, learning, relational and spiritual aspects of the rehabilitation of adults and children/adolescents; and interdisciplinary aspects, community resources and involvement, as well as institutional care and primary, secondary and tertiary prevention. Practical application is expected as students initiate and manage care in their practice settings. Diagnostic procedures and medical intervention are covered at an applied level. Constructive co-operation with other members of the health team is part of the process of equipping the neuroscience nurse practitioner. The course includes aspects of rehabilitation of the patient with a neurological deficit, such as medical treatment, physical treatment, functional assessment, retraining and resettlement, and allowing the disabled person to achieve the greatest possible efficiency in his/her physical, emotional, social and economic functions.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The final summative assessment contributes 60% towards the final mark.

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#### AHS4148W NEUROSCIENCE NURSING PRACTICE B

35 NQF credits at HEQSF level 8

**Convenor:** Dr N Fouché

**Course entry requirements:** AHS4147W

**Course outline:**

The aim of this practise-based course is the application of knowledge of the biosciences, technology and neuroscience to inform nursing practice in all healthcare settings to ensure patient safety. Emphasis is on the whole-person approach. The course includes guided clinical learning experiences and the development of neuroscience nursing skills with the aim of developing clinical judgement and to equip the neuroscience nurse practitioner to practise independently in a variety of settings. Constructive co-operation with other members of the health team is part of the process of equipping the neuroscience nurse practitioner. When needed, end-of-life care is provided with sensitivity and cultural relevance.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the course, both components must be passed.

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**AHS4157W CHILD NURSING PRACTICE A**

35 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof M Coetzee**Course entry requirements:** None**Course outline:**

This course focuses on evidence-based knowledge, understanding and skills core to the practice of nursing children, intentionally supportive of the mother-child dyad, and using the primary healthcare approach in each encounter with children and their families. It includes an understanding of the pathophysiology related to the growth and development of the growing and maturing child, and ensures a developing knowledge base and skill in communicating with infants, children, parents and families in ways that promote health while working as an active contributory member of the multidisciplinary team.

**DP requirements:** (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per course; and (c) a minimum of 50% of hours of clinical learning activities to be completed prior to the summative clinical examination in October/November of the year of examination.

**Assessment:** Continuous coursework assessment contributes 40% towards the final mark. The summative assessment contributes 60% towards the final mark. Details of the coursework and summative assessments are given to the student at the beginning of the course. The final summative assessment is externally moderated.

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**AHS4158W CLINICAL MANAGEMENT IN PAEDIATRIC PHYSIOTHERAPY**

90 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof B Morrow**Course entry requirements:** None**Course outline:**

This course provides students with an understanding of evidence-based treatment methods for acute and chronic paediatric conditions. Students are exposed to evidence-based principles of treatment and learn about the theoretical foundation, core concepts and principal techniques of evidence-based physiotherapy treatment models. Basic training in normal and abnormal child development, pathology, physiology, handling, and interpretation of the literature in clinical decision-making will be provided through different learning activities: lectures (face-to-face, limited interaction, or technologically mediated), tutorials, group learning (if sufficient trainees), and independent self-study.

**DP requirements:** Students need to attend a minimum of 70% of formal teaching events and be present for at least 70% of the clinical contact time (6 months). All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments including completion of logbook: 20%. Assessment of clinical skills: 30%. Final practical and oral examination: 50%

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**AHS4163S DISABILITY STUDIES IN EDUCATION**

30 NQF credits at HEQSF level 8

**Convenor:** Dr J McKenzie**Course entry requirements:** None**Co-requisites:** None**Course outline:**

The aim of this course is to examine educational theory and practice through the lens of critical disability studies. The course critiques an underlying deficit model of disability with regard to special education and promotes an understanding of the social context of disability that can enable or disable, educational access and achievement. The course adopts an approach of lifelong learning and is not confined to a particular phase or stage of education.

**DP requirements:** Attendance of at least 90% of face-to-face sessions and completion of all required assignments within the prescribed time period, unless otherwise approved by the Diploma convener. Participation in seminars and group projects is compulsory and will be monitored. Students are required to participate in at least 80% of online teaching and learning support activities as monitored via Vula site statistics. A year mark of at least 45% is required for examination entrance, unless approved otherwise by the Diploma convener.

**Assessment:** Coursework assignments and online participation (50%); an integrated oral examination presentation (50%).

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#### **AHS5011W OCCUPATIONAL THERAPY M/DISSERTATION (90 CREDITS)**

90 NQF credits at HEQSF level 9

**Convener:** Dr H Buchanan

**Course entry requirements:** None

**Course outline:**

The minor dissertation of a maximum of 25 000 words is prepared under supervision and must be on a topic in the same discipline of the coursework master's programme for which the candidate is registered. The Master's dissertation must demonstrate rigorous application of the relevant research methodology, but does not have to be original research. The minor dissertation should deal with a topic that is contextually relevant to occupational therapy and may draw on or develop occupational therapy and occupational science theories and philosophies. The dissertation must comply with all scientific, ethical and legal requirements.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **AHS5014F RESEARCH METHODS**

15 NQF credits at HEQSF level 9

**Convener:** Prof S Amosun and Dr N Fouché

**Course entry requirements:** None

**Co-requisites:** None

**Objective:** The objective is to introduce students to the research process and equip them with necessary skills and competencies to develop research proposals for their selected research projects.

**Course outline:**

The aim of this course is to introduce students to the research process which includes quantitative, qualitative and mixed method research approaches. It enables students to develop an understanding and an appreciation of what research is, and the process of research at postgraduate level.

The course facilitates the acquisition of the necessary skills and competencies to develop the research proposal for students' selected projects. Facilitation of learning draws from different expertise available in the Department of Health and Rehabilitation Sciences.

**Lecture times:** 09h00 -16h00

**DP requirements:** None

**Assessment:** One formative assignment and one summative assignment. The formative assignment contributes 40% towards the final mark. The summative assignment contributes 60% to the final mark and is externally moderated.

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#### **AHS5015F HUMAN OCCUPATION: THEORY & CRITIQUE**

15 NQF credits at HEQSF level 9

**Convener:** Assoc Prof E Ramugondo

**Course entry requirements:** None

**Course outline:**

This course has a strong occupational science focus. The science of occupation is an academic discipline, the purpose of which is to generate knowledge about the form, function and meaning of occupation. Human Occupation I focuses on the many dimensions that influence human occupation and examine the impact of occupation on health and adaptation.

At the end of this course, students will be able to: (1) identify and describe key theoretical frameworks used by occupational science theorists to understand occupation; (2) name and explain a documented critique on key occupational science constructs; (3) use personal lived experience and practice examples to affirm or disaffirm different theoretical perspectives on human occupation; (4) provide a comprehensive analysis of context as it relates to human occupation; (5) appreciate the collective dimension to occupational engagement; and (5) appreciate the political dimension of occupation.

**DP requirements:** Attendance and participation in all lectures.

**Assessment:** *Formative assessment:* Critical reflective piece - 20%; Applied critical reflection - 30%; *Summative assessment:* Examination mark - 50%

### **AHS5016F OCCUPATIONAL THERAPY: IDENTITIES & PRACTICES**

15 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof E M Duncan

**Course entry requirements:** None

**Course outline:**

This course builds on and will inform the content of AHS5015F (Human Occupation I) in which the historical, theoretical and philosophical background to human occupation in context and its significance for health, development and adaptation are covered. It explores the phenomenon of occupation within the context of daily life and across the lifespan in order to inform occupation-based practice (OBP). It focuses on the dimensions, principles and processes of OBP with particular emphasis on the African context. Relevant factors that impact directly and indirectly on service provision are considered, including occupational performance, engagement and participation; principles of occupational justice; and processes of enabling occupation, including evidence-based practice. At the end of this course the student will be able to: (1) critically appraise assumptions in occupational therapy about the nature of occupation and occupational performance; (2) explain occupation centred practice in the African context; (3) describe and theorise contextual influences on occupational performance, engagement and participation of individuals, groups and communities; and (4) critically appraise professional models and frameworks for enabling occupational participation and inclusion.

**DP requirements:** Attendance and participation in all lectures.

**Assessment:** Examination mark (summative) 50%; Course mark (formative) 50%.

### **AHS5018S RESEARCH METHODS II**

15 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof E Ramugondo and Dr H Buchanan

**Course entry requirements:** Research Methods (AHS5014F)

**Objective:** At the end of this course, students will: (1) have an advanced appreciation of evidence-based practice as an approach to clinical decision making; (2) be able to formulate a focused clinical question about intervention effectiveness; (3) be able to plan and conduct an effective search using a variety of databases to find relevant research articles to answer a clinical intervention question; (4) have developed the skills required to appraise systemic reviews and randomized controlled trials; (5) be able to apply research findings to health practice in an African context; (6) be able to situate qualitative research correctly with consideration to paradigmatic orientation and/or ontological orientation; (7) be able to critique qualitative research in terms of goodness of fit between research question and data; (8) be able to incorporate relevant strategies in or to ensure trustworthiness of findings generated into the research process; and (9) be able to explain particular dimensions that require attention when ethics is being considered in qualitative research.

**Course outline:**

This course provides more in-depth preparation for students to plan, execute and report research. The course includes advanced qualitative and quantitative research methodology and evidence-based practice. A major focus is on the further development of the research protocol.

**DP requirements:** Attendance and participation in all lectures.

## 210 DEPARTMENTS IN THE FACULTY

**Assessment:** *Formative assessment: Qualitative research assignment - 25%; Evidence-based practice presentation - 25% Summative assessment: Examination mark - 50%*

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### AHS5022F/S THEORETICAL FOUNDATIONS OF NURSING PRACTICE

22 NQF credits at HEQSF level 9

**Convener:** Assoc Prof S Duma

**Course entry requirements:** None

**Co-requisites:** None

**Objective:** The objective of this course is to explore the nature of theory in nursing practice in order to understand the relationship between theory and research, management, education, and clinical practice.

**Course outline:**

The aim of this course is to explore and analyse the nature of theory in nursing practice in an attempt to understand the relationship between theory and research, management, education, and clinical practice. An understanding of this relationship should result in a logical, reflective and critical approach to reasoning in nursing practice which is appropriate for a master's level nurse/midwife. Such understanding should also contribute to the development of new knowledge in nursing sciences.

Students are introduced to several different nursing theories and theoretical frameworks or "borrowed theories" with relevance to nursing practice, nursing education, nursing management and research. Concepts of person, health, nursing and environment are explored from various theoretical perspectives. Students are expected to consider how these concepts are reflected in their own practice. Theory construction, levels and function of theories in nursing practice, nursing education, nursing management and research, as well as contextual application of theories also form part of the content of the course.

**Lecture times:** 09h00 -16h00

**DP requirements:** Attendance and participation in 75% of class times.

**Assessment:** Formative assessment contributes 40% of the final mark. The summative assessment (externally moderated) contributes 60% of the final mark.

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### AHS5024W NURSING MINOR DISSERTATION (90 CREDITS)

90 NQF credits at HEQSF level 9

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### AHS5032H RESEARCH METHODOLOGY 1

12 NQF credits at HEQSF level 9

**Convener:** Dr T Burgess

**Course entry requirements:** None

**Course outline:**

This course is completed in the first coursework year. The course includes an introduction to research design, proposal development, the critical appraisal of literature, quantitative and qualitative research methods, and basic statistics. It also includes the development and presentation of the research proposal, and submission of the full proposal for ethical approval.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** The year mark is based on one written assignment, the presentation of the research proposal and the submission of the research proposal. The examination mark is based on one theory paper. The year mark constitutes 60% and the examination mark constitutes 40% of the final mark.

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### AHS5033W EXERCISE & SPORTS PHYSIOTHERAPY

36 NQF credits at HEQSF level 9

**Convener:** Dr T Burgess

**Course entry requirements:** None

**Course outline:**

This course includes the prevention, comprehensive assessment, management and rehabilitation of injuries associated with physical activity, exercise and sports. Key concepts include the development of clinical reasoning and evidence-based practice. This course incorporates the assessment and management of athletes of all ages and abilities, and emphasises principles of safe participation in physical activity, exercise and sports.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** The year mark is based on two class tests and a group assignment. The examination mark is based on a theory paper, a clinical assessment examination, and the submission of a portfolio of evidence for the practicum. The year mark constitutes 49% and the examination mark constitutes 51% of the final mark.

**AHS5034W EXERCISE & SPORTS PHYSIO M/DISS (60 CRED)**

*When the primary supervisor is in the Department of Health and Rehabilitation Sciences*

60 NQF credits at HEQSF level 9

**Convener:** Dr T Burgess

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be a maximum of 25 000 words in length and must be on a topic in the same discipline of the coursework master's programme in which the candidate is registered. Having submitted their research proposals and obtained formal research ethics approval, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must develop conceptual and academic rigour in research, acquire competence in initiating, planning and conducting research, and be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgements using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences. They must also disseminate research findings that will contribute to the field of Exercise and Sports Physiotherapy in appropriate formats, such as publications or other documents for the information of athletes or sporting organisations.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

**AHS5044S OCCUPATIONAL THERAPY IN PRIMARY HEALTH CARE**

15 NQF credits at HEQSF level 8

**Convener:** Assoc Prof E M Duncan and Dr H Buchanan

**Course entry requirements:** None

**Course outline:**

This course examines the role of occupational therapy in comprehensive primary healthcare. It considers how the PHC philosophy and approach can be facilitated through occupation centred health promotion, prevention, therapeutic and rehabilitative programmes within the district health system. It reviews national and international policy frameworks and principles that guide community-based rehabilitation and the advancement of disability-inclusive development. At the end of this course the student will be able to: (1) critically discuss the relevance of comprehensive primary healthcare in the African context; (2) justify the focus of occupational therapy in promotive, preventive, therapeutic and rehabilitative programmes within the district health system; and (3) appraise a range of pertinent national and international policy guidelines for community-based rehabilitation and disability inclusive development.

**DP requirements:** Attendance and participation in all lectures

**Assessment:** *Formative assessment:* Minor assignment - 20%; Major assignment - 30% *Summative assessment:* Examination mark - 50%

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**AHS5045S OCCUPATION-BASED COMMUNITY DEVELOPMENT PRACTICE**

15 NQF credits at HEQSF level 9

**Convener:** Assoc Prof R Galvaan

**Course entry requirements:** None

**Course outline:**

This course examines how occupational therapy is able to contribute to an emancipatory agenda in which population inequities are addressed. It considers how critical perspectives on occupation are able to inform practice that aims to facilitate the participation, social inclusion and, therefore, the well-being of vulnerable people. It introduces an appraisal of how occupational-science constructs may be integrated into occupation-based community development practice. At the end of this course the student will be able to: (1) explain the relationship between social inclusion and occupational engagement; (2) identify critical perspectives of occupation that inform community development practice; (3) explain and theorise occupation-based frameworks of practice that are locally situated and globally relevant; and (4) theorise the design of occupation-based community development services.

**DP requirements:** Attendance and participation in all lectures.

**Assessment:** *Formative assessment:* Minor assignment - 20%; Major assignment - 30% *Summative assessment:* Examination mark - 50%

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**AHS5046W INDEPENDENT STUDY PROJECT**

45 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M Coetzee (Department of Paediatrics and Child Health)

**Course entry requirements:** None

**Course outline:**

This component of the Master of Nursing in Child Nursing programme offers the student the opportunity to assimilate the content of the 4 courses in the programme by developing one set of clinical best practice guidelines. These guidelines are intended to set a standard for practice, to align practice with current best evidence, and to increase accountability for good practice. Development of best practice guidelines requires diligent research, a thorough knowledge of the current context including the clinical and theory base, participative approaches to working with clinicians in practice, and sound reasoning. The guidelines need to be peer-reviewed and validated as acceptable, accessible and achievable in practice so that there is acceptance by clinicians and implementation into actual practice settings.

**DP requirements:** Attendance of at least two thirds of contact time for lectures and tutorials of each course as well as formative assignments as specified in each course.

**Assessment:** The summative evaluation of this course comprises an extensive literature review, and the development and implementation of one set of best practice guidelines in a subspeciality of the students' choice for different child nursing practices. Supervision and mentoring will be provided throughout the process. Summative work is externally examined.

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**AHS5047W CLINICAL LEADERSHIP**

30 NQF credits at HEQSF level 9

**Convener:** Dr U Kyriacos (Department of Health and Rehabilitation Sciences)

**Course entry requirements:** None

**Course outline:**

Innovation and value-based principles form the core of this course. These challenge students to deconstruct deeply entrenched thinking and traditions that pervade health service provision. Core values of caring, competence, accountability, integrity, responsiveness and respect are explored, nurtured and applied in various ways. Principle-centred and collaborative leadership styles which support a District Health Service with the philosophy of Primary Healthcare are nurtured. The course includes innovative thinking and emerging modalities including emotional intelligence, a strength-based approach to building and managing teams and honing communication skills. The principles of change management are taught to help students to courageously pursue change

implementation. Aspects of economics and financial planning, resource management, systems thinking, monitoring and evaluation are included as well as robust debate encompassing ethics and the various aspects of restorative justice. Knowledge and skills in these essentials of transformative clinical leadership and the ability to model leadership are gained on the Clinical Leadership course (year 1) and evaluated throughout and specifically in the clinical nursing practice courses (year 2).

**DP requirements:** Attendance of at least two thirds of contact time for lectures and tutorials of each course as well as formative assignments as specified in each course.

**Assessment:** Two formative assessments contribute 40% of the final mark. The summative assessment (externally moderated) contributes 60% of the final mark. Formative: review and critique of two published articles using a structured guided framework (20% each). Summative: use of a systematic review quality assessment tool to analyse a published randomised control trial (60%). Summative work is externally examined.

### **AHS5048W ADVANCED NURSE PRACTICE B**

40 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M Coetzee (Department of Paediatrics and Child Health)

**Course entry requirements:** AHS5049W Advanced Child Nurse Practice A

**Course outline:**

This course further explores the emerging science and application of advanced children's nursing practice in local, regional and international contexts for the acquisition of an expert knowledge and skills base. Clinical practice improvement in advanced nursing practice in local, regional and international contexts is explored. Learning activities are intentionally designed to facilitate the progressive development of complex decision-making skills for expanded nursing practice in the care of infants, children and adolescents. Clinical reasoning skills require critical and creative thinking skills based on sound knowledge, in order to master clinical competencies for advanced practice, working with individuals, families and communities across all levels of the formal healthcare system. Clinical learning occurs within multidisciplinary teams where students will carry full clinical responsibility for a particular patient load and population, while being accountable to the multidisciplinary team leader (consultant). These skills are gained on this course, evaluated in year 1, and built on and consolidated in Child Nursing Practice B in year 2.

**DP requirements:** Attendance of at least two thirds of contact time for lectures and tutorials of each course as well as formative assignments as specified in each course.

**Assessment:** Formative assessment contributes 50% of the final mark. The summative assessment contributes 50% of the final mark. Assessment will be structured around the development of a portfolio of evidence embedded in clinical learning and covering assessment, planning, monitoring, and providing and evaluating care within complex, rapidly changing situations. A practice improvement process will be included in this course evaluation. Assessment criteria will be provided to the student in the beginning of the module. The summative assessment (50%) is externally moderated.

### **AHS5049W ADVANCED CHILD NURSE PRACTICE A**

35 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M Coetzee (Department of Paediatrics and Child Health)

**Course entry requirements:** None

**Course outline:**

This course explores the emerging science and application of advanced children's nursing practice in local, regional and international contexts for the acquisition of an expert knowledge and skills base. Learning activities are intentionally designed to facilitate the progressive development of complex decision-making skills for expanded nursing practice in the care of infants, children and adolescents. Clinical reasoning skills require critical and creative thinking skills, based on sound knowledge, in order to master clinical competencies for advanced practice, working with individuals, families and communities across all levels of the formal healthcare system. Clinical learning occurs within multidisciplinary teams where students carry full clinical responsibility for a particular patient load and population, being accountable to the multidisciplinary team leader

(consultant). These skills are gained in this course, evaluated in year 1, and built on and consolidated in Child Nursing Practice B in year 2.

**DP requirements:** Attendance of at least two thirds of contact time for lectures and tutorials of each course as well as formative assignments as specified in each course.

**Assessment:** Formative assessment contributes 50% of the final mark. The summative assessment contributes 50% of the final mark. Assessment will be structured around the development of a portfolio of evidence embedded in clinical learning and covering assessment, planning, monitoring, providing and evaluating care within complex, rapidly changing situations. Assessment criteria will be provided to the student at the beginning of the module. The summative assessment is externally moderated.

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### AHS5050W CLINICAL RESEARCH

30 NQF credits at HEQSF level 9

**Convenor:** Dr U Kyriacos (Department of Health and Rehabilitation Sciences)

**Course entry requirements:** Introduction to Research Methods at HEQSF level 8.

**Course outline:**

This course aims to prepare specialist clinicians who require competence in clinical research methods, data management and analysis, and research ethics and dissemination of research results. Evidence-based practice is a core part of the curriculum. Students are expected to develop competencies in research critique and utilization, a working knowledge of statistics, intervention research, randomised control trials, and systematic and integrative reviews. These competencies are gained on the Clinical Research course, evaluated in year one and applied throughout the programme, specifically in the independent study component in year two. On completion of this course, the student is expected to be able to: (1) Demonstrate evidence of understanding the logical sequence of each step of the clinical research process; (2) Show evidence of a clear understanding of the ethical implications of doing clinical research, and of regulations and legal ethical frameworks that govern clinical research with particular reference to vulnerable study populations; (3) Apply knowledge and understanding of the clinical research process in the critique of published studies; (4) Make sound judgements using data and information at their disposal and communicate conclusions clearly to specialist and non-specialist audiences.

The above aims are in preparation for the task set for the Independent Study Project: to analyse and critique published studies in a particular clinical context and then construct one set of best practice guidelines for that clinical context and, by peer review, to evaluate the produced best practice guidelines.

**DP requirements:** Attendance of at least two thirds of contact time for lectures and tutorials of each course as well as formative assignments as specified in each course.

**Assessment:** Two formative assessments contribute 40% of the final mark. The summative assessment (externally moderated) contributes 60% of the final mark. Formative: review and critique of two published studies using a structured guided framework (20% each). Summative: use a systematic review quality assessment tool to analyse a published randomised control trial (60%). Summative work is externally examined.

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### AHS5051W RESEARCH METHODOLOGY II

12 NQF credits at HEQSF level 9

**Convenor:** Dr T Burgess

**Course entry requirements:** Research Methodology I.

**Course outline:**

This course is completed in the second coursework year. This course is designed to assist students in developing scientific thinking and critical analysis skills, as well as in the analysis and write-up of their research projects. The course includes the development of a literature review, data management and statistics.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** The year mark is based on the completion of a literature review, and an oral presentation of research progress. The examination mark is based on one theory paper. The year mark constitutes 60% and the examination mark constitutes 40% of the final mark.

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**AHS5052W MANAGEMENT OF EXERCISE- AND SPORTS-RELATED CONDITIONS**

12 NQF credits at HEQSF level 9

**Convener:** Dr T Burgess

**Course entry requirements:** None

**Course outline:**

This course covers the assessment and management of common medical conditions associated with physical activity, exercise and sports; sports traumatology, which includes on-field assessment of the injured athlete, management of airway and breathing, management of spinal injuries and disabilities, and resuscitation; pharmacology for exercise and sports physiotherapists; exercise and sports nutrition; and sports psychology.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** The year mark is based on two class tests and an individual assignment. The examination mark is based on a theory paper and a practical examination. The year mark constitutes 49% and the examination mark constitutes 51% of the final mark.

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## HEALTH SCIENCES EDUCATION

*Room 21, E52 Old Main Building, Groote Schuur Hospital*

**Professor and Head of Department:**

H Kathard, B(SPHT) M (SpPath) DEd *UDW*

### Clinical Skills Unit

*G13, New Groote Schuur Hospital*

**Senior Lecturer & Acting Director:**

R Weiss, MBChB MPhil *Cape Town*

**Lecturer/Clinical Educator**

M Jansen, BTech (Emergency Medical Care) NDip (Emergency Medical Care) *CPUT*

**Clinical Educators**

N A Moller, RN RM RSCN DNE and BA

G Edelstein, RN RM Dip IntN Dip CHN DNE MPhil *Cape Town*

S Buthelezi, BCur (Nursing) Masters of Nursing (Nursing Education) *UWC*

### Intervention Programme

**Co-ordinator and Senior Lecturer: MBChB programme**

E Badenhorst, BA(Hons) Stell MPhil *Cape Town*

**Coordinator and Lecturer Health and Rehabilitation programme**

B O Ige, BA(Hons) *Ilorin, Nigeria* MA PhD *UKZN PGDip Health Professional Education*

### Education Development Unit

*E52, Old Main Building, Groote Schuur Hospital*

**Associate Professor and Director: Education Development Unit**

F Cilliers, MBChB HonsBSc(MedSc) MPhil(HE) Stell PhD *Maastricht*

**Senior Lecturer**

N Hartman, BA Stell BSocSc(Hons) MSocSc PhD *Cape Town*

**Curriculum Development Officer:**

M Alperstein, BSocSc (Nursing) *UKZN Dip PHC (Ed) Witwatersrand* MPhil (Adult Ed) *Cape Town*

**Lecturer:**

L Pienaar, BSc(Physio) *UWC MSc(Physio) Stell*

**IT Education Manager:**

G Doyle, BSc(Hons) HDE *Rhodes*, MSc (IT) *Cape Town*

**E-Learning Technologists**

S Mandyoli, BA (Hons) *UWC*

D Sias, BA HDE BEd (Hons) *UWC BPhil (Info and Knowledge Management) Stell PGDip (Ed Tech) Cape Town*

F van Breda, ND (Horticulture) *CPUT BA (Communication Science) UNISA*

N Withers, BSc (Biodiversity & Conservation Biology) *UWC*

**The Writing Lab**

*E53 – 27, Old main Building, Groote Schuur Hospital  
(Tel: 021 4066241)*

**Language Development Lecturer**

*N Muna, PhD Cape Town*

**Consultants**

K Moxley, MSc  
T Moola, BSc(Med)(Hons)  
A Dabengwa, MSc  
E Nwosu, MSc

**COURSES OFFERED****HSE4000F LEARNING THEORIES IN HEALTH PROFESSIONAL EDUCATION**

30 NQF credits at HEQSF level 8

**Convener:** M Alperstein

**Course entry requirements:** None

**Course outline:**

This course introduces students to learning theories in relation to teaching practice in health sciences education in the clinical, classroom and community context, within a higher education framework and Primary Health Care-led curriculum and health service policy. Students examine their own learning and teaching experience in relation to theories of learning and teaching relevant to their context. At the end of the course, students are able to reflect critically on their own teaching and facilitation of learning and on the student and teacher roles in various educational and organisational contexts; critically apply the theoretical approaches underpinning teaching and facilitation of learning in the clinical, classroom and community context; explain the importance of social accountability and health professionals as agents of change; and critically appraise e-learning in health professional education.

**DP requirements:** Satisfactory completion and submission of portfolio tasks after formative assessment and feedback, and participation in 80% of the weekly online activities, tracked via Vula site statistics.

**Assessment:** Summative course assessment constitutes 100% of the final mark at the end of the course, and comprises a written assignment at the end of the course. A re-examination will be awarded if a student achieves between 47% – 49% before the final mark is submitted.

**HSE4001F LEARNING AND TEACHING PRACTICE**

30 NQF credits at HEQSF level 8

**Convener:** L Pienaar

**Course entry requirements:** Full-time: HSE4000F; part-time: HSE4000F & HSE4002S

**Course outline:**

This course aims to critically review the range of teaching methodologies appropriate to teaching and facilitation of learning in the classroom and clinical context in a primary healthcare-led curriculum and health service, and further develops skills in the various methodologies. At the end of the course, students are able to demonstrate an awareness to identify opportunities that exist for facilitating learning in the classroom, clinical and community contexts; select and apply appropriate methodologies for teaching and facilitation of learning in different situations in the classroom, clinical and community contexts; demonstrate evidence of best practice of the effectiveness of various approaches; modify, plan, design and structure appropriate teaching and learning activities in the classroom, clinical and community contexts; demonstrate the integration of the Primary Health Care-led curriculum in teaching; demonstrate the ability to provide constructive, critical feedback; demonstrate an understanding of group dynamics and the principles of effective

facilitation in small group learning; and identify and raise ethical and human rights issues for discussion within the classroom, clinical and community contexts.

**DP requirements:** Satisfactory completion and submission of portfolio tasks after formative assessment and feedback, and participation in 80% of the weekly online activities, tracked via Vula site statistics.

**Assessment:** Summative course assessment constitutes 100% of the final mark at the end of the course and comprises a written assignment at the end of the course. A re-examination will be awarded if a student achieves between 47% – 49% before the final mark is submitted.

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### **HSE4002S ASSESSMENT IN HEALTH PROFESSIONAL EDUCATION**

30 NQF credits at HEQSF level 8

**Convener:** Assoc Prof F Cilliers

**Course entry requirements:** Full-time: HSE4001F; part-time: HSE4000F

**Course outline:**

This course aims to provide an overview of various assessment approaches, purposes, methods, and debates focusing on changing trends in assessment in the classroom, community and clinical context (clinical context in this instance can include clinical procedures, consultation, clinical reasoning and management, professionalism and communication skills). At the end of the course, the student should be able to demonstrate an awareness of concepts, approaches, and debates associated with assessment; critically select, develop or modify an appropriate assessment instrument for specific teaching practice; reflect critically on assessment practices on his/her own and align assessment with course/programme outcomes and teaching/learning activities; develop and implement appropriate assessment instruments for the health sciences educational context; demonstrate an understanding of the role of an assessment blueprint; demonstrate the integration of the Primary Health Care approach in assessment; and critically appraise online assessment in health professional education.

**DP requirements:** Satisfactory completion and submission of portfolio tasks after formative assessment and feedback, and participation in 80% of the weekly online activities, tracked via Vula site statistics.

**Assessment:** Summative course assessment constitutes 100% of the final mark at the end of the course and comprises a written assignment at the end of the course. A re-examination will be awarded if a student achieves between 47% – 49% before the final mark is submitted.

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### **HSE4003S CURRICULUM DEVELOPMENT AND COURSE DESIGN**

30 NQF credits at HEQSF level 8

**Convener:** Dr N Hartman

**Course entry requirements:** Full-time: HSE4002S; part-time: HSE4001F (in the second year)

**Course outline:**

This course examines the relationship between course and curriculum design, the implications of the various models for student learning, and the complexities of health professions curriculum development, particularly within the context of a Primary Health Care-led curriculum. In addition, ways of improving the quality of teaching, learning and assessment in the classroom, community and clinical context are addressed. At the end of the course, the student should be able to explain underlying educational theory, values and beliefs of different approaches to curriculum development; describe the models, principles and elements of curriculum and course design; plan and design a course, demonstrating links to the broader programme or curriculum; construct a well-designed course evaluation instrument; critically appraise the value and limitations of course evaluations; discuss the complexity in achieving alignment between curriculum, course planning and implementation; explain the hidden curriculum and identify an instance thereof in the programme or course in which he/she is teaching; and appreciate the complexities of the relationship between health professional curricula and health service provision.

**DP requirements:** Satisfactory completion and submission of portfolio tasks after formative assessment and feedback, and participation in 80% of the weekly online activities, tracked via Vula site statistics.

**Assessment:** Summative course assessment constitutes 100% of the final mark at the end of the course and comprises a written assignment at the end of the course. A re-examination will be awarded if a student achieves between 47% – 49%, before the final mark is submitted.

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#### **HSE4004S INTEGRATED ASSESSMENT**

0 NQF credits at HEQSF level 8

**Convener:** M Alperstein

**Course entry requirements:** Successful completion of all the preceding courses.

**Course outline:**

Not applicable (this course exists for the sole purpose of recording a weighted final mark).

**DP requirements:** None

**Assessment:** The examination comprises an open-book written examination (20%); a portfolio of course tasks (40%); an oral examination on the portfolio (15%); and a simulated teaching session (25%). Students must obtain a subminimum of 45% for each component and an overall pass mark of 50%. A re-examination will be awarded if a student achieves between 47% – 49%, before the final mark is submitted, at the discretion of the programme convener. A student who fails the final integrated examination with less than 45% may be awarded a supplementary examination at the discretion of the Faculty Examinations Committee.

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#### **HSE4005S ACADEMIC LITERACY FOR HEALTH PROFESSIONAL EDUCATION**

30 NQF credits at HEQSF level 8

**Convener:** L Pienaar

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The way knowledge is constructed and communicated can vary widely from one discipline to the next, and this disparity between disciplinary discourses is particularly apparent within the sciences. Practically, this most commonly translates into the way reading and writing happens within a discipline, which has been specifically termed 'Academic Literacy'. In conjunction with this understanding, it has become clear that student success is closely coupled with their ability to master academic literacy.

This course aims to enable students to critically examine disciplinary modes of communication within their field in order to identify meaningful themes and features, for example: disciplinary conventions; what is valued in the writing; and how the structure of the writing informs the function. On successful completion of the course, diploma graduates will be able to teach and support academic literacy development in their own students.

**DP requirements:** Satisfactory completion and submission of portfolio tasks after formative assessment and feedback, and participation in 80% of the weekly online activities, tracked via Vula site statistics.

**Assessment:** The summative course assessment will constitute 100% of the final mark, and comprises a written assignment at the end of the course. A re-assessment will be awarded if a student achieves 47% – 49% before the final mark is submitted.

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#### **HSE4006S TECHNOLOGY-ASSISTED TEACHING AND LEARNING**

30 NQF credits at HEQSF level 8

**Convener:** G Doyle

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The course aims to enable students to evaluate educational technologies suitable for use within health professions education. An understanding is cultivated of the advantages, disadvantages and

opportunities for utilising technology in teaching and learning. This is done through critical engagement with emerging technologies appropriate to the student's own context.

**DP requirements:** Satisfactory completion and submission of portfolio tasks after formative assessment and feedback, and participation in 80% of the weekly online activities, tracked via Vula site statistics.

**Assessment:** The summative course assessment will constitute 100% of the final mark, and comprises a written assignment at the end of the course. A re-assessment will be awarded if a student achieves 47% – 49% before the final mark is submitted.

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#### **HSE5000W** HEALTH SCIENCES EDUCATION DISSERTATION

180 NQF credits at HEQSF level 9

**Convener:** Assoc Prof F Cilliers

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in health sciences education. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. The dissertation is externally examined.

**Assessment:** External examination of the dissertation

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#### **HSE6000W** HEALTH SCIENCES EDUCATION THESIS

360 NQF credits at HEQSF level 10

**Convener:** Assoc Prof F Cilliers

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This is a degree by doctoral thesis of up to 80,000 words in length. It must reflect a comprehensive and systemic grasp of a discipline's body of knowledge with expertise and specialist knowledge in an area at the forefront of the discipline; a critical understanding of the most advanced research methodologies, techniques and technologies in the discipline; an ability to participate in scholarly debates at the cutting edge of an area of specialisation; and an ability to apply knowledge, theory and research methods creatively to complex practical, theoretical and epistemological problems. The candidate should demonstrate advanced information retrieval and processing skills and an ability to effectively present and communicate the results of research and opinion to specialist and non-specialist audiences, using the full resources of an academic/professional discourse. The production of the thesis must meet international standards of scholarly and professional writing.

**Assessment:** External examination of the thesis

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## HUMAN BIOLOGY

*Room 5.14, Level 5, Anatomy Building, Health Sciences Campus and Sports Science Institute of South Africa Building, Newlands. (This incorporates the disciplines of anatomy, biokinetics, biological anthropology, biomedical engineering, cell biology, exercise science, health technology and infrastructure management, physiology, and sport and exercise medicine).*

**Professor and Head:**

M R Collins, BSc(Hons) *Stell PhD Cape Town FECSS*

**Professor and NRF/DST South African Research Chair in Biomedical Engineering & Innovation:**

TS Douglas, BSc (Eng) MBA *Cape Town MS Vanderbilt PhD Strathclyde*

**Professor and NRF/DST South African Research Chair in Brain Imaging :**

E Meintjes, BSc(Hons) MSc *UKZN MS PhD Oregon State*

**Professors:**

SH Kidson, BSc(Hons) MSc PhD *Witwatersrand HDE JCE*

EV Lambert, BA(PhysEd) MSc *South Carolina PhD Cape Town*

MI Lambert, BSc(Agric) *UKZN BA(PhysEd)(Hons) Rhodes MSc South Carolina PhD Cape Town*

GJ Louw, BVSc DVSc *Pret*

S Prince, BSc (Hons) HDE PhD *Cape Town*

**Emeritus Professors:**

LA Kellaway, BSc(Hons) MSc PhD *Cape Town*

AG Morris, BSc(WLU) PhD *Witwatersrand*

TD Noakes OMS, MBChB MD DSc(Med) *Cape Town FACSM (Hon) FFSEM UK*

VA Russell, BSc(Hons) MSc *Cape Town PhD Stell*

CL Vaughan, BSc(Hons) Rhodes PhD *Iowa DSc Cape Town*

**Honorary Professors:**

M Glucksberg, BS MS PhD *Columbia*

JL Jacobson, MA PhD *Harvard*

SW Jacobson, BA *Brandeis MA PhD Harvard*

D Kelso, BS *Purdue MS PhD Northwestern*

A Mairal, BSc *Raipur MSc Bombay PhD Boulders MBA Berkeley*

W Van Mechelen, MD PhD *VU Amsterdam FACSM*

**Associate Professors:**

AN Bosch, BSc *UKZN BA(PhysEd)(Hons) MA Rhodes PhD Cape Town*

T Franz, PhD *Bremen*

DM Lang, Dr rer nat *Konstanz Germany*

E Ojuka, BSc(Med) *Makerere PhD Brigham Young*

L Davids, BSc(Hons) MSc(Eng) *UKZN PhD Cape Town*

M Senekal, BSc(Hons)(Diet) MSc PhD *Stell*

NP Steyn, BSc(Diet) *UKZN Hons MSc MPH Cape Town PhD Stell*

**Associate Professor and Chief Research Officer:**

AV September, BSc(Med)(Hons) (Human Genetics) MSc(Med) (Human Genetics) PhD *Cape Town*

**Adjunct Associate Professor:**

W van der Merwe, MBChB *UFS Social Studies (Oxford), BSc(Med)(Hons) Cape Town FCS (SA) Ortho*

**Honorary Associate Professors:**

JH Goedecke, BSc(Med)(Hons) Nutrit&Dietetics PhD *Cape Town* RD(SA)  
RP Lamberts, BSc(Physiotherapy) MSc(Pedagogics/Human Movement Science) *Netherlands* PhD  
*Cape Town* FECSS  
G Limbert, BSc MSc *Toulouse* MPhil *Bordeaux* PhD *Southhampton* CEng FIMechE  
LK Mickelsfield, BA (Human Movement Studies) *Rhodes* BSc(Med (Hons) Biokinetics MSc(Med)  
PhD *Cape Town*  
A van der Kouwa, BEng MEng *Pret* PhD *Ohio State*

**Senior Lecturers:**

S Sivarasu, PhD(Biomed Eng) *VIT University India*  
J Swart, MBChB MPhil (Sports Medicine) PhD *Cape Town*  
Y Albertus-Kajee, BSc (Med) (Hons) Exercise Science PhD *Cape Town*  
K Bugarith, BSc(Hons) *UKZN* PhD *Washington State*  
J Harbron BSc (Diet) *Stell* MSc PhD *Stell*  
G Gunston, MBChB *Cape Town*  
A Gwanyanya, MBChB DA SA MMed(Anaesthetics) *Zimbabwe* PhD *Leuven*  
VE Gibbon, BArts (Adv) *Manitoba* PhD *Witwatersrand*  
V Naidoo, BSc *UKZN* BSc(Hons) *Pret* MMedSci *UKZN* PhD *Michigan*  
D Shamley, BSc PhD *Witwatersrand*  
CP Slater, MBChB MPhil *Cape Town* FFRad(T) *SA*  
EL van der Merwe, BSc(Med)(Hons) MSc PhD *Cape Town*  
CMR Warton, MBChB *Zimbabwe*

**Honorary Senior Lecturers:**

J de Beer, MBChB MMed(Orthop) *Pret*  
J Gray, BSc(Physio) *Witwatersrand* BSc(Med)(Hons) Exercise Science PhD *Cape Town*  
TL Kolbe-Alexander, BA *UWC* BSc(Med)(Hons) MPH PhD *Cape Town*  
B S Spottiswoode, BSc *Witwatersrand* PhD *Cape Town*

**Lecturers:**

E Badenhorst, BA(Hons) *Stell*  
A Abrahams, BSc (Hons) PhD *Cape Town*  
R Ballo, MSc PhD *Cape Town*  
S Booley, MSc (Nutr Manag) *UWC*  
J Fortuin, BOH *UWC* M eHealth & Telemedicine *UQ* PhD *UWC*  
J Friedling, MSc PhD *Cape Town*  
J Kroff, BSc(Human Movement Science) BHons(Biokinetics) MSc(Medical Physiology) PhD *Stell*  
T Mutsvangwa, BScEng MSc(Med) PhD *Cape Town*  
M Theron, BSc(Hons)(Diet) *Pret*

**Assistant Lecturer:**

KS Mpolokeng BSc *UFS* BMedSc(Hons) Anatomy and Cell Morphology

**Honorary Lecturers:**

DT Crombie, BA(Hons) (Industrial Relations) BA(Hons) (Industrial Psychology) PhD  
(Management Theory) PhD *Cape Town*  
S Dawson, BScHons MSc (Med) *Cape Town* PhD *Edinburgh*  
M K Patrick, MA *Cape Town*

**Senior Research Officers:**

C Draper, BSocSci(Psych) BSocSc(Hons)(Psych) MA(Psych) PhD *Cape Town*  
T Kohn, BSc BSc(Hons)(Biochemistry) PhD *Stell*  
M Posthumus, BSc BSc(Med)(Hons) Exercise Science PhD *Cape Town*

D Rae, BA(Human Movement Studies) *AUS* BSc(Med)(Hons) Exercise Science PhD *Cape Town*

**Clinical Educators:**

M Blacker, BSc(Med)(Hons)(Diet) *Cape Town*  
 N Jaffer, BSc(Med)(Hons)(Diet) *Cape Town*  
 K Sexton, BSc(Med)(Hons)(Diet) *Cape Town*

**Research Officers:**

A Alhamud, MSc PhD *Cape Town*  
 M Holmes, BS *Western Washington* MS PhD *Vanderbilt*  
 M Jankiewicz, MS *Copernicus* PhD *Vanderbilt*  
 M Nglazi, BSc(Microbiology) *Zambia* MPH *Cape Town*  
 L Rauch, BSc(Physiology) BSc(Med)(Hons) Exercise Science PhD *Cape Town*  
 F Robertson, BSc(Eng) MSc PhD *Cape Town*  
 J Smith, PhD *Cape Town*

**Honorary Research Associate:**

N J Bergman, MBChB *Cape Town* DCH *Sweden* MPH MD *Zimbabwe*

**Principal Technical Officers:**

C Harris, NTC(Tool, Jig and Die Making) *Athlone Tech Coll*  
 S Cooper, BSc BMedSc (Hons) BEd MMedSc MBA *UFS*

**Chief Technical and Scientific Officers:**

D A Bouwers, BSc (Hons) *Cape Town* MSc *Stell*  
 G de Bie, BSc *Rhodes* BSc(Hons) *UOFS* MPhil *Stell*  
 I Fakier, NDElectricEng *CPUT*  
 M Petersen, Dip(MedTech) BTech *CPUT*  
 V Fourie  
 H Victor, Dip (Datametrics) *UNISA*

**Senior Technical and Scientific Officers:**

S Rayise, MSc *UWC*  
 M Cassar  
 P Steyn BSc(Hons) MSc PhD *Stell*

**Technical Officer:**

D Abrahams

**Clinical Research Sister:**

M Blackaller-Smal, BCur PGDNS (Clinical Nursing, Community) PGDNS (Nursing Management)

**Human Nutrition**

*Level 3, Anatomy Building*

**Associate Professor and Head:**

NP Steyn, BSc(Diet) UKZN Hons MSc MPH *Cape Town* PhD *Stell*

**Associate Professor**

M Senekal, BSc(Hons) PGDip Diet MNutr PhD *Stell* RD (SA)

**Senior Lecturer:**

J Harbron, NNutr MSc NutrSc PhD *Stell* RD (SA)

**Lecturer:**

S Booley, MSc(NutrManagement) *UWC* RD (SA)

**Senior Clinical Educator:**

B Najaar, MSc(Nutritional Sciences) *Stell* RD (SA)

**Lecturers/Clinical Educators Full-time/Part-time:**

L Cornelissen, BA HE(Hons) MA HE *UWC*

C Day, BScLife Sc(Hons) *Stell* BSc(Med)(Hons) Nutr&Diet *Cape Town*

N Jaffer, BSc(Med)(Hons) (Diet) *Cape Town* (SA)

K Sexton, BSc(Med)(Hons) *Cape Town* RD (SA)

M Theron, BDiet(Hons) *Pret* RD (SA)

## **COURSES OFFERED**

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### **HUB2022F ANATOMY FOR BIOMEDICAL ENGINEERS**

18 NQF credits at HEQSF level 6

**Convener:** Prof G Louw

**Course entry requirements:** HUB4075W Biomedical Engineering Overview.

**Objective:** Overview of the structure and function of the human body.

**Course outline:**

A full course of lectures, tutorials and practicals, with emphasis on practical work. The course includes all aspects of gross anatomy, neuroanatomy and selected topics in applied anatomy.

**DP requirements:** Completion of all coursework.

**Assessment:** Final examination: 40%. Class record: 60%.

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### **HUB2025H PHYSIOLOGY FOR BIOMEDICAL ENGINEERS**

12 NQF credits at HEQSF level 6

**Course outline:**

This course aims at providing postgraduate students with knowledge in selected topics of the human physiology in preparation for their research project in biomedical engineering. The course includes lectures on the following topics: (1) Introduction to physiology, (2) cells, tissues and membranes, (3) musculoskeletal system, (4) cardiovascular system, (5) nervous system, and (6) respiratory system. In addition, students will complete an independent learning module on basic biological concepts (reading and quizzes), group presentations on aspects covered in self-directed study module and lectures, and an essay on links between physiology and biomedical engineering. At the end of the course, students will: (1) have basic understanding in the selected topics of human physiology, (2) be able to apply and transfer knowledge obtained to biomedical engineering problems arising in other courses of their curriculum and in their research project, and (3) be able to advance, in self-study, their knowledge in the selected and related topics in physiology.

**DP requirements:** Completion of independent learning module; delivery and attendance of group presentations

**Assessment:** Independent learning module (5%); group presentation (5%); assignment (15%); mid-year class test (15%); final written examination (60%)

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### **HUB4000W BMEDSCHONS IN MEDICAL CELL BIOLOGY**

120 NQF credits at HEQSF level 8

**Convener:** Dr R Ballo

**Course entry requirements:** None

**Course outline:**

This specialisation introduces students to an academic or research career in Cell Biology. It consists of two general modules, four specialisation-specific modules and a research project. There is a seven-week laboratory techniques course teaching basic information in the discipline along with

statistics. Bioinformatics is required for students taking the infectious diseases, immunology and molecular medicine specialisations. A scientific communication module trains students in scientific writing and comprehension. In addition, they attend four specialisation-specific modules. Three of the modules chosen should be within Cell Biology and one module can be from any of the following honours specialisations: Applied Anatomy or Biological Anthropology, Bioinformatics, Human Genetics, Infectious Diseases and Immunology, Medical Biochemistry, or Physiology. The research project begins in April and ends in October. Students become integrated into research groups and participate in weekly research discussions and seminars. Towards the end of the year they write and present a research project and sit a final comprehension examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework, and in examination. In order to pass the academic year, students must obtain an overall final course average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

#### **HUB4001W BSC(MED)(HONS) IN BIOLOGICAL ANTHROPOLOGY**

120 NQF credits at HEQSF level 8

**Convenor:** Dr L J Friedling

**Course entry requirements:** None

**Course outline:**

This specialisation introduces students to an academic or research career in biological anthropology. It consists of five modules and a research project. There is an intensive seven-week laboratory techniques course aimed at teaching basic anatomy in the anatomical sciences. Students also attend a scientific communication module to train them in scientific writing, and four specialisation-specific modules. Each module covers a specific field and generally runs over a three-week period. Three modules should be from the anatomy specialisation and one module can be from any of the following honours specialisations: Applied Anatomy or Bioinformatics, Biological Anthropology, Cell Biology, Human Genetics, Infectious Diseases and Immunology, or Medical Biochemistry and Physiology. The research project begins in April and ends in September. Students choose their research project from a variety of projects on offer by researchers within Applied Anatomy or Biological Anthropology. During that period, students become integrated into research groups and participate in weekly research discussions and seminars. Towards the end of the year students are required to write a research project and a final examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

#### **HUB4002W BSC(MED)(HONS) IN APPLIED ANATOMY**

120 NQF credits at HEQSF level 8

**Convenor:** Dr L J Friedling

**Course entry requirements:** None

**Course outline:**

This specialisation introduces students to an academic or research career in Applied Anatomy or Biological Anthropology. It consists of two general modules, four specialisation-specific modules and a research project. There is an introductory intensive seven-week laboratory techniques course which includes statistics. Students also attend a scientific communication module that focuses on

scientific writing and comprehension. In addition, they attend four specialisation-specific modules, each of which cover a specific field and run over a three-week period. Students are assessed during each module and there is an examination at the end of the first semester. Three modules should be within Applied Anatomy or Biological Anthropology, and one can be from any of the following honours specialisations: Bioinformatics, Cell Biology, Human Genetics, Infectious Diseases and Immunology, Medical Biochemistry and Physiology. The research project begins in April and ends in September. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and sit a final comprehension examination.

**DP requirements:** Completion and attendance of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examination. In order to pass the academic year, students must obtain an overall average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

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#### **HUB4007F BIOMECHANICS OF THE MUSCULOSKELETAL SYSTEM**

12 NQF credits at HEQSF level 8

**Convenor:** Dr S Sivarasu

**Course entry requirements:** Mathematics 2, Physics 2 or Applied Mathematics 2 or equivalent.

**Co-requisites:** HUB2022F Anatomy for Biomedical Engineering.

**Course outline:**

This course covers physical fundamentals (forms of motion; forces; work, energy and conservation; body segment parameters); the biological properties and the biomechanics of bone, cartilage, tendons, ligaments, nerves and muscles; the biomechanics of joints (knee, hip, ankle, lumbar and cervical spine, shoulder, elbow, wrist, hand and foot); joint forces and torque, and the lubrication of joints. Students then learn methods of application, including the design of artificial joints, implant failure analysis, tissue response to implanted materials, human gait and applied ergonomics.

**DP requirements:** Completion of all assignments. Attendance of site visits.

**Assessment:** Written examination at the end of the course. Work during the semester may contribute to the overall mark.

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#### **HUB4027F HEALTHCARE TECHNOLOGY ASSESSMENT**

13 NQF credits at HEQSF level 8

**Convenor:** M Poluta (Department of Human Biology)

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course provides an introduction to formal concepts and methodologies used in support of health technology screening and adoption as part of appropriate, cost-effective healthcare delivery specifically and health-related interventions more generally. Topics include macro- and micro-assessment; assessment criteria, methods and processes; health status, health outcomes and impact analysis; cost-effectiveness analysis (CEA) methods and thresholds; priority-setting for technology adoption; linking HTA to clinical and institutional practice; public health policy decisions on health technology innovations; special needs and challenges of resource-scarce settings; limitations associated with HTA studies and evidence; concepts in the assessment of diagnostic technologies; programme costs in the economic evaluation of health technologies; case studies.

**DP requirements:** Attendance and completion of all coursework requirements.

**Assessment:** Assignment (30%), class test (10%), written examination (60%).

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**HUB4028H INTRODUCTION TO HEALTHCARE TECHNOLOGY**

13 NQF credits at HEQSF level 8

**Convenor:** Dr J Fortuin**Course entry requirements:** None**Co-requisites:** None**Course outline:**

This course introduces the topic of healthcare technology. It clearly defines the terminology associated with healthcare technology. It further highlights the role of healthcare technology in the health system. The benefits and challenges of healthcare technology is discussed extensively.

**DP requirements:** Attendance and completion of all coursework requirements.**Assessment:** Assignment (30%), class test (10%), written examination (60%).

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**HUB4030H HEALTHCARE PROJECT MANAGEMENT**

13 NQF credits at HEQSF level 8

**Convenor:** Dr J Fortuin**Course entry requirements:** None**Co-requisites:** None**Course outline:**

This course underlines the importance of the project management approach in the healthcare delivery environment. Topics include stakeholder and feasibility analysis, scope definition, activity scheduling (network diagrams, critical path analysis, Gantt charts), resource planning, procurement scheduling, cost estimation/budgeting, project control, scope management, project accounts, earned value, risk management, quality management, project teams, project leadership, conflict management, and project evaluation and reporting.

**DP requirements:** Attendance and completion of all coursework requirements.**Assessment:** Assignment (30%), class test (10%), written examination (60%).

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**HUB4032W PROJECT IN HEALTHCARE TECHNOLOGY MANAGEMENT**

16 NQF credits at HEQSF level 8

**Convenor:** M Poluta**Course entry requirements:** None**Co-requisites:** Courses forming part of the HTM programme**Course outline:**

This is an applied research project that aims to consolidate the student's understanding of the course material through application in a target environment. The topic and brief are determined in consultation with the programme convenor.

**DP requirements:** Submission of project proposal and draft/final versions of report.**Assessment:** Proposal (10%), final report (90%) (with oral examination if necessary).

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**HUB4040W BSC(MED)(HONS) IN PHYSIOLOGY**

120 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof D Lang**Course entry requirements:** None**Course outline:**

This specialisation is aimed at introducing students to an academic or research career in Physiology. It consists of two general modules, four specialisation-specific modules and a research project. The academic year begins with an intensive, seven-week laboratory techniques course, which is a practical module aimed at teaching students basic information in the discipline along with statistics. Bioinformatics is required for students taking the molecular medicine specialisations. Students also attend a scientific communication module that runs throughout the academic year and trains them in scientific writing and comprehension. In addition, students need to attend four specialisation-specific modules. Each module covers a specific field and generally runs over a three-week period. Students are assessed during each module and there is an examination at the end of the first

semester. Three of the modules chosen should be in Physiology and one module may be from any of the following honours specialisations: Applied Anatomy/Biological Anthropology, Bioinformatics, Cell Biology, Human Genetics, Infectious Disease and Immunology, and Medical Biochemistry. The research project begins in April and ends in October. Students choose their research project from a variety of projects on offer by researchers within Physiology. During that period, students become integrated into research groups and participate in weekly research discussions and seminars. Towards the end of the year, students are required to write a research project report and sit a final comprehension examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examination. In order to pass the academic year, students must obtain an overall final course average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme modules and final examination. The final mark is made up as follows: computer programming/biology (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); research project (35%); oral presentation of research project (5%); programme modules final examination (16%); and final comprehension examination (5%).

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#### **HUB4041W BSC(MED)(HONS) IN EXERCISE SCIENCE**

120 NQF credits at HEQSF level 8

**Convener:** Dr T Kohn

**Course entry requirements:** None

**Course outline:**

This qualification is aimed at introducing students to an academic or research career in exercise science. It consists of modules and a research project. The academic year begins with a laboratory techniques course, which is a practical module aimed at teaching students basic and advanced molecular and biochemical techniques. Students complete a module on research methodology and basic concepts of exercise science. In addition, students attend six specialisation-specific modules. Each module covers a specific field in exercise science. The research project begins in April and ends in October. During that period, students become integrated into research groups and participate in weekly research discussions and seminars. Towards the end of the year, students are required to write a research project and final examination. This specialisation is administered at the Sports Science Institute and is separate from the biomedical sciences Honours specialisations.

**DP requirements:** None

**Assessment:** Evaluation is based on performance in research projects, in coursework, and in examination. The final mark is made up as follows: laboratory techniques (15%); programme modules (tests/evaluations) (25%); research project (33%); oral presentation of research project (2%); and final examination (25%).

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#### **HUB4043W BMEDSCHONS IN BIOKINETICS**

120 NQF credits at HEQSF level 8

**Convener:** Dr J Kroff

**Course entry requirements:** None

**Course outline:**

This curriculum comprises lectures, practicals, thematic seminars and tutorials arranged into several different modules. Content includes muscle physiology and biochemistry, anatomy and biomechanics, physiological aspects of human performance, intermediary metabolism and endocrinology, respiratory and cardiovascular systems, neurophysiology, orthopaedic injuries and conditions, chronic diseases and disabilities, health promotion and research methodology. The clinical portion of the biokinetics modules includes clinical rotations and ward rounds in the various programmes run by the Sports Science Institute of South Africa, and in the private biokinetics practice at Vincent Pallotti Hospital in Pinelands, and at Victoria Hospital in Wynberg. In addition, each student is required to complete a research project.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** This includes two written theory papers, an oral examination, class tests, and assignments during and upon the completion of each module. Students are also expected to complete a practical competency examination at two different times during the year in addition to the final Biokinetics clinical examination. The final mark is made up as follows: biokinetics (including tests, evaluations, clinical examinations, rotations) (20%); additional modules (tests/evaluations) (20%); research project (33%); oral presentation of project (2%); final examination 1 and 2 (written) (18%); and final examination (oral) (7%).

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#### **HUB4045F INTRODUCTION TO MEDICAL IMAGING & IMAGE PROCESSING**

12 NQF credits at HEQSF level 8

**Convenor:** Dr M Jankiewicz

**Course entry requirements:** Students must be in their fourth year of study.

**Course outline:**

This course provides an introduction to the principles of physics and engineering involved in the acquisition and processing of medical images. Topics include mathematical tools of image processing; computed tomography; ultrasound; and magnetic resonance imaging.

**Assessment:** Assignments, written assessment and/or a final project.

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#### **HUB4046F NUTRITION SCIENCE I**

10 NQF credits at HEQSF level 8

**Convenor:** Dr J Harbron

**Course entry requirements:** None.

**Course outline:**

The first course in nutrition science covers the essentiality of nutrients, dietary standards, goals, guides and guidelines, and energy. An overview of the nutrition status assessment is also provided. Additionally, the chemical/physical structure, digestion, absorption, metabolism, physiology and functions, the effect of over-/underconsumption, dietary recommendations and food sources of the macronutrient carbohydrates are covered.

**DP requirements:** Students are required to attend and participate in all contact sessions including lectures, tutorials, seminars and group-work, and complete the necessary assignments/tests by the specified due dates.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% of the final mark for the course. The final mark for each of the Nutrition Science courses is the average of the three written course assessments (weighted 80% towards the coursework mark), seminar presentation (weighted 15%) and portfolio (weighted 5%); and the weighted average of the results of the final course examination.

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#### **HUB4047F NUTRITION SCIENCE II**

10 NQF credits at HEQSF level 8

**Convenor:** Dr J Harbron

**Course entry requirements:** HUB4046F.

**Course outline:**

The second course in nutrition science covers the chemical/physical structure, digestion, absorption, metabolism, physiology and functions; the effect of over-/underconsumption; dietary recommendations and food sources of the macronutrients fat and protein. The effects of alcohol on metabolism and nutritional states are covered briefly. The chemical/physical structure, digestion, absorption, metabolism, physiology and functions, dietary recommendations, food sources and the over-/underconsumption of individual nutrients or combinations of nutrients and nutrient interactions are covered for water soluble vitamins (vitamin B1 and B2, niacin, folate, pantothenic acid, vitamin B6 and B12 and vitamin C).

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, tutorials, seminars and group-work, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% of the final mark for the course. The final mark for each of the Nutrition Science courses is the average of the three written course assessments (weighted 80% towards the coursework mark), seminar presentation (weighted 15%) and portfolio (weighted 5%); and the weighted average of the results of the final course examination.

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### **HUB4048F NUTRITION SCIENCE III**

10 NQF credits at HEQSF level 8

**Convenor:** Dr J Harbron

**Course entry requirements:** HUB4047F

**Course outline:**

The third course in nutrition science covers the chemical/physical structure, digestion, absorption, metabolism, physiology and functions, dietary recommendations, food sources and the over-/underconsumption of individual nutrients or combinations of nutrients and nutrient interactions for fat-soluble vitamins (vitamin A, D, E and K), macro- (calcium, magnesium, phosphorus) and trace and ultra-trace (iron, zinc, copper, fluoride, iodine, selenium, manganese, chromium, molybdenum, boron and cobalt) minerals. Functional foods, organic and genetically modified foods, sports nutrition and nutritional genomics are also covered.

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, tutorials, seminars and group-work, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% of the final mark for the course. The final mark for each of the Nutrition Science courses is the average of the three written course assessments (weighted 80% towards the coursework mark), seminar presentation (weighted 15%) and portfolio (weighted 5%); and the weighted average of the results of the final course examination.

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### **HUB4049H COMMUNITY NUTRITION I**

10 NQF credits at HEQSF level 8

**Convenor:** S Booley

**Course entry requirements:** None

**Course outline:**

This first course in community nutrition covers the nutritional needs and health problems associated with different stages of the life-cycle, including pregnancy and lactation, infancy, childhood, adolescence, the adult years and ageing. The course also covers the definition of health and the dimensions of health; the basic principles and history of public health and public health nutrition; the social determinants of health and disease; and the principles and objectives of primary healthcare (PHC). Further content includes PHC in South Africa; the role of nutrition in health and in PHC; health system reforms (e.g. re-engineering PHC; National Health Insurance (NHI); the millennium development goals (MDGs); and sustainable development goals (SDGs)); as well as the effect of globalisation on health and the impact of climate change on health.

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, tutorials, seminars and group-work, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% towards the final mark for the course. The final mark for each of the Community Nutrition courses is the average of the three written course assessments (weighted 80% towards the composite coursework mark), seminar presentation (weighted 15%) and portfolio (weighted 5%); and the weighted average of the results of the final course examinations.

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**HUB4050H COMMUNITY NUTRITION II**

10 NQF credits at HEQSF level 8

**Convenor:** S Booley**Course entry requirements:** HUB4049H.**Course outline:**

The second course in community nutrition covers health and disease patterns (over- and undernutrition, non-communicable and communicable diseases) in South Africa. The UNICEF conceptual framework, the effects of nutrition transition and of urbanisation on health and nutritional status, food and nutrition security, equity and access to health and nutrition services in South Africa are also covered.

**DP requirements:** Students are required to attend and participate in all contact sessions including lectures, tutorials, seminars and group-work, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% of the final mark for the course. The final mark for each of the Community Nutrition courses is the average of the three written course assessments (weighted 80% towards the coursework mark), seminar presentation (weighted 15%) and portfolio (weighted 5%); and the weighted average of the results of the final course examination.

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**HUB4051H COMMUNITY NUTRITION III**

10 NQF credits at HEQSF level 8

**Convenor:** S Booley**Course entry requirements:** HUB4050H**Course outline:**

This third course in community nutrition covers the “triple-A cycle” (assess, analyse, act); community entry; community needs assessment; community development; the programme planning cycle; the monitoring and evaluation of community-based programmes; success factors for community-based nutrition programmes; nutrition surveillance; and health and nutrition policies and programmes in South Africa. The principles of health promotion; behaviour change theories and models; behaviour change counselling techniques; communication skills; nutrition education and advocacy; and nutrition training are also covered in the final course.

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, tutorials, seminars and group-work; and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% towards the final mark for the course. The final mark for each of the Community Nutrition courses comprises the average of the three written course assessments (weighted 80% towards the coursework mark), the result of the seminar presentation (weighted 15%) and the portfolio (weighted 5%); and the weighted average of the results of the final course examinations.

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**HUB4052S CLINICAL NUTRITION I**

10 NQF credits at HEQSF level 8

**Convenor:** Dr J Harbron**Course entry requirements:** None.**Course outline:**

The first course in clinical nutrition covers medical nutrition therapy for the management of non-communicable diseases. More specifically, the course covers the description, definition, signs and symptoms, risk factors, prevalence, diagnostic criteria, pathogenesis, primary prevention, short-term and long-term complications, nutrition status assessment (anthropometric, biochemical, clinical and dietary assessment), medical management and medical nutrition therapy for obesity, diabetes mellitus, cardiovascular disease, hypertension, anaemia and renal disease.

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, tutorials, seminars and group-work, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% of the final mark for the course. The final mark for each of the Clinical Nutrition courses is the average of the three written course assessments (weighted 80% towards the coursework mark), seminar presentation (weighted 15%) and portfolio (weighted 5%); and the weighted average of the results of the final course examination.

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### **HUB4053S CLINICAL NUTRITION II**

10 NQF credits at HEQSF level 8

**Convener:** Dr J Harbron

**Course entry requirements:** HUB4052S.

**Course outline:**

The second course in clinical nutrition covers the description, definition, signs and symptoms, risk factors, prevalence, diagnostic criteria, pathogenesis, primary prevention, short-term and long-term complications, nutrition status assessment (anthropometric, biochemical, clinical and dietary assessment), medical management and medical nutrition therapy for oncology, rheumatic diseases, allergies and intolerances, diseases of the upper and lower gastrointestinal tract including gastric and intestinal surgeries and malabsorption syndromes and disease related to the liver, gallbladder and pancreas.

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, tutorials, seminars and group-work, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% of the final mark for the course. The final mark for each of the Clinical Nutrition courses is the average of the three written course assessments (weighted 80% towards the coursework mark), seminar presentation (weighted 15%) and portfolio (weighted 5%); and the weighted average of the results of the final course examination.

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### **HUB4054S CLINICAL NUTRITION III**

10 NQF credits at HEQSF level 8

**Convener:** Dr J Harbron

**Course entry requirements:** HUB4053S.

**Course outline:**

The third course in clinical nutrition covers the description/definition, signs and symptoms, risk factors, prevalence, diagnostic criteria, pathogenesis, primary prevention, short-term and long-term complications, nutritional status assessment (anthropometric, biochemical, clinical and dietary), medical management and medical nutrition therapy both for adults with metabolic stress, burns, HIV/TB and, neurologic disorders and for paediatric patients (pre-term infants, severely malnourished infants and children, acute gastroenteritis, burns, congenital heart disease, cerebral palsy, HIV, cystic fibrosis, renal disease and liver disease). Feeding options, routes and methods both for adult and for paediatric patients are covered.

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, tutorials, seminars and group-work, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** The coursework mark contributes 60% and the final summative examination contributes 40% of the final mark for the course. The final mark for each of the Clinical Nutrition courses is the average of the three written course assessments (weighted 80% towards the coursework mark), seminar presentation (weighted 15%) and portfolio (weighted 5%); and the weighted average of the results of the final course examination.

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**HUB4055W DIETETICS PRACTICE**

30 NQF credits at HEQSF level 8

**Convenor:** F Hoosen**Course entry requirements:** None.**Objective:** Exposure to the practice of nutrition science, community nutrition, clinical nutrition and food science and training in relevant skills.**Course outline:**

This course involves the development of skills in applying dietary standards and the FBDG (Food-based Dietary Guidelines) to nutritional assessment, to the formulation of nutritional recommendations, and to nutrition education; in discerning between scientific nutrition information and nutrition disinformation; in recommending dietary supplements; in nutritional status assessment within different groups (dietary assessment, anthropometry, clinical and biochemical evaluations); in the growth monitoring of pre-school children; in the compilation of a community profile as a part of the community diagnosis process, and in the identification of appropriate intervention strategies using a community participatory approach; in development of appropriate nutrition education materials, applying exchange systems/recommendations in dietary calculations and planning for specified conditions, including paper case studies; in the writing of clinical notes about the insights gained into clinical and community nutrition practice through observation in outpatient clinics and on field visits, and finally in the manipulation of foods, recipe adaptation and preparation for medical nutrition therapy in the clinical management of disease.

**DP requirements:** Students are required to attend and participate in all contact sessions including tutorials, skills training sessions, field trips and group-work, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** Formative assessment includes assessment of skills training, assignments and practical tests covering normal nutrition, community nutrition, clinical nutrition and food science related topics/skills (65% of final mark). Summative assessment includes a practical examination covering all four focus areas (35% of final mark). Students are expected to pass all four focus areas covered in Dietetics Practice.

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**HUB4056W FOOD SERVICE MANAGEMENT**

30 NQF credits at HEQSF level 8

**Convenor:** M Theron**Course entry requirements:** None.**Objective:** To study all aspects of food service management and the application thereof in practice.**Course outline:**

This course covers the planning, management and evaluation of the different types of food service and delivery systems; criteria for identification of the most suitable system for a particular situation; the physical facility, equipment and design of a kitchen; menu planning for different types of institutions, as well as therapeutic adaptation of these menus; recipe standardisation; food procurement, storage and production planning; food safety and the introduction of HACCP (Hazard Analysis Critical Control Points) into a food service establishment; leadership styles and management; assessment of quality management; productivity and marketing in the food service industry; human resource management, industrial relations and financial controls within a food service establishment; and practical exposure to large-scale cooking.

**DP requirements:** Students are required to attend and participate in all contact sessions including lectures, tutorials, seminars and group sessions, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** Includes formative assessment; tests (65%); seminar (15%); and portfolio (20%). The year mark contributes 60%, and the summative assessment (examination) 40% of the final mark.

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### **HUB4057F FOOD SCIENCE**

15 NQF credits at HEQSF level 8

**Convenor:** L Cornelissen

**Course entry requirements:** None.

**Objective:** The study of food composition and quality of food preparation and processing techniques, and of food product and recipe development for normal and specialised diets, with a focus on optimal retention of nutritional value.

**Course outline:**

This course includes theoretical and practical perspectives on food characteristics and quality (including palatability, digestibility, versatility and nutritional value); basic cookery methods; effect of preparation and cooking techniques on nutritional content and shelf-life of the end product; food selection, taking into account the cost, the nutritional contribution and the differences in food habits and customs among different cultures and religions.

**DP requirements:** Students are required to attend and participate in all contact sessions including lectures, tutorials, seminars and group sessions, and to complete the necessary assignments/ tests by the due dates specified.

**Assessment:** Includes formative assessments: compulsory assignments (30%), theory tests (45%) and practical tests (25%). The year mark contributes 60% of the final mark; the summative assessment (theory examination) contributes 40% of the final mark.

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### **HUB4058F NUTRITION RIGHTS**

5 NQF credits at HEQSF level 8; Eight lectures and two tutorials..

**Convenor:** Prof NP Steyn

**Course entry requirements:** None

**Co-requisites:** None

**Objective:** The objective of this course is to provide the minimum core content relating to nutrition rights for dietetic practitioners as prescribed by the Health Professions Council of South Africa.

**Course outline:**

This course covers the required knowledge relating to, and insights into, relevant nutrition rights-related-concepts to ensure that graduates (future dietetics professionals) know not only the nutrition-related rights of their clients (rights holders), but also their own rights and responsibilities as duty bearers within the human rights framework. The course focuses on health rights and the right to food.

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, case studies and group sessions; and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** This includes the combined results for three formative assessments of individual case studies (40% of the final mark) and the course test mark (60% of the final mark).

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### **HUB4059H RESEARCH THEORY**

15 NQF credits at HEQSF level 8; These comprise 20 lectures and 10 self-study projects..

**Convenor:** Assoc Prof NP Steyn

**Course entry requirements:** None

**Objective:** To equip students with the necessary knowledge and skills to plan and conduct their own research project and to do basic statistics required for data analyses.

**Course outline:**

The objective of this course is to study the fundamentals of research theory and apply this knowledge to the development of a research proposal for execution as a part of the Research Project HUB4064W. This course covers an introduction to the research process; evidence-based nutrition practice, research ethics, research design methods and techniques; reliability and validity of data; dietary assessment in research; development of questionnaires; measurement scales and scores; biostatistics; as well as a critical appraisal of research, scientific writing and the writing of a research proposal.

**DP requirements:** Students are required to attend and participate in all contact sessions, including lectures, tutorials, seminars and group sessions, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** Includes assignments (45% of final mark), portfolio (5% of final mark), and course tests (50% of final mark).

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### **HUB4061W COMMUNITY INTERNSHIP**

35 NQF credits at HEQSF level 8

**Convener:** B Najaar

**Course entry requirements:** All first-year courses.

**Objective:** The objective of this course is to prepare the student for community nutrition practice as a graduate dietitian through supervised practical training as a dietetic intern in community settings.

**Course outline:**

Students participate in service delivery to gain practical experience in the compilation of a community profile; the prevention and treatment of non-communicable and communicable diseases; nutrition through the life cycle, medical nutritional management of vulnerable groups; implementation, monitoring and evaluation of government programmes in this regard; school health (Health Promotion Schools Initiative); nutrition promotion, education and training; application of the intervention programme planning cycle; sport nutrition; eating disorders; community nutrition outreach at schools, crèches and NPOs; and interaction with the media.

**DP requirements:** Students are required to complete all work-based activities, to attend tutorials and group sessions, and to complete the necessary assignments by the due dates specified.

**Assessment:** Includes formative assessment of specified activities and general competency (65%), and summative (written and oral portfolio) examinations (35%).

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### **HUB4062W CLINICAL INTERNSHIP**

45 NQF credits at HEQSF level 8

**Convener:** K Sexton

**Course entry requirements:** All first-year courses.

**Objective:** The objective of this course is to prepare the student for clinical practice as a graduate dietitian through supervised practical training as a dietetic intern in clinical settings.

**Course outline:**

Students participate in service delivery at various clinical sites to gain practical experience in the medical nutritional management of the following: conditions requiring general surgery; gastrointestinal surgery; critical care; vascular and cardiac surgery; burns and trauma care; oncology care (palliative care and the radical treatment of cancer); renal disease care (conservative management of chronic renal failure, renal replacement therapies, transplantation); conditions in general paediatrics; other non-communicable diseases (diabetes mellitus, cardiovascular disease; hypertension and complications thereof); and infectious diseases (HIV/AIDS and tuberculosis).

**DP requirements:** Students are required to complete all work-based activities, to attend tutorials and group sessions, and to complete the necessary assignments by the due dates specified.

**Assessment:** This includes formative assessment of specified activities and general competency (65%), and summative (written and oral portfolio) examinations (35%).

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### **HUB4063W FOOD SERVICE MANAGEMENT INTERNSHIP**

30 NQF credits at HEQSF level 8

**Convener:** M Theron

**Course entry requirements:** All first-year courses

**Objective:** The objective of this course is to prepare the student for food service management practice as a graduate dietitian through supervised practical training as a dietetic intern in food service settings.

**Course outline:**

Students participate in service delivery to gain practice experience in menu planning (general and adaptations for therapeutic diets); food procurement and production procedures; introduction of new menu items and assessment of the effectiveness thereof; implementation of hygiene and food safety standards and systems, e.g. HACCP (Hazard Analysis Critical Control Points); optimising the flow of food in a kitchen; kitchen design and equipment; human resource management, industrial relations and training of staff in a kitchen environment; control and optimal use of financial resources; management of operational procedures; implementation of internal and external policy in management; optimising nutrition service delivery; and food service delivery in government and non-government organisations.

**DP requirements:** Students are required to complete all work-based activities, to attend tutorials and group sessions, and to complete the necessary assignments/tests by the due dates specified.

**Assessment:** Includes formative assessment of specified activities, portfolio and general competency (65%) and a summative (written and oral) examination (35%).

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**HUB4064W RESEARCH PROJECT**

30 NQF credits at HEQSF level 8

**Convener:** Assoc Prof M Senekal

**Course entry requirements:** HUB4059H Research Theory

**Objective:** The objective of this course is to develop honours-level competence in the execution, write-up and presentation of research.

**Course outline:**

The objective of this course is to develop honours-level competence in the execution, write-up and presentation of research. This course involves the critical appraisal of research papers in weekly journal clubs, the completion of a comprehensive literature review on the research topic, writing and finalisation of the research protocol, and ethical and institutional approval if necessary. Execution of the research involves the following: data collection, capture and analysis; a write-up in the form of a research paper, and presentation at a scientific meeting internal to UCT.

**DP requirements:** To qualify for a DP certificate, a student must execute, write up and present a research project and complete a literature review on the topic.

**Assessment:** Includes formative assessments: journal club (5%), research protocol (8%), literature review (22%), research process (10%), research presentation (20%); and summative assessment, involving the examination of the research project (35%).

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**HUB4065H MEDICAL DEVICES AND INSTRUMENTATION OVERVIEW**

13 NQF credits at HEQSF level 8

**Convener:** M Poluta

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course provides an introduction to the design and application of medical devices. Topics include healthcare practice overview, medical device nomenclature and classification; design factors and generic models for medical instrumentation; generalised specifications; human factors; functional requirements, basic principles and operational characteristics of commonly encountered diagnostic, monitoring, therapeutic and assistive medical devices.

**DP requirements:** Attendance and completion of all coursework requirements.

**Assessment:** Assignment (30%), class test (10%), written examinations (60%).

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**HUB4066H HEALTHCARE TECHNOLOGY INNOVATION &**

**ENTREPRENEURSHIP**

13 NQF credits at HEQSF level 8

**Convener:** Dr J Fortuin

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course provides a foundation for those interested in developing and commercialising medical devices and/or associated healthcare technologies. Topics include introduction to medical devices and their classification and nomenclature; healthcare technology needs assessment; new medical devices and healthcare delivery (industry, government, hospital and user perspectives); innovation models, risks, costs and rewards; product development and new product management; product failure; funding; intellectual property issues and patenting; design guidance for manufacturers; medical device regulation including harmonisation; essential principles of safety and performance of medical devices; Council Directive 93/42/EC on Medical Devices; ISO13485 and ISO14971 standards; FDAs 510(k) review procedure for medical devices; product liability and non-conformance; reliability and the product development process; biotechnology innovation; engineering entrepreneurship; medical device innovation for resource-scarce settings.

**DP requirements:** Attendance and completion of all coursework requirements.

**Assessment:** Assignment (30%), class test (10%), written examinations (60%).

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### **HUB4068F/S ASSET MANAGEMENT OF HEALTHCARE TECHNOLOGY AND INFRASTRUCTURE**

13 NQF credits at HEQSF level 8

**Convener:** M Poluta

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

Asset management is “the process of guiding the acquisition, use, safeguarding and disposal of assets to make the most of their service delivery potential and manage the related risks and costs over their entire life-cycle” (*Asset Management Guide, SA National Treasury*). Healthcare providers and organisations require a systematic and co-ordinated set of activities and practices to optimally manage their physical assets – including medical equipment, hospital buildings, plant and machinery, and information systems – for effective health service delivery. Course topics include custodianship and stewardship and related governance issues; life-cycle costing and cost of ownership; strategic planning and investment; operational optimisation and replacement planning; engineering asset management; maintenance strategies and interventions; integrated resource management; asset classification and nomenclature systems; performance, risk and expenditure-related indicators and related benchmarking; audits and asset performance evaluation methodologies. There is a special focus on the public sector.

**DP requirements:** Attendance and completion of all coursework requirements.

**Assessment:** Assignments (30%), class test (10%), written examination (60%).

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### **HUB4069H HEALTHCARE TECHNOLOGY ENGINEERING**

13 NQF credits at HEQSF level 8

**Convener:** Dr J Fortuin

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This module focuses on key technical aspects of healthcare technology which include: (1) Healthcare technology planning & acquisition - technology lifecycles and strategic planning; (2) Health facilities design, planning and assessment - developing expertise in strategic healthcare service and estate planning, with a focus on sound business approaches to health service delivery; (3) Hospital engineering practice - covers the engineering and technical areas associated with the operation of health facilities; (4) Asset Management of Healthcare Technology & Infrastructure

**DP requirements:** Attendance and completion of all coursework requirements.

**Assessment:** Assignments (30%), class test (10%), written examinations (60%).

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### **HUB4071F/S APPLIED ELECTROPHYSIOLOGY**

12 NQF credits at HEQSF level 8

**Convener:** Dr Y Albertus

**Course entry requirements:** Mathematics 2 and Physics 2, or approved equivalent.

**Course outline:**

This course provides an introduction to electrical activity in the human body from an engineering perspective. As such, it is located between cellular electrophysiology and the design of non-invasive electrophysiological equipment. Lecture topics are selected from cellular membrane potentials, electrocardiography (ECG), cardiac fibrillation, pacemakers, surface electromyography (EMG) and high density EMG, electrical stimulation (FES TES) of muscles and nerves, electroencephalography (EEG), brain-computer interfacing (BCI), electrooculography (EOG), electrical bioimpedance, heart-rate variability (HRV) and galvanic skin response (GSR). The course includes lectures, assignments, practical demonstrations, visits to electrophysiological clinics at Groote Schuur Hospital by arrangement, class tests and a final examination.

**DP requirements:** Completion of all assignments.

**Assessment:** Attendance and participation: 10%. Assignments: 30%. Class tests: 10%. Final examination: 50%.

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### **HUB4072F HIGH PERFORMANCE ATHLETE**

15 NQF credits at HEQSF level 8

**Convener:** Dr D Rae

**Course entry requirements:** None

**Course outline:**

Sports performance is improving almost daily in most sporting codes, which may in part be due to the many advances in sports training. This course provides an extensive understanding of skills applied when working with high performance or elite athletes. The coursework includes working in a multidisciplinary team, game analysis, travelling with a team, the influence of environmental factors on performance, developing sports-specific drills, and how to prepare for competitions such as the Olympics or World Cup.

**Lecture times:** Lectures take place during a block week at the beginning of the semester, and then every second week during the semester.

**DP requirements:** Students are required to obtain an average of 50% for the assignments in order to qualify to write the examination. In addition, students are required to attend 80% of lectures to qualify to write the examination.

**Assessment:** Students are required to complete three assignments and an examination at the end of the semester. The assignment and examination each contribute 50% to the total course mark. The examination takes place at the end of semester one.

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### **HUB4073S HEALTH INFORMATICS, E-HEALTH AND MANAGEMENT**

INFORMATION SYSTEMS

13 NQF credits at HEQSF level 8

**Convener:** M Poluta and Dr L Hanmer

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course serves as an introduction to the use of information in healthcare. Topics include an introduction to health informatics; patient records (paper-based and electronic); primary healthcare, district and hospital information systems and their assessment; e-health; m-health; telemedicine; management information systems including the role of information in decision-making. There is a special focus on the South African public health sector.

**DP requirements:** Attendance and completion of all coursework requirements.

**Assessment:** Assignment (30%), class test (10%), written examinations (60%).

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**HUB4089H TELEMEDICINE AND MHEALTH**

13 NQF credits at HEQSF level 8

**Convenor:** Dr J Fortuin**Course entry requirements:** None**Course outline:**

This course serves as an introduction to the use of information in healthcare. Topics include an introduction to health informatics; patient records (paper-based and electronic); primary healthcare, district and hospital information systems and their assessment.

**DP requirements:** None**Assessment:** Examination by external examiners

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**HUB4090H HEALTH INFORMATION SYSTEMS**

13 NQF credits at HEQSF level 8

**Convenor:** Dr J Fortuin**Course outline:**

This course serves as an introduction to the use of information in healthcare. Topics include an introduction to health informatics; patient records (paper-based and electronic); primary healthcare, district and hospital information systems and their assessment.

**DP requirements:** Attendance of all lectures**Assessment:** Class test online 10%; assignment / group work 30%; examination online 60%

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**HUB5006W MPHIL IN SPORTS MEDICINE PART 1A**

60 NQF credits at HEQSF level 9

**Convenor:** Dr J Swart**Course entry requirements:** None**Course outline:**

Readings and study material are provided (via email and Vula) for students doing this part-time programme, and students are required to attend week-long practical components of the programme at the University of Cape Town, three times a year. Practical instruction consists of lectures, tutorials, clinical case discussions and seminars.

Part 1 is divided into three main components: in the first year of study (Part 1A), materials from all the basic sciences are covered. This includes exercise physiology, biochemistry, applied anatomy, biomechanics, pathology and pharmacology, and research methodology.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** During the first year of study, class tests are written and seminars given which make up the year mark (30% of the final mark for Part 1A). At the end of the first year, written examinations (two papers) are taken, which make up 70% of the final mark for Part 1A. Students are admitted to the second year of study only if the final mark is 50% or more.

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**HUB5007W SPORT & EXERCISE MEDICINE M/DISS (60 CRD)**

60 NQF credits at HEQSF level 9

**Convenor:** Dr J Swart**Course entry requirements:** None**Course outline:**

Part 2 consists of a minor dissertation, the choice of the topic to be guided by the programme convenor. The research work for Part 2 can be conducted over the first three years of study, during Parts 1A, 1B and 1C. Students are expected, however, to complete Part 2 by the end of the fourth year of study. Only in exceptional cases will work for Part 2 be continued after the fourth year of study.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** The dissertation is externally examined by two examiners. Students are required to pass the dissertation with 50% or more to successfully complete Part 2.

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### **HUB5010W EXERCISE PHYSIOLOGY**

48 NQF credits at HEQSF level 9

**Convenor:** Dr T Burgess

**Course entry requirements:** None

**Course outline:**

This course comprehensively covers exercise physiology, applied anatomy and biomechanics, and principles of exercise prescription. The purpose of this course is to provide a thorough knowledge of basic sciences as the grounding for clinical practice, to provide an understanding of principles of biomechanics and exercise prescription, and to explore the applications of exercise physiology in both training and competition.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** The year mark is based on two class tests and a group assignment. The examination mark is based on two theory papers and the submission of a portfolio of evidence for the practicum. The year mark constitutes 49% and the examination mark constitutes 51% of the final mark.

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### **HUB5012W EXERCISE & SPORTS PHYSIO MINOR DISSERTATION (60 CRED)**

*When the primary supervisor is in the Department of Human Biology*

60 NQF credits at HEQSF level 9

**Convenor:** Dr T Burgess

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be a maximum of 25 000 words in length and must be on a topic in the same discipline of the coursework master's programme in which the candidate is registered. Having submitted their research proposals and obtained formal research ethics approval, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must develop conceptual and academic rigour in research, acquire competence in initiating, planning and conducting research, and be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgements using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences. They must also disseminate research findings that will contribute to the field of Exercise and Sports Physiotherapy in appropriate formats, such as publications or other documents for the information of athletes or sporting organisations.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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### **HUB5016F PHYSICAL ACTIVITY & EPIDEMIOLOGY**

15 NQF credits at HEQSF level 9

**Convenor:** Dr J Kroff

**Course entry requirements:** None

**Course outline:**

This course aims to provide students with an understanding of the complex nature of the biological, socio-cultural and socio-ecological interactions on physical activity and health promotion, with an emphasis on quantifying the burden of disease associated with physical activity/inactivity, its relationship with other risk factors, and the evaluation of health promotion programmes in various settings.

The topics that are covered in this course include the history of physical activity and health; concepts and methods in epidemiology; measurement and surveillance; development, implementation and evaluation of evidence-based health promotion programmes, focusing on physical activity in various settings; theories of behaviour change and their application in promoting physical activity; and environmental determinants of physical activity.

**Lecture times:** Lectures take place during a block week at the beginning of the semester, and then every second week until the end of the semester.

**DP requirements:** Students are required to achieve an average of 50% for the assignments in order to qualify to write the examination.

**Assessment:** Students are required to complete three assignments and an examination at the end of the semester. The assignment and examination each contribute 50% to the total course mark.

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#### **HUB5017F RESEARCH METHODS AND STATISTICS FOR PHYSICAL ACTIVITY**

15 NQF credits at HEQSF level 9

**Convenor:** Prof E V Lambert

**Course entry requirements:** None

**Course outline:**

The aim of this course is to provide students with the skills and knowledge to conduct both quantitative and qualitative research studies. In addition, the course facilitates the development and investigation of statistical methods and their application in clinical research. The course is divided into two parts: (i) Research methods and (ii) statistics. Content includes the planning, development, execution and evaluation of a qualitative research study; and advanced statistical methods, such as linear regression and survival analyses.

**Lecture times:** Lectures take place during a block week at the beginning of the semester, and then every second week during the semester.

**DP requirements:** Students are required to achieve an average of 50% for the assignments in order to qualify to write the examination.

**Assessment:** Students are required to complete three assignments and an examination at the end of the semester. The assignments and examination each contribute 50% to the total course mark.

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#### **HUB5018F BIOKINETICS IN THE WORKPLACE**

15 NQF credits at HEQSF level 9

**Convenor:** Dr J Kroff

**Course entry requirements:** None

**Course outline:**

This course is comprised of two main sections: (i) Ergonomics in the work-site, and (ii) work-site health promotion programmes. The coursework includes the theory underlying ergonomics assessment in various work settings and occupations, and students receive the required training to enable them to conduct an ergonomic risk assessment. In addition, students learn how to make the case for work-site health promotion programmes, to plan and conduct a needs assessment, and to plan various work-site health promotion strategies.

**Lecture times:** Lectures take place during a block week at the beginning of the semester, and then every second week during the semester.

**DP requirements:** Students are required to achieve an average of 50% for the assignments in order to qualify to write the examination.

**Assessment:** Students are required to complete three assignments and an examination at the end of the semester. The assignments contribute 50% and the examination 50% to the total course mark. The three written assignments must be submitted before the examination.

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#### **HUB5020S ADVANCED STRENGTH AND CONDITIONING FOR ATHLETIC PERFORMANCE**

15 NQF credits at HEQSF level 9

**Convenor:** Prof M Lambert

**Course entry requirements:** None

**Course outline:**

There is an increasing need for biokineticists to expand their skills to become specialised sports and conditioning practitioners, especially in the climate of rapidly changing and evolving training

methods and approaches. The course aims to provide biokineticists with advanced skills for strength and conditioning training, which equip them to prescribe training regimes for special populations, general fitness and conditioning regimes, and sports performance and the rehabilitation of injuries. The coursework includes advanced training in understanding physiological and biomechanical mechanisms, principles and assessment, and how these apply to strength and conditioning training. In addition, students receive extensive training in exercise prescriptions for special populations (children, older adults, pregnancy, and persons with disability). Students are encouraged to write the US Strength and Conditioning Specialist Examination upon completion of the course, although this is not a requirement to pass the course.

**Lecture times:** Lectures take place during a block week at the beginning of the semester, and then every second week during the semester.

**DP requirements:** Students are required to achieve an average of 50% for the assignments in order to qualify to write the examination.

**Assessment:** Students are required to complete three assignments and an examination at the end of the semester. The assignments contribute 50% and examination 50% to the total course mark. The examination takes place at the end of semester two.

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### **HUB5021S BIORHETROPHYSIOLOGY AND NEUROMUSCULAR DISORDERS**

15 NQF credits at HEQSF level 9

**Convenor:** Dr J Kroff

**Course entry requirements:** None

**Course outline:**

This course specifically focuses on the role and application of biokinetics (in which exercise is the therapeutic modality) for patients and clients with neuromuscular conditions, and throughout life. A key focus is to position biokinetics practice, and align it with other disciplines such as physiotherapy and occupational therapy.

The conditions that are addressed in this course include the aetiology, prognosis and exercise prescription for patients with stroke, spinal cord injuries, Becker-Duchenne, cerebral palsy, Friedreich's ataxia and Parkinson's disease.

**Lecture times:** Lectures take place during a block week at the beginning of the semester, and then every second week during the semester.

**DP requirements:** Students are required to achieve an average of 50% for the assignments in order to qualify to write the examination.

**Assessment:** Students are required to complete three assignments and an examination at the end of the semester. The assignments contribute 50% and the examination 50% to the total course mark. The examination takes place at the end of semester two.

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### **HUB5022S NUTRITION & ERGOGENIC AIDS**

15 NQF credits at HEQSF level 9

**Convenor:** Dr J Kroff

**Course entry requirements:** None

**Course outline:**

Many clients and patients seeking biokinetics advice also require nutritional support. These include overweight and obese persons, persons with chronic, non-communicable disease, and sports persons and athletes. This course aims to provide students with a broad understanding of how ergogenic aids and nutrition can influence exercise and sports performance and also of weight management. The course aims to equip students to make sound judgements of both the value and dangers of ergogenic aids in exercise performance. The topics that are addressed in this course include energy expenditure and requirements for weight management and exercise performance, hyponatraemia, body composition for sport and the use and abuse of nutritional and pharmacological supplements and ergogenic aids in sport. (It is important to note that students are not sufficiently qualified to prescribe diets and eating plans for individuals or athletes; rather they have an understanding of the physiological mechanisms and adaptations that occur with various forms of nutritional supplementation and effects of ergogenic aids.)

**DP requirements:** Students are required to achieve an average of 50% for the assignments in order to qualify to write the examination.

**Assessment:** Students are required to complete three assignments and an examination at the end of the semester. The assignments contribute 50% and the examination 50% to the total course mark. The examination takes place at the end of semester two.

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### **HUB5023S ADVANCED CLINICAL EXERCISE PHYSIOLOGY**

15 NQF credits at HEQSF level 9

**Convenor:** Dr M Posthumus

**Course entry requirements:** None

**Course outline:**

The aim of this course is to provide biokineticists with advanced training in exercise physiology, enabling them to have a greater understanding of the physiological and metabolic processes and mechanisms that may influence both disease progression and sporting performance. The course content includes an analysis of the cellular and molecular adaptations that may occur with exercise training and the relationship between genetics, injuries and sports performance. Other topics that are addressed are the effects of exercise on the metabolic system, the neuro-endocrine control of exercise, cellular respiration and regulation, and metabolism during exercise in children and older adults.

**Lecture times:** Lectures take place during a block week at the beginning of the semester, and then every second week during the semester.

**DP requirements:** Students are required to achieve an average of 50% for the assignments in order to qualify to write the examination.

**Assessment:** Students are required to complete three assignments and an examination at the end of the semester. The assignments contribute 50% and the examination 50% to the total course mark. The examination takes place at the end of semester two.

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### **HUB5024W BIOKINETICS MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convenor:** Dr J Kroff

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in biokinetics. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgements using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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### **HUB5025W MPHIL SPORT AND EXERCISE MEDICINE PART 1B**

40 NQF credits at HEQSF level 9

**Convenor:** Dr J Swart

**Course entry requirements:** HUB5006W

**Course outline:**

Readings and study materials are provided (via email and Vula) for students doing the part-time programme, and students are required to attend week-long practical components of the programme at the University of Cape Town, three times a year. Practical instruction consists of lectures, tutorials, clinical case discussions and seminars. In the second and third years (Parts 1B and 1C), the

coursework in clinical sport and exercise medicine is presented in two sections (exercise-related injuries and general sport and exercise medicine). The two sections, exercise related injuries and general sport and exercise medicine, are taught in alternate calendar years. The sequence of presentation therefore switches for successive intake groups. At the end of their second year, students take the examination that completes Part 1B or 1C, as the case may be, and at the end of their third year, correspondingly, they take the examination that completes 1B or 1C.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** *Year marks:* The year mark for each Part (exercise-related injuries and general sport and exercise medicine in two different years) is made up by marks obtained for the class tests, seminars and clinical examinations during each year. All the class tests and seminars contribute to the year mark, which contributes 30% of the final mark for Parts 1B and 1C. *Written examinations:* In October/November of the second and the third years (exercise-related injuries and general sport and exercise medicine in two different years), a paper is written which contributes 30% to the final mark for Parts 1B and 1C. Students are required to obtain 50% or more for the written examinations in each year to successfully complete Parts 1B and 1C. *Clinical examinations:* In October/November of each year (exercise-related injuries and general sport and exercise medicine in two different years), a clinical examination (clinical cases) and objective structured clinical examination (OSCE) are conducted which contribute 40% to the final mark for Parts 1B and 1C. Students are required to obtain 50% or more for each component of the clinical examination (clinical cases and OSCE) to complete Parts 1B and 1C.

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#### **HUB5026W MPHIL SPORT & EXERCISE MEDICINE PART 1C**

40 NQF credits at HEQSF level 9

**Convener:** Dr J Swart

**Course entry requirements:** HUB5006W

**Course outline:**

Readings and study materials are provided (via email and Vula) for students doing the part-time programme, and students are required to attend week-long practical components of the programme at the University of Cape Town, three times a year. Practical instruction consists of lectures, tutorials, clinical case discussions and seminars. In the second and third years (Parts 1B and 1C), the coursework in clinical sport and exercise medicine is presented in two sections (exercise-related injuries and general sport and exercise medicine). The two sections, exercise related injuries and general sport and exercise medicine, are taught in alternate calendar years. The sequence of presentation therefore switches for successive intake groups. At the end of their second year, students take the examination that completes Part 1B or 1C, as the case may be, and at the end of their third year, correspondingly, they take the examination that completes 1B or 1C.

**DP requirements:** Attendance and completion of all coursework commitments.

**Assessment:** The year mark for each Part (exercise-related injuries and general sport and exercise medicine in two different years) is made up by marks obtained for the class tests, seminars and clinical examinations during each year. All the class tests and seminars contribute to the year mark, which contributes 30% of the final mark for Parts 1B and 1C. In October/November of the second and the third years (exercise-related injuries and general sport and exercise medicine in two different years), a paper is written which contributes 30% to the final mark for Parts 1B and 1C. Students are required to obtain 50% or more for the written examinations in each year to successfully complete Parts 1B and 1C. In October/November of each year (exercise-related injuries and general sport and exercise medicine in two different years), a clinical examination (clinical cases) and objective structured clinical examination (OSCE) are conducted which contribute 40% to the final mark for Parts 1B and 1C. Students are required to obtain 50% or more for each component of the clinical examination (clinical cases and OSCE) to complete Parts 1B and 1C.

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#### **HUB5029W HEALTH INNOVATION MINOR DISS (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof T Douglas

**Course entry requirements:** None

**Course outline:**

The minor dissertation must be on an approved topic and must embody research under the guidance of a supervisor appointed by Senate. The research topic/problem is selected in consultation with the supervisor. The dissertation describes the design, implementation or evaluation of an innovation for improved health. Students are expected to attend scientific seminars and present seminars on their dissertation work. A candidate must identify and select a dissertation topic during the second semester of the first year of registration for the degree. The dissertation must be submitted not later than 31 December of the second year of registration for the degree. This rule is waived only in extenuating circumstances and at the discretion of the Head of Department.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

**HUB5031F HEALTH INNOVATION & DESIGN (A)**

21 NQF credits at HEQSF level 9; 36 sessions (lectures/tutorials/site visits).

**Convener:** Dr T Mutsvangwa

**Course entry requirements:** .

**Co-requisites:** None

**Objective:** The aim is to introduce participants to human-centered design of solutions to promote health and wellbeing

**Course outline:**

This course presents the key themes of design thinking as applied to health innovation. A guided tour is provided through the innovation process using design thinking principles. Participants are divided into groups that are tasked with framing a design challenge and addressing it by applying design thinking for health innovation. The design challenges are identified and validated through interaction with stakeholders.

**DP requirements:** Completion of all assignments with a mark of at least 50%.

**Assessment:** Coursework: 100%.

**HUB5032S HEALTH INNOVATION & DESIGN (B)**

21 NQF credits at HEQSF level 9; 36 sessions (lectures/tutorials/site visits).

**Convener:** Dr T Mutsvangwa

**Course entry requirements:** HUB5031F or equivalent

**Co-requisites:** None

**Objective:** Participants apply advanced design thinking to human-centered design of solutions to promote health and well-being and address needs identified through engagement with relevant stakeholders.

**Course outline:**

This course presents advanced key themes of design thinking as applied to health innovation. Participants apply the tools presented in the first semester (HUB5031F) and develop solutions to new design challenges. The semester culminates in the presentation of the developed solutions to the relevant stakeholders. Primer lectures of key points in the innovation cycle are provided at regular intervals during the second semester.

**Lecture times:** By arrangement.

**DP requirements:** Completion of all assignments with a mark of at least 50%.

**Assessment:** Coursework: 100%.

**HUB5033F HEALTH INNOVATION & ENTREPRENEURSHIP**

12 NQF credits at HEQSF level 9; 24 sessions (lectures/tutorials/site visits).

**Convener:** Prof T Douglas

**Course entry requirements:** Honours-equivalent degree; HUB5031F or equivalent

**Co-requisites:** None

**Objective:** The course provides a framework within which to consider the implementation and commercialisation of health innovations.

**Course outline:**

The course assists students to develop an implementation pathway for concepts in innovation that have been developed and creates awareness of the challenges of implementation. It enables students to identify opportunities and implement mechanisms for creating social and economic value through interventions for better health. The risks, pressures and practicalities associated with innovation and entrepreneurship in the healthcare and wellness environment are considered. Topics covered include market needs, routes to market, regulatory standards and requirements, and intellectual property protection.

**Lecture times:** By arrangement.

**DP requirements:** Completion of all assignments with a mark of at least 50%.

**Assessment:** Coursework 100%.

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**HUB5035W BIOLOGICAL ANTHROPOLOGY DISSERTATION**

180 NQF credits at HEQSF level 9

**Convener:** Dr LJ Friedling

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in the relevant discipline. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. The dissertation is externally examined.

**DP requirements:** None

**Assessment:** External examination of the dissertation

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**HUB6007W BIOMEDICAL ENGINEERING M/DISSERTATION (90 CREDITS)**

90 NQF credits at HEQSF level 9

**Convener:** Assoc Prof T Franz

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, must be about 25 000 words in length and must be on a topic in the same discipline of the coursework master's programme for which the candidate is registered. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, design and critically appraise research, make sound judgement using data and information at their disposal, and be able to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**HUB6009F MEDICAL DEVICE DESIGN PART I**

21 NQF credits at HEQSF level 9

**Convener:** Dr S Sivarasu

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This master's level course aims to provide students with the necessary knowledge in health sciences that will enable them to apply their engineering skills to solve important medical/health problems.

The proposed design course will enhance students' preparation for research and careers in biomedical engineering by: (1) Allowing them to apply their engineering design skills to solve biomedical engineering problems. (2) Providing a platform to observe and participate in the design project reviews of other students. (3) Preparing a technical report in the format of an academic journal publication. (4) Presenting and defending their design projects before a multi-disciplinary committee. (5) Demonstrating working prototypes.

The course is also open to graduates with a first degree in engineering or another quantitative discipline (mathematics, computer science, physics).

**DP requirements:** Attendance of all design reviews

**Assessment:** Coursework 55% and Final Assessment 45%  
a) Course Work 55 %Regular project update presentations, attendance and participation in group design discussions  
b) Final Assessment 45%Technical Report 15%; Demonstration 15% & Oral Presentation 15%

### **HUB6010S MEDICAL DEVICE DESIGN PART II**

21 NQF credits at HEQSF level 9

**Course entry requirements:** HUB2019F and HUB2022F

**Co-requisites:** None

**Course outline:**

The purpose of the programme is to train the future generation of biomedical engineers / health technology innovators who will make a significant impact on healthcare delivery in South Africa. This postgraduate course is open to graduates with a first degree in engineering or another quantitative discipline (mathematics, computer science, physics), and has the intention of providing students with the necessary knowledge in health science so that they can apply their engineering skills to solve important medical/health problems. The proposed design course will enhance students' preparation for research and careers in biomedical engineering by: (1) Allowing them to apply their engineering design skills to solve biomedical engineering problems; (2) Providing a platform to observing and participate in the design project reviews of other students; (3) Preparing a technical report in the format of an academic journal publication; (4) Presenting and defending their design projects before a multi-disciplinary committee; and (5) Demonstrating working prototypes.

**DP requirements:** Attendance of all design reviews

**Assessment:** Coursework 55% and Final Assessment 45%, made up as follows:  
a) Course Work 55 %: consists of regular project update presentations, attendance and participation in group design discussions  
b) Final Assessment 45%: consists of technical report 15%; demonstration 15% & oral presentation 15%

### **HUB6011W HEALTHCARE TECHNOLOGY MANAGEMENT DISSERTATION**

180 NQF credits at HEQSF level 9

**Convenor:** Dr J Fortuin

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in the relevant discipline. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. The dissertation is externally examined.

**DP requirements:** None

**Assessment:** External examination of the dissertation

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**HUB6012W BIOLOGICAL ANTHROPOLOGY THESIS**

360 NQF credits at HEQSF level 10

**Convener:** Dr LJ Friedling

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This is a degree by doctoral thesis of up to 80,000 words in length. It must reflect a comprehensive and systemic grasp of a discipline's body of knowledge with expertise and specialist knowledge in an area at the forefront of the discipline; a critical understanding of the most advanced research methodologies, techniques and technologies in the discipline; an ability to participate in scholarly debates at the cutting edge of an area of specialisation; and an ability to apply knowledge, theory and research methods creatively to complex practical, theoretical and epistemological problems. The candidate should demonstrate advanced information retrieval and processing skills and an ability to effectively present and communicate the results of research and opinion to specialist and non-specialist audiences, using the full resources of an academic/professional discourse. The production of the thesis must meet international standards of scholarly and professional writing.

**DP requirements:** None

**Assessment:** External examination of the thesis

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**HUB7014W HEALTHCARE TECHNOLOGY MANAGEMENT THESIS**

360 NQF credits at HEQSF level 10

**Convener:** Dr J Fortuin

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This is a degree by doctoral thesis of up to 80,000 words in length. It must reflect a comprehensive and systemic grasp of a discipline's body of knowledge with expertise and specialist knowledge in an area at the forefront of the discipline; a critical understanding of the most advanced research methodologies, techniques and technologies in the discipline; an ability to participate in scholarly debates at the cutting edge of an area of specialisation; and an ability to apply knowledge, theory and research methods creatively to complex practical, theoretical and epistemological problems. The candidate should demonstrate advanced information retrieval and processing skills and an ability to effectively present and communicate the results of research and opinion to specialist and non-specialist audiences, using the full resources of an academic/professional discourse. The production of the thesis must meet international standards of scholarly and professional writing.

**DP requirements:** None

**Assessment:** External examination of the thesis

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## INTEGRATIVE BIOMEDICAL SCIENCES

### Professor and Head of Department

E D Sturrock, BSc(Med)(Hons) PhD *Cape Town*, FRSSAf, Fellow of UCT

### Medical Biochemistry and Structural Biology

*Level 6, Falmouth Building and Wernher and Beit Building North*

#### Associate Professor and Head:

V Leaner, BSc(Med)(Hons) PhD *Cape Town*

#### Professors:

AA Katz, PhD *Weizmann Institute*

PN Meissner, BSc(Med)(Hons) PhD *Cape Town* Fellow of UCT

RP Millar, PhD *Liverpool* FRCPPath(Chem) FRSE Life Fellow of UCT (UCT Senior Scholar)

MI Parker, BSc(Hons) PhD MASSAf (International Centre for Genetic Engineering and Biotechnology – ICGEB *Cape Town* (South African Research Chair)

BT Sewell, MSc *Witwatersrand* PhD *London*

#### Emeritus Professor:

W Gevers, MBChB DSc(hc) ad eundem *Cape Town* MA DPhil *Oxon* DSc(hc) *UPE CMSA* Fellow of UCT

#### Honorary Professors:

CGP Mathew, BSc(Hons) *UPE PhD London* FRCPPath *Royal College of Pathologists*

W-D Schubert, BSc(Hons) MSc *Cape Town* PhD *Berlin*

K R Acharya, BSc MSc PhD *Bangalore*

#### Associate Professor:

DT Hendricks, BSc(Med)(Hons) PhD *Cape Town*

#### Emeritus Associate Professor:

LR Thilo, MSc *Pret Dr rer Nat Heidelberg*

#### Senior Lecturer:

Z Woodman, BSc(Med)(Hons) PhD *Cape Town*

#### Honorary Lecturer:

KJ Sales, BSc(Med)(Hons) MSc PhD *Cape Town*

#### Senior Researcher:

G Schäfer, PhD *Humboldt Bonn*

#### Lecturer/NRF career:

P van der Watt, PhD *Cape Town*

J Woodward, PhD *Cape Town*

### Chemical and Systems Biology

*Level 3, Wernher and Beit Building North*

#### Professor and Head:

J Blackburn, BSc(Hons) DPhil *Oxon* (South African Research Chair)

**Professors:**

S Barth, PhD *Bonn DMSc Cologne*  
ED Sturrock, BSc(Med)(Hons) PhD *Cape Town*  
M Mhlanga, PhD

**Honorary Professor:**

DL Tabb, PhD *Washington*

**Honorary Associate Professor:**

L Zerbini, MSc PhD *São Paulo, Brazil*

**Lecturer/Junior Research Fellow**

NC Soares BSc(Hons) *Westminster* PhD *Lisbon*

**Chief Scientific Officer**

S Schwager, MSc *Cape Town*

**Computational Biology**

*Level 1, Wernher and Beit Building North, IDM*

**Professor and Head:**

NJ Mulder, BSc(Hons) PhD *Cape Town*

**Honorary Professor:**

S Bergmann, PhD *Rehovot*

**Associate Professor Full-time:**

D Martin, PhD *Cape Town*

**Honorary Associate Professor:**

G Mazandu, PhD *Cape Town*

**Lecturer/NRF career:**

N Wood, PhD *Cape Town*

**COURSES OFFERED**

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**IBS4000W BMEDSCHONS MEDICAL BIOCHEMISTRY**

120 NQF credits at HEQSF level 8

**Convener:** Prof A A Katz

**Course entry requirements:** None

**Course outline:**

This specialisation introduces students to an academic or research career in medical biochemistry, molecular medicine/biology, and structural biology/rational drug design. It aims to prepare students for relevant master's and PhD programmes and career directions in professional scientific research and service careers in biomedical and biotechnology fields. The specialisation consists of two general modules, four specialisation-specific modules, and a research project. There is a seven-week laboratory methods course teaching basic and more advanced molecular and biochemical methods as well as applied bioinformatics and applied statistics. A science and communication module trains them in scientific writing and comprehension. They attend four specialisation-specific modules; three in Medical Biochemistry and one from the Applied Anatomy or Biological Anthropology, Bioinformatics, Cell Biology, Human Genetics, Infectious Diseases and Immunology, or Physiology specialisations. The research project begins in April and ends in October. Students become

integrated into research groups and participate in weekly research discussions and seminars. Finally, they write and present a research project report and sit a final examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework, and in examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% average for the programme modules, tests and final examinations. The final mark is made up as follows: laboratory methods (tests and examination) (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

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### **IBS4001W BMEDSCHONS BIOINFORMATICS**

120 NQF credits at HEQSF level 8

**Convener:** Prof N Mulder

**Course entry requirements:** None

**Course outline:**

This specialisation introduces students to an academic career in bioinformatics. It consists of two general modules, four specialisation-specific modules, and a research project. There is a seven-week laboratory techniques course aimed at teaching basic information in the discipline along with statistics. Students with a computer science background do a biology laboratory techniques course, while those with a biology background learn programming and basic computational techniques. Bioinformatics is required for students taking the molecular medicine specialisation. Students also attend a scientific communication module to train them in scientific writing and comprehension. They attend four specialisation-specific modules, each of which covers a specific field over a three-week period. Three of the modules chosen should be within Bioinformatics, and one can be from any of the following honours specialisations: Cell Biology, Human Genetics, Infectious Diseases and Immunology, or Medical Biochemistry and Physiology. The research project begins in April and ends in October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and sit a final comprehension examination.

**DP requirements:** Completion and attendance of all academic assignments.

**Assessment:** Evaluation is based on performance in the research project, in coursework, and in examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim modules and final examination. The final mark is made up as follows: computer programming/biology techniques (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); research project (35%); oral presentation of research project (5%); programme modules final examination (16%); and final comprehension examination (5%).

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### **IBS4002W BMEDSCHONS STRUCTURAL BIOLOGY**

120 NQF credits at HEQSF level 8

**Convener:** Prof B T Sewell

**Course entry requirements:** None

**Course outline:**

Structural biology deals with the three-dimensional structure and dynamic properties of biological macromolecules (proteins, nucleic acids and complexes) at atomic resolution, in order to provide a structural explanation for biological function, role, activity, toxicity, and selectivity. This programme is aimed at introducing students to an academic or research career in biochemical, biophysical and molecular medicine/biology in broad terms – specialising in structural biology. The programme consists of two general modules, four further modules of which at least three are specialisation-specific and a structural biology-related research project. There is a seven-week Laboratory Methodology course, teaching basic and more advanced molecular and biochemical techniques, applied bioinformatics, and applied statistics. A Science and Communication module teaches scientific writing, critique, presentation and comprehension. Students choose a research

project from a variety within the Division of Medical Biochemistry and laboratories (such as the SBRU, IDM, ICGB, EMU, and CPGR). Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write and present a research project report and sit a specialisation-specific scientific comprehension examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examinations. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the programme modules, tests and final examinations. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules: tests/evaluations (14%); programme modules: final examinations (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

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#### **IBS5003W CHEMICAL BIOLOGY DISSERTATION**

180 NQF credits at HEQSF level 9

**Convenor:** Prof J Blackburn

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in the relevant discipline. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. The dissertation is externally examined.

**DP**

**requirements:**

None

**Assessment:** External examination of the dissertation

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#### **IBS5004Z BIOINFORMATICS FOR HIGH-THROUGHPUT BIOLOGY**

15 NQF credits at HEQSF level 9

**Course outline:**

This course is aimed to introduce students to bioinformatics techniques related to processing, analysis and interpretation of high-throughput biological data. It will cover the analysis of next generation sequence data of different types (metagenomic, RNA-Seq and full genome); statistical analysis of NGS in relation to metadata associated with it; phylogenetic analysis of sequence data; and medical population genetics from NGS or array data. The students who complete the course will be skilled both in handling big biological data sets, and in their downstream interpretation.

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#### **IBS5005W DATA SCIENCE MINOR DISSERTATION**

90 NQF credits at HEQSF level 9

**Course outline:**

The research component of the degree is based on a 90 credit dissertation. The topic of the research will be based on an analysis of large data sets from Computational Biology.

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#### **IBS6002W CHEMICAL BIOLOGY THESIS**

360 NQF credits at HEQSF level 10

**Convenor:** Prof J Blackburn

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This is a degree by doctoral thesis of up to 80,000 words in length. It must reflect a comprehensive and systemic grasp of a discipline's body of knowledge with expertise and specialist knowledge in

an area at the forefront of the discipline; a critical understanding of the most advanced research methodologies, techniques and technologies in the discipline; an ability to participate in scholarly debates at the cutting edge of an area of specialisation; and an ability to apply knowledge, theory and research methods creatively to complex practical, theoretical and epistemological problems. The candidate should demonstrate advanced information retrieval and processing skills and an ability to effectively present and communicate the results of research and opinion to specialist and non-specialist audiences, using the full resources of an academic/professional discourse. The production of the thesis must meet international standards of scholarly and professional writing.

**DP requirements:** None

**Assessment:** External examination of the thesis

## MEDICINE

*J46, Old Main Building, Groote Schuur Hospital*

*The Department of Medicine is a large academic and clinical department which plays a leading role in medical education and research, and provides clinical services to the communities of the Western Cape and, in the case of our highly specialised services, to patients throughout Southern Africa.*

**Professor and Head:**

*N B A Ntusi, BSc(Hons) MBChB FCP SA MD Cape Town DPhil Oxon Cert Cardio1 Phys SA*

**Professor of Clinical Medicine and Deputy Head:**

*V C Burch, MBChB Witwatersrand MMed Cape Town FCP SA FRCP London PhD Rotterdam*

**Emeritus Professors:**

*E D Bateman, MBChB MD Cape Town DCH FRCP UK*

*S R Benatar, MBChB DSc(Med) Cape Town FFA FRCP*

*P J Commerford, MBChB Cape Town FCP SA FACC*

*L H Opie, DPhil Oxon MD DSc(Med) Cape Town FRCP UK*

*S Saunders, MBChB MD Cape Town*

*J L Seggie, BSc(Hons) MBChB MD Birm FRCP London FCP SA*

*G Todd, BSc(Agric) UKZN MBChB PhD Cape Town FC Derm SA*

**Honorary Professors:**

*M O Bachman, MBChB DOH MSc FFCH SA FFPH UK PhD*

*M Badri, BSc(Hons) MSc Statistics India MSc(Medicine) PhD Cape Town*

*J P Bassand, MD FESC FACC*

*T G Clark, BCom MSc New Zealand DPhil, Oxon*

*C A de Jager, BSc(Hons) HDE Natal PhD Cape Town*

*T Forrester, DM(Med) PhD MBBS West Indies MSc*

*B J Gersh, MBChB Cape Town DPhil Oxon FCP SA FRCP UK FACC*

*P Heering, MD FASN*

*A P Kengne, MD PhD Sydney*

*M C Kew, MRCP UK MBBCh MD Witwatersrand PhD FCP SA FRCP London*

*V J Louw, MBChB Stell MMed (Internal Medicine) Stell FCP SA PhD (Health Professions Education) UFS*

*C Masimirembwa, PhD Sweden DPhil BSc(Hons) Zimbabwe*

*G A Mensah, MD FACC FESC FAHA FACP FCP SA Hon*

*A Nel, MBChB PhD Cape Town*

*M G N Pai, MD PhD*

*G Pillai, PhD (Pharmacology)*

*P J Schwartz, MD PhD*

*S Stewart, PhD Glasgow NFESC FAHA FCSANZ*

*R J Wilkinson, BMBCh MA PhD DTM&H FRCP UK*

*D M Yellon, PhD FESC FRCP UK*

*M F Zwarenstein, MBChB Witwatersrand MSc PhD Sweden*

**Visiting Professors:**

*L Thabane, PhD (Statistics) London MSc DipSci England BSc Lesotho*

**Associate Professors:**

*M E Engel, BSc(Hons) MPH (Epid) PhD Cape Town*

*G Meintjes, MBChB PhD Cape Town MRCP UK FCP Dip HIV Man SA MPH Johns Hopkins*

**Emeritus Associate Professors:**

R W Eastman, MBChB *Cape Town* FRCP UK  
 G R Keeton, MBBCh *Witwatersrand* FRCP *Glasgow* FCP SA  
 S R Ress, MBChB *Pret* FCP SA  
 R Scott Millar, MBBCh *Witwatersrand* FCP SA  
 C R Swanepoel, MBChB *Cape Town* MRCP FRCP UK  
 R van Zyl Smit, MBBCh *Witwatersrand* MD *Cape Town* FRCP

**Honorary Associate Professors:**

G Cotter, MD FACC FESC *Israel*  
 R Dawson, MBChB *Cape Town* FCP Cert Pulm Phys SA  
 L R Fairall, MBChB PhD *Cape Town*  
 T Gumbo, MD *Zimbabwe*  
 A P Kengne, MD PhD *Sydney*  
 M Khati, BSc BSc(Med)(Hons) *Cape Town* MSc (Medicine) DIC DPhil UK  
 R McNerney, PhD UK  
 R N van Zyl-Smit, MBChB MMed *Cape Town* FCP Cert Pulm Dip HIV Man SA MRCP UK  
 K Wilkinson, MSc(Chem) PhD (Chem&PetideImmunol) *Budapest*

**Senior Lecturers part-time:**

N P Gina MBBCh *Witwatersrand* FCP DipHIVMan SA  
 C A Viljoen, MBChB *Pret* FCP SA

**Honorary Senior Lecturers:**

M Abelson, MBChB *Witwatersrand* FCP SA MRCP UK  
 A J Brink, MBChB MMed (Path) *Pret*  
 R Burton, BSc PhD MB BS MRCOG FCP DipHIV Cert ID Phys SA  
 J Butler, MBChB *Pret* FCP Neurology SA  
 E Danso, MBChB FCP SA  
 R Davidson, MBChB MD *Cape Town*, MRCP DTM&H FRCP UK  
 C A de Jager, BSc(Hons) HDE *Natal* PhD *Cape Town*  
 J M G du Toit, MBChB *Cape Town* FCP SA  
 R J Freercks, MBChB MPhil *Cape Town* FCP Cert Neph Phys SA  
 T Gould, MBChB *Witwatersrand* FCP SA  
 L Geffen, MBChB *Cape Town* FCFP SA  
 M Gneecchi, MD PhD  
 A A Haripersad, MBChB FCP SA  
 C Kenyon, MBChB *Cape Town* FCP SA  
 J Kuehne, MBChB *Cape Town* MPhil (Applied Medical Ethics) *Stell* Dip HIV Man SA  
 M A Latib, MBChB FCP Cert Cardiol Phys SA  
 M H Letier, MBChB *Cape Town* FCP SA  
 S Mathee, MBChB *Cape Town* MMed (Fam Med) *Stell*  
 A G Parrish, MBChB *Cape Town* FCP DA SA  
 M Pascoe, MBChB FCP SA  
 K Rebe, MBChB *Cape Town* FCP SA DTM&H  
 A Robins, MBChB *Cape Town* MD *Witwatersrand* DPM RCP *London* RCS *England*  
 G Smit, MBChB MMed (Med) *Stell*  
 A Tooke, MBChB *Cape Town* FCP SA  
 J Turner, MBChB MD MMed Dip Pall Med *UCT* FCP SA FCCP  
 G Van Wyk, MBChB FCP SA  
 D Woolf, MBChB FCP SA

**Lecturers part-time:**

A Barnard, MBChB *Cape Town*

## 256 DEPARTMENTS IN THE FACULTY

H Amaler, MBBCh *Witwatersrand*  
S Wasserman, MBChB *Cape Town* FCP Cert ID Phys *SA*

### **Honorary Lecturers:**

M N Abrahams, MBChB *Cape Town* FCP *SA*  
A Bruning, MBBCh *Witwatersrand* FCP *SA*  
R Cornick, MBChB MPhil *Cape Town*  
K D Ebrahim, MBChB *Cape Town* FCP *SA*  
J Hitzeroth, MBChB Stell DA FCP Cert Cardiol Phys *SA*  
A Parker, MBChB Stell FCP *SA*

### **Honorary Research Associates:**

L Acquah, MD MSc FACP *USA*  
A Binder, PhD(Biology) *Germany*  
M Carrington, BA Postgrad Dip (Psych) PhD *Australia*  
J R Hoffman, DPhil (Sociology) *Oxon* BA(Hons)  
V Ives-Deliperi, PhD *Cape Town*  
A Orren, MBChB *Cape Town* MD  
N Peer, MBChB, *Natal* MPH PhD *Cape Town*  
M Rangkaka, MBChB *Cape Town*, MSc MPhil PhD *UK*  
C Stek, MD *Netherlands*  
H Struthers, MBA MSc BSc(Hons) BSc *Witwatersrand*  
D Watkins, MD MPH *USA*  
B Young-Gqamana, BSc PhD *USA*

### **Senior Research Officers Full-time:**

A Deffur, MBChB MMed (Int) DTG *Pret* Cert ID Phys *SA*  
J de Vries, DPhil *Oxon* BSc MSc *Netherlands*  
G Shaboodien, BSc(Hons) PhD *Cape Town*  
F Thienemann, MD DTMPH PhD MSciH *Germany*

### **Clinical Educator:**

F Drummond, SRN *UK*

### **Allergology and Clinical Immunology**

*Allergy Diagnostic and Clinical Research Unit, UCT Lung Institute, George Street, Mowbray E16 and Allergy Diagnostic and Clinical Research Unit, UCT Lung Institute*

### **Head of Division:**

J G Peter, MBChB FCP *SA* MMED PhD *UCT*

### **Emeritus Professors:**

P C Potter, MD *Cape Town* MBChB DCH FCP (Paed) *SA* BSc(Hons)(Immunology) FACAAI  
FAAAAI  
E Weinberg, MBChB FCP *SA* FAAAAI

### **Emeritus Associate Professor:**

S R Ress, MBChB *Pret* FCP *SA*

### **Senior Lecturer Full time:**

J G Peter, MBChB FCP *SA* MMED PhD *Cape Town*

### **Lecturer Part-time:**

R Leaver, MBChB FCP *SA*

J Holtzhausen, MBChB Dip Allergy

**Honorary Lecturer**

S Emanuel, MBChB *Cape Town*

**Medical Officer:**

D Hawarden, MBChB BSc DipMedTech

**Research Medical Officers:**

K Coovadia, MBChB Dip Allergy

C Holmgren, MBChB

R Mistry, MB BS *New Delhi* Dip Allergy Dip HIV Man SA MBA *Cape Town*

A Le Roux, MBChB

**Honorary Research Associate:**

A Orren, MBChB MD *Cape Town*

**Research Nurses:**

S Baker, BSc Nursing MSc Dip Asthma NAEP *UK*

G Poggenpoel, CNP BTech Dip Asthma NAEP *SA*

D Van der Walt, CNP

**Technical Staff:**

B Fenemore

**Cardiology**

*E17, New Groote Schuur Hospital*

**Helen and Morris Mauerberger Professor of Cardiology and Head:**

M Ntsekhe, BA MD *Columbia* FCP Cert Cardiol Phys SA MPhil PhD *Cape Town* FACC

**Emeritus Professor:**

P J Commerford, MBChB *Cape Town* FCP SA FACC

**Honorary Professors:**

B Gersh, MBChB DPhil *Oxon* FCP SA FRCP *UK*

P J Schwartz, MD PhD

**Emeritus Associate Professor:**

R N Scott Millar, MBBCh *Witwatersrand* FCP SA

**Senior Lecturers Full-time:**

A Chin, MBChB FCP SA Cert Cardiol Phys SA MPhil CEPS, CCDS *IBHRE*

B J Cupido, MBChB FCP Cert Cardiol Phys SA

S Pandie, MBChB FCP Cert Cardiol Phys SA

**Senior Lecturer Part-time:**

J E Stevens, MD FRCP *UK*

**Honorary Senior Lecturers:**

M J Abelson, MBChB *Witwatersrand* MRCP *UK* FCP SA

A M Latib, MBChB FCP Cert Cardiol Phys SA

**Lecturer Part-time:**

M De Andrade, MBChB *Cape Town* MRCGP UK

**Honorary Lecturer:**

J Hitzeroth MBChB *Stell DA* FCP Cert Cardiol Phys SA

**Senior Registrars:**

K Moeketsi, MBChB FCP SA

A Mutyaba, MBChB FCP SA

*Chris Barnard Building*

**Professor and Head:**

N Novitzky, PhD *Cape Town* FCP SA

**Senior Lecturers Full-time:**

C Du Toit, MBChB MMed (Int Med) UOFS

E Verburgh, MBChB MMed

**Senior Registrars:**

K R Antel, MBChB FCP SA

J R Du Toit, MBChB *Pret* FCP SA

**Chief Professional Nurses:**

R Charles, RN *Groote Schuur Hospital*, Nico Malan College *Cape Town*

W Vries, RN *Groote Schuur Hospital*, Nico Malan College *Cape Town*

**Clinical Trials Co-ordinator:**

Helen Vermeulen RN

**Haemophilia Nurse Co-ordinator Western Cape:**

A L Cruickshank, RN *Groote Schuur Hospital* *Cape Town*

**Medical Scientist:**

S Mowla, PhD *Cape Town*

**Chief Medical Technologist:**

V Thomas, NDMT

**Clinical Pharmacology**

*K Floor, Old Main Building, Groote Schuur Hospital*

**Professor and Head:**

G Maartens, MBChB MMed *Cape Town* FCP SA DTM&H LSTMH UK

**Professor:**

K I Barnes, MBChB MMed *Cape Town*

**Honorary Professors:**

C Masimirembwa, PhD *Sweden* BSc(Hons) DPhil *Zimbabwe*

G Pillai, PhD (Pharm) MPharm BPharm

**Associate Professors:**

M Blockman, MBChB BPharm MMed *Cape Town*

H McIlleron, MBChB PhD *Cape Town*  
 P J Smith, BSc(Hons) PhD *Cape Town*

**Senior Lecturers:**

K Cohen, MBChB MSc (Epidemiol) MCFP Dip HIV Man Dip Obst *SA*  
 S Dames, BPharm *NMMU*  
 P Z Sinxadi, MBChB PhD *Cape Town*, DA *SA*  
 L Wiesner, PhD *Cape Town*

**Honorary Senior Lecturer:**

A Robins, MBChB *Cape Town* MD *Witwatersrand* DPM *RCP London* RCS *Eng*

**Senior Research Officer:**

C Njuguna-Obwole, BPharm *Rhodes*, MPH *Cape Town*

**Research Officers:**

C de Kock, BSc(Microbiology) BSc(Hons)MedPharm *Cape Town*  
 P Denti, PhD *Italy*  
 JP Mouton, MBChB *Pret*

**Registrars:**

I Ebrahim, MBChB *Cape Town*  
 R Griesel, MBChB *Pret*  
 M Mogano, MBChB *Limpopo* Dip HIV *SA*

**Study Managers:**

E Allen, MPH, *Cape Town*  
 S Castel, PhD *Cape Town*

**Medicine Information Centre Manager and Pharmacist:**

A Swart, BSc (Pharm) *Stell*

**Medicines Information Centre Pharmacists:**

B S Chisholm, BPharm *Rhodes*  
 J Jones, BPharm *Cape Town*  
 A Uys, MSc (Pharm) BPharm *PU for CHE*

**South African Medicines Formulary (SAMF) Pharmacist:**

D Rossiter, DipPharm *Pret* MPharm PhD *Medunsa*

**Principal Technical Officers:**

A C Evans, NatDip(MedLabTech) *CPUT*  
 G A Gabriels, NatHighDip(AnalChem)(Hons) MSc PhD *Cape Town*

**Chief Scientific Officer:**

M J Smit

**Scientific Officers:**

B Holtzhausen  
 N Salie  
 S Salie

**Technical officer:**

M Marais

**Data Manager**

L Workman

**Research Administration Manager**

M Solomons

**Technical Assistant**

V Verhoog

**Critical Care Medicine**

*New Groote Schuur Hospital*

**Associate Professor and Head:**

I A Joubert, MBBCh *Witwatersrand DA FCA(Crit Care) SA*

**Professor:**

K Dheda, MBBCh *Witwatersrand FCP SA FCCP PhD FRCP London*

**Emeritus Professors:**

W L Michell, MBChB *Cape Town DA FFA(Crit Care) SA*

P A Willcox, BSc(Hons) MBChB *Birmingham FRCP UK*

**Associate Professor:**

G M Ainslie, MBChB *Cape Town FRCP UK*

**Associate Professors Part-time:**

J Brink, MBChB *Cape Town FCS(Cardiothoracic) SA*

P L Semple, MBChB *MMed PhD Cape Town FCS(Neurosurg) SA*

**Honorary Associate Professor:**

R Dawson, MBChB *Cape Town FCP Cert Pulm Phys SA*

**Senior Lecturers Full-time:**

G Calligaro, MBChB *Cape Town BSc(Hons) Witwatersrand FCP SA*

M Miller, MBChB *Stell FCDA SA Cert Crit Care (Anaes)*

L Mottay, MBChB *Natal FCP SA*

J Piercy, BSc(Hons) MB BS *London FCA SA Cert Crit Care (Anaes)*

R I Raine, MBChB *FCP SA MMed Cape Town*

G Symons, MBChB *Dip PEC Cape Town FCP Cert Pulm Phys SA*

**Registrars in Pulmonology:**

S Mothilal, MBChB *Natal FCP SA*

T Mnguni, MBChB *Natal FCP SA*

**Senior Technology Staff:**

G Strathie, BTech *Durban*

Y Wells, DipClinTech (Pulmonology/Critical Care)

**Dermatology**

*G23, New Groote Schuur Hospital*

**Associate Professor and Head:**

N P Khumalo, MBChB *UKZN FC Derm SA PhD Cape Town*

**Senior Lecturers Full-time:**

C Hlela, MBChB MMed (Derm) *UKZN FC Derm SA PhD Oxon*

T Isaacs, MBChB *Cape Town*

R Ngwanya, MBBCh *UKZN DTM&H Witwatersrand MFGP FC DERM SA*

**Senior Lecturers Part-time:**

F Esmail, MD *Dar-es-Salaam FC Derm SA*

S J Jessop, MBChB *Cape Town FC Derm SA*

R Lehloenya, BSc *Lesotho MBChB Medunsa FC Derm SA*

M H Omar, MBChB *Cape Town FCP SA*

**Senior Research Officer:**

H Adeola, PhD *Cape Town BDS Nigeria*

**Research Officer:**

J van Wyk, BSc(Hons), MSc PhD *Cape Town*

**Registrars Full-time:**

A Dhana, MBBCh *Witwatersrand*

L Fick, MBChB *Stell*

N Spengane, MBChB *Cape Town*

K York, MBBCh *Witwatersrand*

**Endocrinology and Diabetic Medicine**

*J47, Old Main Building, Groote Schuur Hospital*

**Professor and Head:**

N Levitt, MBChB MD *Cape Town*

**Associate Professor:**

I L Ross, MBChB *Stell FCP Cert Endocrinol & Metab Phys SA PhD Cape Town*

**Senior Lecturer Full-time:**

J A Dave, MBChB *Cape Town FCP PhD Cert Endocrinol & Metab Phys SA*

**Research Officer Full-time:**

N Folb, MBChB *Cape Town MRCGP*

**Diabetic Nurse Educator:**

B C Majikela-Dlangamandla, DipGenNursing&Midwifery DipCommNursingScience BACur UNISA

**General Internal Medicine**

*G8, New Groote Schuur Hospital*

**Chief Specialist and Head:**

P Raubenheimer, MBChB *Witwatersrand FCP SA*

**Associate Professor:**

M Sonderup, MBChB *Cape Town FCP SA*

**Senior Lecturers Full-time:**

T Bana, MBChB *Natal FCP SA*

B Hodkinson, MBChB *Witwatersrand FCP Cert Rheum Phys SA PhD*

A Kropman, MBChB *Cape Town FCEM SA*

G Parolis, MBChB *Cape Town FCP SA*

J G Peter, MBChB FCP SA MMED PhD *Cape Town*

G Symons, MBChB DipPEC *Cape Town FCP Cert Pulm Phys SA*

M Setshedi, MBChB *UKZN FCP SA MPhil MPH Cert Gastro Phys PhD Cape Town*

**Senior Lecturers Part-time:**

S Botha, MBChB *Stell Specialisation Intern. Med and Rheum PhD LUMC*

H Kajee, MBChB *Transkei FCP SA*

**Lecturer Part-time:**

W Latief, MBChB *Cape Town*

**Geriatric Medicine**

*L-51 Old Main Building, Groote Schuur Hospital*

*The Albertina and Walter Sisulu Institute of Ageing in Africa (IAA) conducts interdisciplinary research in Geriatric Medicine, Neurosciences, Neuropsychology, Old Age Psychiatry and Social Gerontology. Current research interests include physical, cognitive and social functioning in old age; quality of life; vascular risk factors and stroke; falls in older persons; quality of care; dementia and cognitive disorders; and social and economic well-being.*

**William P Slater Chair of Geriatrics and Associate Professor:**

M I Combrinck, MBChB BSc(Med)(Hons) PhD *Cape Town FCP SA Neurology MRCP UK*

DTM&H *London*

**Associate Professor and Director of the Albertina and Walter Sisulu Institute of Ageing in Africa:**

S Z Kalula, BSc MBChB *Zambia MMed MPhil PhD Cape Town FRCP UK*

**Honorary Associate Professors:**

J A Joska, MBChB MMed PhD *Cape Town FC Psych SA*

K G F Thomas, PhD (Clin Psych) *Arizona*

**Senior Lecturer Full-time:**

L de Villiers, MBChB *Cape Town FCP SA*

**Senior Lecturers Part-time:**

K Ross, MBChB *Stell FCP Cert Geriatrics Phys SA*

**Honorary Senior Lecturer:**

C A de Jager, BSc(Hons) HDE *Natal PhD Cape Town*

L Geffen, MBChB *Cape Town FCFP SA*

**Honorary Research Associate:**

J R Hoffman, DPhil(Sociology) *OXON BA(Hons)*

**Hepatology**

*K-Floor, Old Main Building, Groote Schuur Hospital*

**Associate Professor and Head:**

C W N Spearman, MBChB MMed PhD *Cape Town FCP SA*

**Emeritus Professor:**

S J Saunders, MBChB MD *Cape Town* FRCP UK FCP SA

**Honorary Research Professor:**

M C Kew, MBChB PhD MD DSc *Witwatersrand* FCP FRS SA FRS London

**Associate Professor:**

M Sonderup, MBChB MMed *Cape Town* FCP SA

**Senior Lecturer Part-time:**

M Setshedi, MBChB *UKZN* FCP SA MPhil MPH Cert Gastro Phys PhD *Cape Town*

**Medical Technical Officer**

B Jennings, MSc(Med)

**Medical Technologist**

G Abdullah, Nat Dip Biomed Tech (SA)

**Infectious Diseases and HIV Medicine**

*G16 Floor, New Groote Schuur Hospital*

**Professor and Head:**

M Mendelson, BSc MB BS PhD *Cantab* FRCP London DTM&H

**Professor Part-time:**

G Maartens, MBChB MMed *Cape Town* FCP SA DTM&H

**Honorary Professor Part-time:**

R J Wilkinson, MA *Cantab* PhD BM BCh *oxon* DTM&H FRCP London

**Associate Professors Part-time:**

L-G Bekker, MBChB PhD *Cape Town* DCH DTM&H FCP SA

G Meintjes, MBChB PhD *Cape Town* MRCP UK FCP DipHIVMan SA MPH *Johns Hopkins*

**Honorary Associate Professor Part-time:**

K Wilkinson, MSc(Chem) PhD (Chem&PetideImmunol) *Budapest*

**Senior Lecturer Full-time:**

T Boyles, BA MD MB BS MRCP DTM&H Cert ID Phys SA

S Dlamini, MBChB FCP Cert ID Phys SA

**Honorary Senior Lecturers:**

J Black, MBChB FCP Dip HIV Man SA

A J Brink, MBChB MMed (Path) *Pret*

R Burton, BSc PhD MB BS MRCOG FCP Dip HIV Cert ID Phys SA

K Rebe, MBChB *Cape Town* FCP SA DTM&H

**Senior Registrar:**

D Reddy, MBChB *Cape Town*, *Pret* FCP SA

**Honorary Research Associate:**

H Struthers, MBA BSc BSc(Hons) MSc *Witwatersrand*

**Lipidology**

*Fifth Floor, Chris Barnard Building*

**Associate Professor and Head:**

D J Blom, MBChB MMed PhD *Cape Town FCP SA*

**Medical Officers Part-time:**

B C Brice, MBChB *Cape Town*

K H Wolmarans, MBChB *Pret*

**Sonographer**

Z Behardien, NatDipDiagRad *SA*

**Trial Co-ordinators Part-time:**

R Jooste, RN *Carinus College*

R Taylor, RN *Groote Schuur Hospital*

**Medical Gastroenterology**

*E23, New Groote Schuur Hospital*

**Professor and Head:**

S R Thomson, ChM FRCS *England & Edinburgh*

**Senior Lecturers Full-time:**

S Hlatshwayo, BSc MBChB *Cape Town HDipIntMed FCP Cert Gastro Phys SA*

D Levin, MBChB MBA FCP Cert Gastro Phys *SA*

G Watermeyer, MBChB *Cape Town FCP Cert Gastro Phys SA*

**Senior Lecturers Part-time:**

J E C Botha, MBChB *Stell MPraxMed Pret*

A K Cariem, MBChB *Cape Town FCP SA*

D Epstein, MBChB *Cape Town FCP Cert Gastro Phys SA*

M Setshedi, MBChB *UKZN FCP SA MPhil MPH Cert Gastro Phys PhD Cape Town*

**Senior Registrars:**

N N Mokhele, Transkei, FCP *SA*

C J Rush, MBChB *Cape Town FCP SA*

**Nephrology and Hypertension**

*E13, New Groote Schuur Hospital*

**Professor and Head:**

B L Rayner, MBChB MMed *Cape Town FCP SA PhD Cape Town*

**Emeritus Professor:**

L H Opie, MD DPhil DSc(Med) FRCP DMed (Hon)

**Honorary Professor:**

P Heering, MD Fellow of the American Society of Nephrology

**Associate Professor**

I Okpechi, MB BS FWACP Cert Nephrol Phys *SA PhD Cape Town*

**Emeritus Associate Professor:**

C R Swanepoel, MBChB *Cape Town* MRCP FRCP UK

**Senior Lecturers Full-time:**

Z Barday, MBChB FCP SA

N Wearne, MBChB BMedSci(Hons) *Sydney* FCP SA Cert Nephrol Phys SA PhD

**Senior Lecturer Part-time:**

E Jones, MBBCh FCP Cert Nephrol Phys SA PhD *Cape Town*

**Honorary Senior Lecturer:**

R Freercks, MBChB MPhil *Cape Town* FCP Cert Neph Phys SA

**Honorary Lecturer:**

J L Ensor, MBChB *Cape Town* FCP SA

**Senior Research Officer Full-time:**

Y Trinder, MBChB *Birmingham*

**Senior Registrars:**

B Davidson, MBChB *Cape Town* FCP SA

M Borkum, MBChB *Cape Town* FCP SA

**Control Technologist:**

M Maree, NatDip *Cape Town* BTech CPUT

**Social Worker:**

L Hlakudi, BASocWork *Fort Hare* Pub Management (Hons) Stell

**Neurology**

*E8, New Groote Schuur Hospital*

**Associate Professor and Head:**

A Bryer, MBBCh *Witwatersrand* MMed PhD *Cape Town* FC Neurol FCP SA

**Associate Professor:**

J Heckman, MBChB *Witwatersrand* MMed PhD *Cape Town* FC Neurol FCP SA

**Senior Lecturers Full-time:**

K J Bateman, MBChB MRCP (UK) FC Neurol SA

E B Lee Pan, MBChB *Cape Town* MMed Neurol Stell

L M Tucker, MBChB *Cape Town* FC Neurol SA MSc *London* PhD *Cantab*

**Senior Lecturers Part-time:**

C A de Jager, BSc(Hons) HDE *Natal* PhD *Cape Town*

R W Eastman, MBChB *Cape Town* FRCP UK

**Honorary Senior Lecturer:**

J Butler, MBChB *Pret* FCP Neurol SA

**Honorary Research Associate:**

V Ives-Deliperi, PhD *Cape Town*

**Senior Registrars:**

S Chetty, MBChB *Cape Town*  
H Cross, MBChB *Cape Town* Dip HIV Man SA MSc(Med)  
W Matshikiza MBChB *Walter Sisulu*

**Occupational Medicine**

*E16, Occupational Medicine Clinic, New Groote Schuur Hospital\**

*The Division of Occupational Medicine is concerned with the study, diagnosis, treatment, rehabilitation, incapacity management and prevention of disease and ill-health attributable to work. Our Occupational Medicine Clinic at New Groote Schuur Hospital is one of the few referral clinics in the country offering specialist services in the diagnosis and management of occupational disease and hazardous occupational exposures.*

**Professor and Head:**

M F Jeebhay\*\*, MBChB UKZN DOH MPhil *Cape Town* MPH (OccMed) PhD *Michigan*

**Emeritus Professors:**

R Ehrlich, BBusSc MBChB PhD *Cape Town* DOH Witwatersrand FFCH FCPHM (OccMed) SA  
G Todd, BSc(Agric) UKZN MBChB PhD *Cape Town* FCDerma SA

**Senior Lecturer:**

S Adams\*\*, MBChB DOH MMed PhD *Cape Town* MFamMed Stell FCPHM (OccMed) SA

**Lecturer Part-time:**

A D H Burdzik, MBChB MMed *Cape Town* DipOccMed UK FCPHM (Occ Med) SA

*[\* Run jointly with Divisions of Pulmonology and Dermatology]*

*[\*\* Jointly appointed with Department of Public Health and Family Medicine]*

**Pulmonology**

*Respiratory Clinic, Ward E16, Groote Schuur Hospital and University of Cape Town Lung Institute*

**Professor and Head:**

K Dheda, MBBCh Witwatersrand FCP SA PhD London FRCP UK FCCP

**Emeritus Professors:**

E D Bateman, MBChB MD *Cape Town* DCH FRCP UK  
S R Benatar, MBChB DSc(Med) *Cape Town* FFA FRCP (Hon) FCP (Hon) SA

**Honorary Professor:**

T G Clark, BCom MSc *New Zealand* DPhil *Oxon*

**Associate Professor:**

G M Ainslie MBChB *Cape Town* FRCP UK

**Emeritus Associate Professor:**

P A Willcox, BSc(Hons) MBChB *Birmingham* FRCP UK

**Honorary Associate Professors :**

R Dawson, MBChB *Cape Town* FCP Cert Pulm Phys SA  
L R Fairall, MBChB PhD *Cape Town*  
R McNerney, CBiol PhD UK

K Steingart, MD PhD *USA*

R N van Zyl-Smit, MBChB MMed *Cape Town FCP Cert Pulm Phys Dip HIV Man SA MRCP UK*

**Senior Lecturers:**

G Calligaro, MBChB *Cape Town BSc(Hons) Witwatersrand FCP SA*

R I Raine (Head: Respiratory Critical Care), MBChB MMed *Cape Town FCP SA*

G Symons, MBChB Dip PEC *Cape Town FCP (CertPulm) SA (seconded to Pulmonology part-time)*

**Lecturers Full-time:**

M E Bateman, MBChB *Cape Town*

S M Oelofse, MBChB *Pret*

**Honorary Lecturer:**

A Bruning, MBChB *Witwatersrand FCP SA*

**Honorary Research Associates:**

A Binder, PhD(Biology) *Germany*

R Hendricks, BChD MChD, *Cape Town*

B Young-Gqamana, BSc PhD

**Senior Research Officer Part-time:**

G Theron, BSc(Hons) MSc PhD *Cape Town*

**Senior Registrars:**

S MothilalMBChB *Natal FCP SA*

A T Mnguni, MBChB *Natal FCP SA*

**Research Officers Full-time:**

B Bam, DipClinTech(Pulm)

D Carter, DipNursing

R Cornick, MBChB MPhil *Cape Town*

B Draper, MBChB *Pret MMed Cape Town FCPHM SA*

J Etheridge, DipClinTech(Pulm/CritCare)

M Evreva, DipNursing

G Faris, AdvCertAdultEducation *Cape Town General Nursing (Midwifery, Oncology, Psych)*

D Georgeu, DipNursing

J Gerszman, NDip(Pharmacy)

R Gillespie, BNursing (GenPsych) DipMidwifery DipIC BNursing(Hons)(Education and CommunityHealth) MNursing

H J Golakai, BSc *Zululand BSc(Hons) Cape Town MScMed Stell*

B Green, DipNursing

J Holborn, DipNursing

S Hood, DipMedTech(Lab)

N James, BTechClinicalTechnology(Pulm)

L Kapa, DipClinTech(Pulm)

R Lehloenya, BSc MBChB FC Derm *SA*

L Lenders, BSc(Med)(Med) *Cape Town*

K Narunsky, MBChB *Cape Town*

M B Ngobese, DipClinTech(Pulm)

A Olkers, DipClinTech(Pulm)

J Philips, DipNursing

A Smith, DipNursing

N Tsutsu, DipClinTech (PulmCard)

V Timmermann, MSc *Pret*

K Uebel, BScMed MB BS *Australia* DCH DO MFamMed *UOFS*  
Y Wells, DipClinTech (PulmCritCare)  
C Wilson, DipNursing  
C Whitelaw, NDip(Pharmacy)

**Principal Scientific Officer:**

M Tomasicchio, BSc BSc(Hons) MSc PhD *Rhodes*

**Research Officers Part-time:**

E Dommissie, MBChB *Cape Town* MRCGP DRCOG UK DCH *SA*  
F Esmail, MD *Dar-es-Salaam* FC Derm *SA*  
J Holtzhausen, MBChB *Stell* DCH *SA* BSc(Hons)Pharmacology  
L Semple, BSc(Hons) MSc PhD *Cape Town*

**Laboratory Technologist:**

R Meldau, BSc(Med)(Hons) *Cape Town*

**Rheumatology**

*J-Floor, Old Main Building, Groote Schuur Hospital*

**Professor and Head:**

A A Kalla, MBChB MD *Cape Town* FCP *SA*

**Senior Lecturers Full-time:**

A Gcelu, MBChB *Cape Town* FCP Cert Rheum Phys *SA*  
B Hodkinson, MBChB *Witwatersrand* FCP Cert Rheum Phys *SA*

**Senior Lecturers Part-time:**

R Breeds, MBChB *Cape Town* FCP *SA*  
S Botha, MBChB *Stell* Specialisation Intern. Med and Rheum PhD *LUMC*  
S J Jessop, MBChB *Cape Town* FC Derm *SA*  
I Joubert, MBChB *Stell*

**Senior Registrar:**

F Moosajee, MBChB *Cape Town* FCP *SA*

**Research Coordinator:**

Z Patel , DipN

**Staff in associated hospitals who teach undergraduate and postgraduate students**

**GEORGE HOSPITAL**

**Senior Lecturer and Head:**

T J Gould, MBChB MMed(IntMed) *Witwatersrand*

**KHAYELITSHA COMMUNITY CENTRE**

**Honorary Senior Lecturers Part-time:**

J Kuehne, MBChB *Cape Town* MPhil (Applied Medical Ethics) *Stell* Dip HIV Man *SA*  
S Mathee, MBChB *Cape Town* MMed (FamMed) *Stell*

**II MILITARY HOSPITAL****Senior Lecturer and Head:**

G Smit, MBChB MMed (Med) *Stell*

**Senior Lecturer Full-time:**

A Tooke, MBChB *Cape Town FCP SA*  
**MITCHELL'S PLAIN HOSPITAL**

**Senior Lecturer and Head:**

T Credé, MBChB Dip HIV FCP *SA*

**Senior Lecturers:**

A Parker, MBChB *Stell FCP SA*  
 D F Maughan, MBChB *Cape Town FCP SA*

**NEW SOMERSET HOSPITAL****Senior Lecturer and Head:**

Y Vallie, MBChB *Cape Town FCP SA*

**Senior Lecturers Full-time:**

M S Moosa, MBChB *Natal FCP SA*  
 I Banderker, MBChB *Cape Town FCP SA*

**Senior Lecturer Part-time:**

H Spilg, FCS *SA*

**VICTORIA HOSPITAL****Senior Lecturer and Head:**

N van der Schyff, MBChB *Cape Town FCP SA*

**Senior Lecturers Full-time:**

B Brink, (Head of Unit) FCS *SA*  
 C Cupido, MBChB *Cape Town FCP SA*

**Senior Lecturers Part-time:**

H Allison, FCS *SA*  
 S Cullis, FCS *SA*  
 L de Villiers, MBChB *Cape Town FCP SA*  
 N Fuller, MBChB *Cape Town FCP SA*  
 K Goldberg, FCS *SA*  
 A Lachman, MBBCh *Witwatersrand FCP SA*  
 K Michalowski, FCS *SA*  
 J Turner, MBChB MD MMed Dip Pall Med *UCT FCP SA FCCP*

**Honorary Senior Lecturer:**

A A Haripersad, MBChB FCP *SA*

## COURSES OFFERED

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### **MDN4030F CLINICAL MANAGEMENT OF HIV IN A PRIMARY HEALTHCARE SETTING**

20 NQF credits at HEQSF level 8

**Convener:** Dr S Coovadia

**Course entry requirements:** None

**Course outline:**

The course aims to provide doctors and nurse practitioners with the knowledge and capacity to diagnose, treat and manage HIV infected patients in line with national guidelines and programmes, in a primary healthcare (PHC) setting. At the end of this course, students will be able to describe the epidemiology of HIV, identify key components in HIV diagnosis, testing in children and adults including pregnant women, recognise and manage common opportunistic infections in South Africa, recognise patients (adults and children) who are eligible for treatment and select the optimal first line treatment for different patient scenarios, prepare the patient for ART and monitor their response to therapy, recognise and manage common side effects and drug interactions of ARV drugs, and identify and manage treatment failure and drug resistance. The course is taught through online lectures, notes and forum discussions.

**DP requirements:** Students need to complete 80% of specified e-learning activities viz. self-assessment tasks, and participate in 80% of online forum discussions. In addition, 60% of synchronous learning activities must be completed and all assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the online examination.

**Assessment:** Assignments 40%; online examination 60%.

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### **MDN4031S CLINICAL MANAGEMENT OF TB IN A PRIMARY HEALTHCARE SETTING**

20 NQF credits at HEQSF level 8

**Course outline:**

The course aims to provide doctors and nurse practitioners with the knowledge and capacity to diagnose, treat and manage TB patients in line with national guidelines and programmes, in a primary healthcare (PHC) setting. At the end of this course, students will be able to describe the epidemiology of TB, demonstrate effective clinical application of algorithms for TB diagnosis, manage contacts of TB patients, manage adults and paediatric TB patients, recognise the indications for first line TB treatment, recognise and manage the common side-effects of medications, properly monitor response to treatment and the correct management of treatment interruption, and the development and transmission of drug-resistant TB and the risk factors for and causes of drug-resistant TB. The course is taught through online lectures, notes and forum discussions.

**DP requirements:** Students need to complete 80% of specified e-learning activities viz. self-assessment tasks, and participate in 80% of online forum discussions. In addition, 60% of synchronous learning activities must be completed and all assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the online examination.

**Assessment:** Assignments 40%; online examination 60%.

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### **MDN4032F TB-HIV CO-INFECTION & INFECTION PREVENTION AND CONTROL**

35 NQF credits at HEQSF level 8

**Convener:** Dr S Coovadia

**Course entry requirements:** MDN4030F and MDN4031S

**Course outline:**

The course aims to provide doctors and nurse practitioners with the knowledge and capacity to diagnose, treat and manage TB/HIV co-infected patients in line with national guidelines and programmes, in a primary healthcare (PHC) setting.

At the end of this course, students will be able to describe TB/HIV service integration, the correct application of Isoniazid Preventative Therapy and the advantages and risks of starting ARVs early, recognise common drug interactions between TB treatment and ARVs, monitor the co-infected patient, identify and manage the most common overlapping side effects of drugs and to manage patients with TB-IRIS, assist patients in developing strategies to improve treatment adherence, describe why infection prevention and control is important in TB care and how to identify four levels of tuberculosis prevention. Infection control strategies to prevent the transmission of TB in the healthcare setting are addressed to identify necessary post-exposure prophylaxis (PEP) for Sexually Transmitted Infections (STIs) and HIV, including occupational PEP. The course is taught through online lectures, notes and forum discussions.

**DP requirements:** Students need to complete 80% of specified e-learning activities viz. self-assessment tasks and participate in 80% of online forum discussions. In addition 60% of synchronous learning activities must be completed and all assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the online examination.

**Assessment:** Assignments 40%; online examination 60%.

### **MDN4033S OPERATIONAL RESEARCH**

33 NQF credits at HEQSF level 8

**Convener:** Dr S Coovadia

**Course entry requirements:** None

**Course outline:**

The course aims to provide doctors and nurse practitioners with the knowledge and capacity to design, implement and report on basic operational research projects, including assessing clinic recorded data, in a primary healthcare (PHC) setting.

At the end of this course, students will be able to describe the role of operations research in strengthening healthcare and services; describe major study designs and how to apply different study designs to answer different types of OR questions; discuss sources and forms of error in measurement and sampling in OR research; and explain confounding, identify potential confounding influences, and understand the tools used to deal with confounding effects in OR in study design and/or analysis. Students will have a practical understanding of data collection and databases, how to draft a research protocol, perform a literature review, how to structure a research report or paper, and the principles of presenting and interpreting research results. The course is taught through online lectures, notes and forum discussions.

**DP requirements:** Students need to complete 80% of specified e-learning activities viz. self-assessment tasks, and participate in 80% of online forum discussions. In addition 60% of synchronous learning activities must be completed and all assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the online examination.

**Assessment:** Assignments 40%; online examination 60%.

### **MDN4034F BIOSTATISTICS**

15 NQF credits at HEQSF level 8

**Convener:** Dr S Coovadia

**Course entry requirements:** None

**Course outline:**

This course provides an introduction to the basic concepts of biostatistics. At the end of the course, students will know how to compute the most commonly used descriptive and inferential statistical procedures using *STATA* statistical software and be able to interpret the results. The course is taught through online lectures, notes and forum discussions.

**DP requirements:** Students need to complete 80% of specified e-learning activities viz. self-assessment tasks, and participate in 80% of online forum discussions. In addition, 60% of synchronous learning activities must be completed and all assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the online examination.

**Assessment:** Assignments 40%; online examination 60%.

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#### **MDN4035F INTEGRATED ASSESSMENT I**

0 NQF credits at HEQSF level 8

**Convenor:** Dr S Coovadia

**Course entry requirements:** The student must have passed the Clinical Management of HIV in a Primary Healthcare Setting, Clinical Management of TB in a Primary Healthcare Setting, and TB-HIV Co-infection and Infection Prevention and Control courses to be allowed entry to the integrated assessment.

**Course outline:**

Not applicable (this course exists for the sole purpose of recording an integrated, overall mark).

**DP requirements:** None.

**Assessment:** Students are required to pass the individual courses as well as the integrated assessment with a minimum of 50% each in order to be awarded the Diploma.

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#### **MDN4036S INTEGRATED ASSESSMENT II**

0 NQF credits at HEQSF level 8

**Convenor:** Dr S Coovadia

**Course entry requirements:** The student must have passed both the Operational Research and Biostatistics courses to be allowed entry to the integrated assessment.

**Course outline:**

Not applicable. This course exists for the sole purpose of recording an integrated, overall mark.

**DP requirements:** None

**Assessment:** Students are required to pass the individual courses as well as the integrated assessment with a minimum of 50% each in order to be awarded the Diploma.

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#### **MDN4037W CLINICAL MANAGEMENT IN HEPATOLOGY**

100 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof C W N Spearman and Assoc Prof M Sonderup

**Course entry requirements:** None

**Course outline:**

The purpose of this course is to allow practising doctors to develop foundation skills in the assessment and management of patients with acute and chronic liver diseases. Training is designed as an apprenticeship, a close trainer-to-trainee ratio and hands-on experience. On successful completion of the course, the student will: (a) have competency in the diagnosis and treatment of a broad range of hepatobiliary disorders including viral hepatitis, drug-induced liver injury, HIV and associated liver disease, alcoholic liver disease, non-alcoholic fatty liver disease, autoimmune liver disease, vascular liver disease (including bilharzia), acute liver failure, and complications of cirrhosis and malignancy; (b) be able to evaluate the prognostic criteria for acute liver failure and chronic liver disease; (c) understand the long-term follow-up requirements of liver transplant patients, including the monitoring of immunosuppression and management of metabolic and infectious complications; (d) have skill in the performance of a limited number of diagnostic and therapeutic procedures; and (e) have an appreciation of the indications and limitations of a number of diagnostic and therapeutic procedures that are needed to manage hepatobiliary disorders – Ultrasound, CT Scan, MRI/MRCP, ERCP, TIPPS shunts.

**DP requirements:** Attendance of and participation in all academic requirements and completion of assignments by the due dates. Successful assessment of clinical outcome goals every three months. Completion of a logbook reflecting clinical cases assessed and procedures performed, by due date.

**Assessment:** Coursework assessment (ongoing): 50%. Final examination: a one-hour clinical MCQ (multiple-choice question) paper (30%) and a one-hour clinical case-based oral (20%). The logbook will be assessed as a part of the final examination. A student failing to obtain 50% for the individual components will have one reassessment. If the student scores more than 40% but less than 50%, the student will undergo a reassessment for which a minimum of 50% constitutes a pass, before the final mark is submitted. A student who has undergone a reassessment shall have a maximum pass mark of 50%.

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#### **MDN4038W ESSAY: TRANSITION & TRANSLATION OF KNOWLEDGE**

20 NQF credits at HEQSF level 8

**Convener:** Assoc Prof C W N Spearman and Assoc Prof M Sonderup

**Course entry requirements:** None

**Course outline:**

This course equips students to apply the knowledge and insights gained during their training to their home settings. Students will analyse the epidemiology of the centres at which they practise healthcare and will analyse the healthcare needs of the region, then plan ways in which to apply the knowledge they have gained in the diploma programme to such settings.

**DP requirements:** Full attendance and completion of all coursework requirements by due dates.

**Assessment:** Completion of an essay (100%). This is preceded by ongoing assessment of performance through regular clinical supervision/tutorial sessions and coursework tasks. A pass mark of 50% is required for the long essay, failing which the student will be required to make the necessary corrections or improvements and submit the assignment for reassessment. The terms of resubmission of the assignment will be at the discretion of the convener.

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#### **MDN6008F INTRODUCTION TO SYSTEMATIC REVIEW METHODS IN HEALTHCARE**

12 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M E Engel

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course provides an understanding of the key steps to plan and execute a systematic review. Rigorous review methods are highlighted, such as question formulation, protocol development, searching for potentially relevant articles, selecting primary articles using explicit, reproducible criteria, critical appraisal and, quantitative data synthesis and interpretation. Aspects of meta-analysis and synthesis of non-numerate data are also highlighted. The work of the Cochrane Collaboration and in particular the Cochrane handbook, forms the underpinning of much of the material.

**Assessment:** Coursework 50%. Exam 25%. Dissertation – protocol 25%.

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#### **MDN7005W MMED IN MEDICINE PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof P J Raubenheimer

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist physicians. Candidates complete the curriculum of the College of Physicians of South Africa in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards MDN7005W. The aim of the course is to provide foundational knowledge in a range of basic science disciplines to prepare candidates to apply such knowledge to the clinical conditions and management strategies in the speciality of internal medicine. The curriculum includes the “micro” and “macro” anatomy and physiology of relevant tissues and

organs; general and relevant pathology and histopathology; relevant clinical pathology, general principles and interpretation of commonly used tests; applied critical care, pathophysiology, biotechnology and measurements of vital organ functions; applied biotechnology; principles of genetics, cell biology, structure, function, and molecular biology; principles of applied biochemistry; basic sciences of immunology; pharmacology; physiology and pathophysiology of acid/base and electrolyte balance; principles of epidemiology; and a working knowledge of imaging techniques and tests. Research methodology and statistical evaluation is regarded as an applied science to the principles and practice of clinical bedside medicine. For the detailed curriculum and the examination rules, see the regulations of the College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** A post-internship qualification to practice medicine which is registered or registrable with the Health Professions Council of South Africa (HPCSA)

**Assessment:** Two written papers in the basic sciences.

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#### **MDN7006W MMED IN MEDICINE PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof P J Raubenheimer

**Course entry requirements:** MDN7005W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist physicians. Candidates complete the curriculum of the College of Physicians of South Africa in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College of Physicians and receive credit towards MDN7006W. Content includes the principles and practice of medicine, ethical issues and health policies, with a particular emphasis on diseases important in the South African context, cost-effective investigation, and treatment. For details, see the regulations of the College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates must have completed two years and six months (30 months) full-time post-internship training as a medical registrar/clinical assistant and must also submit a logbook.

**Assessment:** Two written papers on the principles and practice of medicine, and a clinical examination.

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#### **MDN7007W MEDICINE MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 10

**Convener:** Assoc Prof P J Raubenheimer

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in the speciality of medicine. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. The standard aimed for is a potentially publishable article in a national or international peer-reviewed journal. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** In year one of training, registrars are required to attend a faculty clinical research methods course, and to submit and gain approval for a research project. Submission for marking is expected at the beginning of their year 3 (28 months after starting and before being admitted to MMed Part 2).

**Assessment:** External examination of the minor dissertation.

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**MDN7015W MPHIL IN PULMONOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof K Dheda**Course entry requirements:** None.**Course outline:**

This training programme forms part of the credentialling process of specialist physicians to become subspecialists in adult pulmonology. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards MDN7015W. Training covers a foundational knowledge in a range of basic sciences and clinical disciplines that underpin clinical practice in pulmonology (e.g. cardiac physiology and anatomy, pathology of lung disease, respiratory pharmacology, infectious diseases and immunology), and students are trained in the clinical evaluation and management of pulmonology patients and in the principles of critical care as related to pulmonology. Candidates learn diagnostic techniques in allergy and clinical and laboratory competence for diagnosing and treating allergic diseases, and of community related diseases such as TB, occupational lung disorders, HIV-related lung disease and lung cancer. Candidates gain a range of diagnostic skills using contemporary lung function equipment, and of a range of invasive procedures and the interpretation of imaging techniques. Candidates must have at least one publication in respiratory medicine in a peer-reviewed journal (including the South African Respiratory Journal). This may take the form of a report of an original research project, a retrospective review, a case report, or a review in any aspect of pulmonology or critical care. They learn the role of a pulmonologist relative to that of other healthcare specialists. For the detailed curriculum, see the regulations of the relevant College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least eighteen months as a senior registrar in an accredited specialist department; a prescribed logbook; and a written report from the head of the programme.

**Assessment:** Candidates write the relevant examination of the College of Physicians of South Africa. The examination comprises a written examination (two written papers), assessment of a logbook and an oral examination.

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**MDN7017W MPHIL IN CARDIOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof M Ntsekhe**Course entry requirements:** None**Course outline:**

This training programme forms part of the credentialling process of specialist physicians as subspecialists in cardiology. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards MDN7017W. The aim of this course is to both provide foundational knowledge in a range of disciplines (such as embryology, anatomy, genetics, epidemiology of congenital heart disease, physiology, vascular biology and pathology, pharmacology, radiology imaging and radiation safety, and ultrasound) and to train candidates in the application of such foundational knowledge to clinical cardiac conditions and management strategies. The latter includes congenital heart disease; acquired heart disease; resuscitation and advanced cardiac life support; diagnostic cardiac catheterisation; percutaneous interventions; echocardiography; cardiac imaging and ECG evaluation; exercise testing; electrophysiology; pacemakers; and principles of post-operative management, including haemodynamic monitoring and the use of inotropes and vasodilators. The detailed curriculum is available in the regulations of the College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Before registering for the examination, candidates must have: (a) completed at least 24 months as a subspeciality trainee in the accredited subspeciality training unit; (b) submitted a written report from the head of the institution/programme in which he/she trained indicating satisfactory completion of all training requirements; (c) submitted a satisfactorily completed portfolio; and (d) presented or had accepted for presentation, an original first-author research poster

or paper at a local or international congress, or submitted for publication an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the examination offered by the College of physicians of South Africa. The examination includes two three-hour papers and an oral/OSCE/OSPE/clinical component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is required in each of the two (written and the oral/OSCE/clinical) components of the examination.

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**MDN7018W MPHIL IN RHEUMATOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Prof A Kalla

**Course entry requirements:** None.

**Course outline:**

This training programme forms part of the credentialling process of specialist physicians to become subspecialists in adult rheumatology. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards MDN7018W. Candidates learn to diagnose and manage a large spectrum of rheumatic diseases, including regional pain problems and soft-tissue rheumatism, osteoarthritis and related conditions, crystal arthropathies, inflammatory joint disorders, autoimmune rheumatic diseases, vasculitides, metabolic bone disorders, regional bone disorders, infections and arthritis, and a variety of other disorders ranging from haematological disorders and cancer-associated rheumatic diseases to primary immune deficiency disorders and non-inflammatory myopathies. Training should result in demonstrable competence at consultant level in clinical contact with the patient, assessment of multi-system disease, selection of appropriate laboratory tests, knowledge of the place of imaging techniques in the investigation of the rheumatic diseases, an understanding of the role of neurophysiology in the investigation of the rheumatic diseases, and the management of rheumatic diseases through the age spectrum. Students will be able to handle rheumatological emergencies and understand the pharmacology of drugs used in the rheumatic diseases. For the detailed curriculum, see the regulations of the relevant College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least eighteen months as a subspeciality trainee in accredited specialist department; a completed logbook, filled in up to date and certified by the heads of the departments/divisions/units in which the candidate trained; and written reports from the heads of the institutions in which he/she trained.

**Assessment:** Candidates undergo the relevant examination of the College of Physicians of South Africa. The examination comprises a written examination, a clinical examination and an oral examination, which may cover any aspect of rheumatic diseases outlined in the curriculum.

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**MDN7020W MPHIL IN NEPHROLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Prof B Rayner

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the accreditation process of specialist physicians to become subspecialists in adult nephrology. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards MDN7020W. They learn the management of renal disease and related problems against the background of the relevant basic sciences such as physiology, renal pharmacology, immunology, genetics, cell biology and molecular medicine. The differential diagnosis, investigation and management of acute renal failure and its complications are covered in training. Also included are the physiology of, indications for, complications of, and the various forms both of haemodialysis and of peritoneal dialysis and the management of patients on acute and chronic dialysis. Candidates gain experience in all forms of hypertension and in the pathogenesis and management of renal stone formation, and of urinary tract infection and the management of urinary tract obstruction. They are trained in the performance of renal transplants, mechanisms of

rejection, and in the management of immunosuppression and its complications. For the detailed curriculum, see the relevant regulations of the college of Physicians of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least eighteen months as a subspeciality trainee in an accredited specialist department of nephrology. Candidates must also submit the prescribed logbook and must submit a written report from the head of nephrology in the institution in which he/she trained.

**Assessment:** Candidates undergo the relevant subspecialist examination of the College of Physicians of South Africa. The examination consists of two written theory papers and of a computer-generated objective test examination.

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#### **MDN7021W MPHIL IN ENDOCRINOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof N Levitt

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist physicians as subspecialists in endocrinology and metabolism. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards MDN7021W. The aim of training is to enable candidates to recognise, diagnose and treat a variety of diabetes-related emergencies, hypoglycaemia, lipid disorders, thyroid disorders, pituitary disorders, adrenal disorders, parathyroid disorders, metabolic bone disease, endocrine hypertension, growth and pubertal disorders, ovarian disorders, testicular disorders, nutritional disorders, endocrine disorders in systemic diseases, multi-endocrine disorders, breast disorders, endocrine oncology, renal stones and hypercalcaemia, and a range of other conditions.

**DP requirements:** At least eighteen months' subspeciality training in an accredited specialist endocrinology and metabolism unit/department; a completed logbook; completion of a research component; written report from the head of the institution in which he/she trained; publication in a peer-reviewed journal or presentation of research project at a scientific meeting. For the detailed curriculum, see the regulations of the relevant College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**Assessment:** Candidates write the relevant examination of the College of Physicians of South Africa. The examination comprises one written theory paper and one objective test examination. The written theory paper will address the principles and practice of endocrinology and metabolism, including anatomy, normal physiology, pathophysiology, biochemistry, pharmacology, molecular biology, clinical investigation, diagnosis and treatment. The objective test will include the interpretation of laboratory data, dynamic tests, short case-histories and other material as problem-solving exercises.

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#### **MDN7022W MPHIL IN GASTROENTEROLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof S Thomson

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist physicians to become subspecialists in medical gastroenterology. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards MDN7022W. Training in gastroenterology comprises two major elements: a core curriculum (12 months), and advanced training (12 months). The core curriculum consists of clinical training in the inpatient and outpatient diagnosis, and management of gastrointestinal and hepatic diseases. Core knowledge objectives include an understanding of the anatomy, histology, molecular biology, embryology, and development of the gastrointestinal tract and the liver; and of the physiology and pathophysiology of the gastrointestinal system (digestion, absorption, secretion, motility, metabolism and immunology). Trainees are taught to diagnose and evaluate patients with digestive diseases, taking into consideration all biological and psychosocial

aspects. They are taught the pharmacology and appropriate use of the drugs in the management and treatment of gastroenterological illnesses; to recognise and treat indications for nutritional deficiencies; to conduct, write, and publish research; and to perform procedures such as gastroscopy, oesophageal dilation, colonoscopy and oesophageal manometry. The second 12 months of training confers expertise in more advanced areas of gastroenterology, including therapeutic colonoscopy and gastroscopy, therapeutic ERCP (where pancreaticobiliary work is identified as being a preferred expert area) and/or endosonar training. Advanced hepatology training may also be undertaken during this period. For the detailed curriculum, see the relevant regulations of the college of Physicians of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least eighteen months' training in an accredited subspecialist unit of gastroenterology, a prescribed logbook, and a written report from the head of the institution.

**Assessment:** The candidate undergoes the final examination of the College of Physicians of South Africa. The examination comprises one three-hour written examination incorporating both clinical and basic science elements, at least two clinical cases and paper cases, and a one-hour oral examination. Candidates must obtain at least 50% in both the written and oral components of the examination in order to pass. A candidate who achieves less than 50% aggregate in the written component of the examination will not be invited to the oral component.

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#### **MDN7025W DERMATOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Dr R Lehloenya

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in the same branch of the medical speciality in which the candidate is registered. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **MDN7026W MMED IN DERMATOLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Dr R Lehloenya

**Course entry requirements:** None.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist dermatologists. Candidates follow the relevant curriculum of the College of Physicians of South Africa. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital. On successful completion of training, they write the final examination of the relevant College of Medicine and receive credit towards MDN7026W. The aim of this course is to provide foundational knowledge in a range of basic science disciplines to enable the subsequent training of candidates in the application of such knowledge to the clinical conditions and management strategies in the speciality of dermatology. Content includes anatomy and histochemistry with special reference to the skin, as well as physiology, biochemistry and principles of pathology. For the detailed curriculum, see the regulations of the relevant College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** This examination should be taken within the first 6 to 18 months of admission to registrarship.

**Assessment:** Written papers, an oral, and a practical examination. See details in regulations of College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

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### **MDN7027W MMED DERMATOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Dr R Lehloenya

**Course entry requirements:** MDN7026W.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist dermatologists. Candidates follow the relevant curriculum of the College of Physicians of South Africa. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital. On successful completion of training, they write the final examination of the College and receive credit towards MDN7027W. The aim of this course is to apply foundational knowledge in a range of basic science disciplines to the clinical conditions and management strategies in dermatology. Content includes the principles and practice of dermatology, histopathology of the skin, mycology, and common diagnostic and therapeutic procedures. For the detailed curriculum, see the regulations of the relevant College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least four years of approved training, or two years of such training and one year of approved training in medicine. Submission of a clinical logbook.

**Assessment:** Two written papers, a clinical examination, and an oral.

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### **MDN7028W MMED IN NEUROLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Bryer

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist neurologists. Candidates complete the curriculum of the College of Neurologists of South Africa in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards MDN7028W. The aim of this course is to provide foundational knowledge in a range of basic science disciplines to prepare candidates to apply such knowledge to clinical conditions and management strategies in the speciality of neurology. Content includes neuroanatomy and neurophysiology, neuropharmacology, neurochemistry (especially neurotransmitters), genetics, immunology as applied to the nervous system, statistics, and the neurophysiological basis of electroencephalography, electroneurography and electromyography. For the detailed curriculum and the examination details, see the regulations of the College of Neurologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** None

**Assessment:** Candidates write the Part 1 examination of the College of Neurologists. The examination comprises two written papers.

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### **MDN7029W MMED IN NEUROLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Bryer

**Course entry requirements:** None (Parts 1 and 2 may be taken concurrently if all entry requirements have been met).

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist neurologists. Candidates complete the curriculum of the College of Neurologists of South Africa in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the

College of Neurologists and receive credit towards MDN7029W. Content includes the principles and practice of clinical neurology, interpretations of neurophysical investigations, neuroradiology, basic clinical epidemiology, neuropathology, and applications of basic neurosciences. For the detailed curriculum and the examination details, see the regulations of the College of Neurologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Completion of Part 1 (or intention to take Parts 1 and 2 concurrently); at least four years of medical practice (including one year of internship); appointment as a registrar in neurology for at least two years and six months and approved experience in neuropathology for at least six months; or full-time appointment as a registrar in neurology for two years plus full-time appointment as a registrar in general medicine, psychiatry, neurosurgery or neuro-ophthalmology for one year. Completion of a logbook as specified in the regulations of the South African College of Neurologists.

**Assessment:** Candidates take the Part 2 examinations of the College of Neurologists. The examination comprises two written papers of three hours each, a clinical examination and an OSCE (Objective Structured Clinical Examination).

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#### **MDN7030W NEUROLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Bryer

**Course entry requirements:** None.

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in neurology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **MDN7034W MMED IN CLINICAL PHARMACOLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M Blockman

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist clinical pharmacologists. Candidates follow the relevant curriculum of the College of Clinical Pharmacologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards MDN7034W. The aim of this course is to provide foundational knowledge in a range of basic science disciplines that candidates will later apply to the clinical conditions and management strategies in their area of speciality. Content includes pharmacokinetics and pharmacodynamics; the autonomic nervous system; drug hypersensitivity; pharmacoeconomics; drug interactions; drug discovery, evaluation and development; and ethical principles relevant to clinical research and good clinical practice. For the detailed curriculum, see the regulations of the College of Clinical Pharmacologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must have completed 15 months' full-time post-internship training as a clinical pharmacology registrar in a teaching hospital department of clinical pharmacology at the time of applying for entry into the Part 1 examination.

**Assessment:** Two written papers in the basic sciences.

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**MDN7035W MMED IN CLINICAL PHARMACOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof M Blockman**Course entry requirements:** MDN7034W**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist clinical pharmacologists. Candidates follow the relevant curriculum of the College of Clinical Pharmacologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital. On successful completion of training, they write the final examination of the College and receive credit towards MDN7035W. Content includes the rational and cost-effective use of all major therapeutic classes of drugs; therapeutic drug monitoring: principles and practice; complementary and traditional medicines/natural medicinal products; poisoning and overdose; drugs of abuse; drug discovery, evaluation and development; medico-legal and regulatory aspects of medicines in South Africa, including research ethics; and adverse drug reactions. For the detailed curriculum, see the regulations of the relevant College of Medicine, at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least three years' full-time post-internship training as a registrar/clinical assistant in either of the following combinations: (a) all three years in a teaching hospital department of clinical pharmacology; or (b) two years in a teaching hospital department of clinical pharmacology plus one year as a registrar in a satellite clinical teaching department (this is relevant as 25% of clinical pharmacology training must be in clinical care). In addition, the submission of a logbook is a prerequisite for writing the Part 2 examination.

**Assessment:** Two written papers on the principles and practice of clinical pharmacology and therapeutics, an Objective Structured Clinical Examination, and an oral examination. Candidates are assessed on their ability to apply the principles of clinical pharmacology and therapeutics to complex clinical and policy-making scenarios.

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**MDN7036W CLINICAL PHARMACOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof M Blockman**Course entry requirements:** None**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in clinical pharmacology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal human research ethics approval where necessary, candidates proceed with their research, analyse the results, and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None**Assessment:** External examination of the minor dissertation.

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**MDN7037W PULMONOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof K Dheda**Course entry requirements:** None**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of

Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in pulmonology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**MDN7038W CARDIOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof M Ntsekhe

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in cardiology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. Candidates may be required to present the work at a congress and submit the research for publication.

**DP requirements:** Not applicable

**Assessment:** External examination of the minor dissertation.

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**MDN7039W RHEUMATOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof A Kalla

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in rheumatology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**MDN7040W NEPHROLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof B Rayner

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in nephrology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

**MDN7041W ENDOCRINOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof N Levitt

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in endocrinology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

**MDN7042W MEDICAL GASTROENTEROLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convener:** Prof S Thomson

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in medical gastroenterology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, research methods, conducting literature reviews, and designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

**MDN7043W MPHIL IN GERIATRIC MEDICINE PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Assoc Prof S Kalula

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the process of accreditation of specialist physicians as subspecialists in geriatric medicine. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards MDN7043W. The aim of training is to provide knowledge about the demography of elderly persons (national and international) as well as the factors that affect it; about theories and the biology of ageing; about the physiology and pathology of ageing and their impact on the clinical presentation and management of diseases; and the psychological response of the older persons to the ageing process. Trainees become familiar with the functional assessment and management of the elderly, with major geriatric syndromes and with a range of specific diseases – with specific reference to the cardiovascular system; respiratory system; musculo-skeletal disorders; neurological diseases; endocrine disorders; renal and urological conditions; gynaecological abnormalities; ophthalmological aspects; nutritional deficiencies; gastrointestinal disorders; skin conditions; psychiatric conditions; haematological aspects; immune disorders and infectious diseases. The detailed curriculum is available in the relevant regulations of the College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 18 months' subspeciality training in an accredited specialist department of geriatrics; prescribed logbook; and written reports from the heads of the institutions in which he/she trained.

**Assessment:** Candidates write the relevant examinations of the College of Physicians. The examination comprises one written paper and one paper objective test, and a completed portfolio. There is no oral examination.

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#### **MDN7044W GERIATRIC MEDICINE MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof S Kalula

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in geriatric medicine. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of the research and write the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **MDN7050W MPHIL IN INFECTIOUS DISEASES & HIV MEDICINE PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M Mendelson

**Course entry requirements:** None.

**Course outline:**

This training programme forms part of the credentialling process of specialist physicians to become competent ID subspecialists. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards MDN7050W. Training combines clinical experience in infectious diseases medicine with laboratory training in microbiology and virology, and provides exposure to principles

of communicable diseases epidemiology, infection prevention and control, and tropical public health. Students gain expertise in all aspects of diagnosis and management of organ system and organism-specific infections. Infectious diseases as an integrative clinical subspecialty draw upon not only all of the elements of general internal medicine and paediatrics, but also have relevance to all fields of medicine and surgery. It is integrally involved with the microbiology and epidemiology of infectious diseases. Clinical ID training includes inpatient and ambulatory care. The student will be able to prescribe and monitor antimicrobial therapy, and should have sufficient insight into other forms of medical therapy such as immunosuppression. Practical experience in hospital infection prevention and control forms an integral part of ID training. For physicians/paediatricians, laboratory training includes clinical microbiology and virology training. For the detailed curriculum, see the regulations of the relevant College of Physicians of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate should submit an approved portfolio/logbook.

**Assessment:** Candidates write the relevant subspecialist examination of the College of Physicians of South Africa. The examination comprises a three-hour written examination, an OSCE, an oral examination and a clinical examination. The review of the case portfolio also forms part of the evaluation.

#### **MDN7051W INFEC DIS & HIV MED MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M Mendelson

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in geriatric medicine. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

#### **MDN7053W MPHIL IN ALLERGOLOGY (ADULT) PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Dr JG Peter

**Course entry requirements:** Registered Medical Specialist in Internal Medicine or Family Practice.

**Course outline:**

This training programme forms part of the accreditation process for specialist physicians as subspecialist allergologists. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination in allergology of the College of Physicians, and receive credit towards MDN7053W. The aim of this course is to provide foundational knowledge in a range of disciplines that underpin the clinical training in allergology, as well as train candidates in the application of such foundational knowledge to clinical allergology conditions and management strategies. Students see patients in the allergy clinics on a daily basis (under supervision initially) and are expected to present cases to their supervisors in the clinical situation as well as do formal case presentations to departmental meetings. Clinical competence is assessed in terms of knowledge and

clinical reasoning, and in terms of clinical judgement and decision-making. For the detailed curriculum, see the regulations of the relevant College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** In addition to being registered physicians or specialist family practitioners, candidates must have completed at least 18 months as a subspeciality trainee in the accredited allergology unit in the teaching hospital, submit a written report from the head of the institution and programme in which he/she has trained indicating satisfactory completion of all training requirements; must have submitted a satisfactorily completed logbook; and must have presented or been accepted to present an original first-author research poster or paper at a local or international congress or have submitted or have had accepted for publication an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the examination offered by the College of Physicians. The examination includes formal evaluation of the logbook. The Certificate examination has two components: a written component, and an oral/OSCE/OSPE/clinical component. Each of the two components contributes 50% to the overall mark. The pass mark for the overall examination is 50%. A subminimum pass mark of 50% is required in each of the two (written and the oral/OSCE/clinical) components of the examination.

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#### **MDN7054W ALLERGOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof M Levin, Dr JG Peter

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the College of Medicine examination. The dissertation must be on a topic in allergology and should be of a standard publishable in a peer-reviewed medical or allergy journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing and conducting a self-initiated research project during the two-year training period, and are required to analyse the results, present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **MDN7056W MPHIL IN ADVANCED HEPATOLOGY AND**

#### **TRANSPLANTATION PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof C W N Spearman and Assoc Prof M Sonderup

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist physicians as subspecialists in advanced hepatology and transplantation. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the Part 1 examination of the College, are granted credit towards MDN7056W. Training comprises a core gastroenterology curriculum (12 months in an accredited unit with a subminimum of practical skills); and training in advanced hepatology and liver transplantation (24 months). The core curriculum in medical gastroenterology includes an understanding of basic sciences relative to the subspecialty (e.g. anatomy, histology, molecular biology, embryology, physiology and pathophysiology), pharmacology, nutritional status, and a range of endoscopic procedures. Advanced training in hepatology and liver transplantation is included. Knowledge of clinical research methods, biostatistics, epidemiology and ethics is included, as these form part of the patient-based research projects. Participation in research should lead to at least one manuscript for publication in a reputable journal and/or one presentation at a national or international meeting.

**DP requirements:** Registration as a specialist physician; 24 months' training in an accredited unit of gastroenterology and hepatology with a liver transplantation programme; and submission of a logbook.

**Assessment:** Candidates write the relevant examination of the College of Physicians of South Africa. The examination consists of one three-hour written examination and an oral examination.

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**MDN7057W ADV HEPAT & TRANSPLANT MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof C W N Spearman and Assoc Prof M Sonderup

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in the same branch of the medical subspeciality in which the candidate is registered. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. In some disciplines they are also required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**MDN7058S DRUG DEVELOPMENT**

20 NQF credits at HEQSF level 9

**Convenor:** Prof K Barnes

**Course entry requirements:** None

**Course outline:**

This course will focus on pharmacological aspects of drug development with a particular emphasis on in vitro and in vivo models of efficacy, toxicity, absorption, distribution, metabolism and elimination. Students will also be introduced to the basic concepts of medicinal chemistry, hit and lead compounds and in silico computer modelling. At the end of the course, the student will be familiar with all the main steps in the drug development pipeline.

**DP requirements:** Successful completion of all assignments.

**Assessment:** Written assignments: 50%; written examination: 50%.

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**MDN7059S DRUG ASSAYS**

30 NQF credits at HEQSF level 9

**Convenor:** Dr L Wiesner

**Course entry requirements:** None.

**Course outline:**

This course is designed to provide an understanding of the basic principles of the development and validation of assays for a range of drugs and their metabolites in blood, plasma and urine. The emphasis of the course will be practical with the student acquiring skills to develop drug assays using HPLC and being exposed to methods for assaying drugs by means of tandem mass spectrometry. Principles of assay validation, including the use of HPLC columns, internal standards, methods of extraction, preparation of calibration standards, selectivity, precision, accuracy and stability will be covered. Principles of quality control and quality assurance, external quality assurance evaluation and laboratory accreditation will also be covered.

**DP requirements:** Successful completion of all assignments.

**Assessment:** Written assignments: 50%; written examination: 50%

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**MDN7060F PHARMACOMETRICS**

30 NQF credits at HEQSF level 9

**Convener:** Dr P Denti

**Course entry requirements:** None

**Course outline:**

This course will build on the principles developed in the Pharmacokinetics module. Students will be taught the theory and practice of non-linear Mixed Effects Modelling and will be introduced to the available data analysis software. Different approaches to quantitative analysis of pharmacokinetic and pharmacodynamic data will be introduced. The course will be hands-on and students will be provided with data sets and be taken through the process of developing approaches to analysing the data.

**DP requirements:** Successful completion of all assignments.

**Assessment:** Written assignments: 50%; written examination: 50%.

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**MDN7061F PK-PD PRINCIPLES**

10 NQF credits at HEQSF level 9

**Convener:** Assoc Prof H McIlheron

**Course entry requirements:** None.

**Course outline:**

This course introduces the practice and core concepts of pharmacokinetics (PK) and of pharmacodynamics (PD) to allow students to understand the basic principles underpinning the science of pharmacology. Core concepts of PK: the absorption, distribution, metabolism and excretion (ADME) paradigm; the area under the concentration curve (AUC); half-life; clearance; volume of distribution; bioavailability; single dose vs. steady-state dosing; and therapeutic drug monitoring. Core concepts of PD: receptor-ligand binding; agonists and antagonists; dose-concentration-response relationships; and tolerance.

**DP requirements:** Successful completion of all assignments.

**Assessment:** Written assignments: 50%; written examination: 50%

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**MDN7062W CLINICAL PHARMACOLOGY MINOR DISSERTATION (90 CREDITS)**

90 NQF credits at HEQSF level 9

**Convener:** Dr L Wiesner

**Course entry requirements:** None

**Course outline:**

This comprises a dissertation on an approved topic embodying advanced research under the guidance of a supervisor appointed by Senate. The research topic/problem is selected in consultation with the supervisor. The work involves the construction of a research proposal, a literature review, data collection and analysis of the findings, the drawing of conclusions, the formulation of recommendations, and the preparation of the dissertation. Except by permission of Senate, the dissertation is not to be more than 20 000 words in length.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**MDN7065W CLINICAL HAEMATOLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convener:** Prof N Novitzky

**Course entry requirements:** None

**Course outline:**

The minor dissertation is conducted under supervision and is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the Part 1 examination of the College of physicians of South Africa. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in clinical haematology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. In some disciplines they are also required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

#### **MDN7066W MMED MEDICAL GENETICS PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Dr K Fiegen

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist medical geneticists. Candidates complete the curriculum of the South African College of Medical Geneticists. They undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. They write the Part 1 examination of the College of Medical Geneticists and receive credit towards MDN7066W. Course content aims to build a comprehensive knowledge of basic sciences relative to the practice of medical genetics; including molecular and cell biology; laboratory techniques and interpretation of laboratory results; genetic disorders and birth defects; elementary statistics; public health genetics; applied anatomy, physiology and embryology; and ethical aspects and principles of genetic counselling. For the detailed curriculum, see the regulations of the College of Medical Geneticists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The examination is written prior to completing 30 months as a full-time registrar. Candidates must have completed at least 12 months in a full-time post as a registrar in an HPCSA-registered medical genetics unit.

**Assessment:** Two written papers including MCQ questions, short answer questions and essay questions. Pass mark is 50%

#### **MDN7067W MMED MEDICAL GENETICS PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Dr K Fiegen

**Course entry requirements:** MDN7066W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist medical geneticists. Candidates complete the curriculum of the South African College of Medical Geneticists. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. Towards the completion of their training, they write the final examination of the College and receive credit towards MDN7067W. The aim of the course is to train candidates in the clinical conditions and management strategies in medical genetics: to diagnose patients with medical genetic conditions and birth defects; to judge when to seek the help of other specialists and subspecialists; and to act as the patient's advocate, advisor and guide within the discipline of medical genetics. Candidates gain a detailed knowledge of medical and public health genetics, together with the principles and practices of genetic counselling, medical ethics and interpretation of genetic tests. For the detailed curriculum, see the regulations of the College of Geneticists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least four years' post-internship and three years' full-time training as a registrar, and a completed logbook and portfolio as required by the College of Medical Geneticists of SA

**Assessment:** The examination comprises a written examination, including an Objective Structured Clinical Examination (OSCE) paper and 2 additional written papers, a clinical examination, including a genetic counselling case, 2 short clinical cases and a long clinical case.

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#### MDN7068W MEDICAL GENETICS MINOR DISSERTATION

60 NQF credits at HEQSF level 9

**Convenor:** Dr K Fiegen

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in Medical Genetics. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic or a topic of clinical relevance and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, candidates proceed with their research, analyse the results and write up the dissertation. They are encouraged to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### MDN7069W MPHIL CLINICAL HAEMATOLOGY PART 1

120 NQF credits at HEQSF level 9

**Convenor:** Prof N Novitzky

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist physicians as subspecialists in clinical haematology. Students follow the relevant curriculum of the College of Physicians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards LAB7024W. A paediatrician or physician can enter the subspeciality by training in mainly laboratory haematology for two years and passing the appropriate examinations. A haematological pathologist can enter the subspecialty of clinical haematology after training in paediatric or adult haematology for two years and passing the appropriate examinations. The sequence of training is not relevant. A clinical haematologist with the primary speciality of internal medicine should restrict himself/herself to treating adults mainly with haematological disorders, and can also perform laboratory investigations on his/her patients within the scope of his/her training. Training covers, amongst other things, a wide spectrum of laboratory techniques and haematological diseases for at least one year, knowledge and practice of clinical haematology, diagnostic evaluations, treatments and management of haematological conditions and emergencies, and bone marrow and peripheral stem cell transplantation. For the detailed curriculum, see the regulations of the relevant College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must be registered as a specialist physician, must have completed at least eighteen months as a subspeciality trainee in an accredited specialist department of clinical haematology (of which twelve months must be in a diagnostic haematology laboratory), and must submit positive written reports from the heads of the institutions in which he/she trained. In addition, registered haematopathologists who have completed eighteen months of clinical training at an accredited specialist clinical department of haematology, and who have an adequate report from the head of the department, may sit the examination.

**Assessment:** Candidates write the relevant clinical examination of the College of Physicians. The examination comprises a written paper, clinical cases, laboratory practical examination and an oral examination.



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## OBSTETRICS AND GYNAECOLOGY

*H-Floor, Old Main Building, Groote Schuur Hospital*

**Professor and Head:**

L A Denny, MBChB PhD *Cape Town* MMed FCOG SA

**Professor and Deputy Head:**

S J Dyer, MBChB *Munich* PhD *Cape Town* MMed FCOG SA

**Professor Full-time:**

S R Fawcus, MA (Hons) MB BS *London* MRCOG FRCOG UK

**Emeritus Professor:**

Z M van der Spuy, MBChB *Stell* PhD *London* FRCOG FCOG SA

**Honorary Professors:**

C A Matthews, MD *Charlottesville*

D J M Ncayiyana, MD *Groningen* FACOG

R Parkar, MB BS *Mysore* MMed *Nairobi*

J P W R Roovers

P Steer, MB BS *London* MRCS LRCP MD MRCOG FRCOG

**Associate Professor Full-time:**

J Anthony, MBChB *Cape Town* FCOG SA MPhil *Stell*

**Honorary Associate Professors:**

S W Lindow, MBChB *Sheffield* MMed MD FRCOG FCOG SA

I M Meinhold-Heerlein

S P Puntambekar, MBBS *India*

P S Steyn, MBChB, MMed FCOGSA, DFFP *London*, MPhil (Social Sciences of Methodology) *Stell*

**Emeritus Associate Professors:**

E J Coetzee, MBChB *Cape Town* FRCOG FCOG SA

A Kent, MBChB MPhil *Cape Town* FRCOG

H A van Coeverden de Groot, MBChB *Cape Town* FRCOG (Community Obstetrics)

**Chief Specialist Level Two Service and Head New Somerset Hospital:**

G A Petro, MBChB *Cape Town* FCOG SA

**Senior Lecturers Full-time:**

T Adams, MBChB *Cape Town* FCOG SA Subspeciality Gynaecological Oncology

T A Horak, MBChB *Stell* FCOG SA MMed (O&G)

S Jeffrey, MBChB *Stell* FCOG SA Subspeciality Urogynaecology (RCOG)

L A Kenneth, MBChB *UKZN* FCOG SA MMed (O&G)

J Marcus, MPhil, PGDN (Adv.Mid), RM, RPN, RCN, RPsychN

M Matjila, BSc MBChB *UKZN* FCOG SA PhD *Cape Town*

N H Mbatani, MBChB *Medunsa* FCOG SA

M Patel, MBChB *Cape Town* FCOG SA MMed (O&G) Subspeciality Reproductive Medicine

D Richards, MBChB *Stell* MMed *Cape Town* FCOG, Cert. Gynaecol. Oncol. (CMSA)

L Schoeman, MBChB *Cape Town* MMed FCOG SA

C J M Stewart, BA MBChB MMed *Cape Town* FCOG SA MRCOG

H van Zyl, MBChB *Stell* FCOG SA

**Senior Lecturers Part-time:**

C M C Dehaeck, MBChB *Stell FCOG SA*  
 P R de Jong, MBChB *Pret MMed Cape Town FCOG SA MRCOG*  
 A S Lachmann, MBBCH *Witwatersrand MD FCP SA*  
 J O Olarogun, MB BS *Ilorin DipObst FCOG SA MMed Cape Town*  
 L J Rogers, MBChB *Cape Town MMed FCOG SA Subspeciality Gynae-Oncology (RCOG)*

**Lecturers Full-time:**

S Allie, MBChB *Cape Town FCOG SA*  
 K J Brouard, MBChB *Cape Town FCOG SA*  
 C Gordon, MBChB *Cape Town*  
 K Kadwa, MBChB  
 D Kennedy, MBChB *Stell FCOG SA MMed (O&G)*

**Lecturers Part-time:**

U Botha, MBChB *Stell MMed Cape Town FCOG SA*  
 G Breeds, MBChB *Cape Town FCOG SA*  
 M Cloete, MBChB *UFS FCOG SA MMed (O&G)*  
 J P F Dalmeyer, MBChB *Pret FCOG SA PhD Stell*  
 A R Dhansay, BSc *UDW MBChB UKZN FCOG SA*  
 D Dumbrill, MBChB *Cape Town FCOG MRCOG DA SA*  
 G Groenewald, MBChB *Stell FCOG SA*  
 B R Howard, MBChB *Cape Town FCOG SA*  
 L Jansen, MBChB *Cape Town FCOG SA*  
 M Kleyn, MBChB *Cape Town FCOG SA*  
 C Nel, MBChB *Cape Town FCOG SA*  
 M S Puzy, MBChB *MMed Cape Town FCOG SA*  
 J R Robinson, MB BS *Perth MRACOG FCOG SA MRCOG*  
 J Rowlinson, MBBCh *Witwatersrand*  
 S W Sandler, MBChB *Cape Town FRCOG MA Stell*  
 S Shanahan, MBBCh *Witwatersrand FCOG SA*  
 R Sheldon, BA RN  
 V Stefan, MedicDip PhD *Bucharest*  
 M Wasserman MSocSc *UFS DHS San Francisco*  
 H Wright, MBChB *Cape Town*  
 C Zeelenberg, PN PGDN  
 P Zinn, MBBCh *Witwatersrand MRCOG London MMed (O&G)*

**Fellows Full-time:**

B Guzha, MBChB *Zimbabwe, FCOG SA*  
 R Saidu, MB BS *Nigeria FMCOG MPH*  
 C Senaya, MBChB *(Ghana) FWACS,*

**Fellow Part-time:**

TG Deo, MBChB *Medunsa FCOG SA*

**Honorary Senior Lecturers:**

M Mbenge, (Dora Nginza Hospital) MBChB *Pret MMed FCOG SA*  
 C P Nel, MBChB *Cape Town MRCOG, FRANZCOG FRCOG*  
 V E M Perrott, MBChB *Cape Town, MBChB, MRCGP, MA (Linguistics)*  
 E van Wyk, (HoD Wynberg Military Hospital) MBChB *Cape Town FCOG SA*

**Honorary Lecturers:**

F Abdurahman (Wynberg Military Hospital) MBChB *Cape Town FCOG SA*

R D Boa, MBBCh *Witwatersrand*  
S MacPherson (Wynberg Military Hospital) MBChB *Cape Town* FCOG SA

**Medical Officers Full-time:**

A Boutall, MBChB *Stell A Ciesielski, MBChB Cape Town*  
S N Constantatos, MBChB *Cape Town*  
L Dietrich, MBChB *Cape Town*  
M F Hendricks, MBChB *Stell*  
F Loggenberg, MBChB *UOFS D Nage, MBChB Medunsa*  
B Schilder, MBChB *Cape Town*

**Medical Officers Part-time:**

R D Boa, MBBCh *Witwatersrand*  
M De Souza, MBChB *Cape Town*  
C Floweday, MBChB *Cape Town*  
L S Matthews (Ultrasound), MBChB MD *Cape Town*  
J McInroy, MBChB *Cape Town*  
M E Moss (Family Planning) MBChB *Manchester DCH* (Head of Family Planning and Reproductive Health)  
K Soeters, MD *Leiden*

**COURSES OFFERED**

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**OBS7006W MMED OBSTETRICS AND GYNAECOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Em Prof Z M van der Spuy

**Course entry requirements:** OBS7015W and OBS7016W

**Co-requisites:** Completion of the Portfolio of Learning of the College of Obstetricians and Gynaecologists, which includes a logbook of clinical experience. The experience which is required is listed in the portfolio.

**Course outline:**

This training programme forms part of the accreditation process of general practitioners as specialist obstetricians and gynaecologists. Candidates complete the curriculum of the College of Obstetricians and Gynaecologists of South Africa. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards OBS7006W. The course content covers the principles and practice of general obstetrics and gynaecology, including reproductive medicine, gynaecological oncology, urogynaecology, maternal and foetal medicine, family planning, community obstetrics, and such aspects of other medical disciplines as are relevant. For the detailed curriculum and the examination rules, see the regulations of the College of Obstetricians and Gynaecologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Approved clinical experience in a registrar training post (at least four years post-internship) as outlined in the portfolio; in obstetrics, at least 18 months in a full-time registrar post in a maternity hospital/ department, and in gynaecology, at least 18 months in a full-time registrar post in a gynaecological hospital/department and submission of the logbook. Completion of the dissertation is a requirement for registration as a specialist and for completion of the MMed (O&G).

**Assessment:** Candidates write the Part II examination of the College of Obstetricians and Gynaecologists. The examination consists of two written papers, an OSCE (oral examination) and an OSPE (practical examination). They have to complete a Portfolio of Learning which includes documentation of their required clinical experience. They are not admitted to the Part II examination if they have not completed all clinical requirements. The dissertation is required as evidence of research experience for registration as a specialist with the HPCSA and also for completion of the MMed. This is assessed by examiners appointed by the Faculty of Health Sciences.

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**OBS7007W OBSTETRICS & GYNAECOLOGY MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convenor:** Em Prof Z M van der Spuy**Course entry requirements:** OBS7006W**Course outline:**

The minor dissertation is prepared under supervision. The dissertation is required as evidence of research experience for registration as a specialist with the HPCSA and also for completion of the MMed degree. It must be between 15 000 and 20 000 words in length, and must be on a topic in obstetrics or gynaecology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates are encouraged to present the work at a congress and to submit the research for publication. The candidate must identify a topic and a supervisor in the first 18 months as a registrar.

**DP requirements:** Ideally submitted before the FCOG final examination. Specialist registration with the HPCSA requires evidence of research output from the Faculty.

**Assessment:** Examination of the minor dissertation.

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**OBS7008W MPHIL IN REPRODUCTIVE MEDICINE PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof S Dyer**Course entry requirements:** None**Course outline:**

This training programme forms part of the credentialling process of specialist obstetricians/gynaecologists to become subspecialists in reproductive medicine. Students follow the relevant curriculum of the College of Obstetricians and Gynaecologists of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards OBS7008W. Candidates acquire an advanced understanding of basic sciences relevant to this subspecialty (e.g. physiology, pharmacology; endocrinology, embryology, immunology and genetics; pathology; epidemiology), as well as psychological, social and psychosomatic aspects of reproductive medicine. Students learn to interpret, perform and/or supervise diagnostic and imaging techniques and procedures, and learn the relevant statistical methodology. They acquire expertise in surgery designed to correct particularly infertility problems. They learn fertility regulation and family planning, and in using various diagnostic techniques such as ultrasound, acquire clinical competence and detailed understanding of the differences in aetiology and management of pregnancy and fertility problems during various stages of the patient's lifetime. The trainee will also be able to take an appropriate history, examine the patient and arrange/perform appropriate investigations and treatment. Finally, the student will have applied knowledge of all aspects of assisted reproductive technology, including IVF, GIFT, ICSI, of laboratory aspects of management and quality control, and of legal and ethical issues. For the detailed curriculum, see the regulations of the relevant College of Obstetricians and Gynaecologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Two years of training after completion of specialist training in Obstetrics and Gynaecology; a research project; and a portfolio of practical and academic experience must be completed.

**Assessment:** Candidates write the relevant examinations of the College of Obstetricians and Gynaecologists of South Africa. Examination comprises a clinical examination (OSCE, clinical problem solving, oral) and a three-hour written paper. The research project is examined as a part of the final assessment. It should be of a publishable standard.

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**OBS7009W** REPRODUCTIVE MEDICINE MINOR DISSERTATION (60

CREDITS)

60 NQF credits at HEQSF level 9

**Convener:** Prof S Dyer

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in reproductive medicine. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**OBS7010W** MPHIL IN GYNAECOLOGICAL ONCOLOGY PART 1

120 NQF credits at HEQSF level 9

**Convener:** Prof L Denny and Dr N Mbatani

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist obstetricians/gynaecologists as subspecialists in gynaecological oncology. Students follow the relevant curriculum of the College of Obstetricians and Gynaecologists of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards OBS7010W. The candidate will gain sufficient knowledge of physiology and pathophysiology to manage patients with gynaecological cancer. On completion of training, he/she should be able to identify, on the basis of direct visual and microscopic evaluation, lesions that are pre-malignant or malignant, and distinguish them from benign disorders, and should know the derivation, biological behaviour, important characteristics and prognostic features of diseases of the female genital tract. The candidate is also trained to identify and manage a wide range of factors relevant to carcinogenesis. Training covers relevant aspects of genetics, tumour immunology and treatment, general pharmacology, diagnostic techniques and imaging, pre- and post-operative preparation, complications during surgery, and a range of surgical procedures and methods of terminal care. The candidate learns epidemiological techniques and how to apply a range of statistical tests. While most of the training time should be spent in the gynaecological oncology training unit, rotations also take place in radiation oncology, medical oncology, colorectal surgery, urology service, plastic and reconstructive surgery, palliative and hospice care, and the surgical intensive care unit. The full curriculum is available in the regulations of the College of Obstetricians and Gynaecologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates must have spent two years in full-time clinical training at subspecialist trainee level in gynaecological oncology; or two and a half years if undertaking their dissertation for the Part 2, during which time the equivalent of one year of full-time relevant research was carried out. A clinical logbook must be completed. Admission to this examination will be permitted following the assessment of the portfolio and the research project.

**Assessment:** The exit assessment will include an objectively structured clinical examination (OSCE), a number of objectively structured practical examinations (OSPE) and a written paper.

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**OBS7011W GYNAECOLOGICAL ONCOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof L Denny**Course entry requirements:** None**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in gynaecological oncology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None**Assessment:** External examination of the minor dissertation.

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**OBS7013W MPHIL IN MATERNAL & FOETAL MEDICINE PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Assoc Prof J Anthony and Dr C Stewart**Course entry requirements:** None**Course outline:**

This training programme forms part of the credentialling process of specialist obstetricians/gynaecologists to become subspecialists in maternal and foetal medicine. Students follow the relevant curriculum of the College of Obstetricians and Gynaecologists of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards OBS7013W. Training introduces a broad knowledge of the physiology and pathology of the pregnant woman and the foetus. The trainee is taught to be clinically competent in the investigation and management of both medical and surgical disorders of both patients. Advanced knowledge and skills are taught in biochemistry, and pharmacology and pathology relating to the pregnant woman and the foetus (this includes embryology and teratology, endocrinology of pregnancy, foetal physiology, genetics, immunology, maternal physiology, placental physiology, and the social and psychological aspects of pregnancy). The candidate acquires clinical expertise in complicated obstetrics, including maternal resuscitation and intensive care; foetal medicine including ultrasound examination and invasive procedures; infectious diseases in pregnancy; medical and surgical complications of pregnancy; operative procedures and intrapartum management in pre/post-pregnancy; operative management and bereavement counselling. The detailed curriculum is published in the regulations of the College of Obstetricians and Gynaecologists of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Two years in clinical training at subspecialist trainee level in maternal and foetal medicine, including research relevant to maternal and foetal medicine; or three years, which may be extended to a maximum of four years, in clinical training at subspecialist trainee level in maternal and foetal medicine, including relevant research. To assess research aptitude, the candidate will be expected to submit a paper published in an appropriate peer-reviewed journal, or a manuscript at a publishable standard.

**Assessment:** Candidates write the final subspecialist examination of the College of Obstetricians and Gynaecologists of South Africa. The examination comprises two three-hour papers, one in maternal medicine and one in foetal medicine, as well as a clinical examination. The latter consists of an OSCE and/or a structured viva. A mark of at least 50% is required in each of the two written papers in order to be invited to the clinical examination. A mark of at least 50% is required for a

pass in the clinical examination. The research project is examined as a part of the final assessment. It should be of publishable standard.

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**OBS7014W** MATERNAL & FOETAL MEDICINE MINOR DISSERTATION (60 CRED)

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof J Anthony and Dr C Stewart

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in maternal and foetal medicine. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**OBS7015W** MMED IN OBSTETRICS & GYNAECOLOGY PART 1B

40 NQF credits at HEQSF level 9

**Convener:** Prof L Denny

**Course entry requirements:** OBS7016W

**Course outline:**

The content of Part 1B covers all relevant applied basic sciences and includes microbiology, pharmacology, pathology, principles of bioethics, basic biostatistics and the pathophysiology of diseases in obstetrics and gynaecology. Knowledge is required of all those aspects of the subjects which should form part of the general education of any specialist and particularly of those aspects applicable to obstetrics and gynaecology.

**DP requirements:** None

**Assessment:** Candidates write the Part 1B examination of the College of Obstetricians and Gynaecologists of the Colleges of Medicine of South Africa, which consists of written papers.

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**OBS7016W** MMED IN OBSTETRICS & GYNAECOLOGY PART 1A

20 NQF credits at HEQSF level 9

**Convener:** Prof L Denny

**Course entry requirements:** None

**Course outline:**

The subjects covered by the Part 1A examination include the basic sciences of anatomy, embryology, physiology, endocrinology, cell biology, genetics, immunology and imaging physics.

**DP requirements:** None

**Assessment:** Candidates write the Part 1A examination of the College of Obstetricians and Gynaecologists of the Colleges of Medicine of South Africa which consists of written papers.

## PAEDIATRICS AND CHILD HEALTH

*ICH Building, Red Cross War Memorial Children's Hospital, Rondebosch*

**Professor and Head:**

H J Zar, MBChB *Witwatersrand* FAAP BC Paed, USA BC Paed Pulm, USA PhD *Cape Town*, FCPaed SA

**Professors:**

A Argent, MBBCh MMed (Paed) *Witwatersrand* MD (Paed) *Cape Town* DCH FCPaed CertCritCare SA FRCPCH UK

B S Eley, BSc(Hons)(MedBiochem) MBChB *Cape Town* FCP SA

J Wilmshurst, MB BS *London* MRCP UK FCPaed SA

**Emeritus Professors:**

D W Beatty, MBChB MD *Cape Town* FCP SA

F Bonnici, MBChB MMed *Cape Town* FCP SA ADE

G Swingler, MBChB PhD *Cape Town* DCH SA FCP SA

J Wiggelinkhuizen, MB BCh MMED (Paeds) FCP SA

**Honorary Professors:**

S Andronikou MBBCh *Witwatersrand*, FCRad Diag, FRCR *London*, PhD UCTSir D M B Hall, MB BS UK BSc (Pharm) MRCS LRCP MRCP UK FRCR FRCPH

S M Hall, MB BS BSc(Pharm) MSc(SocMed) *London* MFPH FFPH FRCP ERCPCH

M Levin, MBChB *Witwatersrand* MRCP(Paed) FRCR UK PhD *London* Foundation Fellow *Medical Science*

D Saunders, MBChB *Birmingham* DCH *England* DTPH CertEpid and Med Stats *London* DSc *Cape Town*

N Silverman, MBBCh DSc *Witwatersrand* MD UCSF

D Tibboel, MBChB PhD *Amsterdam*, FCPaed *Rotterdam*

J Warner, BSc *University of London*, PhD *London*

J Warner MBChB, DCH, MRCP UK, MD, FRCR UK, FRCPCH UK, DMedSci, AAAAI

**Associate Professors:**

M Coetzee, BSocSc(Hons) UFS DipPaedNurs PhD *Cape Town*

A Davidson, MBChB *Cape Town* DCH FCP CertMedOnc (Paed) SA

K Donald, MBChB *Cape Town* DCH FCPaed SA MRCPCH UK

W Hanekom, MBChB *Stell* DCH FCP(Paed) SA

M Harrison, MBChB *Cape Town* MRCP FRCPCH UK

M Hendricks, MBChB *Cape Town* DipPEC DCH FCPaed CMO (Paed) SA

A Horn, MBChB *Cape Town* FCPaed DCH CertNeon SA MRCP (Paed) UK

M E Levin, MBChB MMed *Cape Town* FCPaed DipAllerg SA PhD

M McCulloch, MBBCh *Witwatersrand* DTM&H FRCPCH *London* DCH FCPaed SA

B Morrow, BSc (Physio) PhD *Cape Town*

C Scott, MBChB *Cape Town* FCPaed SA

A Westwood, MBChB MD MMed (Paed) *Cape Town* FCP SA MRCP UK

**Emeritus Associate Professors:**

M D Bowie, BSc UKZN MBChB MD *Cape Town* FRCP *Edinburgh* DCH RCP&S UK

V C Harrison, MBChB *Cape Town* MRCP FRCPCH UK

C D Karabus, MBChB MMed (Paed) *Cape Town* DCH RCP&S FRCP *Edinburgh* FRCP *London*

A F Malan, MBChB MMed (Paed) MD *Cape Town* Dip(O&G) SA

M Mann, MBChB PhD MMed (Paed) MMed (Nuclear Med) *Cape Town*

J Wiggelinkhuizen, MBBCh MMed (Paed) FCP SA

## 300 DEPARTMENTS IN THE FACULTY

D L Woods, MBChB MD *Cape Town* FRCP DCH RCP&S *UK*

### Senior Lecturers Full-time:

J Ahrens, MBChB *Cape Town* DA DCH FCPaed CIC(Paed) *SA*  
H A Buys, MBChB *Zimbabwe* LRCP LRCS *Edinburgh* MRCP *UK* FCP *SA*  
A Brink, MBChB *Pretoria* MMed (Nuclear Med) *Cape Town* FCNP DCH *SA*  
M Carrihill, MBChB (Paed) MPhil *Cape Town* FCPaed CertEndo&Metab *SA* (PaedEndo)  
R De Decker, MBChB MSc *Cape Town* DCH *London* FCPaed CertMedGenetics (Paed) *SA*  
S V Delport, MBChB MMed (Paed) BSc (Hons)Epidem *Cape Town* FCP DCH *SA*  
R Dunkley, MBChB *Cape Town* FCPaed *SA*  
P Gajjar, MBChB DCH FCP CertPaedNephro  
M G Hendricks MBChB *Cape Town* DCH Dip PEC FCPaed CertMedOnc (Paed) *SA*  
C Hlela, MBChB FCDerm MSc GHS MMed (Derm) PhD *Oxon*  
Y Joolay MBChB *Stell* FCPaed *SA*  
T Kerbelker, MBChB ATLS ACLS BLS PALS *Cape Town* DCH FCPaed *SA* DipHIVMan *Griffiths*  
Neuro DipAllergy  
CertPaedRheum *Australia*  
S M Kroon, MBChB *Cape Town* FCPaed *SA* DTM & H *London* MRCP *UK*  
R de Lacey, MBChB MMed (Paed) *Cape Town*  
L Linley, MBChB *Cape Town* FCPaed *SA*  
R Muloiwa, MBChB *UKZN* DCH FCPaed *SA* MSc LSHTM  
S Naidoo, MBChB *Cape Town* DCH (*SA*) FCPaeds(*SA*) DipAllerg(*SA*)  
A P Ndondo, MBChB *Medunsa* FCPaed *SA*  
P Nourse, MBChB MMed *Cape Town* FCP *SA* CertPaedNephrol  
J C Nuttall, MBChB *Cape Town* DipObst DCH FCPaed *SA* DTM&H *Witwatersrand*  
R Petersen, MBChB FCP (Paed) *Cape Town* DHC *SA*  
S Raban, MBChB *Cape Town* DCH DipHIVMan FCPaeds CertNeon *SA*  
M T Richards, MBChB CertDevPaed *Cape Town* DCH FCPaed *SA*  
N R Rhoda, MBChB *Cape Town* FCPaed *SA* Cert (Neon) *SA*  
B Rossouw, MBChB DipTropMed (Paed) MSc (Sports Medicine) *Pretoria* CertCritCare *SA*  
A Spitaels, MBChB *Cape Town* DCH FCPaed *SA*  
L Tooke, MBChB *Cape Town* FCPaed MMed (Paed) DipObst Dip(PEC) *SA*  
A L van Eyssen, MBChB *Stell* DCH FCPaed CertMedOnc (Paed) *SA*  
M Zampoli, MBChB *Witwatersrand* DCH FCP(Paed) *SA*  
L Zuhlike, MBChB *Cape Town* DCH *SA* FCPaed *SA* Card Cert *SA* MPH *Cape Town* FESC *UK*

### Lecturers Full-time:

H Mohamed, MBChB MMed (Public Health) *Cape Town*

S Moyo, MBChB MPH *Cape Town*

M Tameris, MBChB *Cape Town*

J Shea, MPHE

P Wicomb, MBChB *Cape Town* DCH FCPaed *SA*

### Senior Lecturers Part-time:

F Desai MBChB *Cape Town* DCH FCP *SA*

E Goddard, MBChB BSc(Med)(Hons) MMed (Paed) PhD *Cape Town*

G Riordan, MBChB *Cape Town* DCH MMed (Paed) FCP *SA*

A Vanker, MBChB MMed *Stell* FCPaed CertPulmPaed *SA*

D Gray, MBChB *Cape Town* FCPaed(*SA*) PhD *Cape Town*

### Lecturers Part-time:

M Ledger, MBChB BSc (Physiology) BSc(Med)(Hons) *Cape Town* DCH FCPaed *SA*

W R Mathiassen, MBChB *Cape Town* MRCP *UK*

C Rainier-Pope, MBChB MMed *Cape Town* DCH RCP&S *London*

**Honorary Senior Lecturers:**

J Alt, MBChB *Cape Town* DCH SA ATLS APLS FCP  
 N J Bergman, MBChB *Cape Town* DCH *Sweden* MPH MD *Zimbabwe*  
 G Boon, MBChB *Cape Town* FCP SA  
 W Breytenbach, MBChB *Stell* FCP SA  
 R Cullis, MBChB *Cape Town* DCH SA FCPaed SA APLS ACLS PALS ATLS  
 R Dippennar, MBChB *Cape Town* DCH MMed *Stell* CertNeon SA Adv Paed Life Support USA  
 L Henley, BSocSci MSocSci PhD MPhil (Bioethics) AdvDipPsychSocWrk *Cape Town*  
 C Hugo-Hamman, MBChB *Cape Town* MA USA DCH FCP SA  
 V Ramanjam, MBChB *Cape Town* DCH FCP SA  
 N McKerrow, MBChB *Cape Town* BA Unisa MMed(Paed) *Cape Town* FCPaed SA DCH SA  
 P J Sinclair, MBChB *Cape Town* DCH FCP SA  
 G Schermbrucker, MBChB *Cape Town* DCH FCP SA

**Honorary Lecturers:**

C Gray, MBChB *Cape Town* MRCPCH London MSc Surrey DipAllergy Southampton  
 DipPaedNutr  
 S Karabus, MBChB *Cape Town* DCH Dip in Allergology FCPaed SA MRCPCH UKM A Meiring,  
 MBChB *Pret* FCPaed SA MMed  
 (Paed) *Witwatersrand*  
 D Van Der Merwe, MBChB *Cape Town* FCPaeds *Griffiths* Neuro CertEndocr ATLS ACLS APLS  
 SA MMed (Paed) *Stell* APLS  
*North Ireland*  
 A L Watkins, MSc (Allergy) BSc(Hons) (Nutrition and Dietetics) MA *Cantab* (Social and Political  
 Science) UK

**Allergology (Paediatric)****Associate Professor and Head:**

M Levin MBChB *Cape Town* FCPaed MMed (Paed) DipAllergy SA PhD

**Honorary Professor**

M Levin, MBBCh *Witwatersrand* MRCP(Paed) FRCP UK PhD London Foundation Fellow  
 Medical Science  
 J Warner, BSc, PhD London

**Honorary Senior Lecturers:**

C Gray, MBChB *Cape Town* MRCPCH London MSc Surrey DipAllergy Southampton  
 DipPaedNutr  
 S Karabus, MBChB *Cape Town* DCH Dip in Allergology FCPaed SA MRCPCH UK  
 A L Watkins, MSc (Allergy) BSc(Hons) (Nutrition and Dietetics) MA *Cantab* (Social and Political  
 Science) UK

**Associated Paediatric Disciplines****Head:**

S Rahim, BSc (Physio) *Cape Town*

**Physiotherapy Department:**

S13 Ground Floor OPD, Red Cross Children's Hospital, Rondebosch  
 ([Sameer.rahim@uct.ac.za](mailto:Sameer.rahim@uct.ac.za) or [Sameer.rahim@westerncape.gov.za](mailto:Sameer.rahim@westerncape.gov.za)) 021 658 5033/5130

**Head:**

S Rahim, BSc (Physio) *Cape Town*

**Occupational Therapy Department:**

*S10 Ground Floor OPD, Red Cross Children's Hospital, Rondebosch*  
(Mereille.pursad@westerncape.gov.za) 021 658 5038/5609

**Head:**

M Pursad, B(OccTher) *Stell*

**Speech and Language Therapy Department:**

*S24 1<sup>st</sup> Floor OPD, Red Cross Children's Hospital, Rondebosch*  
(Lezanne.leroux@westerncape.gov.za) 021 658 5264

**Head:**

L le Roux, B(Speech and Audiology) *Stell*

**Nutrition and Dietetics Department:**

*S14 Ground Floor OPD, Red Cross Children's Hospital, Rondebosch*  
(Shihaam.cader@westerncape.gov.za) 021 658 5471

**Head:**

S Cader, BSc(Med)(Hons) (Nutrition and Dietetics) *Cape Town*

**Audiology Department:**

*S24 1<sup>st</sup> Floor OPD, Red Cross Children's Hospital, Rondebosch*  
(colleen.cox@westerncape.gov.za) 021 658 5406

**Head:**

C Cox, BSc (Audiology) *Cape Town*

**Social Worker Department:**

*B8 B Floor Main Hospital, Red Cross Children's Hospital, Rondebosch*  
(andre.pieters2@westerncape.gov.za) 021 658 5273

**Head:**

C Brown, Dip Social Work *UWC*

**Child and Adolescent Psychiatry**

*[See Department of Psychiatry and Mental Health.]*

**Child Nurse Practice Development Initiative**

**Associate Professor:**

M Coetzee, BSocSc(Hons) *UFS* DipPaedNurs PhD *Cape Town*

**Lecturer Full-Time:**

T Castle, BCUr RN *UWC*, RPaedN

**Lecturers Part-time:**

C Davis, BNurs (Child) DipPICU *England*

L Rees, BSc Nursing *Cape Town*, DipCommHealth *CPUT*, DipPaedNurs *RAU*, MSc Nursing with Nurs Ed *Witwatersrand*, Cert in PHC Clinical Skills *Witwatersrand*

**Practice Development and Research Staff:**

C Bonaconsa, BNurs *Stell* RN  
 A Leonard, MSc (Nurs) *Cape Town* RN  
 N North BA (Hons) Social Policy *London*, RGN  
 S Sieberhagen, Hons, M Psyche *RAU*

**Programme Facilitator:**

J Vos, DipNurs RN

**Cardiology (Paediatric)****Head:**

J Lawrenson, MBBCh *Witwatersrand* MMed *Cape Town* FCP *SA*

**Senior Lecturers Full-time:**

G Comitis, MBChB *Cape Town* DCH DipAnea FCPaed *SA*  
 R De Decker, MSc MBChB *Cape Town* DCH *London* CertMedGenet (Paed) FCPaed *SA*

**Senior Lecturer Part-time:**

H Pribut, MBChB *Cape Town* FCPaed *SA*

**Honorary Senior Lecturer:**

C Hugo-Hamman MA *Oxon* MBChB *Cape Town* DCH *London* FCPaed *SA*

**Child Health Unit****Acting Head and Senior Lecturer:**

J Shea, MPHE

**Critical Care (Paediatric)****Professor and Head:**

A Argent, MBBCh MMed (Paed) *Witwatersrand* MD (Paed) *Cape Town* DCH FCPaed  
 CertCritCare *SA* FRCPCH *UK*

**Associate Professor Full-time:**

M McCulloch, MBBCh *Witwatersrand* DCH FCPaed *SA*

**Senior Lecturers Full-time:**

J Ahrens, MBChB *Cape Town* DA DCH FCPaed CertCritCare *SA*  
 B Rossouw, MBChB DipTropMed (Paed) MSc (Sports Medicine) *Pret* CertCritCare *SA*  
 S Salie, MBChB *Cape Town* DCH *London* FCPaed CertCritCare *SA*

**Honorary Professor**

D Tibboel, MBChB PhD *Amsterdam*, FCPaed *Rottendam*

**Dermatology (Paediatric)****Head:**

C Hlela, MBChB FCderm MSc GHS MMed (Derm) PhD *Oxon*

## **Developmental Paediatrics**

### **Associate Professor and Head:**

K Donald, MBChB MPhil (PaedNeurol) *Cape Town* DCH FCPaed CertPaedNeuro *SA* MRCPCH *UK*

### **Senior Lecturer Full-time:**

R Petersen, MBChB *Cape Town* DCH FCPaed CertDevPaed *SA*

### **Senior Lecturers Part-time:**

S Ackermann, MBChB *Pret* FCPaed CertPaedNeurol *SA*

V Ramanjam, MBChB *Cape Town* DCH FCPaed CertDevPaed *SA*

### **Lecturers Part-time:**

W van der Meulen, MBChB

S Warner, MBChB *Cape Town* DCH *SA*

## **Endocrinology (Paediatric)**

### **Head:**

S V Delpot, MBChB MMed (Paed) BSc(Hons) (Epidem) *Cape Town* FCP DCH *SA*

### **Senior Lecturers Full-time:**

M Carrihill, MBChB (Paed) MPhil *Cape Town* FCPaed CertEndo&Metab *SA* (PaedEndo)

A Spitaels, MBChB *Cape Town* DCH FCPaed *SA*

## **Gastroenterology (Paediatric)**

### **Head:**

E Goddard, BSc(Hons) MSc (Med) MBChB PhD MMed (Paed) *Cape Town* FCPaed  
CertPaedGastro *SA*

### **Senior Lecturer Full-time:**

R de Lacey, MBChB *Cape Town* FCPaed CertPaedGastro *SA*

### **Lecturer Part-time:**

M Ledger, MBChB BSc (Physiology) BSc(Med)(Hons) *Cape Town* DCH FCPaed *SA*

R A Brown, MBChB *Cape Town* MPhil (Ancient Cultures) *Stell* DCH FCS *SA* FRCS *Edinburgh*

## **General Paediatrics**

### **Associate Professors:**

C Scott, MBChB *Cape Town* FCPaed *SA*

M Hendricks, MBChB *Cape Town* DipPEC DCH FCPaed CMO (Paed) *SA*

M E Levin, MBChB MMed *Cape Town* FCPaed DipAllerg *SA* PhD

A Westwood, MBChB MD MMed (Paed) *Cape Town* FCP *SA* MRCP *UK*

### **Senior Lecturers Full-time:**

H A Buys, MBChB *Zimbabwe* LRCP LRCS *Edinburgh* MRCP *UK* FCP *SA*

L Cooke, MBChB *Cape Town*, FCPaed *SA*

R Dunkley, MBChB *Cape Town* FCPaed *SA*

R Muloiwa, MBChB *UKZN* DCH FCPaed *SA* MSc LSHTM

M Richards, MBChB DCH FCPaed CertDevPaed *SA*

## **Haematology/Oncology (Paediatric)**

### **Associate Professor and Head:**

A Davidson, MBChB MPhil *Cape Town* DCH FCPaed CertMedOnc (Paeds) *SA*

### **Senior Lecturers Full-time:**

M G Hendricks, MBChB *Cape Town* DCH Dip PEC FCPaed CertMedOnc (Paeds) *SA*  
A L van Eyssen, MBChB *Stell* DCH FCPaed CertMedOnc (Paeds) *SA*

### **Lecturer Part-Time**

F Desai MBChB *Cape Town* DCH FCP *SA*

W R Mathiassen, MBChB *Cape Town* MRCP *UK*

## **Infectious Diseases (Paediatric)**

### **Professor and Head:**

B S Eley, BSc(Hons) (MedBiochem) MBChB *Cape Town* FCP *SA*

### **Senior Lecturer Full-time:**

J C Nuttall, MBChB *Cape Town* DipObst DCH FCPaed *SA* DTM&H *Witwatersrand*

## **Neonatology**

### **Associate Professor and Head:**

M C Harrison, MBChB *Cape Town* MRCP FRCPCH *UK*

### **Emeritus Associate Professors:**

V C Harrison, MBChB *Cape Town* MRCP FRCPCH *UK*

A F Malan, MBChB MMed MD *Cape Town* DipO&G *SA*

D L Woods, MBChB MD *Cape Town* FRCP DCH RCP&S *UK*

### **Senior Lecturers Full-time:**

A Horn, MBChB *Cape Town* FCPaed DCH CertNeon *SA* MRCP(Paed) *UK*

Y Joolay, MBChB *Stell* FCPaed *SA*

S M Kroon, MBChB *Cape Town* FCPaed *SA* DTM&H *London* MRCP *UK*

L Linley, MBChB *Cape Town* FCPaed *SA*

N R Rhoda, MBChB *Cape Town* FCPaed *SA* Cert (Neon) *SA*

N R Rhoda, MBChB *Cape Town* FCPaed *SA* Cert (Neon)

SAL Tooke, MBChB *Cape Town* FCPaed MMed (Paed) DipObst DipPEC *SA*

### **Lecturers Full-time:**

M T Ismail, MBChB *Cape Town* DCH DipHIV *SA*

A M van Niekerk, MBBCh *Witwatersrand* DCH FCPPaed CertPaedCardiol *SA*

### **Lecturers Part-time:**

J C G Dyssell, MBChB *Cape Town* MMed (Paed) *Witwatersrand* DCH FCPaed *SA*

D H Greenfield, MBChB MPhil MCH *Cape Town* DCH DPH DTM&H *Witwatersrand*

### **Honorary Lecturer:**

D Van Der Merwe, MBChB *Cape Town* FCPaeds *Griffiths* Neuro CertEndocr ATLS ACLS APLS *SA* MMed (Paed) *Stell APLS North Ireland*

## **Nephrology (Paediatric)**

**Head:**

P Gajjar, MBChB DCH FCP CertPaedNephrol

**Senior Lecturer Full-time:**

P Nourse, MBChB MMed *Cape Town* FCP *SA* CertPaedNephrol

## **Neurology (Paediatric)**

**Professor and Head:**

J Wilmshurst, MB BS *London* MRCP UK FCPaed *SA* MD *Cape Town*

**Senior Lecturer Full-time:**

A P Ndondo, MBChB *Medunsa* FCPaed CertPaedNeuro *SA*

**Senior Lecturers Part-time:**

V Kander, MTech (Neurophysiol) *UFS*

G Riordan, MBChB *Cape Town* DCH MMed (Paed) FCPaed *SA*

B Schlegel, MBChB *Cape Town* FCPaed *SA*

K Walker, MBChB *Cape Town* DCH *SA*

## **Pulmonology (Paediatric)**

**Head:**

H J Zar, MBBCh *Witwatersrand* FAAP BCPaedUSA BCPaed Pulmonology USA PhD *Cape Town* FCPaed *SA*

**Senior Lecturer Full-time:**

M Zampoli, MBChB *Cape Town* DCH FCPPaed CertPulmPaed *SA*

**Senior Lecturers Part-time:**

D Gray, MBChB *Cape Town* FCPaed CertPulmPaed (*SA*) PhD *Cape Town*

A Vanker, MBChB MMed *Stell* FCPaed CertPulmPaed *SA*

## **Rheumatology (Paediatric)**

**Associate Professor and Head:**

C Scott, MBChB *Cape Town* FCPaed *SA*

## **COURSES OFFERED**

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### **PED4002F EPIDEMIOLOGY**

14 NQF credits at HEQSF level 8

**Convenor:** Dr D le Roux

**Course entry requirements:** None

**Course outline:**

The course introduces key components of epidemiology that relate to good clinical practice and management in maternal and child health. Content includes the application of epidemiology to disease causation, prevention and treatment. Students are introduced to the different types of epidemiological studies, sampling design and methods, data measurement and collection, as well as disease surveillance. It provides a foundation in research methods which enables students to

critically evaluate and undertake health systems research and audits at the district and regional levels.

**DP requirements:** Students need to attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

**Assessment:** The course assignment is weighted as 10% of the final mark. Other activities in this module attributable to unit submissions and attendance of lectures contribute to the 10% of the final mark.

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#### **PED4003F ORGANISATION & MANAGEMENT**

14 NQF credits at HEQSF level 8

**Convenor:** Dr M Shung King, Dr A Hawkridge, Dr M Moodley, Assoc Prof M Hendricks

**Course entry requirements:** None

**Course outline:**

This course explores the organisation of child health services, programmes and support systems at the different levels of care. It focuses on the role of the paediatrician and medical practitioner in coordinating and managing child health services and programmes at the primary and secondary levels of care. The key aspects that are covered in the course include management as part of health systems; managing change; and a team approach to addressing child health priorities within the district. It explores resource allocation, management, monitoring, and evaluation of child health programmes. Students are also introduced to economic concepts, financial planning and management, as well as budgeting and basic accounting.

**DP requirements:** Students need to attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

**Assessment:** The course assignment is weighted as 10% of the final mark. Other activities in this course attributable to unit submissions and attendance of lectures contribute to the 10% of the final mark

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#### **PED4004S BIOSTATISTICS**

12 NQF credits at HEQSF level 8

**Convenor:** J Ramjith

**Course entry requirements:** None

**Course outline:**

The course aims to introduce students to the basic statistical concepts that will enable them to understand and interpret statistical concepts and to apply this to published research. Using practical examples and case studies, students are introduced to the different types of variables, descriptive statistics, population parameters, sample size estimations and survival analysis. They are required to perform elementary analyses using STATA statistical software. Students are required to summarise, correctly interpret, and present in an appropriate format, data that has been statistically analysed; to analyse and apply statistical concepts to population-based data using appropriate software; and to interpret, summarise and present statistical data.

**DP requirements:** Students need to attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

**Assessment:** The course assignment is weighted as 10% of the final mark. Other activities in this course attributable to unit submissions and attendance of lectures contribute to the 10% of the final mark.

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#### **PED4005S CHILD HEALTH POLICIES**

14 NQF credits at HEQSF level 8

**Convenor:** Prof D Sanders and Dr M Kroon

**Course entry requirements:** None

**Course outline:**

This course enables students to know and be able to critically evaluate current child health policies and legislation. It explores the policy and law making processes. Students are provided with an

approach to and a critical understanding of child health policy analysis and the methodologies used in its evaluation. It explores how the priority conditions affecting children can be addressed through implementation and support for existing policies and programmes, especially at the district level. The course also examines health promotion approaches and strategies and their links to child health programmes that are implemented at the district and regional levels.

**DP requirements:** Students need to attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

**Assessment:** The course assignment is weighted as 10% of the final mark. Other activities in this module attributable to unit submissions and attendance of lectures contribute to the 10% of the final mark.

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#### **PED4006F OPTIMISING CLINICAL CARE FOR LONG-TERM HEALTH**

##### **CONDITIONS**

16 NQF credits at HEQSF level 8

**Convener:** Assoc Prof A Westwood and Assoc Prof C Scott

##### **Course outline:**

The course explores approaches to classification of long-term health conditions and paradigms for continuing clinical care over time. Students are introduced to the concepts of evidence-based practice as applied to priority morbidity and mortality conditions that affect populations of children. They are provided with an approach to providing reliable sources of evidence, and interpreting and applying this to practical settings. It is envisaged that students will develop a critical understanding of the development of guidelines and their implementation and learn how to optimally configure health services with long-term health conditions such as asthma, disabilities, and HIV/AIDS at the primary and secondary levels of care.

**DP requirements:** Students need to attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

**Assessment:** The course assignment is weighted as 10% of the final mark. Other activities in this module attributable to unit submissions and attendance of lectures contribute to the 10% of the final mark.

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#### **PED4007W EXPERIENTIAL LEARNING**

30 NQF credits at HEQSF level 8

**Convener:** Assoc Prof M Hendricks and Assoc Prof A Westwood

##### **Course entry requirements:** None

##### **Course outline:**

This course runs over the entire two year period. It focuses on the practical application of the theoretical learning gained to the context of the student. It evaluates current child health practices through primary research, which includes small projects which students need to undertake in their work environment. It also focuses on the practical implementation of clinical guidelines, policies and programmes in both the clinical and public health context. Students are expected to engage in reflective study on the facilitating factors and barriers to implementing interventions aimed at improving child health status within their work environment.

**DP requirements:** Students need to submit two portfolio reports at the end of the first year.

**Assessment:** The course assignment is weighted as 10% of the final mark. Other activities in this module attributable to unit submissions and attendance of lectures contribute to the 10% of the final mark.

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#### **PED4008F ADVOCACY AND CHILDREN'S RIGHTS**

10 NQF credits at HEQSF level 8

**Convener:** L Lake and P Proudlock

##### **Course entry requirements:** None

##### **Course outline:**

This course introduces the main aspects relating to children's rights and introduces the student to a rights-based approach to child health. It examines the main principles of an effective advocacy strategy that needs to be applied in realising children's rights. Students are introduced to the advocacy process and are provided with practical examples of where an advocacy strategy was successfully applied. The course also aims to provide students with the knowledge and understanding of ethical principles and legislation guiding the provision of child healthcare.

**DP requirements:** Students need to attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

**Assessment:** The course assignment is weighted as 10% of the final mark. Other activities in this module attributable to unit submissions and attendance of lectures contribute to the 10% of the final mark.

### **PED4009S HEALTH INFORMATION SYSTEMS**

10 NQF credits at HEQSF level 8

**Convener:** Assoc Prof A Westwood and Dr N McKerrow

**Course entry requirements:** None

**Course outline:**

The course introduces essential information needed for planning and monitoring child health interventions at the primary and secondary levels. It looks at existing data sources and provides a critical approach to the interpretation of data and child health indicators. Students are also exposed to the advantages and disadvantages of the various data collection tools and systems. The course also explores how data could be used to improve child health services and programmes at the district and regional levels.

**DP requirements:** Students need to attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

**Assessment:** The course assignment is weighted as 10% of the final mark. Other activities in this module attributable to unit submissions and attendance of lectures contribute to the 10% of the final mark.

### **PED4010S COMMUNICATION, EDUCATION & TRAINING**

10 NQF credits at HEQSF level 8

**Convener:** Assoc Prof M Hendricks, M Alperstein and Dr A Spitaels

**Course entry requirements:** None

**Course outline:**

This course is practical and explores the principles of effective verbal and written communication. Students are provided with the necessary skills in presenting, writing and publishing health information relevant to their work. The course also explores the principles of adult education and its application to the in-service training of health care workers in child health. Students are introduced to educational methods and effective facilitation of educational initiatives.

**DP requirements:** Students need to attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

**Assessment:** The final assessment mark will comprise the following components and assessment weightings: Course assignments: 70%; portfolio reports: 20%; unit submissions: 5%; and attendance of lectures: 5%.

### **PED4017F HEALTH & DEVELOPMENT**

12 NQF credits at HEQSF level 8

**Convener:** M Dutsche and J Shea

**Course entry requirements:** None

**Course outline:**

This course explores the developmental determinants of health and the systems and ideologies that promote and sustain maternal and child health. The objectives of this course are: to develop an awareness of human rights issues within the health context, to introduce students to the tools and

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strategies for advocating the realisation of the rights of women and children, to analyse existing health services in order to assess whether they adequately meet the health needs of children, to examine critically the political and economic factors that affect health and health interventions, and to develop an understanding of health promotion and of its role as a key strategy for improving health. The course is offered through lectures and two hours per week online interaction with the tutor for six weeks.

**DP requirements:** Full participation in online learning; completion of and an average of at least 50% for all the course assignments.

**Assessment:** Assessment for this course includes weekly discussions on Vula (constituting 20%); unit learning activity posted on Vula (constituting 20%); and two course assignments (constituting 60% of the overall course mark).

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### **PED4018F EPIDEMIOLOGY**

14 NQF credits at HEQSF level 8

**Convener:** Dr T Hawkridge, Dr C van Woerden and Dr C Wiysonge

**Course entry requirements:** None

**Course outline:**

This course introduces the fundamental concepts of epidemiology for good clinical practice, and district health level management of maternal and child health. The course includes the application of epidemiology to disease causation, prevention and treatment. It introduces participants to the different types of epidemiological studies, sampling design and methods, data measurement and collection, and disease surveillance. The course aims to enable participants to develop an epidemiological approach to defining and measuring the occurrence and health-related states in populations. It provides a foundation in research methods that will enable participants to critically evaluate public health research.

**DP requirements:** Full participation in online learning activities is a prerequisite for completing the end-of-course assignments. All assignments must be completed. An overall pass mark for the coursework component is a prerequisite for sitting the final examination.

**Assessment:** Coursework includes weekly synchronous online learning sessions and independent discussion forum assignments throughout the course which comprise 40% of the final course mark. The final assessment includes an end-of-course assignment that constitutes 40% of the course mark and a multiple-choice examination that constitutes 20% of the course mark.

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### **PED4019F INFORMATION, EDUCATION & COMMUNICATION**

10 NQF credits at HEQSF level 8

**Convener:** Dr A Bangeni and J Shea

**Course entry requirements:** None.

**Course outline:**

This course covers the principles of organisational communication, which include verbal and electronic communication, meeting facilitation and technical writing. Key objectives are to demonstrate effective verbal and written communication skills; to review routine communication practices in the workplace; to examine communication and information aspects of meetings and their role in health service delivery; and to equip students with skills in basic computer set-up, troubleshooting, email communication, and word-processing for effective communication.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Students are assessed continuously through unit submissions and will need to complete a course assignment. Formative assessment includes an assessment of the learning activities submitted on a regular basis, which accounts for 40% of the final course mark. Summative assessment includes an end-of-course assignment which accounts for 60% of the final course mark.

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### **PED4020S FOUNDATIONS OF MATERNAL & CHILD HEALTH**

12 NQF credits at HEQSF level 8

**Convener:** Dr C van Woerden, A Grimwood and J Shea

**Course entry requirements:** None

**Course outline:**

Over a 10-week period this course critically examines priority maternal and child health issues, the major determinants of health, and the role of health services in promoting and sustaining health. The first three units focus on pregnancy and birth, with the further seven units focusing on children. Specific attention is given to normal growth, nutrition and the developmental processes through which all mothers and children progress. The prerequisites for normal growth and development are explored. Critical or particularly important points along the way are highlighted, e.g. breastfeeding and weaning in nutrition. The role of health services in promoting the health and well-being of mothers and children is discussed in relation to the major determinants of health.

**DP requirements:** Full participation in online learning activities is a prerequisite for completing the end-of-course assignments. All assignments must be completed. An overall pass mark for the coursework component is a prerequisite for sitting the final examination.

**Assessment:** Coursework assessment includes weekly discussion forum posts and synchronous online learning sessions that account for 40% of the mark. The final assessment is based on two end-of-course assignments that account for 60% of the course mark.

### **PED4021F PRIORITIES IN MATERNAL & CHILD HEALTH**

20 NQF credits at HEQSF level 8

**Convener:** J Shea

**Course entry requirements:** None

**Course outline:**

This course integrates the principles of the foundation courses into a public health approach addressing a number of priority maternal and child health issues. Curricular topics include perinatal mental health, reproductive health, obstetric emergencies, the perinatal audit, childhood malnutrition, tuberculosis, HIV, diarrhoeal disease, developmental delay and childhood adversity. Maternal and child health interventions are discussed in the context of environmental health determinants, policy frameworks, health advocacy, health system requirements, and resource mobilisation for improved public health outcomes.

**DP requirements:** Full participation in online learning activities is a prerequisite for completing the end-of-course assignments. All assignments must be completed. An overall pass mark for the coursework component is a prerequisite for sitting the final examination.

**Assessment:** Coursework assessment includes weekly discussion forum posts and synchronous online learning sessions that account for 40% of the grade. The final assessment is based on two end-of-course assignments that account for 60% of the final course mark.

### **PED4022S THE PSYCHOSOCIAL CONTEXT OF MATERNAL & CHILD**

HEALTH

12 NQF credits at HEQSF level 8

**Convener:** Dr A Muller

**Course entry requirements:** None

**Course outline:**

The focus of this course is the analysis of the social determinants of maternal and child health behaviour. Learning activities are designed to develop a critical approach for understanding significant social, behavioural and cultural variables and issues that affect the health of populations, specifically the health of women and children. The course is divided into units which explore the concepts of community, gender, socio-economic status, race, ethnicity, environment, and behavioural risks. Several theoretical and conceptual frameworks from the social and behavioural sciences, introduced at the face-to-face session, will be applied to intervention strategies or programme initiatives that address current public health problems.

**DP requirements:** Full participation in online learning activities is a prerequisite for completing the end-of-course assignments. All assignments must be completed. An overall pass mark for the coursework component of the course is a prerequisite for sitting the final examination in the course.

**Assessment:** Weekly synchronous online learning sessions and independent assignments throughout the course constitute 40% of the total course mark. The final course assignment constitutes 60% of the course mark.

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**PED4025W INTRODUCTION TO MATERNAL & CHILD HEALTH**

12 NQF credits at HEQSF level 8

**Convener:** J Shea

**Course entry requirements:** None

**Course outline:**

This course is aimed at the acquisition of a broad knowledge base pertaining to priority issues and interventions in maternal and child health, the district health system, and the application of basic management concepts in the management and delivery of maternal and child health services. It introduces participants to the core concepts that will be covered in individual programme courses, the learning/teaching philosophy, and the learning platform. The foundation of academic competence at the postgraduate level that facilitates connecting academic competence with professional and academic goals is introduced. Global and local patterns of maternal and child health and the role of public health in improving maternal and child health outcomes are examined. Several theoretical and conceptual frameworks from the social and behavioural sciences are applied to intervention strategies or programme initiatives that address current public health problems. The focus throughout this course is on primary prevention which focuses on improving both individual and community health.

**DP requirements:** Full participation in online learning activities is a prerequisite for completing the end-of-course assignments. All assignments must be completed. An overall pass mark for the coursework component of the course is a prerequisite for sitting the final examination in the course.

**Assessment:** Coursework assessment includes an assessment of learning activities submitted on a regular basis, which accounts for 40% of the final course mark. The final assessment consists of an end-of-course group assignment that accounts for 60% of the course mark.

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**PED4026W MATERNAL MENTAL HEALTH**

12 NQF credits at HEQSF level 8

**Convener:** Dr S Honikman

**Course entry requirements:** None

**Course outline:**

The aim of this course is to introduce students to maternal mental health concepts, theories, strategies, and interventions to develop skills essential for effective service development. The course prepares participants to critically analyse strategies and interventions for maternal mental health, engage in research activities to deepen an understanding of local conditions regarding maternal mental health, and design an intervention strategy for maternal mental health that can be put into practise in the local setting.

**DP requirements:** Full participation in online learning activities is a prerequisite for completing the end-of-course assignments. All assignments must be completed. An overall pass mark for the coursework component of the course is a prerequisite for sitting the final examination in the course.

**Assessment:** Coursework assessment includes an assessment of learning activities submitted on a regular basis which accounts for 40% of the course mark. The final assessment consists of an end-of-course assignment that accounts for 60% of the course mark.

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**PED4028S PG DIPLOMA IN MATERNAL & CHILD HEALTH INTEGRATED**

**ASSESSMENT**

0 NQF credits at HEQSF level 8

**Convener:** J Shea

**Course entry requirements:** Successful completion of all preceding courses.

**Course outline:**

Not applicable. This course code exists for the sole purpose of recording a mark for an integrated assessment.

**DP requirements:** None

**Assessment:** The examination comprises a three-hour paper in response to a case study covering the entire syllabus and collectively demonstrating a reasonable balance between the different courses.

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**PED4029F/S ORGANISATIONAL & ACADEMIC COMMUNICATION**

12 NQF credits at HEQSF level 8

**Convener:** Dr A Bangeni and J Shea

**Course entry requirements:** None

**Course outline:**

This course covers the principles of organisational communication including verbal and electronic communication, meeting facilitation, and technical and academic writing. Key objectives are to demonstrate effective verbal and written communication skills; to review routine communication practices in the workplace; to examine communication and information aspects of meetings and their role in health service delivery; and to equip students with skills in basic computer set-up, troubleshooting, email communication and word-processing for effective communication.

**DP requirements:** Full participation in online learning activities is a prerequisite for completing the end-of-course assignments. All assignments must be completed. An overall pass mark for the coursework component of the course is a prerequisite for sitting the final examination in the course.

**Assessment:** Weekly synchronous online learning sessions and independent assignments throughout the course constitute 40% of the final course mark. The final course assignment constitutes 60% of the course mark.

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**PED4030F/S ORGANISATION & MANAGEMENT OF HEALTH SERVICES**

14 NQF credits at HEQSF level 8

**Convener:** J Shea

**Course entry requirements:** None

**Course outline:**

This course examines the organisation, planning, and management of district health services and the nature and role of policy and advocacy in health service delivery. It facilitates a critical understanding of organisational and legislative issues, such as the decentralisation of decision-making power and how this affects management at a district level. It seeks to contextualise Maternal and Child Health (MCH) services within the district, and explores strategies for improving the health of mothers and children. A specific focus falls on leadership for effective health workforce planning and management. Economic and socio-political factors that influence health policy are examined to develop analytical skills for health policy development and implementation. The course enables participants to gain insight into the purpose, nature, and processes of financial planning for health service delivery.

**DP requirements:** Full participation in online learning activities is a prerequisite for completing the end-of-course assignments. All assignments must be completed. An overall pass mark for the coursework component of the course is a prerequisite for sitting the final examination in the course.

**Assessment:** Weekly synchronous online learning sessions and independent assignments throughout the course constitute 40% of the final course mark. The final course assignment constitutes 60% of the course mark.

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**PED4031W CLINICAL MANAGEMENT IN PAEDIATRIC HAEMATOLOGY & ONCOLOGY**

90 NQF credits at HEQSF level 8

**Convener:** Assoc Prof A Davidson

**Course entry requirements:** None

**Course outline:**

This course is delivered over a twelve month period by way of lectures, small group tutorials, and mainly practical workplace experience. The aim of the course is to equip the student to become conversant with the diagnosis and management of haemoglobinopathies, complex anaemia's, nutritional anaemia's, thrombocytopenia's, acquired and congenital bleeding conditions, haematologic conditions encountered in the neonate, and those related to HIV and TB. The student will develop a clinical approach to neutropenia and will develop confidence in the approach to the diagnosis and management of oncological emergencies and all the common childhood tumours including acute leukaemia's, Wilms Tumour, neuroblastoma, Hodgkin and Non-Hodgkin lymphoma, soft tissue sarcomas, retinoblastoma, bone tumours, brain tumours and HIV-associated malignancies. The student will also have developed a knowledge of supportive care and understand the importance of a multidisciplinary team approach. In addition, he/she will have acquired all the necessary practical skills and procedures required for the practice of paediatric oncology.

**DP requirements:** A pass mark of 50% for the coursework components. Submission of completed logbook by the due date.

**Assessment:** The final clinical examination consists of a case-based oral assessment.

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**PED4032W ESSAY: TRANSITION & TRANSLATION OF KNOWLEDGE**

30 NQF credits at HEQSF level 8

**Convenor:** Prof A C Argent

**Course entry requirements:** None

**Course outline:**

This course equips students to apply the knowledge and insights gained during their training to their home settings. Students analyse the epidemiology of the centres at which they practise healthcare and analyse the healthcare needs of the region, then plan ways in which to apply the knowledge they have gained in the diploma programme to such settings.

**DP requirements:** Full attendance and completion of all coursework requirements by the due dates.

**Assessment:** Completion of an essay (100%). This is preceded by ongoing assessment of performance through regular clinical supervision/tutorial sessions and coursework tasks. A pass mark of 50% is required for the long essay, failing which the student will be required to make the necessary corrections or improvements and submit the assignment for reassessment. The terms of resubmission of the assignment will be at the discretion of the convenor.

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**PED4033W CLINICAL MANAGEMENT IN NEONATOLOGY**

90 NQF credits at HEQSF level 8; Three site visits .

**Convenor:** Assoc Prof M C Harrison and Dr N Rhoda

**Course entry requirements:** None

**Objective:** To provide a relevant, appropriate and holistic framework for neonatal health across the continuum of care.

**Course outline:**

This course provides students with foundation skills in clinical neonatology and, to ensure safe practice, they learn basic principles in the management of neonates. Under the supervision of the neonatal staff, students undergo dedicated clinical exposure to clinical service. Their logbooks, which must record the number of patients and the range of conditions, are signed off by the clinical supervisor. By the end of the course, students should have gained insight into the current recommended international guidelines relevant to practice in the field of neonatology, and should have an understanding of the definition, diagnosis, epidemiology, and classification of diseases that affect neonates. They should also be competent in procedures relevant to the care of sick neonates, and should be able to implement their acquired knowledge and skills across all levels of healthcare – from primary to tertiary.

**DP requirements:** Students are required to attend at least 70% of lectures and group supervision sessions. Attendance is monitored through signing of attendance registers. A student who does not achieve a formal assessment mark of at least 45% will not qualify to write the final examination,

except at the programme convener's discretion. Students are required to submit all supervisors' assessment reports, as well as the logbook, before the final examination may be written.

**Assessment:** Students are assessed by means of formal assessments undertaken at 4-monthly intervals and a final written examination. Assessments may be of a practical and/or oral nature.

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#### **PED4034W CLINICAL MANAGEMENT IN PAEDIATRIC CARDIOLOGY**

40 NQF credits at HEQSF level 8

**Convener:** Dr R De Decker

**Course outline:**

This course aims to train qualified general practitioners to practise clinical paediatric cardiology in order to enable the diagnosis, resuscitation, triage and management of children with congenital and acquired heart disease. It does not aim to train the candidate to become a paediatric cardiologist, but rather to practice safely and effectively in resource-limited areas without the immediate supervision of a paediatric cardiologist. Students should become proficient in the following: Routine management of new patients, including the initiation of appropriate acute treatment and long-term management plans; emergency management and resuscitation; selection and triage for tertiary referral; post-operative care; long-term follow-up of post-operative patients and their potential complications (i.e. not immediate post-op ICU care); ethics, rational case selection and difficult decisions; ECG, defibrillation and cardioversion; echocardiography; pericardiocentesis; proficiency in appropriate referral; and communication and counselling of parents. Clinical training takes place via grand rounds, general and speciality meetings, group meetings and interactive sessions, ward rounds and clinical outpatient interactions, and supervisions. Students also partake in supportive multidisciplinary meetings. Key to development of clinical skills is practical workplace experience obtained in one-on-one teaching sessions.

**DP requirements:** Satisfactory completion of a logbook.

**Assessment:** Coursework assessment (ongoing): 50%. Final examination: A one-hour clinical MCQ (multiple-choice question) paper (30%) and a one-hour clinical case-based oral (20%). The logbook will be assessed as a part of the final examination. A student failing to obtain 50% for the individual components will have one reassessment. If the student scores more than 40%, but less than 50%, the student will undergo a reassessment for which a minimum mark of 50% may be obtained.

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#### **PED4035W PAEDIATRIC ECHOCARDIOGRAPHY**

50 NQF credits at HEQSF level 8

**Convener:** Dr R De Decker

**Course entry requirements:** None

**Course outline:**

This course aims to develop expertise in the use of echocardiography to make accurate assessments of the anatomy and function of normal and diseased hearts to inform management decisions. This includes the principles of ultrasonology, the technical capabilities and limitations of echocardiography, a sound knowledge and application of the various routine echocardiographic views of the heart and related structures, and relevant ancillary techniques (e.g. bubblegrams).

**DP requirements:** Attendance of and participation in all academic requirements and completion of assignments by the due dates.

**Assessment:** Final examination: 100%

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#### **PED4036W CLINICAL MANAGEMENT OF PAEDIATRIC DIABETES**

90 NQF credits at HEQSF level 8

**Convener:** Dr S V Delport

**Course entry requirements:** None

**Course outline:**

The purpose of this course is to allow practising doctors to develop foundation skills in the assessment and management of children with paediatric diabetes. Training is designed as an

apprenticeship, a close trainer-to-trainee ratio, and hands-on experience. It does not aim to train the candidate to become a specialist, but rather to practice safely and effectively in resource-limited areas without the immediate supervision of a specialist. Content includes the definition, diagnosis, epidemiology and classification of diabetes; the presentation and phases of diabetes; international guidelines relevant to practice in the field; and the essential biochemical screens and interpretation of results. Students learn to become competent in the role and instigation of insulin treatment and the different insulin regimens. This includes the assessment and monitoring of glycaemic control. Students learn key aspects of the management of hypoglycaemia in the diabetic and the management of diabetic ketoacidosis, as well as microvascular and macrovascular complications of diabetes. Associated conditions and other complications are covered, as are ambulatory diabetes care, diabetes education, nutritional management, exercise and diabetes, sick day management, diabetes care and puberty and adolescent care. Students study the psychological issues affecting the child with diabetes, and the management of the diabetic requiring surgery.

**DP requirements:** A portfolio of at least 25 cases with varied diabetes problems must be completed. Students need to attend a minimum of 70% of training sessions (including lectures, seminars and tutorials.) All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination. The student will be assessed continuously during the coursework. Each module has specific outcome goals which must be completed. Regular reviews with the supervisors is required. Logbook completion by the due date is obligatory, documenting the required number of cases.

**Assessment:** Formative assessment (50%) and a final examination, which will consist of a written paper, a clinical examination in an ambulatory setting and a portfolio-based oral examination.

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#### **PED4037W CLINICAL MANAGEMENT OF PAEDIATRIC EPILEPSY**

90 NQF credits at HEQSF level 8

**Convenor:** Prof J Wilmshurst and Dr V Kander

**Course entry requirements:** None

**Course outline:**

This course provides students with foundation skills in clinical electrophysiology and epilepsy to ensure safe practice. Students are exposed to the field of paediatric EEG and epilepsy; they learn how to perform, interpret and use information attained from EEGs to improve their patient care. They learn basic principles of epilepsy management in children. The student undertakes a combination of dedicated clinical exposure with the paediatric neurology staff in the clinical service for children with epilepsy (the logbook records the number of patients and the range of conditions and is signed by the clinical supervisor). This focusses the appropriate criteria to request an EEG, how the EEG can assist in the patient diagnosis and management, and recognition of key epilepsy syndromes. The student gains insight into the key recommended interventions and medications for children with epilepsy. The student understands the associated co-morbidities of epilepsy and the various epilepsy syndromes. The student is expected to read from the recommended reading list, to have insight into the key epilepsy conditions which can be recognised through EEG testing, and the logbook documents the number of studies successfully interpreted extending beyond the EEG findings to the clinical syndrome (signed by the clinical supervisor and the technologist).

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination. Each module has specific outcome goals which must be completed. Regular reviews with the supervisors will be required. Logbook completion requires students to document the required number of cases (minimum n=50 for EEG performed, n=100 for EEG interpretation, two formal complex clinical cases formally summarised and management challenges identified, and document n=50 clinical cases reviewed).

**Assessment:** End-of-training assessment will be a one-hour paper (written paper – based on illustrative EEG cases n=20) requiring interpretation of the EEG and the clinical relevance of the findings.

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**PED4038W CLINICAL MANAGEMENT IN PAEDIATRIC****GASTROENTEROLOGY**

90 NQF credits at HEQSF level 8

**Convenor:** Dr E Goddard**Course entry requirements:** None**Course outline:**

Training in theory and practice includes the following: routine management of new patients including the initiation of appropriate acute treatment and long-term management plans; emergency management and resuscitation (e.g. the critical neonate, the critical child, hematemesis and melaena, acute liver failure, shock secondary to diarrhoea, and selection and triage for tertiary referral); ethics, rational case selection and difficult decisions; and procedural skills. Diagnostic and therapeutic procedures such as upper colonoscopy; endoscopic procedures; and oesophageal, gastric, small intestinal and other biopsies. Knowledge and interpretation of endoscopic retrograde cholangiopancreatography, transit studies, pancreatic function testing (screening tests, faecal elastase, intubation tests), radio-nucleotide scans, and barium studies. Referral and communication. Knowledge and skills in assessment of nutritional status. Working in nutritional support teams. Clinical training takes place via grand rounds, general and speciality meetings, group meetings and interactive sessions, ward rounds, and clinical outpatient interactions and supervisions. Students also partake in supportive multidisciplinary meetings. Key to development of clinical skills is practical work-place experience of one-on-one teaching sessions.

**DP requirements:** The student will be assessed continuously during the coursework. A formal assessment will be performed after three months to assess initial progress. A student who fails two formative assessments will forego his/her DP and may be required to withdraw from the programme. Logbook completion will be monitored and the logbook must be submitted by the due date.

**Assessment:** End-of-training assessment will be a one-hour paper and a one-hour oral examination (to test the interpretation of image-based investigations.)

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**PED4039W CLINICAL MANAGEMENT IN DEVELOPMENT PAEDIATRICS**

90 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof K Donald**Course entry requirements:** None**Course outline:**

The purpose of this course is to allow practising doctors to develop foundation skills in developmental disorders and neurodisability to ensure safe practice. The trainees require skills in the assessment and multidisciplinary management of children with developmental disorders and neurodisability. This enables and empowers these working professionals to undertake advanced reflection and development in this sub-area of their practice by means of training which is targeted at current thinking, practice and research methods in the area of developmental disorders and neurodisability, and allows these skilled workers to use their knowledge gained to lobby for improving child health. The course is designed as an apprenticeship, based on a close trainer-to-trainee ratio and hands-on experience. The student will acquire skills in the management of children with developmental disorders and neurodisability. This includes knowledge of and an approach to the common conditions such as cerebral palsy, autism, and global developmental delay seen in childhood. On successful completion of the course, the student has skills in the ability to assess the developmental level of a young child and make recommendations for further diagnostic and management pathways as appropriate.

**DP requirements:** Full attendance and completion of all coursework requirements by the due dates.

**Assessment:** The marks for the individual modules are aggregated to become the course mark. A student failing to obtain 50% for each of the individual components will have one opportunity to rewrite this component. If the student obtains an overall score of more than 40% but less than 50%, the student may be eligible to undergo an additional test before the final mark is submitted. If a re-assessment was done, the maximum pass mark shall be 50%.

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**PED4040W CLINICAL MANAGEMENT IN PAEDIATRIC EMERGENCY CARE**

90 NQF credits at HEQSF level 8

**Convener:** Dr H Buys

**Course entry requirements:** None

**Course outline:**

There are six related modules, covering the following: (a) Paediatric Medical Emergency Unit Orientation: the trainee needs to be thoroughly familiar with the workings of the Unit, the communication issues and the laboratory facilities before progressing to the rest of the training module; (b) Trauma Unit module: i.e. initial stabilisation and priority management of children with both complicated and uncomplicated trauma of variable aetiology, both accidental and non-accidental; (c) Emergency Medicine Service module: knowledge and application of the principles and practice of care of children outside of the hospital, including in Emergency Medical Services (EMS.); (d) Paediatric Anaesthesia module: advanced airway management and vascular access for both treatment and monitoring purposes in children. Sedation and analgesia techniques in children; (e) Paediatric Intensive Care (PICU): clinical management of critically ill children and the comprehensive technical aspects surrounding this including monitoring, life support devices, pharmacology, organisational structures, and ethics; (f) Neonatology: knowledge and application of the principles and practice of care of the new-born including premature infants; (g) Paediatric Medical Emergency Unit Consolidation phase (B): a final case-based oral assessment and structured report by the HOD of Emergency and Ambulatory Paediatrics.

**DP requirements:** Satisfactory progress reports (formative assessment) from the HODs at the end of each module and submission of completed logbook by the due date.

**Assessment:** At the end of each module an integrated formative assessment is done. A student failing to obtain 50% for the individual modules will have one opportunity to repeat the module they have failed, at the convener's discretion. No module may be repeated more than once. The marks for the individual module tests are aggregated to become the course mark. No final examination is written for this course and the aggregate of the module marks comprise the final mark.

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**PED4041W CLINICAL MANAGEMENT IN PAEDIATRIC CRITICAL CARE**

90 NQF credits at HEQSF level 8

**Convener:** Prof AC Argent

**Course entry requirements:** None

**Course outline:**

The purpose of this course is to allow practising doctors to develop foundation skills in the assessment and management of critically ill children. Training is designed as an apprenticeship, a close trainer-to-trainee ratio, and hands-on experience. It does not aim to train the candidate to become a critical care specialist, but rather to practise safely and effectively in resource-limited areas without the immediate supervision of a specialist. Content includes the management of specific organ-related problems and support, including brain injury and brain protective strategies; respiratory problems and support; cardiovascular support; gastrointestinal issues in the PICU; the management of fluids and electrolytes in the PICU; renal failure and renal support therapy in the PICU; haematological problems and management; infection control and utilisation of antibiotic therapy in the PICU environment; musculoskeletal issues in the PICU; skin emergencies and dermatological support in the PICU; and other content, including toxin ingestion or exposure. Students are also expected to attend training on the practical management of airway management, vascular access and patient monitoring. Some basic skills in the use of ultrasonography for rapid diagnosis in the PICU setting are taught.

**DP requirements:** Students need to attend a minimum of 70% of training sessions (including lectures, seminars and tutorials). All assignments must be submitted. A subminimum of 45% for the coursework is required. The student is assessed continuously during the coursework. Each module has specific outcome goals which must be completed. Regular reviews with the supervisors are required. Completion by the due date of a logbook, documenting the required number of cases, is obligatory.

**Assessment:** End of training assessment will be a 3 hour paper (with short questions and multiple choice questions), together with an oral examination of 1 hour duration.

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**PED4042W CLINICAL MANAGEMENT OF PAEDIATRIC RHEUMATOLOGY**

90 NQF credits at HEQSF level 8

**Convener:** Prof C Scott

**Course entry requirements:** None

**Course outline:**

Students receive training in a spectrum of rheumatic diseases, which include regional pain problems and soft-tissue rheumatism, inflammatory joint disorders, autoimmune rheumatic diseases, vasculitides, metabolic bone disorders, regional bone disorders, infections and arthritis, crystal arthropathies, and autoinflammatory diseases. They are trained in the assessment of multi-system disease, the selection of appropriate laboratory tests, the place of imaging techniques in the investigation of the paediatric rheumatic diseases, rheumatological diseases in children, and pharmacology of drugs used in the rheumatic diseases. They learn to understand the role of professions allied to medicine in the management of the rheumatic diseases, as well as understand the role of allied specialities (orthopaedic surgery, ophthalmology, dermatology). Finally, they are taught the social, legal, and ethical aspects of the rheumatic diseases. Special skills training includes: aspiration and injection of synovial joints and analysis of synovial fluids, soft tissue injections, counselling and communication skills, and medical management skills.

**DP requirements:** Logbook and successful completion of two of the three formative assessments.

**Assessment:** A student who fails two formative assessments may be required to withdraw. Coursework counts 50%. A final integrated case-based oral examination is conducted at the end of the course and constitutes 50% of the final mark.

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**PED4043W CLINICAL MANAGEMENT IN PAEDIATRIC PULMONOLOGY**

90 NQF credits at HEQSF level 8

**Convener:** Dr A Vanker and Dr M Zampoli

**Course entry requirements:** None

**Course outline:**

This course provides students with foundation knowledge and skills in clinical paediatric pulmonology. Coursework includes relevant basic sciences (embryology, anatomy and pathophysiology of the respiratory tract); clinical history-taking and elicitation (with interpretation) of the physical signs of the respiratory system; indications and interpretation of routine investigations relevant to pulmonary diseases; a systematic approach and management of common childhood respiratory symptoms and conditions; essential skills and procedures (e.g. spirometry) and optional skills/procedures/exposure will be included. The student will undertake a combination of dedicated clinical exposure with the staff in the paediatric pulmonology division through attendance of departmental clinical and academic activities. The logbook will record the number of patients and the range of conditions, investigations and procedures, and will be signed by the clinical supervisors.

**DP requirements:** Students need to attend a minimum of 70% of clinical activities and learning opportunities. A subminimum of 45% for the coursework and submission of satisfactory logbook (min 30 cases) is required in order to be granted admission to the final examination.

**Assessment:** Coursework comprises 50% of the final mark. The final examination consists of an oral/OSCE examination and will constitute 50% of the final mark.

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**PED4044W CLINICAL MANAGEMENT IN PAEDIATRIC NEPHROLOGY**

90 NQF credits at HEQSF level 8

**Convener:** Dr P Gajjar

**Course entry requirements:** None

**Course outline:**

The aim is to train suitable candidates to practice clinical paediatric nephrology in order to enable them to manage basic and complex paediatric nephrology in children, including those from vulnerable populations affected by diseases of poverty. At the end of the course, the student has knowledge in: (i) clinical paediatric nephrology disease clinical markers; (ii) procedures relevant to patients with nephrology disease; (iii) interpretation of results and early initiation of acute interventions; and (iv) management of nephrology disorders.

**DP requirements:** Completion of a logbook including management of cases and procedures. Students are required to attend at least 70% of group supervision sessions if attending full-time, and at least 50% of attendance is expected if attending part-time.

**Assessment:** Formative assessment comprises regular assessments of level of competency achieved throughout the course and are undertaken at four-monthly intervals (40%); Students' range of experience as documented in their assessment and logbooks (20%). Summative assessment comprises a final oral examination (40%).

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**PED5002F INTRODUCTION TO CLINICAL RESEARCH**

8 NQF credits at HEQSF level 9

**Convener:** J Shea

**Course entry requirements:** None.

**Course outline:**

This course serves as a foundation for the master's programme in clinical research administration. It reinforces an analytical and integrative approach to clinical research. Course objectives are to conduct a critical analysis of the processes and domains of science, public health and administration that provide a framework for clinical research administration; to analyse key factors that influence the advancement of clinical research administration; and to develop a global view of clinical research administration and the study programme.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Assessment for this course includes weekly discussions on Vula, independent assignments, and small-group projects throughout the semester which constitute 40% of the final mark. Two projects constitute 60% of the course mark.

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**PED5005S RESEARCH METHODS FOR HEALTH PROFESSIONALS I**

10 NQF credits at HEQSF level 9

**Convener:** Dr T Hawkrige and J Shea

**Course entry requirements:** None.

**Course outline:**

At the end of this course students will demonstrate knowledge and understanding of: research designs, their strengths, weaknesses and application to clinical research; quantitative and qualitative research methods; constructing, motivating and defending a research design; data collection instruments and data collection procedures; and writing a critical review of an article.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Students are assessed continuously through unit submissions and must complete a course assignment. Coursework counts 100%.

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**PED5006F THE PROCESS OF CLINICAL TRIALS**

8 NQF credits at HEQSF level 9

**Convener:** Dr T Hawkrige

**Course entry requirements:** None.

**Course outline:**

The overall purpose of this course is to analyse and evaluate the various components of clinical trial development that include pre-clinical information, phase one, two, and three strategies informed by the relevant regulatory guidelines, and information available in the public domain.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Weekly discussions on Vula are assessed and constitute 20% of the final course mark. Independent assignments and small-group sessions throughout the semester constitute 50% of the final mark. A summary of two articles constitutes 10% and two examinations constitute 20% of the final course mark.

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### **PED5007F PARTNERSHIPS WITH HUMAN SUBJECTS**

8 NQF credits at HEQSF level 9

**Convener:** Dr D Michaels and J Shea

**Course entry requirements:** None.

**Course outline:**

This course explores the implications of conducting clinical research with human subjects, specifically regarding the regulatory framework that aims to promote the ethical conduct of clinical research. Using the study participant as the primary frame of reference, students develop an understanding of the principles and strategies for effectively recruiting and retaining participants in clinical trials.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Assessment for this course includes weekly discussions on Vula. Independent assignments and small-group projects throughout the semester constitute 40% of the final mark, and two projects comprise 60% of the final mark.

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### **PED5008S GOOD CLINICAL PRACTICE**

10 NQF credits at HEQSF level 9

**Convener:** Dr D Michaels

**Course entry requirements:** None.

**Course outline:**

This course explores the historical and ethical underpinnings and current thinking with regard to the standards, responsibilities, and obligations of all relevant parties (the pharmaceutical developers, the researcher scientists, the human subjects) with regard to the powers of a regulatory body in establishing and enforcing regulations to support good clinical practice.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Assessment for this course includes weekly discussions on Vula. Independent assignments and small group projects throughout the semester constitute 50% of the total grade; two research papers constitute 30% of the total grade; and two multiple-choice examinations constitute 20% of the total grade.

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### **PED5009S INTRODUCTION TO CLINICAL RESEARCH MONITORING**

8 NQF credits at HEQSF level 9

**Convener:** Dr J Boccino

**Course entry requirements:** None.

**Course outline:**

This course addresses monitoring methodologies in clinical research. Students will explore the rationale for the various monitoring roles and the responsibilities of key players in clinical research that serve to protect patients participating in clinical trials. Upon completion of this course students will understand the fundamental principles of the clinical research monitoring process. Students will identify organisations and entities impacting clinical research monitoring, evaluate the strengths, limitations and challenges of all aspects of clinical monitoring, and practice current monitoring methods of clinical research.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Weekly discussion forum posts and synchronous discussion sessions that constitute 35% of the course grade. Independent assignments and small group work throughout the semester constitute 50% of the total grade. The online quiz consisting of multiple choice and short questions constitutes 15%.

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**PED5010S MONITORING CLINICAL TRIALS**

8 NQF credits at HEQSF level 9

**Convener:** R Panas

**Course entry requirements:** None.

**Course outline:**

This course aims to develop an in-depth understanding of the impact of relevant regulatory guidelines on monitoring clinical trials from the perspective of the sponsor and the research site.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Assessment for this course includes weekly discussions on Vula. Independent assignments and small-group projects throughout the semester constitute 40% of the final mark; two projects constitute 60% of the final mark.

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**PED5011S MPHIL MATERNAL & CHILD HEALTH INTEGRATED FINAL ASSESSMENT**

0 NQF credits at HEQSF level 9

**Convener:** J Shea

**Course entry requirements:** None.

**Course outline:**

This course code exists for the sole purpose of permitting a mark to be recorded against an integrated assessment of the coursework.

**DP requirements:** None.

**Assessment:** An integrated assessment based on content across all courses in the specialisation.

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**PED5012W MATERNAL & CHILD HEALTH MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convener:** J Shea

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in maternal and child health. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, design and critically appraise research, make sound judgement using data and information at their disposal, and be able to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PED5013F RESEARCH METHODS FOR HEALTH PROFESSIONALS II**

10 NQF credits at HEQSF level 9

**Convener:** J Shea

**Course entry requirements:** None.

**Course outline:**

The purpose of this course is to provide foundational knowledge and skills for evaluating and interpreting published research. At the end of this course students will demonstrate knowledge and understanding of proposal structure and content; the formulation of a health-related research question; a literature review related to a research question; the formulation of an appropriate research design to address a research question; statistical techniques to test, analyse and report findings; and ethical considerations in clinical research.

**DP requirements:** Attendance of all course commitments.

**Assessment:** Students are assessed continuously through unit submissions and need to complete a course assignment. A mark of 50% is required to pass the course.

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**PED7004W MMED IN PAEDIATRICS PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Davidson

**Course entry requirements:** None.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the College of Paediatricians of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PED7004W. The course aims to build knowledge in the principles of paediatrics and child health with special reference to those aspects of applied sciences and therapeutics that are of importance to the foetus and to the care of the neonate infant, toddler, pre-school and school child, and adolescent. Course content covers the therapeutics of importance of the care of the paediatric age group, including the normal and abnormal growth and development of the infant and child, the embryology and anatomy applicable to the above, relevant epidemiology, statistics, genetics, physiology, biochemistry, pathology, microbiology and parasitology, and the principles of therapeutics. For the full curriculum and examination details, see the regulations of the College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Registered general practitioner (post-internship). The CMSA Senate, through its Examinations and Credentials Committee, will consider the eligibility of candidates, which may include their professional and ethical standing.

**Assessment:** Candidates write the Part 1 examination of the College of Paediatricians. The examination comprises three written papers.

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**PED7006W MMED IN PAEDIATRICS PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Davidson

**Course entry requirements:** PED7004W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist paediatricians. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the College of Paediatricians of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PED7006W. Course content covers the principles of child health, including knowledge of those aspects of foetal life, childhood and adolescence that are important to promotion of normal growth, development and health, health surveillance, preventive health, educational medicine and the management of children with handicaps; and the art and practice of clinical paediatrics. For the full curriculum and examination details, see the regulations of the College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** PED7004W.

**Assessment:** Candidates write the final examination of the College of Paediatricians. The examination comprises two written papers, a written OSCE, and a clinical examination.

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**PED7007W PAEDIATRICS MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Davidson

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation may take the traditional form (15 000 to 20 000 words) or may take the new form (a literature review of 3 000 to 4 000 words with a publishable journal article of at least 3 000 words), and must be on a topic in paediatrics. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PED7009W MPHIL IN PAEDIATRIC NEPHROLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Dr P Gajjar

**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians to become subspecialists in paediatric nephrology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards PED7009W. Students learn to deal specifically with paediatric renal conditions in a South African setting, both in inpatient and outpatient situations, but also acquire a sound knowledge of basic sciences (genetics, embryology of the kidneys and urinary tract; anatomy and histology, molecular biology etc.) as these relate to the subspeciality. Training covers specific paediatric renal problems, ranging from paediatric urinary tract infections, management of nephrotic syndrome and acute kidney injury; principles of imaging of the renal tract; diagnosis and management of a range of kidney diseases; renal support to other specialities e.g. paediatric cardiology, endocrinology and oncology; kidney disorders of adolescents; paediatric dialysis; knowledge of renal transplantation; to pharmacokinetic and practice principles in children with respect to normal and impaired renal function. Candidates receive training in specific clinical skills related to paediatric nephrology which includes urinalysis and interpretation of renal function tests; placement of acute dialysis catheters, principles of dialysis, renal biopsy and ultrasound. For the detailed curriculum, see the regulations of the College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 18 months as a subspecialty trainee in an accredited subspecialty unit in a teaching hospital; a written report from the head of the institution/programme; a satisfactorily completed logbook; presentation or acceptance for presentation of an original first-author research poster or paper at a local or international congress or meeting, or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The examination comprises a written component and an oral/OSCE/OSPE/clinical component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is expected for each of the two (written and the oral/OSCE/clinical) components of the examination.

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**PED7010W MPHIL IN NEONATOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof M C Harrison

**Course outline:**

This training programme forms part of the accreditation process of specialist paediatricians to become subspecialists in neonatology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the Certificate in Neonatology examination of the College, are granted credit towards PED7010W. Training includes guidance in

obtaining theoretical knowledge, technical and procedural skills, the application of knowledge and skills in daily practise, organisational aspects of neonatology, quality assurance and a perinatal audit, and ethical implications and clinical research. Candidates obtain knowledge of a range of basic science and related disciplines that underpin the clinical practice of neonatology, including physiology, anatomy, embryology, pharmacology, microbiology, virology and immunology, as well as genetics and nutrition. Candidates are taught to recognise, assess and treat a range of problems, including those that are cardiovascular, neural, renal, gastro-intestinal, haematological and respiratory. In addition, clinical problems in endocrinology and dermatology and a range of acute and chronic infections of the foetus and new-born are covered. Training also includes guidance in obtaining knowledge of neonatal pathology associated with a range of obstetric conditions and methods of resuscitation at birth. Finally, candidates are exposed to research method study design and biostatistical analysis. The detailed curriculum is available in the relevant regulations of the College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 18 months as a subspecialty trainee in an accredited subspecialty unit; a written report from the head of the institution/programme indicating adequate clinical progress and competency (recorded in twice-yearly written assessments); and a completed logbook. The student must also have presented or been accepted to present an original first-author research poster or paper at a local or international congress, or must have submitted or been accepted for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates undergo the relevant subspecialist examinations of the College of Paediatricians of South Africa. The examinations include a written and an oral component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is required in each of the two components of the examination.

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#### **PED7011W MPHIL IN PAEDIATRIC ONCOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof A Davidson

**Course entry requirements:** Qualification as specialist paediatrician (see FMD1; MPhil programmes in subspecialty disciplines).

**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians to become subspecialists in paediatric oncology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the Certificate in Medical Oncology (paediatrics) examination of the College, are granted credit towards PED7011W. Training covers, amongst other things, a range of general principles; e.g. of epidemiology, application of molecular biology in childhood cancer and related illnesses; basic tumour biology; pathology relevant to clinical practice, tumour imaging, principles of staging, the role of chemotherapy and the role of surgery in cancer treatment; the principles of radiation treatment; bone marrow transplantation, stem cell rescue and cord blood transplants; statistical principles, methods of research and conduct of clinical trials; and ethics of cancer treatment and clinical trials. Training embodies a comprehensive approach to diagnosis and management of specific tumour types, and includes supportive care of children with cancer. For the detailed curriculum, see the regulations of the College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 18 months as a subspecialty trainee in an accredited paediatric medical oncology unit; a written report from the head of the institution/programme indicating adequate clinical progress and competency; a completed logbook; presentation or acceptance for presentation of an original first-author research poster or paper at a local or international congress, or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal; certification of an elective attachment of at least one week to a bone marrow transplant unit or a haematology laboratory service; and certification of an elective attachment of at least one week to a radiation oncology unit.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The examination includes a written and an oral component. Each of the two components

contributes 50% to the overall mark. A subminimum pass mark of 50% is expected for each of the two (written and the oral) components of the examination.

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**PED7012W MPhil IN PAEDIATRIC CARDIOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Dr J Lawrenson

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians to become subspecialists in paediatric cardiology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the sub-specialty Certificate in Cardiology of the College of Paediatricians of South Africa: Cert Cardiology(SA) Paed, are granted credit towards PED7012W. The curriculum includes basic knowledge of relevant aspects of embryology; anatomy; genetics; epidemiology of congenital heart disease; physiology; vascular biology and pathology; haemostasis; pathophysiology; pharmacology; radiology imaging and radiation safety; ultrasound; some knowledge of new developments in cardiology; as well as clinical cardiac conditions and management strategies for congenital heart disease, acquired heart disease, resuscitation and advanced cardiac life support including care of the patient with a duct dependent circulation; diagnostic cardiac catheterisation; percutaneous interventions; echocardiography; cardiac imaging; ECG evaluation; exercise testing; electrophysiology; related knowledge of pacemakers; and the principles of post-operative management including haemodynamic monitoring and the use of inotropes and vasodilators. For the detailed curriculum, see the regulations of relevant College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 24 months' training as a subspeciality trainee in an accredited subspecialty unit; a written report from the head of the institution/programme; a satisfactorily completed portfolio; presentation or acceptance for presentation of an original first-author research poster or paper at a local or international congress or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The examination has two components: a written component and an oral/OSCE/OSPE/clinical component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is expected for each of the two (written and the oral/OSCE/clinical) components of the examination.

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**PED7019W PAEDIATRIC NEPHROLOGY MINOR DISSERTATION (60**

**CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Dr P Gajjar

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the College of Paediatricians Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in paediatric nephrology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PED7020W NEONATOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M C Harrison**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those with a South African specialist paediatric qualification who are South African citizens, and who choose not to complete a dissertation, may still register with the HPCSA as subspecialists after successful completion of the Certificate of Neonatology examination of the College of Paediatricians of South Africa. The dissertation may be submitted in “publication-ready format” that includes a publication-ready manuscript of not more than 3 000 words and a separate introduction, or it may be submitted as a standard monograph, usually between 15 000 and 20 000 words in length. It must be on a topic in neonatology and must be based, on a study for which the work was commenced while the candidate was registered as a postgraduate student. The findings of the dissertation should contribute to the scientific understanding of the topic. Candidates are trained in statistics, in research methods, in conducting literature reviews, in designing a research proposal, and in writing up a dissertation. They may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Approval of the research proposal by the head of the relevant departmental research committee, the supervisor(s), the Health Sciences Human Research Ethics Committee, and the chair of the relevant master’s committee. This needs to be completed within 18 months of registration.

**Assessment:** External and internal examination of the minor dissertation.

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**PED7021W PAEDIATRIC ONCOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Davidson**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those with a South African specialist paediatric qualification who are South African Citizens, and who choose not to complete a dissertation, may still register with the HPCSA as subspecialists after successful completion of the relevant Certificate in Medical Oncology (paediatrics) examination of the College of Paediatricians of South Africa. The dissertation may be submitted in “publication-ready format” including a publication-ready manuscript of not more than 3000 words and a separate introduction, or it may be submitted as a standard monograph, usually between 15 000 and 20 000 words in length and must be on a topic in paediatric oncology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The findings of the dissertation should contribute to the scientific understanding of the topic. Students are trained in statistics, in research methods, in conducting literature reviews, in designing a research proposal, and in writing a dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Approval of the research proposal by head of the relevant departmental research committee, the supervisor(s), the Health Sciences Human Research Ethics Committee, and the chair of the relevant masters committee.

**Assessment:** External examination of the minor dissertation.

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**PED7022W PAEDIATRIC CARDIOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Dr J Lawrenson**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Paediatricians examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in paediatric cardiology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PED7023W MPHIL IN PAEDIATRIC ENDOCRINOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Dr S Delport

**Course entry requirements:** None.

**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians to become subspecialists in paediatric endocrinology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards PED7023W. The curriculum covers a range of related emergencies (such as hypoglycaemic and diabetes-related comas); the diagnosis and management of Diabetes Mellitus, hypoglycaemia; a range of other pancreatic endocrine pancreatic disorders (gastrinoma etc.); lipid disorders; thyroid disorders; pituitary disorders; adrenal disorders; parathyroid disorders; metabolic bone disease; endocrine hypertension; growth and pubertal disorders; disorders of sexual differentiation; ovarian disorders; testicular disorders; nutritional disorders; endocrine disorders in systemic diseases; multi-endocrine disorders; breast disorders; endocrine oncology and other conditions. For the detailed curriculum, see the regulations of the relevant College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 18 months as a subspecialty trainee in an accredited subspecialty unit; a written report from the head of the institution/programme; a completed logbook; presentation or acceptance for presentation of an original first-author research poster or paper at a local or international congress, or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The examination comprises a written and an oral/OSCE/OSPE/clinical component. Each of the two components contributes 50% to the overall mark. The pass mark for the overall examination is 50%.

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**PED7024W PAEDIATRIC ENDOCRINOLOGY MINOR DISSERTATION (60**

**CRED)**

60 NQF credits at HEQSF level 9

**Convenor:** Dr S Delport

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in paediatric endocrinology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The

dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. In some disciplines they are also required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **PED7025W MPHIL IN PAEDIATRIC NEUROLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Prof J Wilmshurst

**Course entry requirements:** Qualification as specialist paediatrician (see FMD1; MPhil programmes in subspeciality disciplines).

**Course outline:**

This training programme forms part of the accreditation process of specialist paediatricians to become subspecialists in paediatric neurology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the Certificate in Paediatric Neurology examination of the College, are granted credit towards PED7025W. The course encompasses the study, assessment and management of a wide spectrum of neurological diseases from the new-born period to adolescence, including cerebral palsy, childhood epileptic syndromes, strokes, disorders of the spine, hydrocephalus, neuro-cutaneous disorders, neuromuscular disorders, children with movement disorders, CNS tumours, neuro-degenerative disorders, neuro-metabolic/inborn errors of metabolism disorders, mental retardation, language and communication (autism) disorders, ADHD and learning disorders, headaches, sleep disorders, neuronal migration disorders, disorders of the cerebellum, neuro-psychiatric disorders, and complimentary involvement in neurosurgical patients. Candidates learn key basic sciences and receive clinical training in a wide range of paediatric neurological conditions. They gain competence in a range of neurological emergencies and are taught a wide range of rehabilitative therapies; develop specific clinical skills; and develop teaching and research skills. For the detailed curriculum, see the regulations of the relevant College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Certification of having completed at least 18 months as a subspeciality trainee in an accredited subspeciality unit in a teaching hospital, registered and approved by the Health Professions Council of South Africa; submission of a written report from the head of the institution/programme in which he/she trained indicating satisfactory completion of all training requirements; submission of a satisfactorily completed portfolio; presentation or acceptance for presentation of a first-author research poster or paper at a local (i.e. PANDA meeting) or international congress, or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The examination comprises a written component of which the OSCE is part, and a clinical component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is expected for each of the two (written and the oral/OSCE/clinical) components of the examination.

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#### **PED7026W PAEDIATRIC NEUROLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convener:** Prof J Wilmshurst

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those with a South African specialist paediatric qualification who are South African citizens, who choose not to complete a dissertation, may register with the HPCSA as subspecialists after successful completion of the Certificate in Paediatric Neurology examination of the College of Paediatricians of South Africa. The dissertation may be submitted in “publication-ready format”, including a publication-ready manuscript of not more than

3 000 words and a separate introduction, or it may be submitted as a standard monograph, which must be between 15 000 and 20 000 words in length, and must be on a topic in paediatric neurology. It must be based, moreover, on a study for which the work was commenced while the candidate was registered as a postgraduate student. The findings of the dissertation should contribute to the scientific understanding of the topic. Candidates are trained in statistics, in research methods, in conducting literature reviews, in designing a research proposal, and in writing up a dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Approval of the research proposal by the head of the relevant departmental research committee, the supervisor(s), the Health Science's Human Research Ethics Committee, and the chair of the relevant master's committee.

**Assessment:** Examination (external but may also include one internal examiner) of the minor dissertation.

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#### **PED7027W MPHIL IN PAEDIATRIC CRITICAL CARE PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof AC Argent

**Course outline:**

This training programme forms part of the credentialling process of specialists in paediatrics, internal medicine, anaesthesiology or surgery to become subspecialists in paediatric critical care. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards PED7027W. Training takes places in critical care facilities for children with acute medical (including cardiac), surgical (including polytrauma), thoracic/cardiac surgical, neurological, neurosurgical and neonatal conditions. The programme extends over a 24-month period which may be divided into sections of not less than six months in length. It is possible to complete the programme at different institutions. Six months of this time may be spent in paediatric traumatology, paediatric cardiology, paediatric pulmonology or neonatology. For the detailed curriculum, see the regulations of the relevant College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Registration as a specialist in an approved discipline; certification of having completed at least 18 months as a subspeciality trainee in an accredited subspeciality unit in a teaching hospital, registered and approved by the Health Professions Council of South Africa; submission of a written report from the Head of the Department and programme in which he/she trained indicating satisfactory completion of all training requirements; and submission of a satisfactorily completed logbook.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The examination comprises a written component of which a paper OSCE is a part, and an oral/OSCE component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is expected for each of the two (written and the oral) components of the examination.

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#### **PED7028W PAEDIATRIC CRITICAL CARE MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof A Argent

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Paediatricians Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in paediatric critical care. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed

medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

#### **PED7029W MPHIL IN DEVELOPMENTAL PAEDIATRICS PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof K Donald

**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians as subspecialists in developmental paediatrics. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the Part 1 examination of the College, are granted credit towards PED7029W. The course encompasses the study, assessment and management of variations in normative development and behaviour from the new-born period to adolescence. Students acquire expertise in physical growth, maturation and development, psychosocial development, psychometric testing, screening and early intervention, common behavioural disorders, cognitive developmental disabilities, educational issues, and rehabilitation and the management of social problems such as child abuse. The paediatric heritage therefore has to be superimposed on psychiatry, psychology, neurology, education, social work, the communication sciences, occupational and physical therapy and many more. On completion of training, the candidate must be able to manage children with special needs, whether at risk of, or with established neuro-developmental disabilities. The candidate must have a comprehensive knowledge of the neuro-scientific bases underlying child development and specific health conditions affecting development as well as normal and abnormal development of the child, including physical, psychological, cognitive, social and educational development. The candidate must be able to identify, assess and manage children with developmental disability and behaviour problems, and manage a wide variety of clinical problems and conditions commonly encountered in developmental paediatrics.

**DP requirements:** Completion of at least 18 months as a subspeciality trainee in an accredited subspeciality unit; written report from the head of the institution indicating satisfactory completion of all training requirements; submission of a portfolio; must have presented or been accepted to present an original first-author research poster or paper at a local or international congress, or submitted or had accepted for publication an original first-author or co-authored manuscript in a peer-reviewed journal. The detailed curriculum is available in the regulations of the College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**Assessment:** Candidates write the relevant final examination of the College of Paediatricians of South Africa. The examination comprises a written component and oral/OSCE/OSPE/clinical component. Each contributes 50% to the overall mark. A subminimum pass mark of 50% is required in each of the two (written and the oral/OSCE/clinical) components of the examination.

#### **PED7030W DEVELOPMENTAL PAEDS MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof K Donald

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Paediatricians Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in developmental paediatrics. It must also be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a

peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **PED7033W MPhil IN PAEDIATRIC INFECTIOUS DISEASES PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Prof B Eley

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians to become subspecialists in paediatric infectious diseases. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards PED7033W. Training combines clinical experience with laboratory training in microbiology and virology, and provides exposure to principles of communicable diseases epidemiology, infection prevention and control, and tropical public health. The ID subspecialist has true expertise in all aspects of diagnosis and management of organ, organ system and organism-specific infections. Content includes laboratory microbiology and virology (6 months), during which time the trainee is exposed to mycology, parasitology, epidemiology, hospital infection prevention and control; and clinical infectious diseases (18 months) in both inpatient and ambulatory settings; while clinical training includes a consulting service at the accredited hospital. For the detailed curriculum, see the regulations of the relevant College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Certification of having completed the required time in an accredited subspecialty unit; a written report from the head of the institution/programme; a completed logbook; presentation or acceptance for presentation of an original first-author research poster or paper at a local or international congress, or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The final examination comprises two three-hour written examinations, a three-hour OSCE, an oral examination, and an assessment of ability to perform research or at least to scrutinise and appropriately evaluate research data and scientific articles.

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#### **PED7034W PAEDIATRIC INFECTIOUS DISEASES MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof B Eley

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may still register with the HPCSA as subspecialists after successful completion of the College of Medicine of South Africa Cert ID (SA) Paed examination. The dissertation must be presented in either publication-ready or monograph format, and must be on a topic in paediatric infectious diseases. It must be based, moreover, on a study for which the work was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

**PED7035W MPHIL IN PAEDIATRIC PULMONOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Prof H Zar

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians to become subspecialists in paediatric pulmonology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards PED7035W. Training covers, amongst other things, relevant aspects of anatomy and physiology that will enable the diagnosis and management of a range of clinical diseases, including disorders of the upper airways; infections, congenital disorders of the lower airway, asthma, and bronchiolitis; cystic fibrosis; interstitial lung disease; pneumonia; disorders of the chest wall, diaphragm, and pleural space; acute lung diseases in the new-born infant; the diagnosis and management of respiratory failure and aspiration/inhalation injuries; bronchopulmonary dysplasia; pulmonary vascular diseases in childhood; adult respiratory distress syndrome (ARDS); pulmonary manifestations of immunosuppression; and clinical management of a range of breathing disorders and miscellaneous lung diseases. Candidates are trained in relevant invasive procedures and imaging, and also in appropriate laboratory diagnostic studies. For the detailed curriculum, see the regulations of the relevant College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 18 months as a subspeciality trainee in an accredited pulmonology unit; a written report from the head of the institution/programme; a completed logbook; presentation or acceptance for presentation of an original first-author research poster or paper at a local or international congress, or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The examination comprises a written and an oral/OSCE/OSPE/clinical component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is required in each of the two (written and the oral/OSCE/clinical) components of the examination.

**PED7036W PAEDIATRIC PULMONOLOGY MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convener:** Prof H Zar

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in paediatric pulmonology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, research methods, conducting literature reviews, and designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write the dissertation. In some disciplines they are also required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PED7039W** MPHIL IN PAEDIATRIC GASTROENTEROLOGY PART 1

120 NQF credits at HEQSF level 9

**Convener:** Dr E Goddard

**Course entry requirements:** None.

**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians to become subspecialists in paediatric gastroenterology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards PED7039W. Diseases of the gastrointestinal tract and liver and disorders of nutrition are important causes of morbidity and mortality in infancy and childhood, particularly in developing countries like South Africa. Training includes the development of skills in taking a history, performing a physical examination, formulating a differential diagnosis and an appropriate diagnostic and management plan; knowledge of the epidemiology of the principal diseases in paediatric gastroenterology and hepatology with emphasis on the differences between developed and developing countries and the specific circumstances pertaining to South Africa; an understanding and knowledge of the physiology, pathophysiology, pathology, diagnosis, and treatment of important nutritional, intestinal, and liver diseases in infancy, childhood and adolescence; a range of diagnostic and therapeutic procedures; knowledge and interpretation of tests and scans; knowledge and skills in the nutritional status of children; and research in paediatric gastroenterology, hepatology and nutrition. For the detailed curriculum, see the regulations of the relevant College of Paediatricians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 18 months as a subspecialty trainee in an accredited subspecialty unit; a written report from the head of the institution/programme; a completed logbook; presentation or acceptance for presentation of an original first-author research poster or paper at a local or international congress, or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the relevant examinations of the College of Paediatricians of South Africa. The examination comprises a written component and an oral/OSCE/OSPE/clinical component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is expected for each of the two (written and the oral/OSCE/clinical) components of the examination.

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**PED7040W** PAEDIATRIC GASTROENTEROLOGY MINOR DISSERTATION (60

CRED)

60 NQF credits at HEQSF level 9

**Convener:** Dr E Goddard

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in paediatric gastroenterology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PED7041W MPHIL IN PAEDIATRIC RHEUMATOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Assoc Prof C Scott**Course outline:**

This training programme forms part of the credentialling process of specialist paediatricians to become subspecialists in paediatric rheumatology. Students follow the relevant curriculum of the College of Paediatricians of South Africa and, on successful completion of the Certificate in Paediatric Rheumatology examination of the College, are granted credit towards PED7041W. Training includes guidance in obtaining a thorough foundational knowledge in a range of basic sciences, and in the diagnosis and management of an extensive range of rheumatic diseases. Content covers the epidemiology, aetiology, pathogenesis, pathology, immunology, and clinical features and management of the rheumatic diseases. These include inflammatory joint disorders, regional pain problems, soft-tissue rheumatism and related conditions; autoimmune rheumatic diseases; vasculitides; metabolic bone disorders; regional bone disorders; and infections, arthritis and other miscellaneous disorders such as rheumatic syndromes associated with endocrine and haematological disorders and cancer-associated rheumatic diseases. Candidates are also trained in the application of appropriate laboratory tests. They gain extensive experience in the assessment and management of rheumatological emergencies, and acquire a range of special clinical skills such as the aspiration and injection of synovial joints and the analysis of synovial fluids. For the detailed curriculum, see the regulations of the relevant College of Paediatricians of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least 18 months as a subspeciality trainee in an accredited subspeciality unit; a written report from the head of the institution/programme indicating adequate clinical progress and competency; a completed logbook; presentation or acceptance for presentation of an original first-author research poster or paper at a local or international congress, or submission or acceptance for publication of an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the relevant examination of the College of Paediatricians of South Africa. The examination has two components: a written component and an oral/OSCE/clinical component. Each of the two components contributes 50% to the overall mark. A subminimum pass mark of 50% is required in each of the two (written and the oral/OSCE/clinical) components of the examination.

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**PED7042W PAEDIATRIC RHEUMATOLOGY MINOR DISSERTATION (60****CRED)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof C Scott**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those with a South African specialist paediatric qualification who are South African citizens, and who choose not to complete a dissertation, may register with the HPCSA as subspecialists after successful completion of the Certificate in Paediatric Rheumatology examination of the College of Paediatricians of South Africa. The dissertation may be submitted in "publication-ready format" including a publication-ready manuscript of not more than 3 000 words and a separate introduction, or it may be submitted as a standard monograph, usually between 15 000 and 20 000 words in length and must be on a topic in paediatric rheumatology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The findings of the dissertation should contribute to the scientific understanding of the topic. Students are trained in statistics, in research methods, in conducting literature reviews, in designing a research proposal and in writing a dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Approval of the research proposal by the chair of the relevant departmental research committee, the supervisor(s), the Health Science's Human Research Ethics Committee, and the chair of the relevant master's committee.

**Assessment:** External examination of the minor dissertation.

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**PED7043W MPHIL IN ALLERGOLOGY (PAEDIATRIC) PT 1**

120 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M Levin

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process for specialist paediatricians as subspecialist allergologists. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination in allergology of the College of Physicians, and receive credit towards PED7043W. The aim of this course is both to provide foundational knowledge in a range of disciplines that underpin the clinical training in allergology, and to train candidates in the application of such foundational knowledge to clinical allergology conditions and management strategies. Students see patients in the allergy clinics on a daily basis (under supervision initially) and are required to present cases to their supervisors in the clinical situation and to do formal case presentations at departmental meetings. Clinical competence is assessed in terms of knowledge and clinical reasoning, and in terms of clinical judgement and decision-making. For the detailed curriculum, see the regulations of the College of Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** In addition to being registered paediatricians, candidates must have completed at least 18 months as a subspeciality trainee in the accredited allergology unit in the teaching hospital, must submit a written report from the head of the institution and programme in which he/she trained indicating satisfactory completion of all training requirements; must submit a satisfactorily completed logbook; must have presented or have been accepted to present an original first-author research poster or paper at a local or international congress, or have submitted or had accepted for publication an original first-author or co-authored manuscript in a peer-reviewed journal.

**Assessment:** Candidates write the examination offered by the College of Physicians. The examination includes formal evaluation of the logbook. The Certificate examination has two components: a written component, and an oral/OSCE/OSPE/clinical component. Each of the two components contributes 50% to the overall mark. The pass mark for the overall examination is 50%. A subminimum pass mark of 50% is required in each of the two (written and the oral/OSCE/clinical) components of the examination.

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**PED7044W PAEDIATRIC ALLERGOLOGY MINOR DISSERTATION (60**

**CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof M Levin, Dr JG Peter

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may still register with the HPCSA as subspecialists after successful completion of the College of Medicine examination. The dissertation must be on a topic in allergology and should be of a standard publishable in a peer-reviewed medical or allergy journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing and conducting a self-initiated research project during the two-year training period, and are required to analyse the results, present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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## PATHOLOGY

**Professor and Head (UCT/NHLS joint staff):**  
C Williamson, BSc (Hons) PhD *Cape Town*

### Anatomical Pathology

*Level 4, Falmouth Building North/D7, Groote Schuur Hospital/1<sup>st</sup> Floor ICH Building, Red Cross Children's Hospital*

#### **Wernher & Beit Professor and Head:**

D Govender, MBChB MMed (AnatPath) PhD UKZN FCPATH (Anat) SA FCPATH ECSA FRCPath London IFCAP FAMM

#### **Associate Professors Full-time:**

R Naidoo, BSc(Hons) UDW MMedSc PhD UKZN  
K Pillay, MBChB UKZN MMed *Cape Town* FCPATH (Anat) SA FRCPath London

#### **Emeritus Associate Professor:**

H C Wainwright, MBChB *Cape Town* FCPATH (Anat) SA

#### **Senior Lecturers Full-time:**

M S Duffield, MBChB *Rhodes* LRCP&S *Edinburgh & Glasgow* MMed *Cape Town* MRCPATH  
M L Locketz, MBChB MMed *Cape Town* FCPATH (Anat) SA  
H-T Wu, MBBCh *Witwatersrand* MMed *Cape Town* FCPATH (Anat) SA

#### **Honorary Senior Lecturer:**

G M Learmonth, MBChB BAO *Galway* FCPATH (Anat) SA MIAC

#### **Lecturers Full-time:**

FCJ Botha, MBChB *UFS* FCPATH (Anat) SA  
D Chetty, MBBCh *Witwatersrand*  
L Govender, MBChB *Pret*  
M J Otto, MBChB *UFS* FCPATH (Anat) SA  
A Ramburan, BSc (Hons) MMedSc (Anat) SA  
R Roberts, MBChB MMed *Cape Town* FCPATH (Anat) SA  
N Osman, MBChB *Cape Town* FC Path (Anat) SA  
M J Otto, MBChB *UFS* FCPATH (Anat) SA

#### **Assistant Lecturers/Registrars:**

C Jackson, MBChB *Cape Town*  
M le Grange, MBChB *Cape Town*  
B Kosi, MBChB *Cape Town*  
S C Madlala, MBChB *Limpopo*  
T Nkomo, MBChB *UKZN*  
B Price, BSc(Hons), PhD *UKZN*, MBBCh *Witwatersrand*  
T N Rikhotso, MBChB *Medunsa*  
S Tu, MBChB *Cape Town*  
D Zgambo, MB BS *Malawi*

#### **Chief Scientific Officer/Research Laboratory Manager**

R Kriel, NatDip(MedTech) CPUT Dip(ProfPhotography) PostGradDip(BusManagement) UKZN

**Laboratory Managers (NHLs):**

C Biloibrk (Histopathology-Groote Schuur Hospital), NatDip(MedTech) *CPUT*

S Davids (Acting) (Cytopathology-Groote Schuur Hospital), NatDip(MedTech)

*CPUT*

E Dollie (Histopathology-Red Cross Hospital), NatDip(MedTech) BTech (BioMedTech) *CPUT*

**Chemical Pathology**

*Level 6, Entrance 4, Falmouth Building*

**Professor and Head:**

A D Marais, MBChB *Cape Town FCP SA*

**Associate Professor:**

G F Van der Watt, MBChB *Pret MMed Cape Town FCPPath SA*

**Emeritus Professor:**

E H Harley, PhD MD *London FRCPPath UK*

**Senior Lecturers:**

D M Blackhurst, PhD *Cape Town*

J A King (Principal Medical Scientist), BSc(Hons) MSc PhD *Cape Town*

F Omar (Specialist), MBChB *Stell MMed Cape Town FCPPath SA*

H Vreede (Senior Specialist), MBChB MMed *Cape Town*

**Lecturer Full-time:**

P Fortgens, FCPPath *SA Chem Path PhD UKZN*

**Honorary Professors and Lecturers:**

I Jialal, MBChB *UKZN MD FCPPath SA DABCCM*

T S Pillay, MBChB *UKZN PhD Cambridge MRCPPath UK*

D B Sacks, MBChB *Cape Town* (American Board of Internal Medicine) (American Board of Pathology)

**Forensic Medicine**

*Level 1, Entrance 2, Falmouth Building*

**Professor and Head:**

L J Martin, MBBCh *Witwatersrand MMed Path (Foren) Cape Town DipForMed FCForPath SA*

**Senior Lecturers Full-time:**

M Heyns, BSc Hons (cum laude) MSc (cum laude) PhD Hons BBA (cum laude) MBA (cum laude) *Stell PGCHET QUB*

G M Kirk, MBBCh *Witwatersrand DipForMed FCForPath SA*

L Liebenberg, MBChB *Stell MMed Path (Foren) Cape Town DipForMed SA*

Y van der Heyde, BScMicro MBChB MMed Path (Foren) *Cape Town DipForMed SA*

**Lecturers Full-time:**

I Alli, MB BS *Mysore DipForMed Clin/Path SA Cert Medical Law UNISA FCForPath SA*

M Date-Chong, MBChB *Cape Town DipForMed Path FCForPath SA*

B Davies, BSc Hons *Cape Town MSc (For Sci) George Washington*

L Heathfield, BSc BSc (Med) Hons *Cape Town MSc (For Sci) Strathclyde*

S Mfolozi, MBChB *Cape Town DipForMed Path FCForPath SA MMed (For Path) Cape Town*

I J Molefe, MBChB *Cape Town DipForMed Path FCForPath SA*

I Möller, MBChB *Pret* LLB *UNISA* DipForMed Path FCForPath *SA*  
 L Peddle MBChB *Cape Town* DipForMed *SA* Path

**Medical Technologists:**

Y Davies, NDMedTech *CPUT*  
 M Perrins, NHDMedTech *CPUT*

**Haematology**

*Chris Barnard Building*

**Professor and Head:**

N Novitzky, PhD *Cape Town* FCP *SA*

**Senior Lecturers, Specialists and Haematologists:**

J Opie, MBChB FCP  
 N Mashigo, MBChB FCPATH(Haem)

**Lecturers, Specialists and Haematologists:**

G Bellaires, MBChB  
 J Makan, MBChB  
 M Ntobong, MBChB FFPATH(Haem)

**Medical Natural Scientist:**

K Shires, PhD *Cape Town*

**Research Officer:**

S Mowla, PhD

**Laboratory Manager:**

D Rousseau, B Tech Haem)

**Chief Technologist:**

J Blackbeard, NDMedTech(Haem)

**Human Genetics**

*Room 3.14, Level 3, Wernher and Beit North, IDM*

**Professor and Head:**

R S Ramesar, BSc(Hons) MSc UKZN PhD *Cape Town*

**Professor/Senior Specialist:**

A Wonkam, MBChB *Cameroon* MD Dip(MedGenet) *Switzerland*

**Professor:**

C Dandara, BSc(Hons) PhD *Zimbabwe*

**Emeritus Professors:**

L J H L Greenberg, BSc *Stell* PhD *Cape Town*  
 P H Beighton, MD *London* PhD *Witwatersrand* FRCP UK FRCPCH FRS *SA*

**Honorary Professors:**

W James, BA(Hons) *UWC* MSc PhD *Madison Wisconsin*  
 M J A Wood, MBChB *Cape Town* MA DPhil *Oxford*

**Senior Specialist/Senior Lecturer:**

K Fiegen, MBChB *Cape Town* FCPaeds CertMedGenet *SA*

**Senior Lecturers:**

T Wessels MSc (Genetic Counselling), PhD *Witwatersrand*  
E Chimusa BSc(Hons) MSc and PhD *Cape Town*

**Sessional Specialists and Honorary Senior Lecturers:**

S Zieff, MBChB MMed *Cape Town* FCP *SA*

**Laboratory Manager (Cytogenetics NHLS):**

T Ruppelt, NDip BTech(BiomedicalTechnology) *UPE*

**Immunology**

*Falmouth Building and Wernher and Beit Building South, IDM*

**Wernher & Beit Chair, Professor and Head:**

C M Gray, BSc(Hons) *Western England* MSc PhD *Witwatersrand*

**Honorary Professors:**

G D Brown, PhD *Cape Town*  
B Ryffel, PhD *Switzerland*

**Professors:**

F Brombacher, PhD *Freiburg*  
M Jacobs, PhD *Cape Town*

**Associate Professor:**

W Horsnell PhD *UK*

**Visiting Professors:**

G Alber, PhD *Germany*  
J Alexander, PhD *Glasgow*  
G Ferrari, MD *Genoa*  
T Huenig, PhD *Wuerzburg*  
M Kopf, PhD *ETH Zürich*  
S Magez, PhD *Brussels*

**Senior Lecturer:**

H Jaspan, BSc *USA* MD PhD *Tulane* FAAP PaedsID *Washington*

**Honorary Senior Lecturer:**

J Dorfmann, PhD *Berkeley*

**Research Scientists:**

R Guler, PhD *Switzerland*  
J Hoving PhD, *Cape Town*  
N-J Hsu, PhD *Cape Town*  
F Kirstein, PhD *Cape Town*

**Research Associates:**

A Lopata, PhD *Cape Town*  
B Ryffel, PhD *Basel*

**NHLS staff:**

J Banks, DipMedTechnology  
K Jonas, DipMedTechnology  
S Maart, DipMedTechnology/Lab Manager  
B Pillay, DipMedTechnology  
G Sheba, DipMedTechnology  
L Johnson, DipMedTechnology  
N Semela, DipMedTechnology  
M Watkins, MS PhD *Cape Town*  
A Adefuye, MBChB, PhD *Cape Town*

**Chief Medical Technologist:**

L Fick, DipMedTechnology *CPUT*

**Manager FACS Facility:**

R Dreyer

**Falmouth Laboratory Manager:**

B Allinde

**Medical Microbiology**

*Falmouth Building, Faculty of Health Sciences Campus*

**Professor and Head:**

M P Nicol, MBBCCh MMed(MedMicro) *Witwatersrand DTM&H FCPPath(Microbiol) SA PhD Cape Town*

**Professor:**

G Hussey, MBChB MMed *Cape Town MSc ClinTropMed London DTM&H UK FFCH SA*

**Senior Lecturers Full-time:**

C Bamford, MBChB MMed (MedMicro) MPhil *Cape Town FCPPath(Microbiol) DCH SA*  
N Beyliss, MBBCCh Dip HIV Management *Witwatersrand DTM&H FCPPath(Microbiol) SA*  
PR Naicker, MBChB *UKZN DTM&H Witwatersrand FCPPath(Micro) SA*

**Lecturers:**

L Ah Tow Edries, BSc(Hons) *UWC PhD Cape Town*  
H Cox, BSc MPH PhD *UM Australia*  
E du Toit, PhD *Cape Town*  
M Kaba, MD MSc PhD *AMU France*  
C Moodley, PhD *Cape Town*  
L Robberts, BSc(Hons) *Pret PhD Stell D(ABMM) USA FCCM Canada*

**Honorary Lecturers:**

D A Lewis, FRCP *UK PhD DipGUM DTM&H*  
J Simpson, MMedPath (Microbiol) *Cape Town*

**Registrars:**

C M Centner, MBChB MSc(Med) *Cape Town*  
S Ntuli, MBChB *Medunsa*  
H Tootla, MBChB *Cape Town*

## **Medical Virology**

*Werner and Beit Building South (IDM), Faculty of Health Sciences Campus*

### **Professor and Head (UCT/NHLS joint staff):**

C Williamson, BSc (Hons) PhD *Cape Town*

### **Professor and SARChI Chair in Vaccinology (NHLS/UCT joint staff):**

A L Williamson, BSc (Hons) PhD *Witwatersrand*

### **Emeritus Professor:**

K Dumbell, MBChB MD FRCPath *UK DSc Cape Town*

### **Associate Professors:**

D R Hardie, MBChB MMedPath (MedVirol) *Cape Town*

J A Passmore, PhD *Cape Town*

### **Senior Lecturers/Clinical Virologists (NHLS/UCT joint staff):**

M Hsiao, MBChB DTM&H *Witwatersrand* MMedPath *Cape Town* FCPATH (Virol) *SA*

S Korsman, MBChB *Pret* MMed(VirolPath) *Stell* FCPATH (Virol) *SA*

### **Senior Lecturer (UCT):**

W Burgers, PhD *Cantab*

### **Registrars:**

A Enoch, MBChB *UKZN*

N Nkosi, MBChB *UKZN*

A Khan, MBChB *UKZN*

### **Senior Lecturer/Scientist (UCT/NHLS joint staff):**

H Smuts, PhD *Cape Town*

### **Lecturers:**

T Meiring, PhD *Pret*

L Masson, PhD *Cape Town*

C Anthony, PhD *Cape Town*

### **Medical Scientists/Lecturers (UCT/NHLS joint staff):**

Z Mbulawa, PhD *Cape Town*

Z Valley-Omar, PhD *Cape Town*

### **Honorary Senior Lecturers:**

E Andersen-Nissen, PhD *USA*

A Bere, PhD *Cape Town*

### **Senior Researchers:**

G Chege, PhD *Cape Town*

C Riou, PhD *Lyon*

### **Research Officers:**

R Chapman, PhD *Cape Town*

N Douglass, PhD *Cape Town*

### **Senior Scientific Officers:**

C Adams, MSc *Cape Town*

C Rademeyer, MSc *Cape Town*  
 S Galant, NatDip (ClinPath) NatDip (Microbiology II) *CPUT*  
 E Margolin, MSc *Cape Town*  
 A Keyser, MSc *Cape Town*  
 M Logan MSc *Cape Town*  
 R Thebus, NatDip (MedTech) *CPUT*

**Scientific Officers:**

N Ndabambi, MSc *UWC*  
 P Ximba, MSc, *KZN*  
 T York, MSc *KZN*  
 C Combrinck, MMed Sc *UFS*  
 W Nevondo, MSc *UWC*

**Senior Technical Officer:**

H Gamaldien, Nat Dip (MedTech) *CPUT MSc Cape Town*

**Senior Medical Technologist:**

T Muller, NatDip (BiomedTech) BTech *CPUT MSc Cape Town*

**Project Managers / Administrators:**

D Stewart, MSc *Zimbabwe*  
 L Stephens PhD *Rhodes*  
 K Norman

**Paediatric Pathology**

*Red Cross War Memorial Children's Hospital*

**Senior Lecturer Full-time and Acting Head:**

M H G Shuttleworth, BSc (Hons) MBChB MMed *Cape Town*

**Senior Lecturers Full-time:**

K Pillay, MBChB FC Path(AnatPath) SA FRC Path UK MMed *Cape Town*  
 G van der Watt, MBChB FCPPath(ChemPath) DA SA

**Medical Technologists (Chemical Pathology):**

B Bergstedt, NatDip(ClinPath) NatDip(ChemPath) BTech  
 R Brown, BSc(Microbiol) NatDip(ChemPath)  
 P Joseph, NatDip(ClinPath)  
 I Kamaar, NatDip(ClinPath)  
 S Kear, NatDip(ClinPath)  
 P Mangala, NatDip(ClinPath)  
 R Manuel, NatDip(ClinPath)  
 C Seaton, NatDip(ClinPath) NatDip(Haem) Higher NatDip  
 L Ungerer, NatDip(ChemPath)  
 J van Helden, NatDip(ChemPath)  
 V West, NatDip(ChemPath)

**Medical Technologists (Haematology):**

Z Abrahams, NatDip(ClinPath) BTech *Cape Tech*  
 K Benjamin, NatDip(Haem) BTech *Cape Tech*  
 A Bertscher, NatDip(BloodTransfus) NatDip(Haem) *Joburg Tech*  
 C Booysen, NatDip(ClinPath) *Cape Tech*  
 S Brink, NatDip(ClinPath) BTech *Cape Tech*

L de Wet, NatDip(ClinPath) *CPUT*

H Hendricks, NatDip(ClinPath) *Pen Tech*

M Pickard, NatDip(Haem) *Cape Tech*

M Prins, NatDip(ClinPath) BTech *Cape Tech*

G Tappan, NatDip(BloodTransfus) NatDip(Haem) *Cape Tech*

E van der Heyde, BSc(Microbiol) NatDip(Haem) NatDip(ClinPath) *Cape Tech*

T Zbodulja, NatDip(Haem) *Cape Tech*

**Medical Technologists (Histopathology):**

E Dollie, NatDip(HistopathTechniques) BTech

S Ford, NatDip(HistopathTechniques)

C Jackson, NatDip(Microbiol) NatDip(HistopathTechniques) Higher NatDip

## **COURSES OFFERED**

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### **PTY4000W BMEDSCHONS HUMAN GENETICS**

120 NQF credits at HEQSF level 8

**Convener:** Prof C Dandara

**Course entry requirements:** None

**Course outline:**

This specialisation consists of two general modules, four programme modules and a research project. There is a seven-week laboratory course teaching basic knowledge in the discipline along with statistics. Students also attend a scientific communication module that trains them in scientific writing and comprehension. In addition, they attend four programme modules, each covering a specific field and over a three-week period. Three of the modules are compulsory; the fourth can be chosen from any of the following honours programmes: Applied Anatomy or Biological Anthropology, Bioinformatics, Cell Biology, Human Genetics, Infectious Diseases and Immunology, Medical Biochemistry and Physiology. The research project begins in April and ends in October. Students choose their research projects from a variety of projects on offer by researchers within the division of Human Genetics. They become integrated into research groups and participate in weekly research discussions, seminars and journal clubs. Towards the end of the year students are required to write and present a research project and sit a final examination.

**DP requirements:** Attendance and completion of all coursework.

**Assessment:** Evaluation is based on performance in research projects, in coursework, and in an examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (interim tests/evaluation) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (research paper) (5%).

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### **PTY4001W BMEDSCHONS IN INFECTIOUS DISEASES AND IMMUNOLOGY**

120 NQF credits at HEQSF level 8

**Convener:** Assoc Prof W Horsnell

**Course entry requirements:** A BSc or equivalent degree majoring in a biological science or an MBChB degree

**Course outline:**

This Honours Degree consists of a laboratory techniques module, a specialist lecture course, training in generic research skills and a research project.

The course begins with an intensive laboratory techniques module. This is a practical course aimed at teaching students basic and advanced molecular, immunological and biochemical techniques. Students then attend four modules that cover different specialist fields, each module runs over a

three-week period. Students can select at least three advanced modules from the Infectious Diseases and Immunology stream covering immunology, virology, microbiology and vaccinology. They also have the option to select a module from any of the following honours streams: Applied Anatomy/Biological Anthropology, Cell Biology, Human Genetics, Medical Biochemistry, Bioinformatics, Exercise Science and Physiology. Students also attend courses in generic research skills covering scientific communication, bioinformatics and statistics. A major component of the degree is the research project; the majority of students will conduct their projects in the Institute of Infectious Diseases and Molecular Medicine under the supervision of senior scientists of the Faculty. The research project begins in April and ends in October. During that period, students become integrated into the research groups and participate in weekly discussion meetings and research seminars. Towards the end of the year, students are required to write a research project and final examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in the research project, in coursework and in examinations. In order to pass the academic year students must obtain an overall final average of at least 50% with a minimum score of 50% for the research project and a minimum score of 45% for the combined programme, interim module marks and final examination marks. The final mark for the course is broken down by the following contributions: laboratory techniques (test and examination) (15%); scientific communication (10%); programme modules (tests/evaluations) (14%); programme modules (final examination) (16%); research project (35%); oral presentation of research project (5%); and final comprehension examination (5%).

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#### **PTY4002W BMEDSCHONS FORENSIC GENETICS**

120 NQF credits at HEQSF level 8

**Convenor:** Prof C Dandara

**Course entry requirements:** None

**Course outline:**

This specialisation consists of two general modules, four specialisation-specific modules and a research project. There is a seven-week laboratory course teaching basic knowledge in the discipline along with statistics. Students also attend a scientific communication module that trains them in scientific writing and comprehension. They attend four compulsory specialisation-specific modules, each covering a specific field over a three-week period. The research project begins in April and ends in October. Students choose their research projects from a variety of projects on offer by researchers within the Division of Human Genetics. During that period students become integrated into research groups and participate in weekly research discussions, seminars and journal clubs. Towards the end of the year students are required to write and present a research project and sit a final examination.

**DP requirements:** Attendance and completion of all academic commitments.

**Assessment:** Evaluation is based on performance in research projects, in coursework, and in an examination. In order to pass the academic year, students must obtain an overall final average of at least 50% with sub-minima of 50% for the research project and 45% for the combined programme interim module and final examination. The final mark is made up as follows: laboratory techniques – tests and examination (15%); scientific communication (10%); programme modules (interim tests/evaluations) (14%); programme modules (final examination) (16%); research project (or case reports) (35%); oral presentation of research project (5%); and final comprehension examination (research paper) (5%).

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#### **PTY5001W GENETIC COUNSELLING MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convenor:** Dr T Wessels

**Course entry requirements:** Successful completion of PTY5002W, PTY5003F, PTY5004S, PTY5005F and PTY5006S.

**Course outline:**

The course includes research methodology which focuses on qualitative phenomenology, and the production of a minor dissertation using a qualitative and/or quantitative approach to answer the research question. The minor dissertation, prepared under supervision, should be no more than 30 000 words in length. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, design and critically appraise research, make sound judgement using data and information at their disposal, and be able to communicate their conclusions clearly to specialist and non-specialist audiences. Students are trained in statistics where necessary, in conducting literature reviews, and in designing a research proposal. Students are also required to interview and counsel a cohort of patients or clients and their families. The student has to present the research findings at a seminar and present two critical reviews of articles at a journal club. Having submitted his/her research proposal for approval and obtained formal ethics approval where necessary, the student proceeds with his/her research, analyses of the results and writes up the dissertation.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation. The analysis of two journal articles contributes 10%, a seminar presentation 10%, and the dissertation 80% of the total mark.

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### **PTY5002W GENETIC COUNSELLING PRACTICE**

80 NQF credits at HEQSF level 9

**Convener:** Dr T Wessels

**Course outline:**

This course addresses the theory and practical application of counselling to genetic conditions. Students spend a portion of each week in various clinics, counselling patients/clients and their families under supervision and participating in clinical management discussions. Counselling practice starts from the beginning of the first year of registration on the two-year full-time programme.

**DP requirements:** In order to qualify for the PTY5002W Genetic Counselling Practice examination, the student must: (1) attend 80% of all classroom activities; (2) attend 80% of clinical counselling sessions; (3) achieve a minimum of 50% for seven out of eight clinical block evaluations; (4) achieve a minimum of 50% for four out of six clinical tests; and (5) achieve an average of at least 50% for the two clinical examinations at the end of each year.

**Assessment:** Assessment is by examination, block tests and end-of-block evaluations. Students have clinical tests and examinations at the end of each year. Clinical tests and examinations take the format of a "first counselling session" (of an unknown patient/family) or "follow-up session" of a patient whom the student has previously counselled. End-of-block evaluations include assessment of the student's performance during the clinical rotations by clinical supervisors and assessment of reflective practice by means of clinical case reports. The final two examinations of each year, the first being a "first counselling session" and the second a "follow-up session" contribute 50% of the course marks. An average of at least 50% is required to pass the examination. The Eight block evaluations and six block tests account for the remaining 50%. The student will be required to obtain 50% for seven out of eight end-of-block performance evaluations and four out of six clinical case tests in order to qualify for admission to the final examination. The student will be required to obtain an average of at least 50% for the two examinations at the end of each year in order to pass.

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### **PTY5003F/S PRINCIPLES OF GENETIC COUNSELLING (COURSEWORK)**

10 NQF credits at HEQSF level 9

**Convener:** Dr T Wessels

**Course entry requirements:** None

**Course outline:**

The course aims to introduce students to the principles of genetic counselling. Genetic counselling is the process of helping people understand and adapt to the medical, psychological and familial implications of genetic contributions to disease. It provides individuals and their families with information about genetic conditions, availability of diagnostic testing, and risks in other family members within a framework of nondirective counselling and ethical principles. Content includes

the purpose and structure of genetic counselling session, genetic counselling techniques used in practice, the scope of genetic counselling, professional communication skills appropriate to various settings and audiences and the various settings in which genetic counsellors practise, and ethical considerations in the field of genetics.

**DP requirements:** Successful completion of all in-course assessments.

**Assessment:** Tests and assignments: 40%; written examination: 60%.

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**PTY5004F/S PRINCIPLES OF GENETIC COUNSELLING (APPLIED LEARNING)**

10 NQF credits at HEQSF level 9

**Convener:** Dr T Wessels

**Course entry requirements:** None

**Course outline:**

The purpose of this course is to enable students to broaden their knowledge of the principles of genetic counselling and to apply theory to practice. Genetic counselling is the process of helping people understand and adapt to the medical, psychological and familial implications of genetic contributions to disease. It provides individuals and their families with information about genetic conditions, availability of diagnostic testing, and risks in other family members within a framework of nondirective counselling and ethical principles. Students will learn to critically evaluate genetic counselling literature and apply theory in role-plays, assignments and workshops. There will be group-work and case-based learning, longitudinal learning and consolidated learning.

**DP requirements:** Successful completion of all in-course assessments.

**Assessment:** Tests and assignments: 40%; written examination: 60%.

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**PTY5005F/S MEDICAL GENETICS I**

12 NQF credits at HEQSF level 9

**Convener:** Dr T Wessels

**Course entry requirements:** None

**Course outline:**

This course describes the diagnosis, natural course and management of human diseases that are at least partially genetic in origin. It deals with hereditary diseases, the mechanisms of hereditary transmission and the variation of inherited characteristics among individuals with the same disorders. Commonly encountered medical genetic conditions will be covered in more detail including aspects of diagnosis and management. The outcomes for Medical Genetics I are as follows: genetic mechanisms, embryology and dysmorphology, laboratory techniques, and genetic disorders

**DP requirements:** Successful completion of all in-course assessments.

**Assessment:** Tests and assignments: 40%; written examination: 60%.

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**PTY5006F/S MEDICAL GENETICS II**

12 NQF credits at HEQSF level 9

**Convener:** Dr T Wessels

**Course entry requirements:** None

**Course outline:**

This course describes the diagnosis, natural course and management of human diseases that are at least partially genetic in origin. It deals with hereditary diseases, the mechanisms of hereditary transmission and the variation of inherited characteristics among individuals with the same disorders. Commonly encountered medical genetic conditions will be covered including aspects of diagnosis and management and well genetic mechanisms and testing for genetic conditions.

**DP requirements:** Successful completion of all in-course assessments.

**Assessment:** Tests and assignments: 40%; written examination: 60%.

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**PTY6001W BASIC AND APPLIED RESEARCH IMMUNOLOGY**

15 NQF credits at HEQSF level 9

**Convenor:** Dr M Marakalala; Dr F Kirstein

**Course entry requirements:** MBChB or Hons in immunology or a related field.

**Objective:** To impart key immunology knowledge and skills to students and post-doctoral fellows embarking upon immunology research projects

**Course outline:**

This course aims to give students a basic understanding of research immunology so that they will be able to read and critically assess research reports in immunology. It is primarily intended for students performing or preparing to perform immunology research. Topics include the innate immune response; B and T cell receptor rearrangement and structure; recognition by B, T and natural killer cells; T cell and antibody-mediated immunity; mucosal immunity; allergy and hypersensitivity; immunological assays; genetically modified mice as research tools; cytokine function; immunity to HIV and tuberculosis; and vaccines. Scientific reports will be assigned as a part of the course material.

**Lecture times:** Approximately 24 lectures of 90 minutes each, plus oral presentations by students.

**DP requirements:** Attendance at lectures and attendance at and participation in project presentations and journal clubs. Sit for midterm and final examination.

**Assessment:** Short tests at the end of each topic that test the student's ability to interpret a published scientific report; oral presentation of a critical assessment of an approved scientific report (journal club); oral presentation and defense of a research project; participation in lecturer-led journal clubs; midterm examination and the final examination. The final examination constitutes 40% of the final mark.

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**PTY6002W BIOMEDICAL FORENSIC SCIENCE MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convenor:** Dr M Heyns

**Course entry requirements:** PTY6003F/S; PTY6004F/S; PTY6005F/S; PTY6006F/S; PTY6007F/S; PTY6010F/S; PTY6011F/S.

**Course outline:**

The minor dissertation is conducted under supervision. It must be between 10 000 and 15 000 words in length and must be on a topic in biomedical forensic science. The final submission can be in either a manuscript or monograph format. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, design and critically appraise research, make sound judgement using data and information at their disposal, and be able to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PTY6003F/S FORENSIC ANTHROPOLOGY AND ANATOMY**

18 NQF credits at HEQSF level 9

**Convenor:** Dr V Gibbon

**Course entry requirements:** None

**Course outline:**

This course introduces the field of forensic anthropology, which involves the application of biological anthropology methodology to a medico-legal context. To identify human remains forensic anthropologists assist law enforcement through determining age, sex, ancestry, stature, and unique features from the skeleton. Also, using decomposition rates they can provide an estimate of the

postmortem interval. In this module, students learn human osteology and odontology; how to determine forensic context; methods of scene recovery; estimating the postmortem interval; reconstruction of demographic information; and identification of bone pathology and trauma. Additionally, histology and gross anatomy skills necessary in Forensic pathology and anthropology are taught within this module.

**DP requirements:** Students are required to attend all practical sessions, submit all coursework as required, and obtain a mark of not less than 50% in all class assignments and in all theory and practical tests.

**Assessment:** Assessment consists of some combination of assignments, tests and a final examination. The coursework component carries 50% of the assessment weight and the examination component contributes 50% towards the final mark. A pass mark of 50% (test and examinations, theory and practical) is required for each component of the assessment. An external examiner is appointed for this course and has the discretion to alter any mark based on an assessment of the candidate's overall performance in the course or in one of more of the course components.

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#### **PTY6004F/S FORENSIC PATHOLOGY**

20 NQF credits at HEQSF level 9

**Convener:** Prof L Martin

**Course entry requirements:** None

**Course outline:**

The course aims to provide students with a good understanding of natural and unnatural deaths, statutory obligations for practitioners in the field, basic traumatology, identification of descendants, explanation of the cause of death and the minimum standards in a forensic pathology laboratory. It also provides an introduction to theories of crime and victimisation, the criminal justice system, legislation regarding human tissues, legal age of consent, termination of pregnancy, and sexual offenses. It provides an elementary understanding of criminal trials, and the use of scientific evidence in the courtroom.

**DP requirements:** Students are required to attend all practical sessions, submit all coursework as required, and obtain a mark of not less than 50% in all class assignments and in all theory and practical tests.

**Assessment:** Assessment consists of some combination of assignments, tests and a final examination. The coursework component carries 50% of the assessment weight and the examination component contributes 50% towards the final mark. A pass mark of 50% (test and examinations, theory and practical) is required for each component of the assessment. An external examiner is appointed for this course and has the discretion to alter any mark based on an assessment of the candidate's overall performance in the course or in one of more of the course components.

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#### **PTY6005F/S FORENSIC TOXICOLOGY**

20 NQF credits at HEQSF level 9; 33.

**Convener:** B Davies

**Course entry requirements:** None

**Course outline:**

The course enables the student to reliably perform appropriate toxicological specimen collection, transport, preparation, analysis and reporting on a number of platforms and for most major toxic agents.

**DP requirements:** Attendance at all practicals; 50% in all class, theory and practical tests.

**Assessment:** Assessment consists of some combination of assignments, tests and a final examination. The summative component carries 50% of the assessment weight and the formative tests contribute 50% towards the final mark. A pass mark of 50% (test and examinations, theory and practical) is required for each component of assessment. An external examiner is appointed for each course and has the discretion to alter any mark based on an assessment of the candidate's overall performance in the course or in one or more of the course components.

**PTY6006F/S MOLECULAR FORENSICS**

20 NQF credits at HEQSF level 9

**Convener:** L Heathfield

**Course entry requirements:** None

**Course outline:**

This course explores the areas of genetics and medical microbiology within a forensic context. Topics covered include biological sample collection and handling, body fluid identification, molecular processing of samples in the laboratory (including forensic DNA profiling) as well as the interpretation and reporting of results. Technical and quality aspects of these methods are also discussed. The theoretical and practical components, combined with problem-solving and critical thinking skills equip students to provide expert testimony in a court of law.

**DP requirements:** Students are required to attend all practical sessions, submit all coursework as required, and obtain a mark of not less than 50% in all class assignments and in all theory and practical tests.

**Assessment:** Assessment consists of some combination of assignments, tests and a final examination. The coursework component carries 50% of the assessment weight and the examination component contributes 50% towards the final mark. A pass mark of 50% (test and examinations, theory and practical) is required for each component of the assessment. An external examiner is appointed for this course and has the discretion to alter any mark based on an assessment of the candidate's overall performance in the course or in one or more of the course components.

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**PTY6007F/S APPLIED FORENSIC SCIENCE**

18 NQF credits at HEQSF level 9

**Convener:** Dr M Heyns

**Course entry requirements:** None

**Course outline:**

The course is based on the contents of the Forensic Pathology, Forensic Toxicology, Molecular Forensics and Forensic Anthropology and Archaeology courses. Students integrate and apply this knowledge to case simulations from a crime or death scene through to the courtroom appearance. Additional topics covered may include crime scene photography, impression evidence, bloodstain pattern analysis and other analytical techniques. Ethics and how to conduct oneself as an expert witness testifying in court withstanding rigorous cross-questioning without undue emotional stress are also covered. Students manage crime scenes, collect evidence, write affidavits as expert witnesses, and defend their role in a mock court presided by legal professionals.

**DP requirements:** Students are required to attend all practical sessions, submit all coursework as required, and obtain a mark of not less than 50% in all class assignments and in all theory and practical tests.

**Assessment:** Assessment consists of some combination of assignments, presentations, tests and a final examination. The coursework component carries 50% of the assessment weight and the examination component contributes 50% towards the final mark. A pass mark of 50% (test and examinations, theory and practical) is required for each component of the assessment. An external examiner is appointed for this course and has the discretion to alter any mark based on an assessment of the candidate's overall performance in the course or in one or more of the course components.

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**PTY6010F/S FORENSIC STATISTICS**

12 NQF credits at HEQSF level 9

**Convener:** C Mole

**Course entry requirements:** None

**Course outline:**

This course is delivered online and provides an introduction to the basic concepts of forensic biostatistics and a guide on how to compute the most commonly used descriptive and inferential statistical procedures and for the students to be able to interpret the results.

**DP requirements:** Students are required to submit all coursework and obtain a mark of not less than 50% in all class assignments.

**Assessment:** Coursework contributes 50% and consists of two home assignments (25% each). The final examination is weighted 50% of the final course mark. A pass mark of 50% is required overall, with a 45% sub-minimum for each of the examination and semester marks. An external examiner is appointed for the course and has the discretion to amend the final mark based on an assessment of the candidate's performance across the course (or course components) as a whole.

**PTY6011F/S FORENSIC RESEARCH METHODS**

12 NQF credits at HEQSF level 9

**Convener:** C Mole

**Course entry requirements:** None

**Course outline:**

The aim of this course is to provide students with the skills and knowledge to conduct both qualitative and quantitative research projects. It introduces students to data management and analysis and gives them a foundation for good scientific writing. The course is based on forensic cases and examples. Students learn to apply their knowledge to interpreting and reporting on their own laboratory data, and to the interpretation of observations from case work with which the forensic scientist may become involved (evidence evaluation).

**DP requirements:** Students are required to submit all coursework. Students are required to obtain at least 50% for the coursework assignments combined.

**Assessment:** Coursework: Summative: two individual home assignments (15% each) and one presentation (20%) = 50%. Final online examination: 50% = a written protocol project (25%) and a traditional written examination component (25%). Online submissions of assessments / examination are conducted according to proposed procedures in order to maintain the integrity of all assessments conducted.

**PTY7000W MMED CLINICAL PATHOLOGY PART 1A (CHEMICAL PATHOLOGY)**

18 NQF credits at HEQSF level 9

**Convener:** Dr F Omar

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of medical practitioners as specialist clinical pathologists. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the Part 1A examination in Chemical Pathology and receive credit towards PTY7000W. The purpose of this course is to build a foundational knowledge of the theory, principles and practice of physiological chemistry, abnormal body chemistry, and the various biochemical procedures used in the investigation of disease. The full curriculum is available from the South African College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must have completed 16 months of approved training in chemical pathology.

**Assessment:** The examination includes written, practical and oral examinations. Eligibility for the practical and oral examinations is contingent on passing the prior written examination. Failure to pass the Part 1 examination must be followed by a six-month extension in chemical pathology as well as a repeat examination. Candidates are permitted to repeat only one Part 1 examination during their entire training period across disciplines.

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**PTY7001W MMED CLINICAL PATHOLOGY PART 1B (HAEMATOLOGY)**

18 NQF credits at HEQSF level 9

**Convener:** Dr F Omar

**Course entry requirements:** PTY7000W

**Course outline:**

This training programme forms part of the credentialling process of medical practitioners as specialist clinical pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the Part 1 examination in haematology and receive credit towards PTY7001W. The purpose of this course is to build a foundational knowledge of clinical and laboratory haematology, including blood transfusion. The full curriculum is available from the South African College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must have completed 16 months of approved training in haematology.

**Assessment:** The examination includes written, practical and oral examinations. Eligibility for the practical and oral examinations is contingent on passing the prior written examination. Failure to pass the Part 1 examination must be followed by a six-month extension in haematology and by a repeat examination. Candidates are permitted to repeat only one Part 1 examination during their entire training period and across disciplines.

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**PTY7002W MMED CLINICAL PATHOLOGY PART 1C (MEDICAL**

**MICROBIOLOGY)**

18 NQF credits at HEQSF level 9

**Convener:** Dr F Omar

**Course entry requirements:** PTY7000W

**Course outline:**

This training programme forms part of the credentialling process of medical practitioners as specialist clinical pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the Part 1 examination in medical microbiology and receive credit towards PTY7002W. The purpose of this course is to build a foundational knowledge of medical microbiology. The course content covers clinical and laboratory microbiology including bacteriology, serology, immunology, parasitology, mycology, medical entomology and epidemiology. The full curriculum is available from the South African College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must have completed 16 months of approved training in medical microbiology.

**Assessment:** The examination includes written, practical and oral examinations. Eligibility for the practical and oral examinations is contingent on passing the prior written examination. Failure to pass the Part 1 examination must be followed by a six-month extension in medical microbiology and by a repeat examination. Candidates are permitted to repeat only one Part 1 examination during their entire training period and across disciplines.

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**PTY7003W MMED CLINICAL PATHOLOGY PART 1D (VIROLOGY)**

6 NQF credits at HEQSF level 9

**Convener:** Dr F Omar

**Course entry requirements:** PTY7000W

**Course outline:**

This training programme forms part of the credentialling process of medical practitioners as specialist clinical pathologists. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the Part 1 examination in virology and receive credit towards PTY7003W. The purpose of this course is to acquire knowledge of the theory, principles and practice of clinical virology and laboratory procedures used in investigation of viral diseases. The full curriculum is available from the South African College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must have completed six months of approved training in virology.

**Assessment:** The part 1 examination includes written, practical and oral examinations. Failure to pass the Part 1 examination must be followed by a two-month extension in Virology and by a repeat examination. Candidates are permitted to repeat only one Part 1 examination during their entire training period and across disciplines.

**PTY7006W MMED ANATOMICAL PATHOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Prof D Govender

**Course entry requirements:** Part 1 PTY7010W

**Objective:** The objective of this course is to equip the candidate who has completed the minimum training period with the appropriate professional knowledge, skills and attitude stipulated by the HPCSA training requirements and standards in order to be licensed by the HPCSA as a practitioner of anatomical pathology at specialist level.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist anatomical pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7006W. This course builds on the foundational knowledge in basic sciences covered in the Part 1 course. Material covered includes diagnostic surgical pathology and cytology; classifications of tumours; use of special stains, immunohistochemistry, electron microscopy, morphometry and relevant molecular techniques in diagnostic anatomical pathology; pathogenesis and epidemiology of disease; and laboratory management including quality assurance and accreditation.

**DP requirements:** Candidates must also have completed a minimum of three and a half years of approved training in pathology. At least two and a half of the three and a half years must have been spent in a department of anatomical pathology, and at least three months must have been spent full-time in an approved cytology laboratory. Candidates are required to provide evidence that they have properly completed a minimum of 50 autopsies and are able to cut and stain frozen sections.

**Assessment:** Before being admitted to the Part 2 examination, candidates must have had at least 42 months' approved experience in anatomical pathology. There are two written papers of three hours each (15%); an autopsy (10%); a practical examination consisting of a histopathology slide examination (25%), cytology slide examination (20%), two OSPEs (10% x 2); and an oral examination (10%).

**PTY7007W ANATOMICAL PATHOLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convenor:** Prof D Govender

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in the specialty of anatomical pathology. The dissertation must be based on a study the work for which was commenced while the candidate was

registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, candidates proceed with their research, analyse the results and write up the dissertation (monograph format). Candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgement using the data and information at their disposal, and to be able to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** Candidates must have attended the Registrars Research Training course or equivalent offered by the Faculty of Health Sciences.

**Assessment:** External examination of the minor dissertation. Pass mark 50%.

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#### **PTY7008W MMED IN CLINICAL PATHOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Dr F Omar

**Course entry requirements:** Successful completion of all Part 1 examinations PTY7000W; PTY7001W; PTY7002W and PTY7003W.

**Course outline:**

This training programme forms part of the accreditation process of medical practitioners as specialist clinical pathologists, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7008W.

The aim of the course is to build on the foundational knowledge in the disciplines of chemical pathology, haematology, medical microbiology and virology completed in the Part 1 component of training, and to cover the theory, principles and practice of chemical pathology, haematology, medical microbiology and virology, including various laboratory procedures used in the investigation of disease. Clinical pathology and laboratory medicine are covered.

The full curriculum is available from the South African College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must have completed a minimum of four years of approved training in pathology, which must include a minimum of fourteen months in each of chemical pathology, laboratory haematology and medical microbiology and six months in virology.

**Assessment:** The candidate writes the Part 2 examination in Clinical Pathology of the South African College of Pathology. The final examination comprises three written papers of three hours each: one in each of chemical pathology, haematology and medical microbiology/virology; a practical examination and an oral examination. Eligibility for the practical and oral examinations is contingent on passing the prior written examination.

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#### **PTY7010W MMED ANATOMICAL PATHOLOGY PART 1A**

60 NQF credits at HEQSF level 9

**Convenor:** Prof D Govender

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist anatomical pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the College of Pathologists of South Africa for the Part 1 examination in Anatomical Pathology. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of 18 months of training, they write the Part 1 examination of the College and receive credit towards PTY7010W. The purpose of this course is to build a foundation of knowledge of the basic principles of pathology, including molecular pathology and

autopsy pathology, and to train candidates in laboratory management. The course content covers cell (including gene) and tissue (histology) structure; embryology and development; principles of pathology; the molecular and genetic bases of disease; the principles of immunology; the pathology and the principles of general systemic and systematic diseases; the principles of the light microscope including photomicroscopy and fluorescent microscopy, and the principles of the electron microscope. The practical training includes diagnostic histopathology and autopsy pathology.

**DP requirements:** For admission to the Part 1 examination candidates must have completed a minimum of 18 months' approved training in anatomical pathology.

**Assessment:** The Part 1 examination consists of one written paper of three hours (50%) plus a 3 hour practical histopathology slide examination (50%).

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#### **PTY7011W MPHIL PAEDIATRIC PATHOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof D Govender

**Course entry requirements:** None

**Course outline:**

The course is divided into four modules, namely perinatal and placental pathology, including normal and abnormal foetal growth and development; paediatric autopsies and laboratory investigations; pathological aspects of childhood neoplasia and post-natal growth disturbances including malnutrition; and general systemic and surgical pathology applicable to children. Instruction is by means of formal lectures, tutorials and demonstrations.

**DP requirements:** Attendance and completion of all coursework activities and commitments, including the four assignments.

**Assessment:** Part 1 comprises a year mark made up as follows: essays (four assignments) (25%), two written papers (25%), a practical examination including an autopsy (40%), and an oral examination (10%). The pass mark is 50%.

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#### **PTY7012W PAEDIATRIC PATHOLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convenor:** Prof D Govender

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in paediatric pathology. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgement using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation. Pass mark 50%.

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#### **PTY7015W MMED CHEMICAL PATHOLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convenor:** Prof A D Marais

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of medical practitioners as specialist chemical pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in

a teaching hospital linked to the UCT Faculty of Health Sciences. The course aims to build foundational knowledge in the basic sciences applicable to the practice of chemical pathology. The course covers the theory, principles and practice of physiology, chemistry, abnormal body chemistry and the various biochemical procedures used in the investigation of disease. The curriculum is available from the College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The examination must be completed within eighteen months of formal training having commenced.

**Assessment:** The examination includes written, practical and oral examinations. Eligibility for the practical and oral examinations is contingent on passing the prior written examination.

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#### **PTY7016W MMED CHEMICAL PATHOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Prof A D Marais

**Course entry requirements:** PTY7015W

**Course outline:**

This training programme forms part of the credentialling process of medical practitioners as specialist chemical pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7016W. The course is aimed at consolidating and providing further training in the theory, principles and practice of physiological chemistry, abnormal body chemistry and the various biochemical procedures used in the investigation of disease. The curriculum is available from the South African College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate must have completed a minimum of three and a half years of approved training in pathology. At least two and a half of the three and a half years must have been spent in chemical pathology in order to sit the Part 2 examination in chemical pathology.

**Assessment:** Candidates write the final examination in Chemical Pathology of the College of Pathologists. The examination consists of two written papers of three hours each, a practical examination and an oral examination. Eligibility for the practical and oral examinations is contingent on passing the prior written examination.

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#### **PTY7017W CHEMICAL PATHOLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convenor:** Prof A D Marais

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation comprises four parts: approved research protocol (4 000 words), literature review (4 000 words), publication-ready manuscript (3 000 words) and appendix/ces. The topic must be relevant to chemical pathology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **PTY7018W MMED IN FORENSIC PATHOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Prof L J Martin

**Course entry requirements:** PTY7043W**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist forensic pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7018W. This course focuses on the application of the knowledge gained in basic and applied sciences in Part 1. Candidates gain competency in legal and operational requirements and ethical underpinnings of the practice of forensic pathology, and an understanding of death scene investigation processes and techniques. They gain proficiency in standard autopsy techniques and in interpretation of autopsy findings; familiarity with specialised autopsy and human identification techniques; proficiency in the documentation of autopsies and in clear communication of findings to the justice system; and familiarity with basic clinical forensic medicine, including examination techniques. At the end of this training, candidates are expected to have acquired the relevant skills and competencies to be able to provide or effectively participate as a specialist in a forensic pathology service.

**DP requirements:** A minimum of two years' training in forensic pathology, carrying out routine medico-legal autopsies and the associated microscopic examination of tissues removed at such autopsies, with experience of the court work relating to the autopsies carried out by the candidate. A minimum training period of three years in an HPCSA-approved training post must be completed before the Part 2 examination may be written. This period includes a one-year rotation through anatomical pathology and the successful completion of the Part 1 examination.

**Assessment:** Two written papers, a two-hour slide examination of 10 to 15 haematoxylin and eosin and/or other stained sections, an autopsy practical examination, and an oral examination. Candidates must pass each individual component of these examinations, i.e. the written, slide, autopsy and oral examinations, with a minimum of 50%, for successful completion of the Part 2 examination.

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**PTY7019W FORENSIC PATHOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof L J Martin

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in forensic pathology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PTY7021W MMED IN HAEMATOLOGICAL PATHOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Prof N Novitzky

**Course entry requirements:** Successful completion of Part 1C (PTY7024W).

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist haematologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of

South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7021W. Candidates are trained in laboratory practice and in applying the basic principles of haematology, immunology and blood transfusion. They also learn to diagnose and manage a range of haematological disorders. They apply knowledge gained in the first part of training to practical cases requiring blood transfusion, haemolysis and related applications in haematological pathology. For the full curriculum and examination details, see the regulations of the College of Pathologists of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** A candidate must have completed a minimum of three and a half years of approved training in haematological pathology. At least three months training must have been spent in blood transfusion. This may be part of the training in haematology.

**Assessment:** Candidates write the final examination of the College of Pathologists of South Africa. The examination includes two written papers, a practical examination, a two-day examination in laboratory haematology including morphology, a one-day practical examination in clinical haematology, and an oral examination. The clinical and laboratory examinations must be passed independently.

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**PTY7022W HAEMATOLOGICAL PATHOLOGY MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convener:** Prof N Novitzky

**Course entry requirements:** None.

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in haematology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PTY7024W MMED HAEMATOLOGICAL PATHOLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Prof N Novitzky

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist haematologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards LAB7023W. The first part of training aims to build a foundation of knowledge in basic molecular biology and immunology as applied to haematology, as well as in basic molecular biology. Having become sufficiently acquainted with molecular biological concepts and terms and basic molecular laboratory techniques, the registrar will be able to apply this knowledge to cases that will be encountered in diagnostic and therapeutic haematology. The full curriculum is available in the regulations of the College of Pathologists of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** For admission into the Part 1 examination the candidate must have spent a minimum of 12 months in a department of haematology, which may be clinical or laboratory. This part of the course must be completed within 18 months of commencing formal training in haematological pathology.

**Assessment:** Candidates write the relevant examination of the College of Pathologists of South Africa. The examination has written, practical and oral components.

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#### **PTY7029W MMED MEDICAL MICROBIOLOGY PART 1D**

60 NQF credits at HEQSF level 9

**Convenor:** Prof M Nicol

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist microbiologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7029W. The purpose of this course is to build a foundation in the discipline of clinical and laboratory microbiology, which includes basic sciences knowledge in bacteriology, virology, serology, immunology, parasitology, mycology, medical entomology and epidemiology. For the detailed curriculum, see the regulations of the relevant College of Medicine at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** This course must be completed within 18 months of commencing formal training in medical microbiology.

**Assessment:** Written, practical and oral examinations.

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#### **PTY7030W MMED MEDICAL MICROBIOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Prof M Nicol

**Course entry requirements:** Successful completion of PTY7029W.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist microbiologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7030W. Candidates use the foundational knowledge acquired in the first part of training to apply their knowledge in a clinical microbiology laboratory situation, where they diagnose and recommend management for a range of disorders in the fields of bacteriology, virology, serology, immunology, parasitology, mycology, medical entomology and epidemiology. The detailed curriculum for this speciality is available from the College of Pathologists of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates must have completed a minimum of three and a half years of approved training in pathology. At least two and a half of the three and a half years must have been spent in a department of medical microbiology. At least three months must have been spent in virology. This may be part of the training period in medical microbiology.

**Assessment:** Two written papers on basic microbiology and immunology and on applied clinical microbiology and virology, a practical examination over three days to test applied clinical and laboratory microbiology, and an oral examination. Eligibility for the practical and oral examinations is contingent on passing the prior written examination.

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**PTY7031W MEDICAL MICROBIOLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convener:** Prof M Nicol

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 10 000 and 20 000 words in length, and must be on a topic in medical microbiology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinically relevant topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PTY7032W MMED VIROLOGICAL PATHOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof D Hardie

**Course entry requirements:** PTY7034W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist virological pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7032W. The purpose of this course is to apply the foundational knowledge obtained in the first part of training to practice in a clinical virology laboratory. Candidates study the structure and replication of viruses and the diseases which viruses produce to enable them to make an accurate laboratory diagnosis and practise effective clinical virology. The full detailed curriculum is available from the College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates must have completed a minimum of three and a half years of approved training in pathology. At least two and a half of the three and a half years must have been spent in a clinical virology laboratory. At least three months must have been spent full-time in a microbiology laboratory or in clinical immunology. This may be part of the training in clinical virology.

**Assessment:** Candidates write the College of Pathologists examination: two written papers, a practical examination over two days to test applied laboratory virology, and an oral examination.

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**PTY7033W VIROLOGICAL PATHOLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof D Hardie

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in virological pathology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Candidates are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results

and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PTY7034W MMED VIROLOGICAL PATHOLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof D Hardie

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in virological pathology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Candidates are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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**PTY7040W MPHIL IN PAEDIATRIC FORENSIC PATHOLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof R O C Kaschula and Prof L J Martin

**Course entry requirements:** None

**Course outline:**

This is a part-time course with periodic modules of intensive training involving a total of 75 hours of lectures and 30 hours of practicals/tutorials per annum for the first two years. The course is divided into four quarterly intensive modules, each lasting between 9 and 15 days with an assignment being undertaken at the end of each module. The modules are as follows: foetal, neonatal and paediatric autopsies and placentas; growth anomalies and injuries; medical, surgical and obstetric procedures, diseases and derangements; and clinical and in-depth forensic pathology relevant to childhood. In the event of a candidate securing adequate sponsorship and wishing to undertake the programme on a full-time basis, the four modules of instruction can be compressed into one year of full-time work in the Division of Forensic Medicine at UCT.

**DP requirements:** Successful completion of assignments.

**Assessment:** Progress in gaining appropriate skills and knowledge is monitored and assessed by supervising tutors during periods of intensive training, and the marking of assignments. Final evaluation takes place after the completion of all four modules and the submission of the four assignments. At this stage an examination is written comprising: two written papers (at 100 marks each) for a total of 200 marks; performance of an autopsy with histological reporting for 100 marks; practical microscope slide diagnoses for 100 marks; oral examination (external and internal examiners) for 100 marks; and summation of marks given for assignments for a total of 200 marks. There is a subminimum of 40% for each of the above aspects of the examination processes and after completing this with a minimum mark of 50%, the candidate may proceed with the preparation and submission of a research-based dissertation that requires a minimum 50% pass by an external examiner before the degree is awarded.

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**PTY7041W** PAEDIATRIC FORENSIC PATHOLOGY MINOR DISSERTATION

(60 CRED)

60 NQF credits at HEQSF level 9

**Convenor:** Prof R O C Kaschula and Prof L J Martin

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in forensic pathology. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgements using data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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**PTY7043W** MASTER OF MEDICINE IN FORENSIC PATHOLOGY PART 1

60 NQF credits at HEQSF level 9

**Convenor:** Prof L J Martin

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist forensic pathologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Pathologists of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PTY7043W. The aim of the course is to build foundational knowledge in pathology that will enable candidates to describe features that may be diagnostic, to diagnose or offer differential diagnoses where relevant, and to comment on special stains that may be required to confirm their diagnosis. This includes the principles of general pathology, the pathology of general systemic and systematic diseases (including the vascular system, the heart, the haemopoietic system, the lympho-reticular system and the lung, the head and neck, the gastrointestinal system, the liver and biliary tract, the pancreas, the kidneys and urinary tract, the breast, endocrine system, skin, skeletal system, and central nervous system). For the full curriculum, see the relevant regulations of the College of Pathologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za). At the end of the training the candidate has extensive knowledge of the practical application of anatomical pathology in the medico-legal field, with particular emphasis on the aetiology, epidemiology, classification, pathogenesis and the macroscopic and microscopic appearances of pathology seen in deaths commonly due to natural causes in man, with further emphasis on cases of sudden unexpected deaths and 'natural' secondary complications following 'unnatural' primary injuries.

**DP requirements:** A minimum of one year training in forensic pathology and a minimum of one year training, but not more than two years training, in anatomical pathology.

**Assessment:** Candidates write the Part 1 examination of the South African College of Forensic Pathologists. Examinations comprise two three-hour written papers, and a three-hour slide examination of 15 haematoxylin and eosin and/or other stained sections.

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**PTY7044W CLINICAL PATHOLOGY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convenor:** Dr F Omar

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be written according to the most recent guidelines as prescribed by the University and must be on a topic in clinical pathology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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## PSYCHIATRY AND MENTAL HEALTH

*J-Block, E36A, Groote Schuur Hospital*

**Professor and Head:**

D J Stein, BSc (Med) MBChB *Cape Town FRCPC PhD DPhil Stell*

**Sue Struengmann Professor of Child & Adolescent Psychiatry:**

P J de Vries, MBChB *Stell MRCPsych London PhD Cantab*

**Vera Grover Professor of Intellectual Disability:**

C M Adnams, BSc *UKZN BSc(Med)(Hons) MBChB Cape Town FCPaed SA*

**Professors:**

C Lund, BA *UKZN BA Hons MA Cape Town MSocSci (ClinPsych) Rhodes MA PhD Cape Town*  
J van Honk, PhD *Utrecht*

**Associate Professors:**

J Hoare, MBChB MPhil (Neuropsychiatry) *Cape Town MRCPsych FCPsych SA*  
J Joska, MBChB MMed (Psych) PhD *Cape Town FCPsych SA*  
S Z Kaliski, BA MBChB *Witwatersrand MMed (Psych) PhD Cape Town FCPsych SA*  
S Kleintjes, MA (ClinPsych) MPhil (ChildAdolPsych) PhD *Cape Town*

**Emeritus Professors/Associate Professors:**

A Berg, MBChB *Pret MPhil (Child Dol Psych) Cape Town FC Psych SA*  
L S Gillis, MD DPM *Witwatersrand FRC (Psych) UK*  
C D Molteno, MBChB MMed (Paed) MD *Cape Town BA(Hons) (Sociology) PhD UNISA DCH RCP UK*  
B A Robertson, MD *Cape Town DipPsych McGill FCPsych SA*  
D A White, MBChB MMed (Psych) *Cape Town FCPsych SA*  
T Zabow, MBChB DPM *Cape Town FCPsych SA MRCPsych UK*

**Lecturers:**

L Abrahams, MPsych *UWC*  
T Abrahams, MA (ClinPsych)  
R R Allen, BSc (CompScience Maths Stats) MBChB MBA *Cape Town FCPsych SA*  
S E Baumann, MBChB BA *Cape Town FCPsych SA MRCPsych UK*  
E Benjamin, MA (ClinPsych) *Cape Town*  
S Brooks, BSc(Hons) Psychology, PGCE *Greenwich*, MSc Neuroscience, PhD Clinical Neuroimaging *Kings College*, Postdoc Fellowship, Higher Education Teaching Certificate *Uppsala University*, Postdoc Fellowship *Cape Town*  
N Cader, MA (ClinPsych)  
C Capri, BSocSci Hons *Cape Town*, MA (cum laude) Clinical Psychology and Community Counselling, International Relations, PhD Psychology/Intellectual Disability, DPhil Political Science *Stell*  
O Coetze, MA (ClinPsych) *PU for CHE*  
Q Cossie, MBChB *Cape Town FCPsych DMH SA*  
J J Dawson-Squibb, MA (ClinPsych) *Cape Town*  
C De Clercq, MBChB *Pret FCPsych SA*  
W De Jager, MA (ClinPsych) *UPE*  
C Dean, M Psych *UWC MBA Milpark/Oxford Brookes*  
G Douglas, MSc Nursing *Witwatersrand* MA (ClinPsych) *Cape Town*  
L Frenkel, MA (ClinPsych) *Witwatersrand*  
P Gasela, MBChB *Cape Town FCPsych Cert in Child and Adolescent Psych SA*

N Groenewold, MSc Behavioural and Cognitive Neuroscience (cum laude) MSc Clinical and Developmental Psychology (cum laude) PhD Psychiatry and Neuroscience *Groningen*  
 J Hoare, MBChB MPhil (Neuropsychiatry) *Cape Town* MRCPsych FCPsych *SA*  
 A J Hooper, MBChB *Cape Town* FCPsych *SA*  
 I Hoosen, MbChB *Cape Town* MRCPsych Royal College of Psychiatrists London DipOcc Health Royal College of Physicians UK Dip CBT *Birmingham*  
 N R Horn, MBChB *Cape Town* PGDipCogTher Manchester MRCPsych *UK*  
 F Howells, PhD (Physiology) *Cape Town*,  
 J Ipser, PhD *Cape Town*, MSc Epidemiology *Columbia*  
 Z Kahn, MBChB MMed (Psych)  
 M Karjiker, MBChB *Witwatersrand* FCPsych *SA*  
 N Koen, MBChB PhD *Cape Town*  
 N Lalkhen, MA (ClinPsych) *Stell*  
 S J Lay, MA (ClinPsych) *Cape Town*  
 I Lewis, BSc MBChB MMed (Psych) *Cape Town* FCPsych *SA*  
 D Liedemann, MPsych *UWC*, PG Dipl in Addictions Care *Cape Town*  
 A Marais, PhD *Cape Town* MA (ClinPsych) *Stell*  
 S Mkabile, MA (ClinPsych) *UWC*  
 N Matross, MBChB MMed (Psych) *Cape Town*  
 P Milligan, MBChB *Cape Town* FCPsych *SA*  
 J S Parker, MBChB *Cape Town* FCPsych *SA*  
 Z Parker, MA *Cape Town* MPsych *UWC*  
 M Schneider, BSc (Logopaedics) *Cape Town*, MA (Applied Linguistics) *Reading*, PhD (Public Health) *Witwatersrand*  
 NG Sibeko, MBChB *UKZN*  
 N Siegfried, MBChB *Cape Town* MPH (Hons) *Sydney* DPhil *oxon*  
 P Smith, MBChB *Cape Town* FCPsych *SA*  
 K Sorsdahl, PhD *Cape Town*  
 T Swart, BSc (Biochem) *Cape Town* MSc (ClinPsych) *UKZN*  
 H Temmingh, MBChB MMed (Psych) *Stell* FCPsych *SA* MPH *Cape Town*  
 H Thornton, MA (ClinPsych) *Rhodes* PhD *Stell*  
 T Timmermans, MBChB *Cape Town* FCPsych *SA*  
 A Uhlmann PhD *Cape Town*  
 W Vogel, MBChB MMed (Psych) MSc *Witwatersrand* FF Psych *SA*  
 M F Williams, MBChB *Cape Town* FCPsych *SA*  
 P F Williams-Ashman, MBBCh *Witwatersrand* FCPsych *SA*  
 D A B Wilson, BSc MBChB *Cape Town* FCPsych *SA*  
 J Yako, MA (ClinPsych) *Cape Town*

**Honorary Professors/Associate Professors:**

C Allgulander, MD PhD *Karolinska Institutet*  
 D Baldwin, DM *Southampton* FRCPsych MRCPsych MB BS *London*  
 D Castle, MBChB MD *Cape Town* MRCPsych FRCPSYCH MSc (Epi) *London* DLSHTM FRANZCP GCUT *Melbourne*  
 D Edwards, Psych (Hons) *Oxon* MA (ClinPsych) PhD *Rhodes*  
 S W Jacobson, MA *Brandeis* MA PhD *Harvard*  
 J L Jacobson, MA PhD *Harvard*  
 J Leff, MB.BS *University College London* MRCP UK MD *Kings College London* FRCPsych UK  
 I Marks, MBChB MD *Cape Town* DPM MRCPsych FRCPsych *London*  
 C Mathews, BA *Natal* MSc (Med) PhD *Cape Town*  
 B Myers, MSocSc (cum laude) *Natal* PhD *Cape Town*  
 M Robertson, MBChB MD DSc (Med) *Cape Town* DPM FRCPsych FRCP FRCPCH MRCPsych *London*  
 O Shisana, BA *Univ of the North* MA (ClinPsych) *Loyola College* PhD *Univ of South Florida* ScD

*Johns Hopkins School of Hygiene and Public Health*  
L Simbayi, BSc Zambia MSc Utah DPhil Sussex  
M Tomlinson, BA Rhodes BA(Hons) Witwatersrand MA (ClinPsych) Cape Town PhD Reading  
D Williams, BTh(Hons) University of the Southern Caribbean MDiv (cum laude) Andrews  
University PhD (Sociology) Michigan  
C Zlotnik, MA Witwatersrand, PhD Rhode Island University

**Honorary Lecturers:**

T Amos, MA UWC PhD Cape Town  
L Cluver, DPhil Oxon  
B Dickman, PhD (Psych) Cape Town  
A Gevers, BA (Psych) Grinnell College MA (ClinPsych) Missouri St. Louis PhD Cape Town  
V Ives-Deliperi, BA Unisa PhD Cape Town  
C Kuo, BA Virginia DPhil Oxon  
A Mason-Jones, BA(Hons) MA (Public Health) PhD Nottingham  
I McCallum, BA BSocSc MBBC Ch Cape Town FCPsych SA  
U Meys, MBChB MPhil (Child and Adolescent Psychiatry) Cape Town FCPsych SA  
A Muller, BCur NMMU MCur (Psych) UJ  
A Robins, MBChB Cape Town MD Witwatersrand DRM England MRC Psych London  
C F Zier vogel, MBChB Cape Town FCPsych SA

**Research Officers:**

N J Bikwana, BPA Stell BA(Hons) UWC HDE Cape Town  
E C Baron BSc Reading MSc Durham  
E Breuer BAppSc(Phy) Hons Sydney MPH (Epidemiology) Cape Town  
S D Cooper, BA(Hons) MPH Cape Town  
T Davies, BA Hons Rhodes MPhil Cape Town  
B L Evans, MA (ClinPsych) UNISA  
S Field, BA Hons Rhodes MA Southampton  
S Honikmann, MBChB MPhil (MCH) Cape Town DCH DObstet SA  
A Kleinhans, HDE UWC MSc Open  
R J Paulsen, MA UWC  
D Soowamber, BBusSci Cape Town

**HEADS OF DIVISIONS**

**Addiction Psychiatry**

B Myers, MSocSc (cum laude) Natal PhD Cape Town  
H Temmingh, MBChB MMed (Psych) Stell FCPsych SA MPH Cape Town

**Child and Adolescent Psychiatry**

W Vogel, MBChB MMed (Psych) MSc Witwatersrand FF Psych SA

**Consultation-Liaison Psychiatry**

L Frenkel, MA (ClinPsych) Witwatersrand  
J Hoare, MBChB MPhil (Neuropsychiatry) Cape Town MRCPsych FCPsych SA

**Forensic Psychiatry**

S Z Kaliski, BA MBBC Ch Witwatersrand MMed (Psych) PhD Cape Town FCPsych SA

**General Adult Psychiatry**

R R Allen, BSc (CompScience Maths Stats) MBChB MBA Cape Town FCPsych SA  
P Milligan, MBChB Cape Town FCPsych SA

**Intellectual Disability Psychiatry**C M Adnams, BSc UKZN BSc (Med)(Hons) MBChB *Cape Town FCP SA***Neuropsychiatry**J Joska, MBChB MMed (Psych) PhD *Cape Town FCPsych SA***Psychopharmacology and Biological Psychiatry**D J Stein, BSc(Med) MBChB *Cape Town FRCPC PhD DPhil Stell***Psychotherapy**L Abrahams, MPsych *UWC*S Kleintjes, MA(ClinPsych) MPhil (ChildAdolPsych) *Cape Town***Public Mental Health**C A Lund, BA(Hons) (Psych) MA MSocSci (ClinPsych) PhD *Cape Town*M F Williams, MBChB *Cape Town FCPsych SA***COURSES OFFERED**

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**PRY4008W EVIDENCE-BASED TREATMENT APPROACHES**

15 NQF credits at HEQSF level 8

**Convener:** G Hendricks**Course entry requirements:** PRY4013F**Course outline:**

This course provides students with an understanding of evidence-based treatment approaches for addictive disorders. Students are exposed to evidence-based principles of treatment and learn about the theoretical foundation, core concepts and principal techniques of several evidence-based psychosocial treatment models. Students are provided with intensive training in motivational interviewing and are expected to participate in role-play exercises. Basic training in cognitive behavioural therapy for the treatment of substance use disorders is included in the course. Other treatment approaches including 12-step programmes, the Matrix Model, and harm reduction are also critically explored. The course is taught through lectures, practical demonstrations and role-play exercises.

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments: 40%; final written examination: 60%.

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**PRY4009F SCREENING AND ASSESSMENT OF ADDICTIVE DISORDERS**

15 NQF credits at HEQSF level 8

**Convener:** G Hendricks**Course entry requirements:** PRY4013F**Course outline:**

This course equips students to screen patients for problematic alcohol and drug use and conduct comprehensive assessments of the nature, extent and severity of alcohol- and other drug-related problems. Students are taught to use various screening tools and to effectively feed back these results during brief interventions with patients. Students learn how to take a holistic patient history, conduct a mental state examination and present a concise etiological formulation. The practical application of urine testing in treatment settings is discussed. Students are taught principles and practical approaches to risk assessment, and clinical considerations relevant to alcohol and other drugs are examined. The implications that assessment findings have for patient placement and treatment planning are also outlined.

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments: 40%; final written examination: 60%.

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#### **PRY4010S CASE MANAGEMENT AND SERVICE MONITORING**

15 NQF credits at HEQSF level 8

**Convener:** G Hendricks

**Course entry requirements:** PRY4013F

**Course outline:**

This course provides students with insight into the process of treatment and recovery from addictive disorders and ways in which patient progress towards recovery can be facilitated through proper case management and effective monitoring. Students are introduced to specific case management techniques. The various roles of the multidisciplinary team and the challenges arising in case management are examined. Students are taught about the management of diversions and committals for substance use disorders, referral pathways and the function of assertive community treatment (ACT). Students also explore techniques of evaluating and monitoring addictions services so that the quality and impact of services can be assessed and improvements made where needed.

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments: 40%; final written examination: 60%.

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#### **PRY4011F MANAGING CO-OCCURRING MENTAL DISORDERS**

15 NQF credits at HEQSF level 8

**Convener:** G Hendricks

**Course entry requirements:** PRY4013F

**Course outline:**

This course enables students to identify other mental disorders that frequently co-occur alongside addictive disorders, as well as infectious diseases that co-occur alongside addictions. Students learn about shared risk factors for these disorders in vulnerable population groups. Students also learn about common approaches to managing these disorders in addiction treatment and evidence of their effectiveness. An overview of basic psychopharmacology is included in this course.

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments need to be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments: 40%; final written examination: 60%.

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#### **PRY4012S ETHICS & PROFESSIONAL DEVELOPMENT**

15 NQF credits at HEQSF level 8

**Convener:** G Hendricks

**Course entry requirements:** PRY4013F

**Course outline:**

This course provides students with an overview of key ethics principles when intervening in substance use disorders and the application of these principles to common ethical dilemmas that arise when attempting to prevent or manage illegal behaviours. Human rights concerns related to the treatment of addictive disorders and the impact human rights abuses have on patient outcomes, both in South Africa and in other countries, are also examined. Students are taught about relevant legislation that impacts on their work in the addictions field. Students are also introduced to other key issues relating to professional addiction workforce development.

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments: 40%; final written examination: 60%.

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### **PRY4013F UNDERSTANDING ADDICTIVE DISORDERS**

15 NQF credits at HEQSF level 8

**Convenor:** G Hendricks

**Course entry requirements:** None

**Course outline:**

This course provides students with an overview of alcohol and drug use both globally and in South Africa, and the burden of harm associated with their use. Theoretical models for understanding addiction are introduced. Students learn about the etiology of substance use disorders, as well as protective and risk factors contributing to their presentation. Barriers to treatment access are explored and students are taught about the neurobiology of addiction. An overview of classification systems for substances of misuse is provided and students are introduced to the range of interventions used to prevent initiation to alcohol and drug use, reverse the negative consequences of use, and/or limit the harmful effects of alcohol and drugs where use continues.

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments: 40%; final written examination: 60%.

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### **PRY4015F MANAGING CHILDREN & ADOLESCENTS WITH ADDICTIVE DISORDERS**

15 NQF credits at HEQSF level 8

**Convenor:** G Hendricks

**Course entry requirements:** PRY4013F

**Course outline:**

This course provides students with an overview of risk and protective factors for child and adolescent substance misuse, and discusses the prevention and treatment of substance use disorders amongst children and adolescents. Students learn about the normal stages of child and adolescent development, and how these may be affected by substance misuse. Students are exposed to low-threshold evidence-based interventions for adolescents who misuse substances, as well as to ways to diagnose and effectively treat substance misuse among adolescents. Dual diagnosis, facilitating groups with adolescents, the impact of foetal alcohol spectrum disorders and prenatal methamphetamine exposure are also discussed.

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments: 40%; final written examination: 60%.

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### **PRY4016S WORKING WITH THE FAMILY AND SOCIAL NETWORKS**

15 NQF credits at HEQSF level 8

**Convenor:** G Hendricks

**Course entry requirements:** PRY4013F

**Course outline:**

This course provides students with insight into the impact that addictive disorders have on the structure and functioning of the family, and the important role that the family plays in the treatment of addictive disorders. Family dynamics are examined, and concepts popular in the addictions field, such as co-dependency, are critically discussed. Students learn appropriate ways to educate the family about how to respond effectively to addiction, and how to provide appropriate family support. The role of social networks in recovery is also addressed.

**DP requirements:** Students need to attend a minimum of 70% of lectures. All assignments must be submitted. A subminimum of 45% for the coursework is required in order to be granted admission to the final examination.

**Assessment:** Assignments: 40%; final written examination: 60%.

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**PRY4018F/S INTRODUCTION TO PSYCHODYNAMIC CONCEPTS IN PSYCHOTHERAPY**

25 NQF credits at HEQSF level 8

**Convener:** E Benjamin and L Frenkel

**Course entry requirements:** None

**Course outline:**

This course instructs in both the core principles of this fundamental treatment modality and its practice in real-world treatment settings – addressing theoretical, technical, and clinical issues. Key topics include the unconscious; roots of the past in everyday life; containing feelings and the role of defenses; the relationship between the counsellor and the client and elements of the therapeutic alliance (inter-subjectivity ; resistance; transference and countertransference; issues of power and authority; reflexivity); as well as the phases of counselling (including breaks and termination). It also introduces the students to the continuum of psychodynamic interventions, teaching core skills in the assessment for and practice of the supportive psychotherapy model. Finally, it considers issues of the broader application of psychodynamic principles with the focus on issues of culture and diversity.

**DP requirements:** Students are required to attend 90% of lectures and participate in all lectures, practical sessions, workshops and tutorials. Attendance is monitored through the signing of an attendance register at each session. Students are required to submit all coursework.

**Assessment:** Assignment: 100% of the course mark. Any student failing to obtain 50% will have one opportunity to rewrite the assignment.

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**PRY4019F/S BASIC THERAPEUTIC COMPETENCIES**

30 NQF credits at HEQSF level 8

**Convener:** L Abrahams and G Hendricks

**Course entry requirements:** None

**Course outline:**

This course covers basic competencies common to all methods of psychotherapeutic intervention. These include establishing and negotiating a therapeutic relationship, basic listening and reflecting skills, an awareness of the 'frame' and professional boundaries, an awareness of layers of meaning in interaction, reflective thinking, containment, resistance, and termination. In addition, the course addresses the basic principles of establishing and maintaining a positive therapeutic alliance; understanding and formulating patients' problems; setting realistic treatment goals with patients, helping them maintain or re-establish their best possible level of functioning given the limitations of their personality, native ability, and life circumstances; and practical techniques. Finally, the course introduces knowledge of research-based practice guidelines, assessment of psychotherapy and formulation, and shows how to make appropriate referrals.

**DP requirements:** Students are expected to attend 90% of lectures and participate in all lectures, practical sessions, workshops and tutorials. Students are required to submit all coursework as required in their course manuals.

**Assessment:** Assignment: 100% of the course mark. Any student failing to obtain 50% will have one opportunity to rewrite the assignment.

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**PRY4020F/S INTRODUCTION TO COGNITIVE BEHAVIOURAL THERAPY**

25 NQF credits at HEQSF level 8; 10.

**Convener:** N Parker

**Course entry requirements:** None

**Course outline:**

This course gives instruction in both the core principles of this fundamental treatment modality and its practice in real-world treatment settings, addressing theoretical, technical, and clinical issues. It focuses on key features of CBT, beginning with the origins of the CBT model and an overview of

core theories and techniques that guide the work of effective cognitive-behaviour therapists, and includes core methods and desired elements of the therapeutic relationship in CBT, including how to conceptualise a case with the CBT model and how to structure effective sessions; the critical functions of structure and psycho-education; pragmatic instructions on how to implement the most important CBT methods, including specific methods used to identify and change maladaptive cognitions and practice in major psychiatric disorders from depression and anxiety to bipolar disorder, psychoses, and eating and personality disorders; overcoming common clinical problems in implementing CBT; and guidelines and measures to assess progress toward achieving competency in CBT and continuing to build skills in this effective treatment approach.

**DP requirements:** Students are expected to attend 90% of lectures and participate in all lectures, practical sessions, workshops and tutorials. Students are required to submit all coursework as required in their course manuals.

**Assessment:** Case presentation: 100% of the course mark. Any student failing to obtain 50% will have one opportunity to redo the case presentation.

#### **PRY4021F/S ETHICAL PRACTICE IN PSYCHOTHERAPY**

15 NQF credits at HEQSF level 8

**Convener:** G Hendricks

**Course entry requirements:** None

**Course outline:**

This course engages students with the range of ethical dilemmas that arise in the practice of psychotherapy. Students are presented with case examples and use their own experiential work to familiarise themselves with both legal and clinical principles underlying ethical conduct. Topics include informed consent; confidentiality, privilege, and their limits; treatment of minors and their families; clinical competence and scope of practice; boundaries and nonsexual multiple relationships; termination and abandonment. The course is designed to promote ethical practice, to provide guidance on common ethical dilemmas, and to prevent ethical challenges before they occur.

**DP requirements:** Students are required to attend 90% of lectures and participate in all lectures, practical sessions, workshops and tutorials. Students are required to submit all coursework as required in their course manuals.

**Assessment:** Assignment: 100% of the course mark. Any student failing to obtain 50% will have one opportunity to rewrite the assignment.

#### **PRY4022F/S EVIDENCE-BASED PRACTICE**

25 NQF credits at HEQSF level 8

**Convener:** S Kleintjes and E Benjamin

**Course entry requirements:** None

**Course outline:**

The aim of this course is for students to critically examine the issue of 'evidence' in psychotherapy, and to understand the terms and methodology of evidence-based practice and evidence-based treatments. They explore the applicability of evidence to clinical work and the limitations and advantages of EBT as well as learn the skills to search for and evaluate evidence in the field of counselling and psychotherapy. This is done through exposure to evidence-based techniques and treatment interventions for selected common DSM-V disorders and other presenting problems.

**DP requirements:** Students are required to attend 90% of lectures and participate in all lectures, practical sessions, workshops and tutorials. Students are required to submit all coursework as required in their course manuals.

**Assessment:** Oral presentation: 100% of the course mark. Any student failing to obtain 50% will have one opportunity to redo the oral presentation.

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**PRY4023F/S INTEGRATED ASSESSMENT**

0 NQF credits at HEQSF level 8

**Convener:** G Hendricks

**Course entry requirements:** Successful completion of all other courses

**Course outline:**

Not applicable. This course exists for the sole purpose of recording an integrated, overall mark.

**DP requirements:** None

**Assessment:** The final integrated examination requires students to submit a specified number of case reports, and has an oral examination component. Students are required to pass the individual courses as well as the integrated assessment with a minimum of 50% each in order to be awarded the Diploma.

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**PRY7006W MPHIL CHILD & ADOLESCENT PSYCHIATRY PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Prof P J de Vries

**Course entry requirements:** None.

**Course outline:**

Assessment, formulation and treatment in child & adolescent psychiatry; paediatrics and neurodevelopment; social and applied psychology relevant to child & adolescent psychiatry.

**DP requirements:** The candidate must have at least 18 months' full-time experience or the part-time equivalent thereof. This experience must involve primary clinical responsibility for children and adolescents suffering from emotional and behavioural problems and psychiatric disorders.

**Assessment:** Six-monthly in-course assessment and College Certificate Examination.

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**PRY7007W MMED IN PSYCHIATRY PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof S Kaliski

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist psychiatrists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Psychiatrists of SA. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PRY7007W. The purpose of this course is to build a foundational knowledge of the neurosciences, namely neuroanatomy, neurophysiology and psychopharmacology, as these apply to modern psychiatry. The course content also covers psychology, biostatistics and genetics.

**DP requirements:** Candidates must have spent one year in full-time capacity non-psychiatric clinical employment or research, or one year full-time in an approved appointment in a psychiatric department of a teaching hospital.

**Assessment:** Candidates write three papers (Neurosciences, Psychology, and Psychiatry) and a Psychiatry clinical examination or must pass the Part 1 examination of the College of Psychiatrists of South Africa.

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**PRY7008W MMED IN PSYCHIATRY PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Dr P Milligan

**Course entry requirements:** PRY7007W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist psychiatrists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Psychiatrists of SA.

Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards PRY7008W. The purpose of this training component is to apply the knowledge gained about the basic sciences, behavioural sciences, medical disciplines such as general medicine and paediatrics, as well as other relevant disciplines, to the clinical practice of psychiatry. Students are trained in the clinical practice of adult and child psychiatry, forensic psychiatry, intellectual disability and psychotherapy. By the end of training, students should be able to diagnose and manage a variety of common and some less common clinical problems they will encounter in practice. For the full curriculum and examination details, see the regulations of the College of Psychiatry of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates must have been qualified for at least five years; must have spent at least three years in a clinical appointment where he/she had primary responsibility for patients suffering from psychiatric illness; must have spent at least one year on the staff of an approved psychiatric hospital; must have had satisfactory experience in a community psychiatric service; must have had satisfactory experience in a recognised child psychiatry unit or child guidance unit; and must have had satisfactory supervised experience in psychotherapy, in emergency and crisis care, in the care of psychiatrically ill aged patients, alcoholics, drug dependants and intellectually disabled patients, and in forensic psychiatry.

**Assessment:** Candidates write the final examination of the College of Psychiatrists. The examination comprises three written papers, a clinical examination, an oral examination and an OSCE.

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#### **PRY7009W PSYCHIATRY MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof C Adnams

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in psychiatry. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **PRY7010W CHILD & ADOLES PSYCH MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof PJ de Vries

**Course entry requirements:** None

**Course outline:**

All students are required to produce a minor dissertation under supervision.

(Details about the format and length of such a dissertation are available from the Faculty Office).

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PRY7013W MPHIL IN FORENSIC MENTAL HEALTH PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof S Z Kaliski

**Course entry requirements:** None.

**Course outline:**

General principles of forensic mental health practice; criminal and civil assessments; professional skills development (such as report writing, expert testimony) and ethical considerations.

**DP requirements:** Students are required to attend at least 90% of seminars and academic activities in the Department, and have to obtain a pass mark (50%) in the Part 1 coursework assessments in the first year in order to be eligible to write the Part 1 examination.

**Assessment:** Assessment consists of the following: A three-hour written Part 1 examination.

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**PRY7014W FORENSIC MENTAL HEALTH MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof S Z Kaliski

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length, and must be on a topic in the same discipline of the coursework master's programme in which the candidate is registered. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, design and critically appraise research, make sound judgement using data and information at their disposal, and be able to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** Students will be allowed to submit their dissertations only once they have passed all coursework requirements and the Part 1 examination.

**Assessment:** External examination of the minor dissertation.

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**PRY7016W MPHIL IN ADDICTIONS MENTAL HEALTH PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Dr H Temmingh

**Course entry requirements:** None

**Course outline:**

General principles of addictions mental health practice, pharmacology of substances of abuse, bio-psycho-social management of people with substance abuse, recognition and management of co-morbid conditions, ethical and legal implications, and professional skills development (such as report-writing, therapeutic counselling).

**DP requirements:** Students are required to attend at least 90% of seminars and academic activities related to addiction, complete a logbook of all clinical and academic activities and have to achieve a pass mark of 50% in the Part 1 formative assessments in order to sit the Part 1 examination. They are allowed to submit their dissertations (Part 2) prior to completion of Part 1.

**Assessment:** Continuous assessment of performance through regular supervision sessions and through oral and observed clinical examinations every six months. At the end of the course, candidates will have been assessed formally by means of in-course assessment reports and a three-hour written Part 1 examination.

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**PRY7017W ADDICTIONS MENTAL HEALTH MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convenor:** Dr H Temmingh**Course entry requirements:** None**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in addictions mental health. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgements using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None**Assessment:** External examination of the minor dissertation.

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**PRY7018W MPHIL IN NEUROPSYCHIATRY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof J A Joska**Course entry requirements:** A registerable specialist degree in Psychiatry.**Course outline:**

This training programme forms part of the credentialling process of specialist psychiatrists to become subspecialists in neuropsychiatry. Students follow the relevant curriculum of the College of Psychiatrists of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards PRY7018W. The aim of training is to develop a sound knowledge base of the principles underlying neuropsychiatric practice in relation to neuroanatomy, neurophysiology, neurochemistry and neuropharmacology. The candidate is led to gain first-hand experience of common neuropsychiatric disorders and become competent in their diagnosis and management; and to develop an expertise in the use and interpretation of specialised neuropsychiatric investigations, in particular neuroimaging and neuropsychology. The curriculum includes general principles of clinical neuroscience, theory and practice related to neuropsychiatry/neuropsychiatric syndromes, professional skills development, and ethical aspects such as issues pertaining to curatorship and expert testimony. Areas covered include clinical neuropsychiatry, applied neurology, applied neuropsychology, applied neuro-imaging, psychopharmacology and relevant psycho-legal aspects.

**DP requirements:** At least 18 months' satisfactory full-time training in an accredited neuropsychiatry unit or part-time equivalent; a report from the head of department or neuropsychiatry unit confirming acceptance of the portfolio; and also in neuro-imaging, psychopharmacology and relevant psycho-legal aspects. Students are required to attend at least 90% of seminars and academic activities in the Division to be eligible to write the Part 1 examination.

**Assessment:** Candidates undergo the examination of the Fellowship of Neuropsychiatry of the College of Psychiatrists. Details of this examination are available from the CMSA website. In the College of Psychiatrists examination, there is a written examination and an oral/clinical/practical examination (the clinical/oral/practical may be an OCSE).

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**PRY7019W NEUROPSYCHIATRY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof J A Joska

**Course entry requirements:** Students will be allowed to submit their dissertations only once they have passed all coursework requirements and the Part 1 examination, but are allowed to commence work on the dissertation while completing the coursework.

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant Colleges of Medicine Fellowship in Neuropsychiatry examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in neuropsychiatry. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PRY7020W MPHIL IN LIAISON MENTAL HEALTH PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Assoc Prof J Hoare

**Course entry requirements:** None

**Course outline:**

General principles of liaison mental health practice; clinical assessments; professional skills development (such as report-writing, co-ordination of multidisciplinary teams) and ethical considerations.

**DP requirements:** Students are required to attend at least 90% of seminars and academic activities in the Department, and will have to achieve a pass mark (50%) in the Part 1 coursework assessments in the first year in order to be eligible to write the Part 1 examination.

**Assessment:** Continuous assessment of performance through regular supervision sessions and through oral and observed clinical examinations every six months. At the end of the programme, candidates will have been assessed formally by means of in-course assessment reports and a three-hour written Part 1 examination. Part-time candidates will undergo the same in-course assessment and examination procedures but will be allowed an extra (third) year to complete coursework and dissertation requirements.

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**PRY7021W LIAISON MENTAL HEALTH MINOR DISSERTATION (60**

**CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof J Hoare

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in liaison mental health. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgements using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**PRY7023W MPHIL IN INTELLECTUAL DISABILITY PART 1**

90 NQF credits at HEQSF level 9

**Convener:** Prof C Adnams**Course entry requirements:** None.**Course outline:**

Content includes the following: determinants of intellectual disability; genetic and other syndromes; child development and developmental disabilities; biological aspects of intellectual disability; ageing and lifespan; physical health in intellectual disability; mental health in intellectual disability; bio-behavioural disorders, behavioural phenotypes and social impairment; communication and communication disorders (including autism); cognition in intellectual disability; profound and multiple disability; rights and ethics in intellectual disability; policy and laws in intellectual disability and mental health; forensic issues in intellectual disability psychiatry and mental health; quality of life issues; sexuality issues in intellectual disability; death, dying and bereavement; psychiatric and co-morbid disorders; mood disorders in intellectual disability; central nervous system disorders (including epilepsy, dementia); mental health assessment; cognitive and psychological assessment; special investigations; special issues of diagnosis in intellectual disability and intellectual disability mental health; psychopharmacology; behavioural, psychological and psychotherapeutic interventions; psychosocial rehabilitation; health therapy interventions; advances in neuroscience related to intellectual disability; healthcare policy and service systems; de-institutionalisation; orientation to research in intellectual disability; mental health and other service systems for intellectual disability; setting up an intellectual disability health and mental health service; consultation liaison in intellectual disability; intellectual disability health administration.

**DP requirements:** Students are required to attend at least 90% of seminars and academic activities in the Department, and have to obtain a pass mark (50%) in the Part 1 coursework assessments in the first year in order to be eligible to write the Part 1 examination.

**Assessment:** Assessment consists of: ongoing assessment of performance through regular supervision sessions, and through oral and observed clinical examinations every six months. At the end of the programme candidates will have been assessed formally by means of in-course assessment reports, a three-hour written Part 1 examination, and the presentation. Part-time candidates undergo the same in-course assessment and examination procedures but are allowed an extra (third) year to complete coursework and dissertation requirements.

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**PRY7024W INTELLECTUAL DISABILITY MINOR DISSERTATION (60****CREDITS)**

90 NQF credits at HEQSF level 9

**Convener:** Prof C Adnams**Course entry requirements:** None**Course outline:**

The minor dissertation, prepared under supervision, must be about 25 000 words in length and must be on a topic in intellectual disability. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation.

**DP requirements:** Students will be allowed to submit their dissertations only once they have passed all coursework requirements and the Part 1 examination.

**Assessment:** External examination of the minor dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgement using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences.

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**PRY7027W COUNSELLING & PSYCHOTHERAPY SERVICES DISSERTATION**

180 NQF credits at HEQSF level 9

**Convener:** G Hendricks

**Course entry requirements:** None

**Course outline:**

The aim of this full-research dissertation is to provide students with access to specialised sites of mental health; to research South African and African mental health innovation, interventions and recovery models in public health settings; and to produce research that evaluates mental health interventions being offered at public health settings.

The major dissertation must be a maximum of 50 000 words in length and will reflect the topic in a specialised area. It must be based on the work which the candidate commenced through postgraduate studies. The topic would be clinical and of a standard publishable in a peer reviewed journal. Students are trained in research methodology in conducting literature reviews, and designing research proposals. Having obtained ethics approval, the student will write up the results of their research and complete the dissertation. Students will be encouraged to publish their work.

**Assessment:** External examination of the dissertation. Dissertation 100%.

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## PUBLIC HEALTH AND FAMILY MEDICINE

*Level 4, Falmouth Building South*

**Professor and Head/Director:**

M F Jeebhay, MBChB Natal DOH MPhil (Epi) *Cape Town* MPH (OccMed) PhD *Michigan*

### Environmental Health

*Level 4, Falmouth Building South*

**Associate Professor and Head:**

H-A Rother, BA MA PhD *Michigan*

**Visiting Professors:**

K Ahmed, BSc MSc *Karachi* BS PhD *Minnesota*

T Arcury, BA *Duquesne* MA PhD *Kentucky*

S Quandt, BA *Lawrence* MA PhD *Michigan*

**Associate Professor:**

A Dalvie, BSc BSc(Med)(Hons) MSc(Med) PhD *Cape Town*

**Senior Lecturer Full-time:**

J Irlam, BSc(Med)(Hons) MPhil *Cape Town* (Joint School-Directorate of Primary Healthcare appointment)

**Honorary Senior Lecturer:**

G Manuweera, BSc MPhil *Peradeniya* PhD *Missouri*

### Epidemiology and Biostatistics

*Level 5, Falmouth Building South*

**Professor and Head:**

L Myer, BA Brown MA MBChB *Cape Town* MPhil PhD *Columbia*

**Honorary Professors:**

D Bradshaw, BSc *KwaZulu-Natal* MSc *Cape Town* PhD *Oxon*

J McIntyre, MBChB *Zimbabwe* FRCOG

T Rehle, MD *Munich* MPH *London* PhD *Antwerp*

**Visiting Professor:**

M Egger, MD *Bern* FFPH MSc *London* DTM&H *Basel*

**Senior Lecturer:**

M Lesosky, BSc MSc PhD *Guelph*

**Honorary Senior Lecturers:**

N Ford, BSc *Warwick* DHA *Liverpool* MPH *Cape Town* PhD *Simon Fraser*

T Tucker, MBChB PhD *Cape Town*

**Lecturer:**

J Ramjith, BSc MSc *UKZN*

**Senior Research Officer Part-time:**

A Cois, BSc MSc *Caligari MPH Cape Town*

**Research Fellows:**

K Brittain, BSc *KwaZulu-Natal MPH Cape Town*

N Langwenya, BSc *York MPH Cape Town*

T Phillips, BSc *Johannesburg MPH Cape Town*

**Family Medicine**

*Level 2, Falmouth Building South*

**Associate Professor and Head:**

D Hellenberg, MBChB *Cape Town MFamMed Stell FCFP SA Certificate in Policy, Planning and Management for Health Sector Reform (COPHE) UWC ACLS*

**Honorary Professor:**

R Harding, PhD *Public Health Kings College London*

**Visiting Professor**

M H Cassimjee, LLMRCP and LLMRCS *Ireland MPrax Med UKZN FCFP SA BMedSci (Hon) UDW DipHealthServiceManagement UKZN*

**Senior Lecturers Full-time:**

G Bresick, MBChB MPH *Cape Town DCH SA*

A de Sa, MBChB *Cape Town MCFP SA*

E de Vries, MBChB *Stell MFamMed Medunsa FCFP SA*

A Isaacs, MBChB *Cape Town MFamMed Stell*

R Krause, MBChB MFamMed *UOFS MPhil (Palliative Medicine) Cape Town PGDipHealthProfessionalEduc Cape Town*

L Morales Perez, MBChB MMed Family Medicine *Stell PGDipHealthProfessionalsEduc Cape Town*

T Motsohi, MBChB MFamMed *DipFamMed Cape Town*

M Namane, MBChB MPhil (FamMed and PHC) *Cape Town BSc (LabSciences) MSc (Immunology) UNIN CertCommRheum Pret MSc (MedSci) (ClinEpi) Stell*

T Ras, MBChB *Cape Town MFamMed Cape Town MFGP SA*

B Schweitzer, MBChB *Witwatersrand DA MFGP SA MPraxMed Medunsa*

**Senior Lecturer Part-time:**

E Gwyther, MBChB *MFGP Cape Town DipPallMed MSc (PallMed) Wales*

**Lecturers Full-time:**

N Beckett, BSc MBChB *Stell DipFamMed Cape Town SAFRI Fellow (SA)*

L Ganca, BASocSc(Hons) (Social Work) MPhil (PallMed) *Cape Town DipSecEd Transkei PGDipHealthProfessionalsEduc Cape Town*

N Parker, MBChB *Cape Town*

**Lecturers Part-time:**

A J Barnard, MBChB *Dip Anaes MFGP SA MPhil (PallMed) Cape Town*

F Begg, MBChB *Cape Town*

C Bruce, MBChB *LMCC Dip Pall Med SA MPhil (PallMed) Cape Town*

C Chouler, MBChB *Cape Town FCFP SA*

M Meiring, MBChB *Pret FCPaeds SA MMed(Paeds) Witwatersrand*

M Navsa, MBChB *MPhil (FamMed and PHC) Cape Town*

M S Saban, MBChB *Cape Town* MFamMed *Stell* FCFP *SA*

**Honorary Lecturers:**

S Craven, MBChB *Oxon* LRCP  
 J Dhansay, MBChB MFGP *SA* DPT&M *Witwatersrand*  
 G Petros, PhD CertAdEd NatDip (Public Health) MPH *Cape Town*

**Facilitators:**

S Bhagwan, MBChB *Natal*  
 U Breytenbach, MBChB *Cape Town*  
 J Durandt, MBChB *Cape Town*  
 R Jacobs, MBChB *Cape Town*  
 M A Jardine, MBChB *Cape Town*  
 D Klemp, MBChB *Cape Town*  
 J Makan, MBChB Dip Pall Med *Cape Town*  
 D Petit, MBChB *Cape Town*  
 M A Potts MBCB *Cape Town*  
 A Smith, MBChB PGDipFamMed *Cape Town*  
 S Snyders-Hermann MBChB *Cape Town*  
 S Sonday, MBChB *Cape Town* MRCGP UK MMed *Warwick*  
 J Taite, MBChB *Cape Town*  
 F Yasin, MBChB *Cape Town*

**Registrars:**

A C Anele  
 T Aronsun  
 T N Eziohuru  
 O Fayantu  
 D Huang  
 B Machina  
 L McCrindle  
 A Nya  
 S I Ohiagu  
 N Snyders  
 S Sobamowo  
 T Sobamowo

## Health Economics

*Falmouth Annex*

**Associate Professor and Head:**

E Sinanovic, BSc (Econ) *Zagreb* DipFinMgt *Maastricht* MCom (HealthEcon) *Cape Town*  
 PhD (Health Econ) *London*

**Professor:**

D McIntyre, BCom(Hons)(Econ) MA (Econ) PhD *Cape Town*

**Associate Professor:**

S Cleary, BA *Grahamstown* BA(Hons) (Econ) MA (Econ) PhD *Cape Town*

**Senior Lecturers:**

J E Ataguba, BSc (Econ) *Nigeria* MPH (HealthEcon) PhD (Economics) *Cape Town*  
 O A Alaba, BSc (Econ) MSc (Econ) PhD (Econ) *Ibadan*  
 A Honda, BA (Sociology) MSc (IntHealth) *Tokyo* PhD (HealthEcon) *London*

**Lecturer:**

M Orgill, BAdmin (Econ&PubAdmin) BAdmin(Hons)(Econ) MPhil (PubPolicy) *Cape Town*

**Health Policy and Systems**

*Level 1, Falmouth Building South*

**Professor and Head:**

L Gilson, BA(Hons) *Oxon MA East Anglia PhD London*

**Honorary Professors:**

U Lehmann, PhD *Hanover*

H Schneider, MBChB *Cape Town DCH DTMH MMed (Public Health) Witwatersrand*

**Senior Lecturer:**

M Shung King, MBChB *Westville DPhil (SocPolicy) Oxon*

**Senior Lecturer and Research Coordinator:**

J Olivier, PhD *Cape Town*

**Honorary Senior Lecturer:**

K Daniels, BA (Hons) *Cape Town MPH Cape Town DrPH Nordic School of Public Health*

**Junior Research Fellow:**

L Brady, MBChB *Pret MPH London*

E Whyle, BA (Hons) MA *Witwatersrand MPH Cape Town*

**Honorary Senior Research Associate Emeritus:**

J Cochrane, BSc (Chemistry) PhD *Cape Town MDivinity Chicago*

**Honorary Research Associate:**

R English, MBChB *Cape Town*

**Occupational Medicine**

*Level 4, Falmouth Building South*

**Professor and Head:**

\*M F Jeebhay, MBChB *Natal DOH MPhil (Epi) Cape Town MPH (OccMed) PhD Michigan*

**Emeritus Professor and Senior Scholar:**

R Ehrlich, BBusSc MBChB PhD *Cape Town DOH Witwatersrand FFCH FCPHM (OccMed) SA*

**Emeritus Professor:**

G Todd, BSc(Agric) *UKZN MBChB PhD Cape Town FCDerm SA*

**Honorary Professor:**

G J Churchyard, MBChB MMed (IntlMed) PhD *Witwatersrand FCPSA*

**Senior Lecturer:**

\*S Adams, MBChB DOH MMed PhD *Cape Town MFamMed Stell FCPHM (OccMed) SA*

**Honorary Senior Lecturers:**

S Kisting, MBChB DOH *Cape Town MFamMed Witwatersrand MCFP SA*

S Manjra, MBChB *Natal MMedSc (OccHealth) Birmingham BSc(Med)(Hons) DOH Cape Town*

A Raynal, MBChB *Cape Town* MSc *LSHTM* MPH MfOM *UK*  
 J te WaterNaude, MBChB MPhil *Cape Town* FCPHM *SA*  
 J van Zyl, MBChB MMed DipMed DipOccHealth *Stell FAADEP CIME USA FCPHM SA*

**Lecturer Part-Time:**

A D H Burdzik, MBChB MMed *Cape Town* DipOccMed *UK FCPHM (Occ Med) SA*

**Honorary Lecturers:**

D Knight, MBChB MMed *Cape Town*  
 A van der Walt, DipMidw *SA* DOH MPhil *Cape Town*  
 H Williams, MBChB DOH MMed *Cape Town* FCPHM (OccMed) *SA*

**Registrars:**

F Al Badri  
 B Cloete  
 V Faruk  
 D Ngajilo  
 N van de Water

\*Joint appointment with Department of Medicine

**Public Health Medicine**

*Levels 2 and 4, Falmouth Building South*

**Professor and Head:**

L London, MBChB MMed MD *Cape Town* BSc(Med)(Hons) *Stell DOH Witwatersrand FCPHM SA*

**Honorary Professors:**

T Rehle, MD *Munich* MPH *LSHTM* PhD *Antwerp*  
 W Pick, MBChB MMed *Cape Town* DPH DTM&H *Witwatersrand FFCH SA*

**Visiting Professors:**

L Baldwin-Ragaven, AB *USA* MDCM CCFP FCFP *Quebec*  
 F Coomans, PhD *Maastricht* MA (Human Rights) *Italy*  
 S Whittaker, MBChB MMed PhD *Cape Town* FFCH *SA*

**Associate Professors:**

A Boulle, MBChB PhD *Cape Town* MSc *London* FCPHM *SA*  
 D Coetzee, BA *Cape Town* MBChB DPH DTM&H DOH *Witwatersrand FFCH SA* MSc(Epi)  
*Columbia*

**Associate Professor Part-time:**

G Perez, BDentistry *Algiers* DHSM MDent (CommDentistry) *Witwatersrand* (Deputy Dean;  
 Joint Faculty Department appointment)

**Honorary Associate Professors:**

L Bourne, BSc(Dietetics) *UKZN* BSc(Med)(Hons) MSc(Med) PhD MPH *Cape Town*  
 N Morojele, PhD *Kent*

**Senior Lecturers Full-time:**

J Irlam, BSc(Med)(Hons) MPhil *Cape Town* (Joint School-Directorate of Primary Healthcare  
 appointment)  
 N Jacob MBChB MMed *Cape Town* FCPHM *SA*  
 L Olckers, MPhil (Ed) (Higher Education Studies) BSocSc (SocWrk)(Hons) *Cape Town*

T Oni, BSc *London* MB BS *UCL* MPH MMed *Cape Town* MD (Res) *Imperial College London*  
MRCP DFPH *UK* FCPHM *SA*

V Zweigenthal, BSc DTM&H DPH *Witwatersrand* BSocSc(Hons) MBChB PhD *Cape Town*  
FCPHM *SA*

**Honorary Senior Lecturers:**

E Goemare, MSc MD DTMH *Belgium* DSc hc. *Cape Town*

T Hawkridge, MBChB FCPHM *Cape Town* DTM&H MSc (Med) *Witwatersrand*

S Moyo, MBChB MPH Dip MSHS PhD

T Naledi, MBChB *Cape Town* FCPHM

D Pienaar, MBChB MMed *Cape Town*

M Stuttaford, PhD *UK*

**Lecturers Full-time:**

F Amien, BChD MChD (CommDentistry) *Cape Town*

I Datay, MBChB *Cape Town* DPhil *Oxon* (Joint School-Directorate of Primary Healthcare  
appointment)

S Toto BSc(OT) *Cape Town*

**Lecturer Part-time:**

R Morar, MBChB *Natal* DHMEF MMed (CommH) *Cape Town* FCPHM *SA* (Deputy Dean; Joint  
Faculty-Department appointment)

**Honorary Lecturers:**

G Denicker, MSc *Oxford* BChD *UWC*

J Evans, PhD BSc(Med)(Hons) BSc Physiology *Cape Town*

**Senior Research Officer:**

T Boulle, BSc(OccTher) MPH *UWC*

**Research Officers:**

H Haricharan, MA (SocAnthrop) *Cape Town* MJournalism *Canada*

M Heap, PhD *Cape Town*

**Medical Natural Scientist:**

N Zinyakatira, BSc(Hons) Statistics *Zimbabwe* MPhil (Demog) CertProjMgt *Cape Town*

**Honorary Research Associates:**

T Alfaro-Velkamp, PhD MA *Georgetown*, MSc *London*, BA *California*

N Harker-Burnhams, PhD *Cape Town*, BA Honours Social Sciences MPhil in Health and Welfare  
Management *UPE*

R Matzopoulos, BBusSci MPhil (Epi) PhD *Cape Town*

D Michaels, PhD *Cape Town*, MSc Epidemiology *Columbia*, MPhil (Maternal and Child Health)  
BSocSci *Cape Town*

CJ Seebregts, PhD BSc(Hons) Medical Biochemistry, BSc(Hons) Software Eng., BSc Physiology,  
Dip Comp Sci, *Cape Town*

**Facilitators:**

T Abrahams, MPhil (Social Work)

D Aldera, BSocSci *Cape Town*

R Banoobhai, BA (Hons) *Natal*

M Botsis, BA *Rhodes* Dip (HE) *Stell*

F Cassim, BSc (Occ Therapy) *Cape Town*

M Chinaka, BSocSci(Hons) *Cape Town*

G Cook, BSc (Hons) Psych UK Dip (Careers Guidance) *Kent*  
 S Cotton, PhD *Cape Town*  
 K Fataar, BSocSci (Hons) *Cape Town*  
 D Grey, BSoc Sci *Cape Town*  
 P Hoffman, BSocSci (Hons) (SocWrk) *Cape Town*  
 J Jayakumar, PhD *Cape Town*  
 H Katito, MSocSci, (Clinical Social Work) *Cape Town*  
 L Khalema, BA (Psychol) *Cape Town*  
 M Limikatso BSc (Physiotherapy) *Cape Town*  
 L Louiskieter, BSocSci (Hons) *Cape Town*  
 H McGlead, BA *Cape Town*  
 C Ohajunwa, MPhil (Disability Studies) *Cape Town*  
 A Parker, BA(Hons) *Cape Town*  
 G Pienaar, MSc (Applied Forensic Psychol) *York* BA(Hons) Psych *UNISA*

**Registrars:**

K Bobrow  
 Z Mgugudo-Sello  
 T Mosedi  
 L Mureithi  
 S Peters  
 A von Delft  
 G Ward

**Social and Behavioural Sciences**

*Level 3, Falmouth Building South*

**Associate Professor and Head:**

C Colvin, BA *Virginia Tech* MA PhD *Virginia* MPH *Cape Town*

**Honorary Professor:**

D Cooper, BSocSci BA(Hons) PhD *Cape Town*

**Visiting Professor:**

S Gutmacher, MPhil PhD *Columbia*

**Associate Professor:**

J Harries, BA(Hons) MPhil MPH PhD *Cape Town*

**Honorary Associate Professors:**

A Harrison, BA *Penn* MA MPH *Johns Hopkins* PhD *LSHTM*  
 M Lurie, PhD *Johns Hopkins* MA *Florida* BA *Boston*  
 C Mathews, BA *UKZN* BSocSci(Hons) MSc (ComHealth) PhD *Cape Town*

**Honorary Senior Lecturers:**

C Morroni, MPhil MBChB *Cape Town* PhD (Epi) *Columbia* DTM&H *LSHTM* DFSRH  
 D Peacock, BA(Hons) *California* MA (SocWrk) *San Francisco*

**Lecturer:**

A Swartz, BSocSci BA(Hons) MPH *Cape Town*

**Honorary Research Associates:**

E Stern, MPH PhD *Cape Town*  
 E Venables, PhD *Edinburgh*

## COURSES OFFERED

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### **PPH4004F PRINCIPLES OF FAMILY MEDICINE**

16 NQF credits at HEQSF level 8; 16 x 1.5hr sessions conducted over 8 Wednesday afternoons which include site/practice visits and learning activities..

**Convener:** Dr G Bresick and Dr M Navsa

**Course entry requirements:** None

**Course outline:**

This course includes the foundations of family medicine; applying a bio-psycho-social approach; promotive and preventive care; and the range of consultation skills needed for effective and primary care including basic counselling skills and brief motivational interviewing/behavior change counselling. The course aims to help practitioners put theory into practice using learning techniques that include role-playing and reviewing video-taped consultations of clinical practices in a supportive group setting. Successful completion of the course enables graduates to practice cost-effective primary care by applying the principles of family medicine, communicating effectively, and building therapeutic doctor-patient relationships with a variety of patients. Graduates are more aware of personal strengths and limitations in the context of therapeutic relationships and are able to identify and address stressors to prevent burnout.

**DP requirements:** Students are expected to attend and participate in all seminars, record and observe at least one consultation, and take part in practical sessions where these apply.

**Assessment:** Assignments on the application of the principles of family medicine (100%).

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### **PPH4005S EVIDENCE-BASED MEDICINE**

13 NQF credits at HEQSF level 8

**Convener:** J Irlam

**Course entry requirements:** None

**Course outline:**

This course aims to enable practitioners to define practice-based clinical questions, search for and access relevant literature, and appraise the applicability of the evidence to their practice situations. Tools to understand and assess the results of systematic reviews are taught. Questions such as those related to interventions, diagnostic and screening tests, and prognoses are addressed. The course provides hands-on practice; examples of evidence-based articles are reviewed in the sessions.

**DP requirements:** Students are required to attend and participate in all seminars.

**Assessment:** Presenting a critical appraisal of a scientific paper addressing a question derived from the student's practice (100%).

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### **PPH4006S CLINICAL MEDICINE (A)**

21 NQF credits at HEQSF level 8

**Convener:** Dr B Schweitzer

**Course entry requirements:** None

**Course outline:**

Aspects of clinical medicine related to primary care including ENT, ophthalmology, orthopaedics, and minor surgical procedures are learned by means of seminars and practical sessions. Most clinical learning occurs during everyday healthcare practice. Students are expected to address their own learning needs identified in daily practice, the course material and seminars. Contact sessions serve mainly to stimulate learning; computer-based quizzes help identify gaps in knowledge. Attendance at specific specialist clinics can be arranged.

**DP requirements:** Students are required to attend and participate in all seminars and take part in practical sessions.

**Assessment:** Computer-based examination (100%).

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**PPH4007S ETHICS**

12 NQF credits at HEQSF level 8

**Convenor:** Dr M Navsa and Dr B Schweitzer**Course entry requirements:** None**Course outline:**

The ethics course includes the study of a number of ethical theories, human rights issues, professionalism, and legal issues as these relate to health care. Approaches to ethical issues are discussed as they relate to primary care including child health, mental illness, HIV, reproductive and end-of-life care.

**DP requirements:** Students are required to attend and participate actively in all seminars.**Assessment:** Assignment (100%).

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**PPH4011S CLINICAL MEDICINE (B)**

18 NQF credits at HEQSF level 8

**Convenor:** Dr B Schweitzer**Course entry requirements:** None**Course outline:**

Aspects of clinical medicine, including women's health, mental health, HIV, TB, STI and pharmacology are covered in seminars and practical sessions. It is not possible to cover all aspects of clinical medicine in contact time available; students are expected to address their own learning needs identified in daily clinical practice, the course material and seminars etc. Attendance at specific specialist clinics can be arranged.

**DP requirements:** Students are required to attend and participate in all seminars and take part in practical sessions.**Assessment:** Computer-based examination (100%).

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**PPH4018F INTRODUCTION TO HEALTH ECONOMICS**

15 NQF credits at HEQSF level 8

**Convenor:** Dr O Alaba**Course entry requirements:** None**Course outline:**

The course aims to give students an introduction to the scope and content of the sub-discipline of health economics, and to explain the reasons why healthcare differs from other commodities and the basis of market failure in healthcare. The following topics are covered: The scope of health economics, healthcare demand, healthcare supply, market failure, medical ethics and efficiency, and equity.

**DP requirements:** Submission of coursework by the due dates.**Assessment:** Two assignments, each counting 50% towards the final course mark.

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**PPH4019F THE ECONOMICS OF HEALTH SYSTEMS**

15 NQF credits at HEQSF level 8

**Convenor:** M Orgill**Course entry requirements:** None**Course outline:**

The course aims to assist students with an understanding of health systems, different forms of organisation and financing of healthcare systems, and to outline the key elements of strategic purchasing. The following topics are covered: introduction to health systems, universal health coverage goals, overview of healthcare financing functions (revenue collection, pooling and purchasing), key issues in revenue collection and risk pooling to promote equity, efficiency and sustainability, key elements of strategic purchasing, and introduction to importance of economic evaluation and health technology assessment in strategic purchasing.

**DP requirements:** Submission of coursework by the due dates.**Assessment:** Two assignments, each counting 50% towards the final course mark.

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**PPH4020S PRIORITY SETTING AND HEALTHCARE DECISION-MAKING**

15 NQF credits at HEQSF level 8

**Convener:** N Foster

**Course entry requirements:** None

**Course outline:**

This course aims to provide students with an overview of the economic and other approaches to priority setting for healthcare decision-making, in terms of both efficiency and equity. The following topics are covered: review of priority setting, the use of economic evaluation in healthcare decision-making, budget impact analysis in economic evaluation, programme budgeting and marginal analysis, burden of disease and priority setting, and equity implications for decision-making.

**DP requirements:** Submission of coursework by the due dates.

**Assessment:** Two assignments, each counting 50% towards the final course mark.

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**PPH4021S KEY FEATURES OF ECONOMIC EVALUATION**

15 NQF credits at HEQSF level 8

**Convener:** L Cunnama

**Course entry requirements:** PPH4020S

**Course outline:**

The course aims to provide students with an understanding of the concepts, methods and application of economic evaluation in health related interventions. Topics covered include principles of economic evaluation, different techniques of economics evaluation, key issues in costing and measuring health outcomes.

**DP requirements:** Submission of coursework by the due dates.

**Assessment:** Two assignments, each counting 50% towards the final course mark.

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**PPH4022F ECONOMIC EVALUATION FOR HEALTHCARE DECISION-MAKING**

15 NQF credits at HEQSF level 8

**Convener:** Assoc Prof E Sinanovic

**Course entry requirements:** PPH4020S; PPH4021S

**Course outline:**

The course aims to equip students with the skills to interpret the cost-effectiveness ratios and to critique articles from the literature. The following topics are covered: evidence-based medicine, decision analysis models in economic evaluations, interpretation of cost-effectiveness ratios, alternative methods for handling uncertainty, pros and cons of the reference case, and case study.

**DP requirements:** Submission of coursework by the due dates.

**Assessment:** Two assignments, each counting 50% towards the final course mark.

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**PPH4023F STRATEGIC PURCHASING 1**

15 NQF credits at HEQSF level 8

**Convener:** Dr A Honda

**Course entry requirements:** PPH4019F

**Course outline:**

The course aims to give students an overview of the key strategic purchasing actions in relation to both populations served and health care providers. The following topics are covered: Determining health service entitlements, identifying appropriate health care providers, taking action to promote service access, and establishing contracts or service agreements with providers.

**DP requirements:** Submission of coursework by the due dates.

**Assessment:** Two assignments, each counting 50% towards the final course mark.

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**PPH4024S STRATEGIC PURCHASING 2 – INFLUENCING PROVIDERS**

15 NQF credits at HEQSF level 8

**Convener:** Dr A Honda**Course entry requirements:** PPH4019F; PPH4023F**Course outline:**

The course aims to provide students with an understanding of the provider payment methods and other mechanisms that encourage providers to enhance and maintain service quality and efficiency. The following topics are covered: standard treatment guidelines and formularies for medicines and medical supplies, provider payment mechanisms, monitoring provider performance (particularly quality and service availability), requirements for information from providers, feedback from citizens, and balance of power between purchaser(s) and providers.

**DP requirements:** Submission of coursework by the due dates.**Assessment:** Two assignments, each counting 50% towards the final course mark.

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**PPH4025S STRENGTHENING PROGRESS TO UNIVERSAL COVERAGE**

15 NQF credits at HEQSF level 8

**Convener:** Dr J Ataguba**Course entry requirements:** PPH4019F; PPH4023F; PPH4024S**Course outline:**

The course aims to provide students with an overview of other actions required to promote universal coverage, and to review existing international experience of priority setting and strategic purchasing. The following topics are covered: enhancing transparency and accountability: governance of key health system organisations, main issues in promoting financial risk protection, key issues in ensuring access to effective, quality health services, and case studies of international experience with priority setting and strategic purchasing.

**DP requirements:** Submission of coursework by the due dates.**Assessment:** Two assignments, each counting 50% towards the final course mark.

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**PPH4028F CHILD AND FAMILY HEALTH**

20 NQF credits at HEQSF level 8

**Convener:** Dr M Navsa and Dr B Schweitzer**Course entry requirements:** None**Course outline:**

The course integrates 3 components: clinical paediatrics and child health; human development from birth to middle years; and family-oriented primary care. Most of the seminars and discussions of child development and family-oriented care take place online and are based largely on the course material e.g. readings and role-plays.

**DP requirements:** Students are required to attend and participate in all seminars and online discussions, and to take part in practical sessions.**Assessment:** Clinical examination (25%); discussions (25%); assignment on family-oriented primary care (25%); computer-based examination (25%).

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**PPH4029H PREVENTION & PROMOTION OF CHRONIC ILLNESS**

21 NQF credits at HEQSF level 8

**Convener:** Dr M Navsa and Dr B Schweitzer**Course entry requirements:** None**Course outline:**

This course focusses on the management of patients with common chronic conditions including cardiovascular, respiratory and musculoskeletal conditions, addressing clinical, preventive and promotive aspects of healthcare, and includes seminars on rehabilitation. Students are required to conduct an audit of an aspect of chronic disease care in their own practices. At the end of this course students are able to describe current theories of disease prevention and health promotion; implement a quality improvement cycle in practice to improve the quality of care; promote health

and prevent disease for a chronic condition, diagnose and manage patients with common chronic medical conditions (cardiovascular, respiratory, rheumatologic, geriatric, diabetes, neoplastic) using the principles of family medicine and understand the principles of providing care for patients with chronic diseases; describe the principles of ageing and caring for the elderly; manage common clinical problems in the elderly; describe the principles of rehabilitation and perform a functional assessment of a patient (assignment); manage patients with common disabilities and impairments; and describe the importance of the doctor-patient relationship in chronic care.

**DP requirements:** Students are required to attend and participate in all seminars, take part in practical sessions, and a visit to a rehabilitation center.

**Assessment:** QI cycle presentation (40%); assignment on rehabilitation (20%); end-of-course MCQ (multiple choice questions) examination (40%).

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#### **PPH4030S CLINICAL PALLIATIVE CARE**

60 NQF credits at HEQSF level 8

**Convener:** Dr Z Jaffer

**Course entry requirements:** None

**Course outline:**

The aim of this course is to equip experienced clinicians with the knowledge and skills for the practical management of patients with incurable and terminal illness, including advanced cancer, HIV/AIDS and end-stage disease, organ failure, and progressive neurological disorders. It focuses on disease management and symptom control. These topics are explored through interactive workshops and focused readings supported by web-based learning, and students are encouraged to apply their learning in the context of their own work setting.

**DP requirements:** Attendance at contact workshops and successful completion of assignments.

**Assessment:** Continuous coursework assessment contributes 75% of the final mark, with three written assignments (50%) and a portfolio of learning (25%). The final summative assessment comprises a written examination (25%). A pass mark of 50% is required in both the coursework and the final summative assessment. The external examiner has the authority to allocate final marks.

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#### **PPH4031S PAEDIATRIC PALLIATIVE CARE**

60 NQF credits at HEQSF level 8

**Convener:** Dr M Meiring

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of this course is to equip palliative care professionals with the knowledge and skills for the practical management of children with life-limiting conditions. It focuses on clinical, psychosocial and spiritual supportive care in the context of the family. These topics are explored through interactive workshops and focused readings, supported by web-based learning, and students are encouraged to apply their learning in the context of their own work setting.

**DP requirements:** Attendance at contact workshops, and successful completion of assignments.

**Assessment:** Formative assessment contributes 75% of the final mark, with three written assignments (50%) and a portfolio of learning (25%). Summative assessment comprises a written examination (25%). A pass mark of 50% is required in each component of the assessment. The external examiner has the authority to allocate final marks.

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#### **PPH4032H PALLIATIVE CARE PRINCIPLES**

60 NQF credits at HEQSF level 8

**Convener:** Dr L Gwyther

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of this course is to introduce students to the principles and ethics of palliative care. The course covers concepts that support patient-centred holistic care in the family context including communication skills; clinical, psychosocial and spiritual supportive care; human rights; and ethics of end-of-life care. These concepts are introduced through interactive workshops and focused readings supported by web-based learning, and students are encouraged to apply their learning in the context of their own work setting.

**DP requirements:** Attendance at contact workshops and successful completion of assignments.

**Assessment:** Continuous coursework assessment contributes 50% of the final mark, with five written assignments counting 40%. Forum participation contributes to 10% each semester. The final summative assessment includes a written examination (25%) and communication skills assessment (25%). A pass mark of 50% is required in the coursework and in the final assessment components respectively. The external examiner has the authority to allocate final marks.

**PPH4033F/S PESTICIDE RISK MANAGEMENT**

20 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof H-A Rother

**Course entry requirements:** None

**Course outline:**

Five one-week modules introduce students to the Code, a life-cycle analysis approach, pesticide policy, a legal framework for pesticides, international conventions, and how to regulate vulnerable populations and complex use environments. The central management philosophy taught in this course is to regulate, control and monitor pesticides through a holistic life-cycle approach (from the beginning until the end of a product's life). Students will be introduced to the basic principles of risk, risk assessment, highly hazardous pesticides, ethical pesticide policies, a situation and gap analysis, pesticide management, risk reduction policies, five international agreements (Basel, Stockholm and Rotterdam Conventions, the Code and SAICM), compliance with international commitments and standards, registration issues, pesticide governance, implementation of pesticide legislation, the incorporation of vulnerability into the registration process, and how to design a life-cycle management strategy for a particular pesticide. At the end of the course, students will have developed an approach to critically analyse pesticide policies and the registration process in order to promote effective regulatory implementation in varying pesticide use contexts (e.g. different climates, populations, legal structures).

**DP requirements:** Attendance at on-campus teaching blocks, successful completion of web-based forums, and submission of all assignments by the due date (late penalties apply).

**Assessment:** Continuous coursework assessment consists of written assignments, tests, assessment of participation in bi-monthly web-based seminars, and written web-based forum assignments, and contributes 60% towards the final mark. A final summative examination or written assignment counts 40% towards the final mark. A student failing to obtain 50% will have one opportunity to rewrite the examination or assignment.

**PPH4034F/S HEALTH AND SAFETY MANAGEMENT**

20 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof H-A Rother

**Course entry requirements:** None

**Course outline:**

The course provides students with the technical knowledge base and skills to regulate and manage the acute and chronic health effects associated with exposure to pesticides. To promote this understanding, students receive training in the basic chemistry of pesticides and how to interpret the WHO and GHS hazard classification systems. An introduction to pesticide toxicology, pesticide epidemiology, and the principles of risk and hazard assessment provides the technical skills and knowledge base to evaluate the quantitative human risk assessment data in pesticide dossiers. The health consequences of pesticide exposure are covered through an understanding of exposure pathways and multiple exposures, as well as endocrine disruption, neurotoxicity, genotoxicity,

immunotoxicity (vital for countries with high immune-compromised populations), and reproductive effects. The course also covers ways to interpret strength-of-association in epidemiological studies and to critically appraise pesticide health literature. Students learn how to assess human risk assessment data submitted as a part of a pesticide dossier, and the application of the Code and life-cycle approach to health risk assessment.

**DP requirements:** Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply).

**Assessment:** Continuous coursework assessment consists of written assignments, tests, assessment of participation in bi-monthly web-based seminars and written web-based forum assignments, and contributes 60% towards the final mark. A final summative examination or written assignment counts 40% towards the course mark. A student failing to obtain 50% has one opportunity to rewrite the examination or assignment.

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#### **PPH4035F/S MANAGEMENT OF ENVIRONMENTAL RISK**

20 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof H-A Rother

**Course outline:**

This course provides students with an understanding of the principles of environmental risk assessment as used in the pesticide registration process (e.g. predicting environmental concentrations and toxic effects, quantifying risk, tiered assessments); differences between (pre-registration) pesticide risk assessment and (post-registration) pesticide impact studies, and the types of impact a pesticide may have (e.g. effects on organisms, environmental contamination, biodiversity, ecosystem services, agronomic productivity, disease vector control); environmental protection goals (determining what needs to be protected and to what extent); linkages with environmental legislation and policy; harmonisation and environmental governance; approaches to the assessment of (potential) environmental impact of a pesticide after its introduction for use in a country (e.g. environmental monitoring, incident reporting); how basic chemistry of pesticides influences their properties, environmental fate and persistence; the assessment of pesticide contamination – basic methodology; sampling for pesticide residues (e.g. methods for organisms, soils, water); the influence of temperature and other environmental parameters on the environmental fate and persistence of pesticides; the principles of ecotoxicology with reference to pesticide use; impacts at organism, population and community levels of organisation and how ecotoxicology is used in risk assessments and for the formulation of pesticide policy and registration; the use of risk assessment data in the decision-making process, how a risk management component is added, and measures to mitigate and reduce risk; the principles and varied methodologies for assessing pesticide impacts in the field; how pesticides affect non-target organisms and how this can lead to pest resurgence; and how to develop a pesticide resistance management programme.

**DP requirements:** Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply).

**Assessment:** Continuous coursework assessment consists of written assignments, tests, assessment of participation in bi-monthly web-based seminars and written web-based forum assignments, and contributes 60% towards the final mark. A final summative examination or written assignment counts 40% towards the course mark. A student failing to obtain 50% has one opportunity to rewrite the examination or assignment.

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#### **PPH4040F/S CONTAINERS & CONTAMINATED SITE MANAGEMENT**

20 NQF credits at HEQSF level 8

**Convenor:** R Thompson (FAO)

**Course outline:**

The course introduces the student to systems for the scoping of project components related to contaminated site assessment and management of pesticide containers (legacy stockpiles and new wastes). The course then progresses to the development of operational plans for the implementation of container and contaminated site assessments, leading to development of site-specific environmental management plans and remediation strategies. With regard to container

management, the course makes the distinction between the development and implementation of strategies for addressing existing stockpiles of contaminated materials and the need to develop sustainable container management programmes for the future. The student is required to demonstrate competence in the development of operational plans for a series of case-study contaminated sites, and to develop container management strategies based on a series of hypothetical situations. The student is also required to look to maximise local treatment of all materials based on assessments of national capacities and the application of international best practice/standards for treatment under local conditions.

**DP requirements:** Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply).

**Assessment:** Continuous coursework assessment consists of written assignments, tests, assessment of participation in bi-monthly web-based seminars and written web-based forum assignments, and contributes 60% towards the final mark. A final summative examination or written assignment counts 40% towards the final mark. A student failing to obtain 50% has one opportunity to rewrite the examination or assignment.

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### **PPH4041F/S CHEMICAL CONVENTIONS**

20 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof H-A Rother

**Course outline:**

This course aims to provide students with an in-depth knowledge of the various international chemical conventions and agreements, and their relevance to managing the risks associated with pesticides. These include the Code, the Stockholm Convention, the Rotterdam Convention, the Strategic Approach to International Chemicals Management (SAICM), and the Basel Convention. By the end of the course, students are able to describe the detailed requirements of different conventions at each stage in the pesticide life-cycle and relate them to national legislation to regulate pesticides, understand how chemical conventions can be implemented at local level in a systematic and synergistic way, critically appraise their own national legislation and assess its compliance with international convention requirements, and identify and use existing information resources about conventions and international initiatives.

**DP requirements:** Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply).

**Assessment:** Continuous coursework assessment consists of written assignments, tests, assessment of participation in bi-monthly web-based seminars and written web-based forum assignments, and contributes 60% towards the final mark. A final summative examination or written assignment counts 40% towards the final mark. A student failing to obtain 50% has one opportunity to rewrite the examination or assignment.

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### **PPH4042F/S PUBLIC HEALTH AND PESTICIDES**

20 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof H-A Rother

**Course outline:**

This course provides the student with the skills for managing public health pest problems and for implementing effective control strategies (e.g. integrated vector management [IVM]) through the life-cycle approach, alternatives, and cost-effective approaches. Students examine the World Health Organisation (WHO) models for evaluating and testing pesticides to be used in public health, along with the WHO's strategies, policies and guidelines for using pesticides in public health. On completion of the course, students have knowledge of a holistic approach to public health vectors and disease management; basic vector ecology and biology for major diseases; WHO global framework for IVM; IVM for malaria; IVM for nuisance pest control; and how to integrate public health pesticides legislation, develop a reporting system, and assure efficacy and compliance with international conventions.

**DP requirements:** Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply).

**Assessment:** Continuous coursework assessment consists of written assignments, tests, assessment of participation in bi-monthly web-based seminars and written web-based forum assignments, and contributes 60% towards the final mark. A final summative examination or written assignment counts 40% towards the final mark. A student failing to obtain 50% has one opportunity to rewrite the examination or assignment.

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**PPH4051F/S ALTERNATIVES & RISK REDUCTION STRATEGIES**

20 NQF credits at HEQSF level 8

**Convenor:** Assoc Prof H-A Rother

**Course outline:**

The course provides students with the complex and diverse background knowledge required to prevent pesticide exposure (protecting human health and the environment) through various alternatives, control mechanisms, and risk reduction strategies. The course presents the methods for a life-cycle assessment, needs assessment, and exposure management. To reduce increased ineffective use of pesticides and associated hazards/risks, students are introduced to alternative approaches to pest management (e.g. IPM, agro-ecology, conservation agriculture, sustainable intensification of production), the implementation of registration as a risk reduction strategy, ways to control distribution and trade, ways to conduct a social impact assessment, and risk communication models, theories and applications.

**DP requirements:** Attendance at on-campus teaching blocks, successful completion of web-based forums and submission of all assignments by the due date (late penalties apply).

**Assessment:** Continuous coursework assessment consists of written assignments, tests, assessment of participation in bi-monthly web-based seminars and written web-based forum assignments, and contributes 60% towards the final mark. A final summative examination or written assignment counts 40% towards the final mark. Any student failing to obtain 50% has one opportunity to rewrite the examination or assignment.

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**PPH4054S INTEGRATED ASSESSMENT**

0 NQF credits at HEQSF level 8

**Course entry requirements:** Successful completion of all other courses.

**Course outline:**

Not applicable. This course code exists only for the purpose of recording a mark for the final, overall, integrated assessment/examination. All students must register for this course in their final year (in the Diploma programmes where this applies). Students must pass all the individual courses as well as the integrated final examinations to be awarded the Diploma.

**DP requirements:** None

**Assessment:** Integrated assessment of all coursework during the programme. Students achieving a final course mark of between 40% – 49% may qualify for an additional assessment.

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**PPH4057W CRITICAL HEALTH MANAGEMENT PRACTICES**

25 NQF credits at HEQSF level 8

**Convenor:** Professor L Gilson

**Course outline:**

This course introduces participants to key areas of health management that are important in sustaining health policy implementation and health system improvement towards public value creation. These include the use and interpretation of data in monitoring team and system performance, which is essential to support health planning and accountability; health economics principles that offer insight for priority-setting and efficient resource use; practical financial and wider resource management strategies; and quality improvement principles. The course also provides opportunities for students to integrate leadership and managerial practices in strengthening the health policy implementation and health system improvement actions developed in PPH4060S and PPH4058W. On completion of the course, students are able to apply a core set of health management practices and principles; work with formal and informal data to support managerial

decisions; integrate management practices and principles in health policy implementation and health system improvement activities; and appreciate the leadership-management practice continuum.

**DP requirements:** None.

**Assessment:** Coursework: 100%

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### **PPH4058W LEADING HEALTH SYSTEM IMPROVEMENT**

25 NQF credits at HEQSF level 8

**Convener:** Professor L Gilson

**Co-requisites:** PPH4060S

**Course outline:**

The course draws on students' own experiences, as well as relevant analytic frameworks, to deepen students' understanding of how to work in teams in leading health policy implementation and health system change. It deepens the understanding that policy is constructed through actors' practices and influenced by their mindsets, values and interests. It highlights the importance of recognising that policy implementation involves change throughout the health system – from the macro level to the underpinning institutions of the system and on to individuals' and teams' daily activities. It equips students with analytical skills and approaches in managing the process and politics of health policy implementation and improvement. It helps them understand their own power, and how to draw on it, to support implementation and system innovation. Students' personal and team roles and influence over policy implementation and system improvement are made explicit. The value of reflective practice as essential to ethical health leadership is emphasised. On completion of the course, students will be able to work in teams; appreciate multiple perspectives and worldviews; recognise and use their power to support health policy implementation and health system improvement through appropriate, ethical strategies that take account of other system actors; and deepen their personal reflective practice, communication and critical analysis skills.

**DP requirements:** None.

**Assessment:** Coursework: 100%

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### **PPH4059S HEALTH SYSTEM INTERVENTION PROJECT**

45 NQF credits at HEQSF level 8

**Convener:** Professor Lucy Gilson

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to: Provide opportunities to synthesise and integrate new knowledge and skills in leadership practice, through the opportunity to plan, implement and evaluate a larger-scale workplace based intervention intended to support health system improvement. This final course prepares participants to implement a larger scale, action-learning, intervention project that supports health system improvement for public value. Participants will have the opportunity to integrate knowledge, skills and practices across the programme. They will be specifically required to develop, implement and evaluate a health system intervention, in response to a significant health system improvement opportunity or challenge in their workplace. Their ability to apply the analytical and synthesis skills gained from the programme in taking appropriate action, underpinned by ethical leadership practice, will be tested through an action-learning process. This process will involve the following steps: diagnosis; construction of theory of action appropriate to the context; implementation; observations of process and implementation results; and critical reflection on the process to evaluate leadership practice. The project must be implemented by a team, allowing participants to demonstrate their team leadership skills. Assessment is based on: a summative personal assessment that demonstrates deep personal reflection on personal leadership practice; peer/team assessment of the intervention experience; and a final written report about the intervention project.

**Assessment:** Coursework 100%.

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**PPH4060S WORKING IN COMPLEX HEALTH SYSTEMS**

25 NQF credits at HEQSF level 8

**Convener:** Professor Lucy Gilson

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to provide participants, by drawing on their experiences and combining it with relevant analytic frameworks, with an understanding of the multiple and complex dimensions of health system workplaces and to how to apply analytical frameworks to negotiate their complex work environments.

It introduces core relevant concepts and ideas that cut across the programme, such as: public value; equity, efficiency and responsiveness; human rights principles ; people-centredness in the health system; the importance of teams ; personal and related power in the health system; ethical leadership practice; and policy as practice.

It also introduces core leadership practices including: reflective practice; teamwork; critical appraisal and critical thinking that will allow participants to explore how their personal understandings and behaviours influence how they work. In particular participants will consider the practices of ethical leadership; develop the thinking and analytic skills important in appropriately responding to challenges and opportunities for improved performance; and practice communication skills important in effective leadership.

**Assessment:** Coursework 100%.

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**PPH7015W MASTER OF PUBLIC HEALTH MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convener:** Prof L Myer

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, must be about 25 000 words in length and must be on a topic in the same discipline of the coursework master's programme for which the candidate is registered. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, design and critically appraise research, make sound judgement using data and information at their disposal, and be able to communicate their conclusions clearly to specialist and non-specialist audiences.

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**PPH7016F PUBLIC HEALTH AND SOCIETY**

12 NQF credits at HEQSF level 9

**Convener:** Assoc Prof C Colvin

**Course entry requirements:** None

**Course outline:**

The course consists of two related components. The first provides a historical analysis of the concept of public health and the growth and development of a public health movement in Europe and South Africa. The second considers social patterning of disease around the world and the role of public health in addressing health illness.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two to three semester assignments and a final examination. The examination makes up 30% of the coursework mark, and the assignments the remaining 70%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7018F INTRODUCTION TO EPIDEMIOLOGY**

12 NQF credits at HEQSF level 9

**Convener:** Dr A Grimsrud**Course entry requirements:** None

**Objective:** The course aims to introduce the basic principles and methods of epidemiology. Candidates are able to demonstrate knowledge of: the nature and uses of epidemiology; the epidemiological approach to defining and measuring the occurrence of health-related states in populations; the strengths and limitations of epidemiological study designs; the epidemiological approach to disease causation.

**Course outline:**

The course aims to introduce the basic principles and methods of epidemiology. The course focuses on the epidemiological approach to defining and measuring the occurrence and associations of health-related states in populations, the strengths and limitations of study designs, and the approach to disease causation.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7021F BIOSTATISTICS I**

12 NQF credits at HEQSF level 9; 19.

**Convener:** J Ramjith**Course entry requirements:** None**Course outline:**

This course provides an introduction to the basic concepts of biostatistics and a guide on how to compute the most commonly used descriptive and inferential statistical procedures using *STATA* statistical software and for the students to be able to interpret the results.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** A class test and one to two semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the test and assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7022S EVIDENCE-BASED HEALTH CARE**

12 NQF credits at HEQSF level 9

**Convener:** To be confirmed

**Course entry requirements:** A pass mark of at least 55% in PPH7018F Introduction to Epidemiology. A pass in PPH7021F Biostatistics I. Experience in clinical practice or health policy is recommended.

**Course outline:**

The course introduces students to the principles of evidence-based health care. It teaches the skills of critical appraisal of systematic reviews and clinical papers related to diagnosis, therapy, prognosis, clinical practice guidelines, and clinical decision analysis.

The group assignment is designed to test the skill of presenting a critical appraisal of a paper in the context of an evidence-based journal club. The individual assignment teaches the use of the GRADEPro software package for summarizing and presenting information for healthcare decision-making. The final examination tests understanding of theoretical concepts and skills in critically appraising a clinical paper or systematic review.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two semester assignments (one individual and one group assignment) and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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### PPH7029F ADVANCED EPIDEMIOLOGY

12 NQF credits at HEQSF level 9

**Convenor:** Prof L Myer

**Course entry requirements:** PPH7018F Introduction to Epidemiology with a pass mark of at least 55%; PPH7021F Biostatistics I; and PPH7092S Biostatistics II. *Recommended:* one or more of: PPH7022H Evidence-based Healthcare; PPH7063S Epidemiology of Infectious Diseases; PPH7065S Epidemiology of Non-communicable diseases. Regular access to a computer and the internet at home and/or on campus to make use of online course materials and teaching resources.

**Course outline:**

This course provides candidates with a deeper understanding of the concepts learned in the introductory epidemiology course. These include: causation, measures of occurrence and measures of association; the relationships between observational and experimental study designs, and an understanding of how different observational designs are inter-related; the role of variable measurement in research, with emphasis on bias and misclassification and their effects; how confounding is controlled in epidemiological research, and the uses and limitations of matching in analytical studies; the role of intermediate variables in investigating the determinants of disease; effect modification/interaction, including the relevance of these concepts to public health and the difficulties in identifying these phenomena in data; and the integration and application of different epidemiological concepts to provide a thorough critique of study design, conduct and analysis.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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### PPH7033W MMED IN PUBLIC HEALTH PART 1

60 NQF credits at HEQSF level 9

**Convenor:** Prof L London

**Course entry requirements:** None

**Objective:** The purpose of the Part 1 training is to build a foundational knowledge in Public Health Medicine

**Course outline:**

This training programme forms part of the accreditation process of medical practitioners as public health medicine specialists. The Health Professions Council of South Africa stipulates the training requirements. Candidates complete the relevant curriculum of the College of Public Health Medicine of SA, available at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za), and undergo training in an HPCSA-accredited training unit linked to the UCT Faculty of Health Sciences. The Part 1 training includes epidemiology; biostatistics; demography; health informatics; qualitative study methods; behavioural and social sciences; health economics; health management; the organisation of healthcare; social marketing; occupational health and disease; communicable and non-communicable diseases; environmental health; healthcare organisations (locally and internationally) in the legal and political context; and international health structures. At the end of the part I course, candidates are able to describe, explain, quantify and prioritise the burden of disease, risk factors amenable to intervention and health service needs for individuals, communities and society, at home, at work and in wider society; and plan, design and evaluate intervention to promote health.

**DP requirements:** At least three years as a registered student for the MMed (Public Health Medicine) and appointment as a registrar.

**Assessment:** Candidates must complete the assessments for selected courses in the Epidemiology track of the Master of Public Health, Diploma in Occupational Health, Diploma in Health Economics and the Diploma in Health Management, but are not required to complete projects or research-related courses in these streams or qualifications. Students who fail an examination are allowed to repeat the course and rewrite the exam once only. No more than two examinations may be repeated in this manner, failing which a student may not be permitted to progress to the Part II course.

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**PPH7034W MMED IN PUBLIC HEALTH PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Prof L London**Course entry requirements:** PPH7033W**Objective:** The purpose of this training component is to enable successful candidates to attain the appropriate skills in public health practice and to demonstrate their ability to master the application of these skills in service delivery.**Course outline:**

This training programme forms part of the accreditation process of medical practitioners as public health medicine specialists. The Health Professions Council of South Africa stipulates the training requirements. Candidates complete the curriculum of the College of Public Health Medicine of SA, available at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za), and undergo training in an HPCSA-accredited training unit linked to the UCT Faculty of Health Sciences. The training comprises experiential learning in supervised public health practice in service sites at different levels of the health services and health system. By the end of the Part II, candidates are able to identify and characterise a public health problem for the health system; and to develop, plan and implement interventions relating to evaluation outcomes and impacts, in terms of effectiveness, efficiency, quality, equity and sustainability.

**DP requirements:** (i) Successful completion of PPH7033W; (ii) at least three calendar years as a registered student for the MMed (Public Health Medicine); and (iii) certification by the HoD that the candidate has achieved a required skills range (listed in the Regulations for Admission to the Fellowship of the College of Public Health Medicine). Candidates must also have met other requirements set by the College of Public Health Medicine for admission to the college examination: (i) Completed their dissertation for the MMed degree (PPH7035W); (ii) submitted a short report on a public health topic that fulfils the requirements of the College of Public Health Medicine; and (iii) submitted an electronic portfolio that conforms to the CMSA format and contains six-monthly institutional formative assessment reports for a period of at least 36 months of training.

**Assessment:** Formative assessment is carried out every six months by the candidate and his/her designated academic supervisor, overseen by the Head of Division (HoDiv). The formative assessment provides an opportunity for the candidate, academic supervisor and HoD to review the learning that has taken place and that is planned for the next six months. For summative assessment, candidates write the examination of the South African College of Public Health Medicine, which fulfils the requirement for Part 2. The final examination consists of three written papers, an oral examination, and assessment of the short and long reports (or dissertation submitted for Part 3). A minimum of 50% must be obtained in the unseen components of the examination (written papers and oral) and a minimum of 50% for the aggregate mark.

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**PPH7035W PUBLIC HEALTH MEDICINE MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof L London (Department of Public Health and Family Medicine)**Course entry requirements:** PPH7033W**Objective:** The purpose of the dissertation is to demonstrate the capacity to undertake research appropriate to a Public Health Medicine specialist.**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be on a topic in public health medicine. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a public health topic and of a standard publishable in a peer-reviewed medical journal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation, under appropriate supervision. The dissertation must follow guidelines issued by the Postgraduate Office. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Completion of PPH7033W

**Assessment:** External examination of the minor dissertation.

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**PPH7039F THEORY AND APPLICATION OF ECONOMIC EVALUATION IN HEALTHCARE**

12 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof E Sinanovic

**Course entry requirements:** None

**Objective:** This course aims to provide an understanding of the concepts, methods, and applications of economic evaluation in health-related programmes and interventions.

**Course outline:**

The main objectives of the course are to gain insights into the theory underlying the application of economic evaluation to health related programmes and interventions; develop an understanding of economic evaluation methodologies; and develop skills in designing and conducting cost, cost-effectiveness, cost-utility and cost-benefit analyses with an aim of informing policy formulation and implementation.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7041S HEALTH POLICY AND PLANNING**

12 NQF credits at HEQSF level 9

**Convenor:** Prof L Gilson and MS Orgill

**Course entry requirements:** None

**Course outline:**

This course enables participants to gain insights into the purpose, nature and processes of health policy development and implementation; recognise the socio-political factors acting on health policy; conduct comprehensive analyses of health policy development and implementation, including stakeholder analysis; apply theoretical frameworks and concepts in analysis of policy processes; develop strategies for influencing agenda setting and policy implementation; and demonstrate understanding of critical factors influencing policy change towards health equity.

**DP requirements:** At least 45% for the formative assignments taken as a whole.

**Assessment:** Two to three formative assignments and a final summative assessment. The summative assessment makes up 50% of the course mark, and the formative assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the formative and summative assessment components.

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**PPH7048W PALLIATIVE MEDICINE MINOR DISS (90 CREDITS)**

90 NQF credits at HEQSF level 9

**Convenor:** Dr L Gwyther

**Course entry requirements:** None.

**Course outline:**

The minor dissertation, prepared under supervision, must be about 25 000 words in length and must be on a topic in palliative medicine. Having submitted their research proposals for approval and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgements using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences.

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**PPH7050F MICROECONOMICS FOR THE HEALTH SECTOR**

12 NQF credits at HEQSF level 9

**Convenor:** N Foster**Course entry requirements:** None**Objective:** The objective of the course is to enable an understanding of the theory and principles of microeconomics and their application to health and healthcare, including the analysis of the structure and characteristics of the healthcare market with a view to informing healthcare planning and policy.**Course outline:**

The course covers the following: Theory and principles of microeconomics as applied in health economics; theory and principles of microeconomics applied to the healthcare market; theory of the firm and production of health and healthcare; theory of individual behaviour and demand and utilisation of health services; efficiency and equity in healthcare provision and utilisation; agency theory; and economics of health insurance.

**DP requirements:** At least 45% for the semester assignments taken as a whole.**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7053F PUBLIC HEALTH & HUMAN RIGHTS**

12 NQF credits at HEQSF level 9

**Convenor:** Prof L London**Course entry requirements:** None.**Course outline:**

This course provides students with insight into the theoretical and historical background to human rights; international and national human rights instruments and institutions; contemporary debates in defining human rights and their implementability; the relationship of human rights to health; the right to health, and of access to healthcare in national and international law; health as a socio-economic right; when it may be legitimate to restrict rights and the public health rationale; instruments to examine the human rights impact of public health policies, and to incorporate human rights in public health planning and practice; vulnerable groups, human rights and health; participation in health systems; and the impact of intellectual property restrictions on medicines access.

**DP requirements:** At least 45% for the semester assignments taken as a whole.**Assessment:** Three three-semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7054S GENDER AND HEALTH**

12 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof J Harries**Course entry requirements:** None**Course outline:**

The course provides candidates with an understanding of issues of gender impact on health and healthcare; global patterns in gender and health; gender and health in South Africa; men, gender and health; changing practices and mainstreaming gender; and strategic and practical approaches. Specific topics are used to examine the impact of gender on health. These include: gender and HIV/AIDS; gender-based violence; sexual and reproductive health and rights including abortion, masculinities and sexual health.

**DP requirements:** At least 45% for the semester assignments taken as a whole.**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7056W** MMED IN OCCUPATIONAL MEDICINE PART 1

60 NQF credits at HEQSF level 9

**Convenor:** Prof M F Jeebhay (Department of Public Health and Family Medicine)

**Course entry requirements:** None

**Objective:** The purpose of the Part 1 training is to build a foundational knowledge in Occupational Medicine

**Course outline:**

This training programme forms part of the credentialling process of medical practitioners as occupational medicine specialists. The Health Professions Council of South Africa stipulates the training requirements. Candidates complete the relevant curriculum of the Occupational Medicine Division of the College of Public Health Medicine available at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za) and candidates undergo training in an HPCSA-accredited Occupational Medicine training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. The purpose of Part 1 is to provide foundational knowledge in basic public and occupational health sciences, including epidemiology and biostatistics; health economics, health policy and management; social and behavioural sciences including industrial relations; occupational medicine and toxicology; occupational hygiene; occupational safety; occupational health management systems; legislation and ethics; and environmental health.

**DP requirements:** At least three years as a registered student for the MMed (Occupational Medicine) and appointment as a registrar.

**Assessment:** Candidates must complete the assessments for selected modules in the Epidemiology track of the Master of Public Health, Diploma in Occupational Health, and Diploma in Health Management (optional), but are not required to complete research projects on these courses. Students who fail an examination are allowed to repeat the course and rewrite the examination once only. No more than two examinations may be repeated in this manner, failing which a student may not be permitted to progress to the Part II.

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**PPH7057W** MMED IN OCCUPATIONAL MEDICINE PART 2

60 NQF credits at HEQSF level 9

**Convenor:** Prof M F Jeebhay

**Course entry requirements:** PPH7056W

**Objective:** The purpose of this training component is to enable successful candidates to attain the appropriate skills in occupational medicine practice and to demonstrate their ability to master the application of these skills in service delivery.

**Course outline:**

This training programme forms part of the accreditation process of medical practitioners as occupational medicine specialists. The Health Professions Council of South Africa stipulates the training requirements. Candidates complete the curriculum of the Occupational Medicine Division of the College of Public Health Medicine available at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za) and candidates undergo training in HPCSA-accredited Occupational Medicine training units linked to the UCT Faculty of Health Sciences. The training comprises experiential learning in supervised occupational medicine practice in service sites at different levels of the health services and health system. The purpose of this part of the training course is to enable successful candidates to attain the appropriate skills to diagnose and manage all aspects of work-related disease or disability, or threats to the health and well-being of individual employees through their clinical attachments. This includes the ability to interpret chest radiology, lung function testing, bronchial challenge testing, audiometry, toxicological testing, vision screening, haematological and biochemical testing, testing for infection and immune function, allergy testing, and skin patch testing; to treat common occupational diseases where appropriate; to conduct fitness, impairment and disability assessment and implement workplace accommodation, disability management and workers' compensation claims administration; and to counsel and/or refer employees with occupational health problems affecting work capacity. Aside from the clinical training, key skills in occupational health policy analysis and programme development are acquired through attachments in the provincial health department.

**DP requirements:** (i) Successful completion of PPH7056W and the submission of three clinical case reports; (ii) at least three calendar years as a registered student for the MMed (Occupational Medicine); and (iii) certification by the HoD that the candidate has achieved a required skills range (listed in the Occupational Medicine Regulations for Admission to the Fellowship of the College of Public Health Medicine). Candidates are also required to submit a short report on an occupational health topic that fulfils the requirements of the College of Public Health Medicine; and (iii) submit an electronic portfolio which conforms to the CMSA format and contains six-monthly institutional formative assessment reports for a period of at least 36 months of training.

**Assessment:** Formative assessment is carried out every six months by the student's designated academic supervisor, overseen by the Head of Division (HoDiv) of Occupational Medicine in the Department. The formative assessment provides an opportunity for the candidate, academic supervisor and HoDiv of Occupational Medicine to review the learning that has taken place and that is planned for the next six months. For summative assessment, candidates write the Occupational Medicine examination of the South African College of Public Health Medicine, which fulfils the requirement for Part 2. The final examination includes three written papers, a clinical skills examination, an oral presentation and an assessment of the short report. For a pass in this examination, candidates must obtain a minimum of 50% in the unseen components of the examination (written papers, clinical skills and oral) and a minimum of 50% for the total aggregate mark.

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**PPH7058W OCCUPATIONAL MEDICINE MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof M F Jeebhay

**Course entry requirements:** PPH7057W

**Objective:** The purpose of the dissertation is to demonstrate the capacity to undertake research appropriate to an occupational medicine specialist.

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation is on a topic in occupational health. The dissertation is based on a study for which the work was commenced while the candidate was registered as a postgraduate student. The dissertation must be of a standard publishable in a peer-reviewed medical journal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. In terms of length, format and style, the dissertation must follow the guidelines issued by the Faculty. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Completion of PPH7057W.

**Assessment:** External examination of the minor dissertation.

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**PPH7059W MPHIL IN OCCUPATIONAL HEALTH PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Prof M F Jeebhay

**Course entry requirements:** None

**Course outline:**

Coursework includes key learning areas in relation to occupational health risk assessment and management; occupational medicine and work ability; occupational health services management; epidemiology, biostatistics and research methods.

**DP requirements:** Attendance and submission of all academic coursework commitments.

**Assessment:** Assessment of coursework is by means of written assignments/portfolios, quizzes, written and oral examinations. A pass of 50% is required for the course. In addition, the examiners retain the discretion to alter any mark based on assessment of the candidate's overall performance on the course or in one or more of the course components.

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**PPH7060W OCCUPATIONAL HEALTH MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof M F Jeebhay

**Course entry requirements:** PPH7059W

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be on a topic in occupational health. The dissertation must be based on a study for which the work was commenced while the candidate was registered as a postgraduate student. The dissertation should be of a standard publishable in a peer-reviewed medical journal. Having obtained formal ethics approval where necessary, students proceed with their research, analyse the results and write up the dissertation. Students are required to critically evaluate their results and limitations and discuss the implications for knowledge production and implementation of preventive and/or promotive measures in the workplace. In terms of length, format and style, the dissertation must follow the guidelines issued by the Faculty. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Completion of PPH7059W is required before the dissertation is submitted.

**Assessment:** External examination of the minor dissertation.

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**PPH7063S EPIDEMIOLOGY OF INFECTIOUS DISEASES**

12 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof A Boulle

**Course entry requirements:** A pass of at least 55% in PPH7018F. **Recommended:** Biostatistics I (PPH7021F)

**Course outline:**

This course is designed to enable candidates to apply descriptive epidemiology to communicable diseases and outbreak situations; discuss how observational studies are used to investigate causation; discuss transmission dynamics and mathematical modelling of epidemics; discuss routine and sentinel surveillance; discuss how experimental studies are used to evaluate efficacy and effectiveness of treatment and control measures; discuss the epidemiology of vaccination; and apply epidemiology to specific communicable diseases including HIV/AIDS, TB, STIs and childhood communicable diseases.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7064F QUANTITATIVE METHODS FOR HEALTH ECONOMISTS**

12 NQF credits at HEQSF level 9

**Convenor:** Dr O A Alaba

**Course entry requirements:** None

**Objective:** The aim of this course is to introduce candidates to fundamental statistical and econometric techniques to conduct policy relevant empirical investigations as health economists. There is a heavy emphasis on health economics applications.

**Course outline:**

Students gain in-depth understanding from a health economics perspective on: Basic concepts in statistics; linear regression; model specification and model building; binary response models; polychotomous outcome regression models (multinomial and ordered logit models); regression models with count data; measuring socioeconomic status; and basics of multi-level analysis and its application to social determinants of health.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7065S EPIDEMIOLOGY OF NON-COMMUNICABLE DISEASES**

12 NQF credits at HEQSF level 9

**Convenor:** Dr V Zweigenthal and Dr T Oni**Course entry requirements:** A pass of at least 55% in PPH7018F Introduction to Epidemiology. Recommended: PPH7021F Biostatistics I.**Course outline:**

The course aims to equip candidates with conceptual frameworks for understanding the epidemiology of the major chronic diseases such as the eco-social model and Rose's high risk/low risk strategies, and to provide a critical perspective on (i) the quality of evidence on risk factors, and (ii) the likely effectiveness of approaches to the control of these diseases. Curricular topics include the epidemiology of early-life factors, nutrition, physical exercise, diabetes, cardiovascular disease, chronic lung disease, cancer, mental illness, injuries and environmental and occupational hazards.

**DP requirements:** At least 45% for the semester assignments taken as a whole.**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7070S QUANTITATIVE RESEARCH METHODS**

12 NQF credits at HEQSF level 9

**Convenor:** Dr A Grimsrud**Course entry requirements:** None

**Objective:** To enable candidates to write detailed research proposals, directed at health or health service problems that utilise quantitative methods; to encourage students to engage with their dissertation topic during the beginning of their MPH; to introduce candidates to data management including open source questionnaire management software; to introduce candidates to the application of quantitative research methods in the monitoring and evaluation of programmes; To discuss opportunities for MPH graduates by introducing key public health agencies, their missions and their funding mechanisms; to strengthen public presentation skills and introduce alternative presentation mediums and software; and to promote research reading and review skills, and writing skills (including citation and scientific argument) for purposes of the research proposal.

**Course outline:**

The course has four parts: (1) Introduction to quantitative research including an overview of data management; (2) Overview of programme monitoring & evaluation; (3) Overview of public health agencies and their funding; (4) Introduction to good scientific writing.

**DP requirements:** At least 45% for the semester assignments taken as a whole.**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7071F QUALITATIVE RESEARCH METHODS**

12 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof C Colvin**Course entry requirements:** None**Course outline:**

Conceptual/theoretical foundations for qualitative research and the relationship/differences between qualitative and quantitative research designs and theoretical perspectives; overview of qualitative data collection methods and study designs; overview of data analysis techniques; formats and strategies for write-up; reporting and dissemination of qualitative research results; ethical issues in qualitative research; evaluating the quality of qualitative research projects.

**DP requirements:** At least 45% for the semester assignments taken as a whole.**Assessment:** Two to three semester assignments and a final examination. The examination makes up 30% of the coursework mark, and the assignments the remaining 70%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

**PPH7072W** MMED IN FAMILY MEDICINE PART 1

60 NQF credits at HEQSF level 9; Courses vary in length from 8 to about 15 weeks..

**Convener:** Dr T Ras

**Objective:** By the end of the Part 1 course candidates have foundational knowledge of Family Medicine and competence in the management of patients and families at a primary level of care and a community-orientation. For the full curriculum, see the regulations of the College of Family Practitioners at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**Course outline:**

This training programme forms part of the accreditation process of doctors as specialist family physicians. Candidates follow the curriculum of the College of Family Physicians. Candidates undergo training at HPCSA-accredited training sites linked to the UCT Faculty of Health Sciences. On successful completion of training, candidates write the Part 1 examination (this is run by the University) and may proceed to the MMED(FamMed) Part 2 (PPH7073W).

The components that make up Part 1 include Principles of Family Medicine; Clinical Medicine A and B; Community-oriented Primary Care; Ethics; Evidence-based Medicine; Chronic Diseases, Prevention and Promotion; Research Methods; Child and Family Health.

**Lecture times:** Seminars for first and second year MMED students take place on Wednesday afternoons at the University.

**DP requirements:** The Part 1 examination may be taken at the end of the second year of MMED training on successful completion of the training and coursework required for the first two years. Successful completion of the portfolio for first year and achieving a minimum of 50% in the coursework are further DP requirements.

**Assessment:** The examination consists of theoretical and practical components. Theoretical components include one paper containing multiple-choice questions and extended matching items, and another paper consisting of modified essay questions. The practical aspect of the examination includes observed clinical examinations and an OSCE (Objective Structured Clinical Examination) in which pattern recognition (X-rays, ECGs etc.) and communication and procedural skills are tested. Each component (theory and practical) of the examination must be passed with a minimum of 50%. Subcomponents may compensate for each other as long as the mark for a component is not less than 48%. If one component is failed, the candidate is required to repeat that component as well as the other component unless the mark for the component passed is 70% or more. Registrars who fail the Part 1 examination will be able to repeat the examination in October / November of the following year. No more than one repeat examination is allowed.

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**PPH7073W** MMED IN FAMILY MEDICINE PART 2

*Equivalent to FCFP(SA) Final Part A*

60 NQF credits at HEQSF level 9; Courses vary in length from four to nine weeks..

**Convener:** Associate Prof D Hellenberg

**Course entry requirements:** PPH7072W

**Co-requisites:** Research protocol completed.

**Objective:** To develop appropriate clinical, counselling, management and academic skills to function efficiently at the district level of healthcare delivery; to complete research project before writing up the dissertation.

**Course outline:**

This training programme forms part of the accreditation process of doctors as specialist family physicians. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in HPCSA-accredited training units linked to the UCT Faculty of Health Sciences. On successful completion of training, candidates write the final examination of the College of Family Physicians. For the detailed curriculum, see the regulations of the College of Family Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za). Students also complete components of courses in teaching and learning; community-oriented primary care; organisation and management; and research.

**Lecture times:** Thursdays: 14h00 – 17h00

**DP requirements:** The Part 2 examination may be taken after a minimum of three years of full-time post-community service training. Candidates may not apply for the Part 2 examination until they have successfully completed all or a satisfactory part of their clinical training, which includes the satisfactory completion of a logbook. Candidates must hold a current CPR, ACLS or ATLS certificate of competence or its equivalent. Candidates should also have submitted a successfully completed portfolio which has been signed off by the HoD.

**Assessment:** Candidates write the final examination of the College of Family Physicians. The examination consists of three written papers (MCQ, MEQ and critical appraisal of a journal article), and an OCSE and a clinical examination during which they are required to examine three different patients in front of three different sets of examiners.

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#### PPH7074W FAMILY MEDICINE MINOR DISSERTATION (60 CRED)

*Equivalent to CFP(SA) Final Part B*

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof D Hellenberg and Dr T Ras

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in family medicine. The dissertation must be based on a study for which the work was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in research methods. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### PPH7077S THE ECONOMICS OF HEALTH SYSTEMS

12 NQF credits at HEQSF level 9

**Convener:** Dr A Honda

**Objective:** At the end of the course, students should be able to demonstrate an understanding of the complex nature of health systems and the interrelationships between the various components of the health systems; identify key functions of health care financing; recognise the advantages and disadvantages of various health care financing options; engage in debate about health financing reforms; and use a range of analytical tools to examine specific issues in health systems.

**Course outline:**

Health systems, comprising all organisations, institutions and resources devoted to producing actions whose primary intent is to improve health, are located within a country's macroeconomic, public policy and social environment, which is further surrounded by the global economy and environment. Health systems provide three main functions: governance, financing and service delivery, all of which closely interact. This course looks at health systems from a broader economic perspective and explores the use of economic concepts and tools to examine various issues in health systems, with an emphasis on the financing of health systems. **Part 1** focuses on health systems financing and discusses issues relating to universal coverage in low- and middle-income country settings; **Part 2** introduces a number of analytical tools for assessing health financing systems, with a focus on progress towards universal coverage; and **Part 3** discusses the inter-relationships between healthcare financing and other components of health systems, including issues associated with human resources, gender and health care service provision. Theories and methodologies used to examine the economics of health systems are integrated with practical sessions, such as group exercises, to help students better understand the application of those theories and methodologies in the context of low- and middle-income countries.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two semester assignments and a final examination. The examination makes up 50% of the final mark and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7080H RESEARCH METHODS**

90 NQF credits at HEQSF level 9

**Convener:** Dr L Gwyther

**Course entry requirements:** None

**Course outline:**

The aim of this course is to equip palliative care professionals with knowledge and understanding of research methods and to impart the skills needed to conduct independent research. It covers the topics of palliative care research methods, quantitative methodology and analysis, biostatistics and epidemiology, qualitative methodology and analysis, research ethics and scientific writing skills. These topics are explored through interactive workshops, focused readings, and online discussions with web-based support of learning.

**DP requirements:** Completion and attendance of all coursework commitments.

**Assessment:** Assessment is conducted on the basis of 6 written assignments, substantive contribution to Vula discussion forums, and research ethics approval of the research proposal. A pass mark of 50% is required in each component of the assessment. The external examiner has the authority to allocate final marks.

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**PPH7087W MASTER OF PUBLIC HEALTH: HEALTH ECONOMICS STREAM**

**DISSERTATION**

90 NQF credits at HEQSF level 9

**Convener:** Dr O Alaba

**Course entry requirements:** None

**Objective:** Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, design and critically appraise research, make sound judgement using data and information at their disposal, and be able to communicate their conclusions clearly to specialist and non-specialist audiences.

**Course outline:**

The minor dissertation, prepared under supervision, is comprised of 4 components (a detailed literature review, a protocol, a journal-ready article based on the work conducted and policy brief) and must be on a topic in health economics. Having submitted their research proposals for approval and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation.

**DP requirements:** None

**Assessment:** External examination of the dissertation.

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**PPH7089F/S PUBLIC HEALTH PRACTICUM**

12 NQF credits at HEQSF level 9

**Convener:** Prof L London and Dr V Zweigenthal

**Course entry requirements:** Successful completion of at least two modules from the MPH programme, one of which should be either PPH7070S or PPH7071F.

**Objective:** To provide candidates with the experience of practical application of public health skills in a community, organisational or other service context. The Practicum is also intended to help students gain confidence, competence and a sense of personal achievement and satisfaction while preparing them to gain better insight into their own personal and professional skills, including communication with non-academic audiences.

**Course outline:**

Each practicum attachment has learning outcomes specific to the particular placement, which is developed on a case-by-case basis. However, the learning outcomes are, in general, (a) ability to apply public health skills to a client/organisational problem; (b) ability to adapt to a service setting

and meet client need; and (c) ability to process and communicate the practical experience. To varying degrees, the practicum experience aims to provide the student with opportunities (i) to integrate their skills acquired during the MPH with a practice activity; (ii) to understand the structure, governance, inputs, output, outcomes and programmes associated with public health organisations to improve the health of their target populations; (iii) to exercise their critical skills in improving the delivery of a service or programme with a health objective.

**DP requirements:** None

**Assessment:** Student performance are assessed in three written pieces of work and an oral presentation as follows: A reflective journal (10%), an oral presentation of the project output to teaching staff and hosts (10%), a report by the host on the student's practicum contributions (30%) and a written report (50%).

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#### **PPH7090F/S SEMINARS IN EPIDEMIOLOGY**

12 NQF credits at HEQSF level 9

**Convener:** Prof L Myer

**Course entry requirements:** Introduction to Epidemiology (PPH7018F), Advanced Epidemiology (PPH7029F), Biostatistics I (PPH7021F), Biostatistics II (PPH7092S), and Biostatistics III (PPH7095F). Prior arrangements need to be made with the convener.

**Course outline:**

The purpose of this course is to provide MPH candidates with advanced training in epidemiological methods that extends beyond the existing course offerings. The course is structured as a reading and tutorial seminar over one semester that provides students with understanding of recent developments in epidemiological principles and with proficiency in advanced epidemiological analytic methods. Topics for the seminar series include: causal thinking; the application of marginal structural models; infectious diseases modelling; directed acyclic graphs and estimator biases; instrumental variables, propensity scoring and alternative methods of adjusting for confounding. Students will meet the convener or designated lecturer for weekly sessions of two to four hours and are expected to undertake an additional four to six hours of reading or demonstration analyses each week. Admission is by prior arrangement with the course convener.

**DP requirements:** Completion of all coursework.

**Assessment:** Formative: 33% student critical reading summaries and class participation, and 33% student project based on methods and concepts taught in class. Summative: 34% final examination.

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#### **PPH7091S QUALITATIVE DATA ANALYSIS**

12 NQF credits at HEQSF level 9

**Convener:** Assoc Prof C Colvin

**Course entry requirements:** PPH7071F or equivalent.

**Course outline:**

This course aims to provide a practical introduction to data analysis in social science research. Building on the conceptual and protocol design work undertaken in PPH7071F, students are led through the process of analysing and writing up their qualitative research data. By the end of the course, students should be able to describe conceptual/theoretical foundations of qualitative data analysis; describe the range of possible analytic strategies in qualitative research and select an appropriate strategy for analysing their data set; prepare and manage their dataset effectively and carry out their chosen analytic strategy; reflect critically on the strengths and weaknesses of their chosen strategy and their own application of that strategy; and select an appropriate format for writing up their results and producing a complete qualitative research report.

**DP requirements:** Attendance of and participation in all lectures, practical sessions, workshops and tutorials.

**Assessment:** Coursework is weighted 70% and comprises a data analysis project (50%) and analysis exercises (20%). The final examination contributes 30%.

**PPH7092S BIOSTATISTICS II**

12 NQF credits at HEQSF level 9; 15 lectures.

**Convenor:** Mr J Ramjith

**Course entry requirements:** A pass of *at least* 65% in PPH7021F and a pass in PPH7018F.

**Course outline:**

The course is designed to equip candidates with a good understanding of modelling the relationship between a response and a set of risk factors, so as to be able to perform such analyses themselves using sophisticated statistical software. The nature of the response variable determines the modelling framework and both linear and logistic regression are covered. At the end of the course, students are able to recognise data forms and analyses that require commonly used regression methods in the health sciences, conduct preliminary analyses to inform the application of specific regression methods, apply and interpret correctly specific regression methods (including model building approaches), and apply and interpret techniques to examine model fit and model diagnostics.

**DP requirements:** Completion of all assessment tasks and a minimum of 45% for the semester component.

**Assessment:** Two to three semester assignments, a mid-term examination and a final examination. The examinations make up 50% of the coursework mark, and the assignments and class participation the remaining 50% (the semester component). A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

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**PPH7093F INTRODUCTION TO HEALTH SYSTEMS**

12 NQF credits at HEQSF level 9

**Convenor:** Prof L Gilson and Dr J Olivier

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to provide an introduction to the core elements of any health system, and an understanding of health systems as complex systems comprised of components, actors and inter-relationship. It provides a foundation for understanding health systems analysis, action and research. Drawing on cutting-edge international thinking and experience, it considers various frameworks for understanding health systems, as well as their core performance goals; examines international experience of, and key international debates about, health system development; and considers how to intervene and manage change in health systems. It draws on relevant case studies as well as participants' own experience.

**Assessment:** There are coursework assignments and a final summative assessment. The coursework assignments make up 50% of the final course mark, and the summative assessment the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the coursework and summative assessment components.

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**PPH7094S HEALTH SYSTEMS RESEARCH & EVALUATION**

12 NQF credits at HEQSF level 9

**Convenor:** Dr J Olivier & Prof L Gilson

**Course entry requirements:** PPH7093F

**Co-requisites:** None

**Course outline:**

This course comprises an introduction to health systems research and evaluation methods. It seeks to open up the "black box" of the health system, and the contemporary approaches to studying it, with the view to encouraging students to consider future research in this field. There has been substantial debate around the definition and scope of health system (and linked to this policy) research, and there is no single definition. This is due to the fact that health systems research is a relatively new field and - because health systems are complex - involve many different actors engaged in a variety of activities. However, there is consensus that health systems research draws on a variety of

disciplines (economics, sociology, anthropology, political science and epidemiology). As an applied field, it starts with a problem or topic and selects methods, whether qualitative or quantitative, that address this in the most appropriate manner. It is different from classic public health research. By the end of the course, students are expected to be able, confidently, to identify substantively relevant HPSR questions, select appropriate research strategies for addressing these questions in specific contexts, and think through approaches that support the use of research evidence in decision-making.

**Assessment:** There are coursework assignments and a final summative assessment. The coursework assignments make up 50% of the final course mark, and the summative assessment the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the coursework and summative assessment components

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### **PPH7095F BIOSTATISTICS III**

12 NQF credits at HEQSF level 9

**Convener:** Dr M Lesosky

**Course entry requirements:** PPH7021F, PPH7092S

**Co-requisites:** None

**Course outline:**

This course aims to provide candidates with a good understanding of the analysis of “time-to-event” data, longitudinal data, methods for survey designs, and with the ability to perform such analyses themselves. It further introduces students to more advanced statistical methods relevant to medical research, so that they are aware of their availability for application to specific problems in medical research. Part of the practical work involves the analysis of data from their own research.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two to three semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum on each of the semester and examination components.

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### **PPH7096F CANCER PREVENTION AND CONTROL**

12 NQF credits at HEQSF level 9

**Course outline:**

This course aims to provide an introduction to the principles of cancer prevention and control. It will cover a broad range of topics including relevant to our setting e.g. cancer screening, biomarkers to assess cancer risk and determine outcome, surveillance and cancer registries, infection and cancer, survivorship, cancer genetics, behavioural interventions, molecular epidemiology and its role in cancer control etc. The module will have an interdisciplinary approach and teaching staff will include clinical, public health and basic scientists. This approach is likely to attract a broader range of students. Initially this will be an elective module in the General MPH track but over time the plan is to develop a Cancer track for the MPH, with this as one of the core courses.

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### **PPH7097F/S CLIMATE CHANGE, POLLUTION AND HEALTH**

12 NQF credits at HEQSF level 9

**Convener:** Assoc Prof MA Dalvie

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The course aims to equip students with an understanding of environmental health from a global and local perspective by informing them about the major environmental health issues which impact local and global burden of disease, enabling them to critically analyse environmental health problems, strengthening their commitment to environmental health issues and equipping them with skills to study environmental health problems. The topics that will be covered by the course include Environmental Epidemiology, Environmental Burden of Disease, Climate change and Health, Air pollution and Health, Water Pollution and Health, Toxic Chemicals and Health (Including

pesticides, persistent organic pollutants, metals and endocrine disruptors . Learning will take place through a combination of formal seminars and group work in class.

**DP requirements:** At least 45% for the semester assignments taken as a whole

**Assessment:** 50% final examination; 30% individual assignment; 20% group work

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### **PPH7098F ENVIRONMENTAL HEALTH POLICY**

12 NQF credits at HEQSF level 9

**Convener:** Prof L London

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course aims to equip students with a broad overview of the field of environmental health policy, as well as some of the key debates in the environmental health field. Students will be encouraged to develop a critical understanding of national and global environmental health policies, so that they can shape health and other public policies to promote environmental health and environmental justice. The course will cover key concepts such as: the environment as a public good; sustainable development; environmental ethics, environmental justice and human rights-based approaches to environmental stewardship. Additionally, the course will cover the main global environmental health conventions and agreements; the national regulatory, policy and governance arrangements and the place of environmental health in the health system. Case studies that illustrate each of these content areas will draw on both local and international examples, including acid mine drainage, asbestos, chemicals management, Marikana, pesticides in rural farming communities and other environmental health case studies.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** 50% final examination; 30% individual assignment; 20% group work

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### **PPH7099F/S CHILDREN'S ENVIRONMENTAL HEALTH**

12 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Rother

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of this course is to equip students with: (1) a comprehensive understanding of children's environmental health issues and (2) the ability to address these issues through analysing policy options, and identifying practical health interventions and risk management / risk reduction approaches. Specifically, the course will provide students with a broad understanding of children's environmental health issues from a rights, regulatory, preventative and community action perspective; promote understanding of the unique nature of children's health risks, especially their vulnerability to toxic agents and harmful microorganisms; promote critical analysis skills to assess children's health risk to environmental factors, such hazardous products, polluted air, contaminated water, and unsanitary facilities; develop skills to design innovative health interventions and risk management strategies appropriate for children's health risks in low and middle income countries (including risk communication, risk assessment and hazard assessment); and promote evaluation skills of various options available to address children's health issues, including enactment of public policy and community-based programs.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** 50% exam 30% long assignment 10% short assignment or group work 10% quiz on Vula

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## RADIATION MEDICINE

### Professor and Head:

*Rotating head: Currently S J Beningfield, MBChB Cape Town FFRadDiag SA*

### Medical Physics

*L-Block, Groote Schuur Hospital*

#### Head:

H Burger, BSc(Hons) MSc(MedPhys) *Pret*

#### Lecturers:

H Mac Gregor, BSc(Hons) *Stell*

C Trauernicht, BSc(Hons) MSc(Med) *Cape Town*

N Willemse (Joubert), BMedSc(Hons) MMedSc (MedPhys) *UFS*

### Nuclear Medicine

*C4/C3, New Groote Schuur Hospital*

#### Head of Division and Senior Lecturer Full-time:

T Kotze, MBBCh *Witwatersrand FCNP SA*

#### Consultants:

A Brink, MBChB *Pret DCH FCNP SA MMed (NucMed) Cape Town*

R Steyn, MBChB *Free State FCNP SA*

### Paediatric Radiology

*Red Cross Children's Hospital*

#### Senior Lecturers Full-time:

T N Kilborn, MBChB *Cape Town FRCR UK*

N A Wieselthaler, MBChB *Cape Town FCRadDiag SA*

#### Lecturer Full-time:

E Banderker, MBChB *Cape Town FCRadDiag SA*

### Radiation Oncology

*L-Block, Groote Schuur Hospital*

#### Professor and Head:

J Parkes, MBChB *Cape Town FCRadOnc SA*

#### Senior Lecturers Full-time:

H Burger, MBChB *Cape Town FCRadOnc SA*

A J Hunter, BSc(Med)(Hons) PhD *Cape Town*

Z Mohamed, MBChB *Stell MMed Cape Town*

H Simonds, MBChB PGDip (HealthEcon) *Cape Town MRCP FRCR UK*

A L van Wijk, MBChB *Cape Town FCRadOnc SA*

#### Lecturers Full-time:

S Dalvie, MBChB *Cape Town FCRadOnc SA MMedRadOnc UFS*

A S Hendrikse, BSc(Hons) PhD *Cape Town*

B Robertson, MBChB *Cape Town FCRadOnc SA*  
J Wetter, MBChB *Cape Town FCRadOnc SA MMedRadOnc UFS*

## **Radiology**

*C16, New Groote Schuur Hospital*

### **Professor and Head:**

S J Beningfield, MBChB *Cape Town FFRadDiag SA*

### **Senior Lecturers Full-time:**

N Ahmed, MBChB *Cape Town FCRadDiag SA*

S E Candy, BSc HDE MBChB *Cape Town FFRadDiag SA*

### **Senior Lecturers Part-time:**

H T Goodman, MBChB *Cape Town MPraxMed Pret MFGP FFRadDiag SA FRCR UK*

H Ball *MBChB St Andrews FFRad SA*

### **Lecturers Full-time:**

R Gamieldien MBChB *Cape Town FCRadDiag SA*

T Hartley MBChB *Cape Town FCRad(Diag) SA*

Q Said-Hartley MBChB *Cape Town FCRad(Diag) SA*

Z Somhlahlo, MBChB *Cape Town FCRad(Diag) SA*

## **COURSES OFFERED**

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### **RAY4010W QUANTUM MECHANICS**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to introduce the student to advanced principles of quantum mechanics.

Content includes examples of quantum systems; mathematical tools of quantum mechanics; postulates of quantum mechanics; harmonic oscillators; angular momentum; and approximation methods for stationary states.

**Assessment:** Coursework 50%. Examination 50%.

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### **RAY4011W RADIATION INTERACTIONS**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to indicate the useful, purposeful, safe and innovative applications of radiation.

Content includes radiation sources; the process of radioactive decay as source of radiation; interaction of photons and neutrons with matter; isotope production with reactors and accelerators; nuclear fission as a source of radiation; and lasers and microwaves as sources of radiation.

**Assessment:** Coursework 50%. Examination 50%.

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### **RAY4012W COMPUTATIONAL PHYSICS**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

In the real world, very few deterministic problems can be solved analytically. Furthermore, many physical processes are stochastic. In both cases, physicists look to computers to shed light on the physics. In this course, several of the more ubiquitous numerical methods are introduced that form part of most physicists' toolkits. Topics presented are drawn from: Monte Carlo techniques of sampling, integration and simulation; numerical calculus (including integration using orthogonal polynomials); function interpolation, extrapolation and fitting (including the technique of Smoothed Particle Hydrodynamics); and ODE and PDE solution.

**Assessment:** Coursework 50%. Exam 50%.

#### **RAY4013W DIGITAL IMAGE PROCESSING**

9 NQF credits at HEQSF level 8

**Convener:** Dr T Kotze

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to provide students with an introduction to basic concepts and methodologies for digital image processing.

The course builds an understanding of the physics and engineering principles involved in the acquisition and processing of medical images. Content includes mathematical tools of image processing; x-ray imaging; computed tomography; ultrasound; and magnetic resonance imaging.

**Assessment:** Coursework 100%.

#### **RAY4014W PHYSICS OF RADIOLOGY**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to introduce the student to the basic principles of imaging in diagnostic radiology. The student will be acquainted with imaging modalities such as computed tomography, ultrasound and magnetic resonance imaging. Content includes production of x-rays: x-ray tubes, x-ray generators; factors influencing x-ray emission; conventional radiography computer tomography; and ultrasound magnetic resonance imaging.

**Assessment:** Coursework 50%. Examination 50%.

#### **RAY4015W NUCLEAR MEDICINE**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to familiarise the student with the theory and principles of operation of all medical nuclear instrumentation; the quality control measures of nuclear instrumentation; the practical uses of radioactive sources; the theoretical principles of common tracer techniques; and computer processing techniques of nuclear medicine images. The course outline includes radiation detectors; the gamma camera quality control of the gamma camera computers in nuclear medicine; principles of SPECT; principles of PET; statistics of counting basic principles of tracer studies; and whole body counters.

**Assessment:** Coursework 50%. Examination 50%.

**RAY4016W RADIOTHERAPY**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to introduce the student to the basic principles of dose measurements and dose calculations for teletherapy and brachytherapy, beam shaping, shielding and treatment planning. Content includes dosimetry of teletherapy filters; geometry of the beam teletherapy units; quality assurance; electron therapy; Brachytherapy; unsealed sources and Beta irradiators.

**Assessment:** Coursework 50%. Examination 50%.

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**RAY4017W RADIATION PROTECTION**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to present the student with a sound conceptual foundation in the theory and practice of radiological protection and the shielding of ionising radiation. Content includes physical quantities used in radiological protection; biological aspects of radiological protection; the control of exposure; internal dosimetry calculations; and radiation transport calculations.

**Assessment:** Coursework 50%. Examination 50%.

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**RAY4018W TREATMENT PLANNING**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to present the student with a sound foundation in the theory and practice of the radiation treatment planning process, including parameters such as target volume, dose-limiting structures, treatment volume, dose prescription, dose fractionation, dose distribution, positioning of the patient, and treatment machine settings.

Content includes imaging in radiotherapy; DICOM conformance; patient data acquisition, patient and organ movement; localisation, multiple beams, correction techniques, patient positioning and immobilisation; treatment planning algorithms; quality assurance; 3D conformal radiation therapy; IMRT, IGRT, VMAT, radiosurgery, LDR brachytherapy, HDR brachytherapy; and treatment plan evaluation.

**Assessment:** Coursework 50%. Examination 50%.

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**RAY4019W RADIOBIOLOGY**

9 NQF credits at HEQSF level 8

**Convener:** C Trauernicht

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

The aim of the course is to provide the student with an introduction to basic radiobiology, anatomy and physiology.

Content includes cellular radiobiology; tumour radiobiology and radiation effects in normal tissues; an overview of radiobiological modelling of cellular and organ effects, including tumour control probability and normal tissue; and complication probability.

**Assessment:** Coursework 50%. Examination 50%.

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**RAY4020W BMEDSCHONS IN MEDICAL PHYSICS RESEARCH PROJECT**

30 NQF credits at HEQSF level 8

**Convener:** C Trauernicht**Course entry requirements:** None**Co-requisites:** None**Course outline:**

The aim of the course is to perform independent research work at honours level on topics that form part of medical physics. The independent project work that must be of an experimental nature and it culminates in an individual research project.

**Assessment:** Coursework 70% (project work). Examination 30% (examination presentation).

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**RAY7009W MMED IN RADIATION ONCOLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Prof J Parkes**Course entry requirements:** None**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist radiation oncologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Radiation Oncologists of SA. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards RAY7009W. The purpose of this course is to provide a sound foundation of basic sciences to the subsequent training in clinical radiation medicine. Training covers relevant areas of disciplines such as anatomy and physiology as applied to the practice of radiotherapy and chemotherapy, general and special pathology, radiobiology and medical statistics. Training also covers clinical physics and apparatus construction as applied to the practice of radiotherapy; the physical basis of treatment with radioactive isotopes; and radiation hazards and protection. For the full curriculum and examination details, see the regulations of the College of Radiation Medicine at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates must have worked full-time in a department of radiation oncology for at least one year post-internship, of which six months must be in general practice or pathology.**Assessment:** Candidates write the Part 1 examination of the College of Radiation Medicine. The examination consists of three written papers of three hours each.

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**RAY7010W MMED IN RADIATION ONCOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Prof J Parkes**Course entry requirements:** RAY7009W**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist radiation oncologists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Radiation Oncologists of SA. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards RAY7010W. Part 2 training applies the knowledge of basic and other sciences acquired in Part 1 to the clinical practice of radiation medicine. The course covers the principles and practice of radiotherapy and chemotherapy, and relevant aspects of immunity in cancer. General medicine, surgery and gynaecology as they affect the practice of radiotherapy and chemotherapy are also covered. For the full curriculum and examination details, see the regulations of the College of Radiation Oncologists, at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The part 2 examination must be passed within six years of passing Part 1. Candidates must have practised medicine for at least five years and must have spent three years in a full-time post in a recognised department of radiation therapy.

**Assessment:** Candidates write the final examination of the College of Radiation Oncologists. The examination consists of three written papers, a viva voce examination, a clinical examination and a practical examination.

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**RAY7011W RADIATION ONCOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof J Parkes

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in radiation oncology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**RAY7012W MMED IN NUCLEAR MEDICINE PART 1**

60 NQF credits at HEQSF level 9

**Convenor:** Dr T Kotze

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as nuclear medicine specialists. Candidates complete the training programme of the College of Nuclear Physicians of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the Part 1 examination of the College of Nuclear Physicians and receive credit towards RAY7012W.

The aim of this course is to provide foundational knowledge in a range of basic science disciplines to prepare candidates to apply such knowledge to the clinical conditions and management strategies in nuclear medicine. Content includes radiation physics, radiation protection, radiation biology, instrumentation, statistics, radiopharmacology, applied physiology, and anatomy and pathology. For the detailed curriculum and the examination rules, see the regulations of the College of Nuclear Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Appointment as a registrar in nuclear medicine: one year as medical officer in Nuclear Medicine training department. The candidate must have completed Part 1 of the College of Nuclear Physicians within the first 24 months of their rotation. Two attempts at the examination will be allowed. If the candidate does not succeed within the first 24 months, he/she will be deemed not eligible to continue the degree. The MMED proposal must be finalised and ethics approval obtained within the first 18 months of the rotation.

**Assessment:** Candidates write the Part 1 examination of the College of Nuclear Physicians. The examination comprises two written papers.

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**RAY7013W MMED IN NUCLEAR MEDICINE PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Dr T Kotze**Course entry requirements:** RAY7012W**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist nuclear medicine physicians. Candidates complete the training programme of the College of Nuclear Physicians of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital. On successful completion of training, they write the Part 2 examination of the College and receive credit towards RAY7013W. Course material includes clinical nuclear medicine, radiopharmacology, in-vitro studies and the therapeutic use of radionuclides. For the detailed curriculum and the examination rules, see the regulations of the College of Nuclear Physicians at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Medical practice of at least five years at least four years of which must have been in a recognised department of nuclear medicine as a registrar. The MMED project must be completed before Part 2 examination is attempted. The requirements for the College logbook must be met before Part 2 examination is attempted.

**Assessment:** Candidates write the Part 2 examination of the College of Nuclear Physicians. The examination comprises two papers, an OSCE session and an oral examination.

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**RAY7014W NUCLEAR MEDICINE MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Dr T Kotze**Course entry requirements:** None**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in nuclear medicine. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None**Assessment:** External examination of the minor dissertation.

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**RAY7017W MMED IN DIAGNOSTIC RADIOLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convenor:** Prof S Beningfield**Course entry requirements:** None**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist radiologists. Candidates follow the curriculum of the College of Radiologists of South Africa. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit based in a teaching hospital. On successful completion of training, they undertake the College examinations and on passing receive full credit towards RAY7017W. The aim of this course is to provide foundational knowledge in a range of basic science disciplines to prepare candidates to apply such knowledge to clinical conditions and management strategies in the speciality of radiology.

There are two parts: (1) Medical Physics, including general physics, radiation physics, principles of X-rays, fluoroscopy, angiography, diagnostic ultrasound, computed tomography, magnetic resonance imaging and thermography, principles of diagnostic equipment construction and operation, nuclear medicine, radiography, general radiation biology, and radiation protection and

techniques; and (2) Imaging Anatomy, which includes human physiology and anatomy, and imaging anatomy and related techniques. The second part is available in detail in the curriculum regulations of the College at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**Lecture times:** See timetable

**DP requirements:** HPCSA requirements for entry into specialist training.

**Assessment:** A written paper for Medical Physics and a slide test for Imaging Anatomy.

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#### **RAY7020W MMED IN DIAGNOSTIC RADIOLOGY PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Prof S Beningfield

**Course entry requirements:** RAY7017W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist radiologists. Candidates follow the curriculum of the College of Radiologists of South Africa. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit based in a teaching hospital. On successful completion of training, they write the final examination of the College and receive credit towards RAY7020W. The aim of the course is to apply foundational and clinical knowledge in a range of basic science disciplines to the clinical conditions and management strategies in the specialty of diagnostic radiology. Content includes all medical imaging modalities, including X-rays, fluoroscopy, ultrasound, angiography, computed tomography, and magnetic resonance imaging, and clinical medical practice and pathology as applied to diagnostic and interventional radiology.

**Lecture times:** See timetable

**DP requirements:** Four years' approved training; submission of a logbook.

**Assessment:** Candidates write the Part 2 examination of the College of Radiology. The examination comprises three written papers, long case reporting and oral examinations.

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#### **RAY7021W DIAGNOSTIC RADIOLOGY MINOR DISSERTATION (60**

**CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof S Beningfield

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in diagnostic radiology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are offered training in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. This is then marked by external examiners and needs to be passed for credit. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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## SURGERY

*J Floor, Old Main Building, Groote Schuur Hospital*

**Professor and Head:**

D Kahn, MBChB *Birmingham ChM Cape Town FCS SA*

**Emeritus Professors:**

P C Bornman, MMedSurg FRCS Ed FCS SA FRCS *Glasgow*

D M Dent, MBChB ChM *Cape Town FCS SA FRCS UK FRCPS Glasgow (Hon)*

J E J Krige, MBChB MSc *Cape Town FRCS Edinburgh FCS SA*

J Terblanche, MBChB ChM *Cape Town FCS SA FRCS UK FRCPS Glasgow FACS (Hon)*

FCAP(Hon) FRCS UK (Hon) FRCSC (Hon) FRCS *Edinburgh FMC SA FRCSI (Hon)*

### **Cardiothoracic Surgery (Chris Barnard Division of Cardiothoracic Surgery)**

*Groote Schuur Hospital; Red Cross Children's Hospital; Cape Heart Centre, Medical School*

*The Division of Cardiothoracic Surgery provides clinical cardiac and thoracic surgery services for the community of Cape Town and the Western Cape region at both Groote Schuur Hospital and Red Cross Children's Hospital. In addition, this Division is the only academic unit that provides cardiac transplantation in South Africa. This Division also has an active laboratory research programme centering on the development of an 'easy to implant' synthetic heart valve for developing countries; myocardial regeneration, restenosis and angiogenesis in tissue engineering.*

**Chris Barnard Chair of Cardiothoracic Surgery and Head:**

P Zilla, MD *Vienna DMed Zurich PhD Cape Town PD Vienna FCS SA*

**Associate Professors Full-time:**

D Bezuidenhout, PhD

J G Brink, MBChB *Cape Town FCS SA*

J Hewitson, MBChB *Cape Town FCS SA*

**Associate Professor Part-time:**

A Linegar, MBChB *Cape Town PhD UFS FCS SA*

**Senior Lecturers Full-time:**

A Brooks, MBChB *Stell FCS SA*

N Davies, PhD

P Human, PhD *Cape Town*

J Scherman, MBChB *Cape Town FCS SA*

**Senior Lecturers Part-time:**

W Lichtenberg, MBChB MMed *Cape Town*

L Moodley, MBChB *Natal FCS SA*

J Rossouw, MBChB PhD *FCS SA*

## **Emergency Medicine**

*F Floor Old Main Building, Groote Schuur Hospital and Metro EMS, Karl Bremer Hospital*

**Professor and Head:**

L Wallis, MBChB FRCS (A&E) *Edinburgh MD DIMCRCS DipSportMed Glasgow FRCS Ed FCEM UK FCEM SA FIFEM*

**Senior Lecturers Full-time:**

S Bruijns, MBChB *Pret* MPhil (EM) PhD *Cape Town* DipPEC SA FCEM UK FCEM SA  
P Hodkinson, MBBCh *Witwatersrand* MPhil (EM) PhD *Cape Town* DipPEC DA Dip Obst SA  
DTM&H *Witwatersrand*

**Senior Lecturers Part-time:**

T Welzel, MBChB *Cape Town* DipPEC HDipIntMed DipHIVMan DipForMed (ClinPath) SA  
DTM&H *Pret* BSc(Med)(Hons) (DivingMed) MSc(Med)(ClinEpi) *Stell* EMDM *Novara*

**Lecturers (Joint Staff):**

K Cohen, MBChB MMed (EM) *Cape Town*  
B Cheema, MB BS BSc (Psychology) MRCPCH *London* DTM&H *Liverpool*  
P Cloete, MBChB FCEM SA MMed *Cape Town*  
R Dickerson, MBBCh *Witwatersrand* Dip PEC DA SA FCEM SA Cert Critical Care SA ATCL UK  
K Evans, MBChB FCEM SA MMed *Cape Town*  
D Fredericks, MBChB *Cape Town* FCEM SA  
H Geduld, MBChB MMed (EM) *Cape Town* DipPEC FCEM SA  
C Hendricks, MBChB FCEM SA MMed *Cape Town*  
M Kalla, MBChB FCEM SA MMed *Cape Town*  
AM Kropman, MBChB *Cape Town* FCEM SA  
A Smith MBChB FCEM SA MMed *Cape Town*  
W Smith BSc MBChB *Cape Town* EMDM FCEM SA

**Honorary Lecturers:**

S de Vries, MBChB MPhil(EM) *Cape Town* DipPEC SA  
S Lahri, MBBCh *Witwatersrand* FCEM SA  
H Lamprecht MBChB *Stell D'Anaes London* FCEM UK FRCPI *Ireland*  
S Le Roux, BSc MBChB *Cape Town*  
P Louw MBChB *Pret* MMed (EM) *Cape Town*  
J Malan, MBChB *Pret* DipPEC FCEM SA  
I Macdonochie, MB BS FRCPCH PhD *London* FCEM UK FRCPI *Ireland*  
A Parker MBChB FCEM SA MMed *Cape Town*  
M Stander, MB BCh UJ MMed(EM) *Cape Town*  
H Tuffin MBChB *Cape Town*  
M Twomey BSc PhD *Cape Town*  
K Vallabh, MBBCh *Witwatersrand* FCEM SA  
N van Hoving, MBChB *Free State* DipPEC SA MMed(EM) MSc(Med)(ClinEpi) *Stell*

## **General Surgery**

*J-Floor, Old Main Building, Groote Schuur Hospital*

**Professor and Head:**

D Kahn, MBChB *Birm ChM* *Cape Town* FCS SA

**Professors:**

A Mall, BSc(Med)(Hons) MSc *Cape Town* PhD *Newcastle-upon-Tyne*  
P Navsaria, MBChB MMed *Cape Town* FCS SA

**Emeritus Professors:**

P C Bornman, MMedSurg FRCS Ed FCS SA FRCS *Glasgow*  
D M Dent, MBChB ChM *Cape Town* FCS SA FRCS UK FRCPS *Glasgow* (Hon)  
J E J Krige, MBChB MSc *Cape Town* FRCS *Edinburgh* FCS SA  
J Terblanche, MBChB ChM *Cape Town* FCS SA FRCS UK FRCPS *Glasgow* FACS (Hon) FACP  
(Hon) FRCS UK (Hon) FRCSC (Hon) FRCS *Edinburgh* FMC SA FRCSI (Hon)

**Associate Professors:**

P A Goldberg (Head: Colorectal Unit), MBChB MMed *Cape Town FCS SA*  
 A J Nicol (Head: Trauma Unit) MBChB *Cape Town FCS SAE* Panieri (Head: Oncology, Endocrinology) MBChB MMed *Cape Town FCS SA*  
 E Muller, MBChB *Pret MMed Cape Town MRCS FCS SA*  
 E Jonas MBChB; MMed; FCS (SA); PhD

**Senior Lecturers Full-time:**

M Bernon, MBBCh *Witwatersrand FCS SA CertGastro*  
 A B T Boutall, MBBCh *Stell FCS SA CertGastro*  
 S Burmeister, MBChB *Cape Town FCS SA CertGastro*  
 L Cairncross, MBChB *Cape Town FCS SA*  
 G Chinnery, MBChB *Witwatersrand MMed FCS SA CertGastro*  
 S Edu, Dip in Medicine *Romania FCS SA*  
 J H Klopper, MBChB *Pret MMed (Surg) UFS Cum laude*  
 J C Kloppers, MBChB *Stell DipPEC FCS SA MRCS FRCS (GenSurg) Edinburgh*  
 N G Naidoo (Head: Vascular Unit), MBChB *UKZN FCS SA*  
 D A Thomson, MBChB *UKZN FCS SA MMed Cape Town*  
 C Warden, MBChB *Cape Town MMed FCS SA*  
 F Malherbe MBChB *FCS SA*

**Adjunct Professor:**

R J Baigrie, BSc MD *Cape Town FRCS UK*

**Senior Lecturers Part-time:**

H F Allison, MBChB *Cape Town FRCS Edinburgh FCS SA*  
 D Anderson, MBChB *Cape Town FCS SA*  
 S N R Cullis, MBChB *Cape Town FCS SA FRCS Edinburgh*  
 K J Goldberg, MBChB *Cape Town FCS SA*  
 M V Madden, MBChB *Cape Town FCS SA FRCS UK FRCS Edinburgh*  
 P J Matley, MBChB *Cape Town FCS SA*  
 K Michalowski, MD *Poland FCS SA*  
 J A Tunnicliffe, MBChB *Cape Town FCS SA*  
 S Bhaila MBChB, FRCS Cert Surgical Gastroenterology  
 B Natha MBChB, FCS SA Cert Vascular Surgery  
 M Forlee MBChB, FCS SA Cert Vascular Surgery  
 B Jones MBChB, FRCS

**Neurosurgery**

*H53, Old Main Building, Groote Schuur Hospital*

**Helen & Morris Mauerberger Professor and Head:**

A G Fiegen, BSc(Med) MBChB MD *Cape Town MSc London FCS SA*

**Professors:**

A A Figaji, MBChB MMed PhD *Cape Town FCNeurosurg SA*  
 P L Semple, MBChB MMed PhD *Cape Town FCS SA*

**Emeritus Professors:**

J C Peter, MBChB *Cape Town FRCS Edinburgh*  
 J C de Villiers, MD *Cape Town MD Stell DSc UWC FRCS UK FRCS Edinburgh*

**Honorary Professors:**

P Siesjö, MD PhD *Lund*

M J A Wood, MBChB *Cape Town* DPhil Oxon

**Associate Professors:**

D E J Le Feuvre, MBChB MMed *Cape Town* MSc *Paris/Mahidol* FCS SA

A G Taylor, MBBCh *Witwatersrand* MMed *Cape Town* MSc *Paris/Mahidol* FCS SA

**Senior Lecturers:**

L C Padayachy, MBChB *Pret FCNeuroSurg* SA MMed PhD *Cape Town*

S J Röthemeyer, MBBCh *Witwatersrand FCNeuroSurg* SA

**Senior Lecturers Part-time:**

N D Fisher-Jeffes, MBChB *Stell FCS* SA

C F Kieck, MBChB *Stell MD Cape Town FCS* SA

R L Melvill, MBChB *Cape Town FCS* SA

S A Parker, MBChB *Cape Town FCS* SA

D G Welsh, MBChB *Cape Town FRCS London FCS* SA

G A White, MBChB *Cape Town FCS* SA

**Lecturer:**

C Thompson, MBChB MMed *Cape Town FCNeuroSurg* SA

**Senior Research Officer:**

N G Langerak, BSc (Physio) MSc (HumMovSci) PhD (BiomedEng)

**Postdoctoral Fellow:**

U Rohlwink, Neuroscience Post-doctoral Research Fellow, Division of Neurosurgery

**Ophthalmology**

*H52, Old Main Building, Groote Schuur Hospital*

**Morris Mauerberger Professor of Ophthalmology and Head:**

C Cook, MBChB MPH *Cape Town FCS(Ophth)* SA FRCOphth

**Emeritus Professor:**

A Murray, MBChB *Witwatersrand FRCS Edinburgh FRCOphth*

**Senior Lecturers Full-time:**

N du Toit, MBChB *Cape Town DipOphth FCSOphth* SA

K Lecuona, MBChB *Cape Town FCSOphth* SA

T Pollock, MBChB *Cape Town FCSOphth* SA

J Rice, MBChB *Witwatersrand FCSOphth* SA

J Steffen, MBChB *Stell FCSOphth* SA

C Tinley, MBChB *Cape Town FCSOphth*

**Director: Community Eye Health Programme**

D Minnies, NHDMT(Haematology) SA MPH *Cape Town*

**Senior Lecturers Part-time:**

E Albrecht, MBChB *Stell FCSOphth* SA

M Attenborough, MBChB *Witwatersrand FRCOphth*

N Cockburn, MBChB *Cape Town FCSOphth* SA

J de Villiers, MBChB *Cape Town FCSOphth* SA

R Grötte, MB BS *Newcastle FRCS Edinburgh DO RCP London RCS UK*

D Harrison, MBChB *Cape Town FCSOphth* SA

F J Kupper, MBChB MMed *Cape Town* DO RCP *London* RCS *UK*  
 A Perrott, MBChB *Cape Town* FCSOphth *SA*  
 P Steven, MBChB *Cape Town* DOMS RCP *London* RCS *UK*  
 K Suttle, MBChB *Cape Town* FCSOphth *SA*  
 H van Velden, MBChB *Stell* FCSOphth *SA*

## **Orthopaedic Surgery**

*H49 Old Main Building, Groote Schuur Hospital*

**Pieter Moll & Nuffield Professor of Orthopaedic Surgery and Head:**  
 R Dunn, MBChB MMed *Cape Town* FCSOrth *SA*

**Emeritus Professor:**

J Walters, MBChB *Cape Town* FCSOrth *SA*

**Associate Professor:**

S Roche, MBChB *Cape Town* LMCC *Canada* FCSOrth *SA*

**Emeritus Associate Professor:**

E B Hoffman, MBChB *Stell* FCSOrth *SA*

**Honorary Associate Professor:**

B C Vrettos, MBChB *Zimbabwe* FRCS *England* MMed *Cape Town* FCSOrth *SA*

**Adjunct Professor:**

W M van der Merwe, MBChB *UOFS* Social Studies *Oxon* BMedSci(Hons) (Sport) *Cape Town* FCSOrth *SA*

**Senior Lecturers Full-time:**

S Dix-Peek, MBBCh *Witwatersrand* FCSOrth *SA* MMed *Cape Town*  
 A Horn, MBChB *Pret* MMed Orth *Cape Town* FC Orth *SA*  
 N Kruger, MBChB *Cape Town* FCSOrth *SA*  
 M Laubscher, MBChB Dip PEC FC Orth *SA* MMed Ortho *Cape Town*  
 S Maqungo, MBChB *Natal* FCSOrth *SA*  
 G McCollum, MBChB MMed *Cape Town* DIP PEC FCSOrth *SA*  
 S Mears, MBChB *Stell* FCSOrth *SA*  
 M Nortje, MBChB MMed Orth *Cape Town* FC Orth *SA* DipPEC *SA*  
 P Rowe, MBBCh *Witwatersrand* FCSOrth *SA*  
 M Solomons, MBChB *Cape Town* FCSOrth *SA*

**Senior Lecturer Five-eighths:**

G Grobler, MBChB MMed *Cape Town* FRCS *Edinburgh* FCS (Orth) *SA*

**Senior Lecturers Part-time:**

S Carter, MBChB *Cape Town* FCSOrth *SA*  
 B Dower, MBChB *Cape Town* FCSOrth *SA*  
 P Ehlers, MBChB *Stell* FCOrth *SA*  
 M Held, Med Cert *Heidelberg* MD *Munich* MMed *Cape Town* PhD *Cape Town* FC Orth *SA*  
 Facharzt Ortho/Unfall *Germany*  
 H Hobbs, MBChB *Cape Town* DipPEC FCOrth MMed (Orth) *SA*  
 K V Hosking, MBChB *Cape Town* FCSOrth *SA*  
 I Koller, MBChB *Pret* FC Orth *SA* MMed (Orth) *Cape Town*  
 P Makan, BSc(Med) MBChB MMed *Cape Town* FCSOrth *SA*  
 M Maree MBChB *Cape Town* FCSOrth *SA* MMed (Orth) *Cape Town*

D McGuire, MBChB *Witwatersrand* MMed *Cape Town* FCOrth SA  
S Mears, MBChB *Stell* FCSOrth SA  
P Polley, MBChB *Cape Town* FCSOrth SA  
L T Sparks, MBChB *Cape Town* FRCS UK  
R von Bormann, MBChB *Cape Town* FCOrth DA SA

**Honorary Senior Lecturers:**

B Bernstein, MBBCh *Witwatersrand* FCSOrth SA  
D Engela, MBChB *Pret* FCSOrth SA

**Honorary Lecturers:**

R K Marks, MBChB *Cape Town* FRCS *Edinburgh* FCSOrth SA CIME  
Martin, MBChB *Cape Town* FCOrth SA

**Otorhinolaryngology**

*H53, Old Main Building, and Ward F8, Groote Schuur Hospital, Red Cross War Memorial Children's Hospital and New Somerset Hospital*

**Leon Goldman Professor of Otorhinolaryngology and Head:**

J J Fagan, MBChB MMed *Cape Town* FCS SA

**Emeritus Professor:**

SL Sellars, FRCS FCS SA

**Senior Lecturers Full-time:**

G J Copley, MBChB *Cape Town* FCSOtol SA  
O Edkins, MBChB *Witwatersrand* FCSOtol SA  
T Harris, MBChB *Cape Town* FCSOtol SA  
D E Lubbe, MBChB *Stell* FCSOtol SA

**Lecturer Five-eighths:**

E Meyer, MBChB *Pret* FCSOtol SA

**Lecturers Part-time:**

M D Broodryk, MBBCh *Stell* FCSOtol SA  
P J de Waal, MBChB *Cape Town* FCSOtol SA  
L Nel, MBChB *Pret* FCS SA  
P S Traub, MBBCh *Witwatersrand* FCSOtol SA  
M J R R Vanlierde, MBChB *Cape Town* FCSOtol SA  
A van Lierop, MBChB *Stell* FCSOtol SA

**Paediatric Surgery**

*Institute of Child Health, Red Cross Children's Hospital, Rondebosch*

**Charles F M Saint Professor of Paediatric Surgery and Head:**

A Numanoglu, MBChB *Turkey* FCS SA

**Professors:**

A A Figaji, MBChB MMed PhD *Cape Town* FCNeurosurg SA  
A B van As, MBChB *Netherlands* FCS SA PhD *Cape Town* MBA SA

**Adjunct Professor:**

R A Brown, MBChB *Cape Town* MPhil (Ancient Cultures) *Stell DCH SA FRCS Edinburgh*  
*FCSSurg SA*

**Emeritus Professors:**

M R Q Davies, MBChB *Pret MMed (Surg) FCS SA FRCS UK & Edinburgh*  
A J W Millar, MBChB *Cape Town FRCS UK FRCS Edinburgh FRACS DCH (RCP&Seng)*  
*FCS SA*  
H Rode, MBChB *Pret MMed (Surg) FRCS Edinburgh FCS SA*

**Associate Professor:**

J Lazarus, MBChB *Cape Town FCS (Urol) SA*

**Senior Lecturers:**

S Adams, MBChB *Cape Town FC(Plast&ReconSurg) SA*  
A Alexander, MBBCh *Witwatersrand FCS SA CertPaedSurg SA*  
G Copley, MBChB *Cape Town FCSOtol SA*  
S G Cox, MBChB *Cape Town FCS SA CertPaedSurg SA*  
S Dix-Peek, MBChB *Cape Town FCSOrth SA*  
L C Padayachy, MBChB *Pret FCSNeurosurg SA MMed Cape Town*  
T Pollock, MBChB *Cape Town FCSOphth*  
C Tinley, MBChB *Stell FRCOphth*

**Research Social Worker:**

R Albertyn, BSocSc(MW) *Free State BA(Hons)(GMW) Stell PhD Cape Town*

**Child Accident Prevention Foundation of Southern Africa (Childsafe):**

P Nyakaza, BA (SocWrk) *UWC*

**Senior Medical Technologist:**

J Raad, DipMedTech(Microbiol)(Haem) *UJ*

**Plastic, Reconstructive and Maxillo-facial Surgery**

*F16, New Groote Schuur Hospital*

**Associate Professor and Head:**

D A Hudson, MBChB *MMed Cape Town FCS (SA) FRCS Edinburgh FACS*

**Consultants Full-time:**

K G Adams, MBChB *Cape Town FC Plast(Plast&ReconSurg) SA*  
S Adams, MBChB *Cape Town FC Plast(Plast&ReconSurg) SA*

**Senior Lecturers Part-time:**

D B Fernandes, MBChB *FRCS Edinburgh*  
S Geldenhuys, MBChB *FCS SA*  
A Landau, MBChB *Cape Town FCS SA*  
D Lazarus, MBChB *Cape Town FCS SA*  
R Lechtape-Grüter, MD *MMed Cape Town*  
S Moodley MBChB *FCS SA MMed Cape Town*  
C Pienaar, MBChB *UOFS FCS SA*  
P J Skoll, MBChB *Cape Town FRCS FCS SA*  
L B van Oudenhoove, MBChB *Cape Town FCS SA*  
J E van Zyl, MBChB *Stell FCS SA*  
M van der Velde, MBChB *FCS SA*

**Part-time Dental Surgeon and Acting Head of Oral and Dental Surgery:**  
G Kariem, BChD *UWC MChD MFOS Stell*

**Maxillo-facial and Oral Surgery: Part-time Consultants:**

G J Hein, BChD MChD *UWC*  
G Kariem, BChD *UWC MChD MFOS Stell*

**Maxillo-facial Prostheticist:**

R Goolam, BDChD MChD

**Dentists:**

S Aniruth, BChD *UWC*  
A Kassan, BDS *RAU*  
S Singh, BChD *UWC BSc UKZN*

**Maxillo-facial Prosthetics Technologist:**

R Wallis, DipDentTech *SA CertAdvOrthod&MaxilloFacialTech*

## **Surgical Gastroenterology**

*E23, New Main Building, Groote Schuur Hospital*

**Professor and Head:**

J E J Krige, MBChB MSc (Med) *Cape Town FCS SA FACS FRCS*

**Associate Professor and Head Colorectal Clinic:**

P A Goldberg, MBChB *Cape Town FCS SA*

**Senior Lecturers:**

M Bernon, MBBCh *Witwatersrand FCS SA Cert Gastroenterology*  
A B T Boutall, MBBCh *Stell FCS SA Cert Gastroenterology*  
S Burmeister, MBChB *Cape Town FCS SA Cert Gastroenterology*  
G Chinnery, MBChB *Witwatersrand MMed FCS SA Cert Gastroenterology*

## **Urology**

*E26, New Groote Schuur Hospital*

**Associate Professor and Head:**

J M Lazarus, MBChB *Cape Town FCSUrol SA*

**Emeritus Associate Professor:** (subject to approval at time of print).

R D Barnes, MBChB *Cape Town FCSUrol SA*

**Senior Lecturers Full-time:**

Justin Howlett, FC Urol *SA MMED Urol UKZN MBChB Cape Town*  
L Kaestner, MBChB *Stell FCSUrol SA MMed Cape Town*  
J M Lazarus, MBChB *Cape Town FCSUrol SA*  
S Sinha, MB BS *Ranchi, HDipSurg FCSUrol SA FRCS Glasgow*

**Senior Lecturers Part-time:**

L A Aldera, MBChB *Cape Town FCSUrol SA*  
T M Borchers, MBChB *Cape Town FCSUrol SA*  
K S Jehle, MBChB *Free State MRCS (Eng) FCSUrol SA*

## COURSES OFFERED

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### **CHM4000F COMMUNITY EYE HEALTH FOR VISION 2020**

20 NQF credits at HEQSF level 8; The course comprises a total of six modules covered over a six-week period through online access with accompanying self-study tasks, plus the completion and submission of two assignments over a further six-week period..

**Convener:** Prof C Cook

**Course entry requirements:** None

**Co-requisites:** None

**Course outline:**

This course is delivered on-line over a six-week period. A further period of six weeks is allocated for the completion of assignments. The following week-long modules are offered: "Introduction to Vision 2020", "Cataract", "Childhood blindness, Refractive error, Low vision" and "Other blinding eye diseases". Through downloadable course materials, interactive individual and group exercises and case study analyses, students gain the knowledge and understanding of the magnitude, causes, and different control strategies for the major blinding eye diseases in the world, with a particular focus on cataract, glaucoma, refractive error, diabetic retinopathy and childhood blindness, as well as the components of the WHO/IAPB Vision 2020 initiative to eliminate avoidable blindness. Students are introduced to the principles of Vision 2020 programme planning and are coached through the conduct of a situational analysis of the needs and resources for their own eye care programme. During this period, students develop strategies to develop service delivery responses for the major blinding and visual-impairing eye conditions in their local settings. These strategies are integrated into a Vision 2020 programme plan for their particular service units.

**DP requirements:** Attendance of all coursework commitments and submission of coursework requirements by the due dates.

**Assessment:** During the second six-week period, the students complete two assignments with the aim of applying their knowledge and skills obtained during the first six-week period. At the end of the 12-week period, an examination is written. Students who failed but who obtained 40% or more may be eligible for one supplementary examination, for which they must obtain 50% to pass. Students who fail the course must repeat it.

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### **CHM4001F HEALTH PROMOTION AND HUMAN RESOURCE DEVELOPMENT FOR VISION 2020**

10 NQF credits at HEQSF level 8; The course comprises a total of 30 contact sessions over the two-week period, including didactic lessons, individual and group exercises, and field visits..

**Convener:** D Minnies

**Course entry requirements:** None

**Course outline:**

This course is delivered on-campus over a two-week period. The following half-week long modules are offered: "*Health Promotion for Eye Care*", "*Advocacy for Eye Care*", "*Human Resource Development for Eye Care*" and "*Health Professional Education for Eye Care*". Through didactic lectures, group exercises and case study analyses, students gain knowledge and understanding of the principles and techniques of advocacy, health promotion and human resource development for eye care programmes, with a particular focus on the challenges eye care service delivery face in the highly resource-limited, disease-burdened and competitive health systems of the developing world. The study material is largely based on current understandings of health system principles and applications. During this period, the students develop appropriate strategies for health promotion, advocacy, human resource development and health worker education, to address these challenges in their local settings.

**DP requirements:** Attendance of all coursework commitments and submission of coursework requirements by the due dates.

**Assessment:** At the end of each module, an integrated assessment is done, comprising a short written test and a practical exercise, each weighted appropriately to constitute formative assessments

for these study areas. A student failing to obtain 50% for the individual assessments will have one opportunity to repeat the assessment. The marks for the individual module tests are aggregated to become the course mark. A course aggregate mark of 50% and greater constitutes a pass, while a mark of less than 40% constitutes a fail. If the student scores more than 40%, but less than 50%, the student is eligible to write a course test, for which a minimum of 50% constitutes a pass. Scores below 50% in the course test constitute a fail and students have to repeat the course. No examination is written for this course.

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### **CHM4002F MANAGEMENT FOR VISION 2020**

20 NQF credits at HEQSF level 8

**Convener:** D Minnies

**Course entry requirements:** None

**Course outline:**

This course is delivered on-campus over a five-week period. The following week-long modules are offered: *“Introduction to management”*, *“Strategy, leadership and management”*, *“Project planning and management”*, *“Programme development and implementation”*, and *“Programme administration and management”*. The overall paradigm of the course is that better eye care service delivery outcomes can be achieved through better management practices. Through didactic lectures, group exercises and case study analyses, students gain knowledge and understanding of the principles and techniques of planning, organising, controlling and leading as core competencies of management. Special attention is given to key management responsibilities including project, financial, stakeholder, quality and strategic management, as well as personal leadership and communication. During this period, the students study and apply the principles and techniques of management to develop strategies for the planning, implementation and administration of district Vision 2020 programmes.

**DP requirements:** Attendance of all coursework commitments and submission of coursework requirements by the due dates.

**Assessment:** The course is assessed through the writing of a final examination. Students failing to obtain 50%, but who obtained 40% or more are eligible for one supplementary examination, for which they must obtain 50% to pass. Students failing the course must repeat it.

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### **CHM4003W IMPLEMENTATION OF VISION 2020**

70 NQF credits at HEQSF level 8; The course is delivered in distance mode and comprises the preparation and submission of eight assignments..

**Convener:** Prof C Cook and D Minnies

**Course entry requirements:** Successful completion of at least two of the following three courses: CHM4000F, CHM4001F and CHM4002F.

**Course outline:**

This course is delivered in two parts: a 20-week period of practical assignment preparation and submission followed by a two-week period of debriefing and feedback, facilitated through supervision by the course conveners. The first 20-week period comprises a total of eight compulsory assignments, where students apply the knowledge gained and techniques learned. The assignments pose context-particular interventions to develop and improve eye care programme performance. This includes developing district action plans, advocacy strategy for eye care, monitoring systems and strategies for managing human resources. Each assignment is supervised by a lecturer who provides the student with further reading materials, coaching and support through email and Vula (a web-based interactive platform), and feedback. During this period, students establish strategies to develop service delivery responses for the major blinding and visual-impairing eye conditions in their local settings. These strategies are integrated into an eye care programme plan for their particular service units. During the final two-week period, the students and the convener interact via tele-communications to facilitate report-back and debriefing which provides an opportunity for students to share their experiences about planning and managing their programmes, and to plan their work for the next period.

**DP requirements:** Attendance of all academic commitments and submission of all assessments by the due dates.

**Assessment:** Assessment comprises the preparation and submission of eight assignments, three completed during the first half of the academic year, and the other five completed during the 20-week distance study period. Each assignment makes up 12.5% of the total course mark. No examination is written. A pass mark of 40% is required for each assignment, failing which the student will be required to make the necessary corrections or improvements and submit the assignment for reassessment. The terms of resubmission of the assignment are at the discretion of the convener. A final course mark is calculated by adding the marks for each of the eight assignments and converting to a percentage. A total course mark of 50% and greater constitutes a pass, while a mark of less than 50% constitutes a fail. If the student obtains a final course mark of greater than 40% but less than 50%, the student will have one opportunity to revise an assignment for re-marking. The new assignment mark will replace the lowest assignment mark obtained. If the student still does not obtain the aggregate mark of 50%, the student will have to repeat the course. The course may be repeated only once.

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#### **CHM4016F INTRODUCTION TO POSTGRADUATE STUDIES**

10 NQF credits at HEQSF level 8

**Convener:** Dr T Welzel

**Course entry requirements:** None

**Course outline:**

This course focuses on achieving the basic skills set to succeed in postgraduate work. It looks at searching the literature and using a number of medical databases. It also looks at plagiarism avoidance, time planning in study and research, and how to structure and write assignments and do researched presentations.

**DP requirements:** Completion of all coursework requirements by the due dates.

**Assessment:** Assessment is based on coursework (50%), a final examination (30%) and a take-home examination assignment (20%).

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#### **CHM4017F CLINICAL RESEARCH METHODS**

15 NQF credits at HEQSF level 8

**Convener:** Dr N van Hoving

**Course entry requirements:** None

**Course outline:**

This is a semester-based course designed to develop a coherent and basic understanding of the theory, research methodologies and techniques relevant to Emergency Medicine. Basic research methodologies, study designs and basic biostatistics are covered. A limited research proposal will have to be developed as a part of this course and the research assignment that needs to be completed will be introduced.

**DP requirements:** Completion of all coursework requirements by the due dates.

**Assessment:** Assessment is based on coursework (50%) and a final examination (50%).

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#### **CHM4018F CONCEPTS OF EMERGENCY CARE**

20 NQF credits at HEQSF level 8

**Convener:** Dr S Bruijns

**Course entry requirements:** None

**Course outline:**

This course provides the candidate with the basic insight into the differences between Emergency Care and other medical fields. It introduces the EMS and healthcare systems, principles of adult and paediatric triage, principles of acute care diagnostics and aspects of teamwork, handover and communication.

**DP requirements:** Completion of all coursework requirements by the due dates.

**Assessment:** Assessment is based on coursework (50%), a final examination (30%) and a take-home examination assignment (20%).

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**CHM4019W ADULT EMERGENCY CARE**

25 NQF credits at HEQSF level 8

**Convener:** Dr P Hodgkinson

**Course entry requirements:** CHM4016F, CHM4018F

**Course outline:**

This course focuses on adult emergency care. It is a problem-based course with emphasis on evidence-based medicine and critical thinking. It revisits basic adult physiology and anatomy, deals with the management of common adult medical and surgical emergencies, and the evidence-base for these recommendations. Recent attendance at advanced cardiac and medical life support courses is advantageous.

**DP requirements:** Completion of all coursework requirements by the due dates.

**Assessment:** Assessment is based on coursework (50%) and a final examination (50%).

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**CHM4020W PAEDIATRIC EMERGENCY CARE**

20 NQF credits at HEQSF level 8

**Convener:** Dr B Cheema

**Course entry requirements:** CHM4016F, CHM4018F

**Course outline:**

This course focuses on paediatric emergency care. It covers essential theory and concepts relating to emergency care of neonates and children. There is an emphasis on building a sound understanding of key paediatric medical, trauma, surgical and neurological topics. It revisits basic neonatal and paediatric physiology and anatomy, deals with the management of common childhood medical and surgical emergencies, and introduces the evidence-base for these recommendations. Recent attendance at advanced neonatal and paediatric resuscitation courses is advantageous.

**DP requirements:** Completion of all coursework requirements by the due dates.

**Assessment:** Assessment is based on coursework (50%) and a final examination (50%).

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**CHM4021W RESEARCH ASSIGNMENT**

30 NQF credits at HEQSF level 8

**Convener:** Dr T Welzel

**Course entry requirements:** None

**Course outline:**

The assignment asks for a literature review and depends mainly upon direct supervision of the student and, to a lesser extent, upon learning through teaching. It is intended to develop the ability to independently perform the required literature review within the context of the chosen PG Dip offered in the Division, to a total of 5 000 – 6 000 words, in preparation for a full research project as a part of a master's degree.

**DP requirements:** Completion of all coursework requirements by the due dates.

**Assessment:** The final assignment counts 100%.

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**CHM6003W MPHIL IN SURGICAL GASTROENTEROLOGY PART 1**

120 NQF credits at HEQSF level 9

**Convener:** Prof D Kahn

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist surgeons to become subspecialists in adult surgical gastroenterology. Students follow the relevant curriculum of the College of Surgeons of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards CHM6003W. In addition to receiving formal training in diagnostic and therapeutic endoscopy procedures in a recognised gastrointestinal unit, the

candidate will also be familiarised with the surgical techniques of complex gastrointestinal conditions when working in the specialised gastrointestinal surgical units. The first year focuses on endoscopy experience. During the course of training, the candidate becomes proficient in doing the procedures designated as "mandatory" unsupervised, and is exposed to and assists at operations and endoscopic procedures designated as "advanced". These include a range of endoscopic and surgical techniques, ranging from endoscopies and bleeding oesophagectomies, peptic ulcer surgery, biliary bypasses, laparoscopies, liver disorders and clinical management/surgery in this regard, oesophageal and gastric pathophysiology, and diagnostic and therapeutic incontinence surgery, all within the context of appropriate knowledge of basic sciences relevant to the subspecialty. All trainees are required to participate in basic or clinical research during their training. Knowledge of clinical research methods, biostatistics, epidemiology and ethics is essential in patient-based research projects. Participation in research during the training period should lead to at least the submission of one manuscript to a peer reviewed journal during the two years training period, and one presentation at a national or international GI conference. For the detailed curriculum, see the regulations of the relevant College of Surgeons of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least eighteen months as a subspecialty trainee in accredited specialist departments/divisions/units of gastroenterology, registered and approved by the Health Professions Council of South Africa; submission of the prescribed logbook; and written reports from the heads of the institutions in which he/she is trained.

**Assessment:** Candidates undergo the relevant examination of the College of Surgeons of South Africa. The examination comprises one three-hour written examination incorporating both clinical and basic science elements; at least three clinical cases; and a one-hour oral examination which will include applied anatomy, physiology, pathology and radiology relevant to gastroenterology in general, and the declared area of clinical focus stated by the candidate and reflected in the logbook.

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#### **CHM6004W SURGICAL GASTROENTEROLOGY MINOR DISS (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof D Kahn

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in gastroenterology. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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#### **CHM6005F CLINICAL RESEARCH METHODS I**

15 NQF credits at HEQSF level 9

**Convener:** Dr C Hendricks and Dr N van Hoving

**Course entry requirements:** None

**Course outline:**

This is a semester course designed to develop a coherent and basic understanding of the theory, research methodologies and techniques relevant to emergency medicine. Basic research methodologies, bias, confounders and basic biostatistics are covered.

**DP requirements:** The successful submission of a research summary (EMDRC B) to the Divisional Research Committee.

**Assessment:** Assessment is based on coursework (40%), the research proposal (10%), as well as a final examination (50%).

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### **CHM6006F CLINICAL RESEARCH METHODS II**

15 NQF credits at HEQSF level 9

**Convener:** Dr T Welzel

**Course entry requirements:** CHM6005F

**Course outline:**

This course builds on the basic epidemiology taught in CRM I (CHM6005F) and deals with specific research designs in greater detail (systematic reviews, diagnostic and screening trials, randomised controlled trials) and culminates in techniques of critical appraisal of the major types of study design. In addition, the principles of research ethics are dealt with.

**DP requirements:** The successful submission of the full research proposal to EMDRC (EMDRC D), ready for HREC.

**Assessment:** Assessment is on the basis of coursework and assignments. Coursework: 55%; examination: 45%.

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### **CHM6007F EMERGENCY CARE I**

15 NQF credits at HEQSF level 9

**Convener:** Dr B Cheema and Dr S Bruijns

**Course entry requirements:** None

**Course outline:**

This semester course focuses on acute clinical emergency care in the adult and paediatric population. The assumption is that the student already knows the core clinical knowledge and the emphasis is on improving clinical thought processes through exploration of best evidence and best clinical practices as well as exploring controversies and 'grey-areas' regarding evidence and practices. The course is divided into three sections: (1) Introduction to emergency medicine; (2) Paediatric emergency medicine; and (3) Adult emergency medicine. The course uses a combination of e-learning, self-study and contact teaching sessions.

**DP requirements:** Completion of online self-assessment tests and the FEC (Fundamentals of Emergency Care) course (in the first contact week).

**Assessment:** Assignments during the semester (60%); and a final summative assessment comprising MCQ (multiple-choice questions) and SAQ papers (40%).

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### **CHM6008S EMERGENCY CARE II**

15 NQF credits at HEQSF level 9

**Convener:** Dr P Hodgkinson, Dr D Moiloa and Dr P Xafis

**Course entry requirements:** CHM6007F

**Course outline:**

This semester course focuses on clinical emergency care and continues the themes started in CHM6007F. It is a problem-based course with emphasis on evidence-based medicine and clinical decision-making. Students are encouraged to critically appraise the evidence and develop their own management protocols. The course focuses on trauma, toxicology and environmental medicine, as well as surgical and obstetric emergencies.

**DP requirements:** None

**Assessment:** Assessment is by virtue of assignments (60%) and a final summative assessment (40%).

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### **CHM6009S HEALTHCARE SYSTEMS**

15 NQF credits at HEQSF level 9

**Convener:** Dr J Fleming and Dr I D'Andrea

**Course entry requirements:** None

**Course outline:**

This is a semester course designed to generate an understanding of health systems structure and financing in emergency care. The structure and function of emergency care systems, including global health systems, pre-hospital and in-hospital systems, are examined. An analysis of processes and flow in emergency systems and how these are related to error and productivity are examined.

**DP requirements:** None.

**Assessment:** Assessment is by virtue of coursework and assignments (40%), completion of a project related to management principles and healthcare systems (20%) and a final written examination (40%).

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### **CHM6010F RESUSCITATION AND CRITICAL CARE**

15 NQF credits at HEQSF level 9

**Convenor:** Prof R Dickerson, Dr AA Parker, D L Phillips

**Course entry requirements:** CHM6008F

**Course outline:**

This semester course focuses on clinical emergency care in resuscitative and critical care medicine. It is a problem-based course with emphasis on evidence-based medicine and clinical decision-making. Students are encouraged to critically appraise the evidence and develop their own management protocols. Core clinical competencies in key emergency medicine related skills and procedures are required.

**DP requirements:** A minimum of 65% needs to be obtained for the semester mark to qualify for the examination.

**Assessment:** Assessment is by virtue of assignments (50%), oral examination (20%), and a final written summative assessment (30%).

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### **CHM6012F DISASTER MEDICINE**

15 NQF credits at HEQSF level 9

**Convenor:** Dr W Smith

**Course entry requirements:** None

**Course outline:**

The underlying principles of disaster medicine, including risk assessment, preparation and planning, and communication and response, are covered. The course delineates the multi-service response required for a major incident. Students are given practical knowledge of tools, resources and processes utilised in a medical major incident response. In addition, special disaster scenarios are covered, including CBRN responses, mass gatherings, terrorism, earthquakes, complex humanitarian emergencies and psychological aspects of disaster. The assignments involve case reports evaluating aspects of current disasters/major incidents. Students are required to complete a research project involving disaster, major incidents or mass gathering scenarios. Contact time includes a practical major incident response simulation.

**DP requirements:** Must be able to attend the week-long practical session (Disaster Medicine Course) and successfully complete the written examination at the end thereof.

**Assessment:** Assessment is on the basis of coursework assignments (60%), a contact week assessment (10%), and a final oral examination (30%).

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### **CHM6013S EDUCATION & TRAINING IN EMERGENCY CARE**

15 NQF credits at HEQSF level 9

**Convenor:** Dr A Oosthuizen

**Course entry requirements:** None

**Course outline:**

This is a semester course which covers aspects of adult learning theory, small group teaching, use of virtual learning environments (VLE) and electronic learning resources, and clinical skills-based teaching. The course aims to develop core teaching skills useful on a day-to-day basis when teaching undergraduates, postgraduates and paramedical students in emergency care. The education

section builds on the knowledge of the clinical research methods courses and focuses on evidence-based medicine and knowledge translation in EC.

**DP requirements:** Satisfactory completion of a self-reflection portfolio of clinical experiences submitted to the convener at specified times, as outlined in the Portfolio Guidelines.

**Assessment:** Assessment is by coursework assignments (40%), project (30%), and final written assessment (30%).

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#### **CHM6016W EMERGENCY MEDICINE MINOR DISSERTATION**

60 NQF credits at HEQSF level 9

**Convener:** Dr P Hodgkinson

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in the same discipline of the coursework master's programme in which the candidate is registered. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, design and critically appraise research, make sound judgement using data and information at their disposal, and be able to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** Satisfactory completion of a self-reflection portfolio of clinical experiences submitted to the convener at specified times, as outlined in the Portfolio Guideline.

**Assessment:** External examination of the minor dissertation.

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#### **CHM6018S AFRICAN EMERGENCY CARE**

15 NQF credits at HEQSF level 9

**Convener:** Prof L Wallis

**Course entry requirements:** None

**Course outline:**

The objectives of this course are: (a) To develop an understanding of the complexities of emergency care in an African setting. (b) To understand rational systems-based approach to emergency care system development in African countries. (c) To develop further knowledge and skills in African emergency burden of disease, epidemiology and resource allocation.

The course covers aspects of African epidemiology and emergency care systems, both pre-hospital and in-hospital. The aim is to explore emergency care in Africa in terms of initiating, developing and maintaining appropriate and adequate systems. Aspects of cost-effectiveness, continuous quality improvement and patient safety are also covered.

**DP requirements:** Satisfactory completion of a self-reflection portfolio of clinical experiences submitted to the Division at specified times, as outlined in the Portfolio Guideline.

**Assessment:** Assessment is by means of coursework (40%), written test (30%) and a research assignment (30%).

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#### **CHM6019W EMERGENCY MEDICINE MINOR DISSERTATION (90 CREDITS)**

90 NQF credits at HEQSF level 9

**Convener:** Dr P Hodgkinson

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, must be about 25 000 words in length and must be on a topic in emergency medicine. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted

their research proposals for approval and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation.

**DP requirements:** Satisfactory completion of a self-reflection portfolio of clinical experiences submitted to the convener at specified times, as outlined in the Portfolio Guideline.

**Assessment:** External examination of the minor dissertation.

### **CHM6022F COMMUNITY EYE HEALTH I**

12 NQF credits at HEQSF level 9

**Convener:** Prof C Cook

**Course entry requirements:** None

**Course outline:**

The course aims to provide an overview of the principles of the control of blindness in general and an overview of the control of blindness due to cataract and the control of visual impairment due to refractive error.

The course is run online, with about four hours of online teaching each week over six weeks. Additionally, there is weekly tutorial contact time.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two semester assignments and a final examination. The examination makes up 50% of the coursework mark and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

### **CHM6023F COMMUNITY EYE HEALTH II**

12 NQF credits at HEQSF level 9

**Convener:** Prof C Cook

**Course entry requirements:** None

**Course outline:**

The course aims to provide an overview of the principles of epidemiology for eye health. The course is run online, with about four hours of online teaching each week over six weeks. Additionally, there is weekly tutorial contact time.

**DP requirements:** At least 45% for the semester assignments taken as a whole.

**Assessment:** Two semester assignments and a final examination. The examination makes up 50% of the coursework mark, and the assignments the remaining 50%. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

### **CHM6026S CRITICAL THINKING IN EMERGENCY CARE**

15 NQF credits at HEQSF level 9

**Convener:** Dr T Welzel

**Course entry requirements:** None

**Course outline:**

Candidates are introduced to the principles of critical thinking and on-the-spot decision making in healthcare and its link to patient safety. Topics covered include models of decision making (thinking styles), the human factor in patient safety: contrasting the high reliability models with the “normal accident” model, as well as the identification of cognitive and affective error and countering their influence through cognitive forcing strategies.

**DP requirements:** Satisfactory completion of all coursework commitments.

**Assessment:** Assessment is by virtue of coursework (55%), and a final summative assessment (45%).

### **CHM6028S MANAGEMENT & LEADERSHIP IN HEALTHCARE**

15 NQF credits at HEQSF level 9

**Convener:** Dr T Welzel

**Course entry requirements:** None

**Course outline:**

This is a semester course which introduces the candidate to both the theory and practicalities of effective management and leadership in healthcare in general and the emergency department in particular. Using the online learning platform and contact sessions, delegates develop an understanding of the principles of leadership and management which they can use to improve the care delivered in their own environment and beyond, focusing on levels of work theory, leadership styles and situational leadership, team dynamics and effectiveness, and conflict handling strategies and leadership in a crisis. Workplace management or leadership experience within the preceding 24 months is advantageous.

**DP requirements:** Satisfactory completion of all coursework commitments.

**Assessment:** Assessment is by virtue of coursework (55%) and a final summative assessment (45%).

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**CHM6029S DISASTER MEDICAL RESPONSE TRAINING**

15 NQF credits at HEQSF level 8

**Convener:** Dr W Smith

**Course entry requirements:** CHM6012F and CHM6030S

**Course outline:**

Medical personnel are often called upon to respond across provincial and/or international borders. The recent earthquakes and other complex humanitarian emergencies are cases in point. Medical staff deployed to such incidents are faced with providing care in an often difficult or hostile environment. This course attempts to address some of the issues and skills that such a response may require. Topics covered are: an introduction to INSARAG, as well as medical considerations in an urban search and rescue environment, an introduction to basic veterinary and dentistry skills, as well as selected primary healthcare considerations, amongst others.

**DP requirements:** Must attend the five-day practical session (DisMert Course)

**Assessment:** Assessment is on the basis of coursework (40%), a written examination (20%), and a minor research project (40%).

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**CHM6030S AMBULATORY CARE & TRAVEL MEDICINE**

15 NQF credits at HEQSF level 9

**Convener:** Dr A Kropman and Dr P Louw

**Course entry requirements:** None

**Course outline:**

This course covers aspects of the common primary healthcare complaints which may be managed by emergency care workers. It includes clinical approaches and management of common chronic medical conditions, as well as selected topics in travel medicine. The course is aimed at nurses, paramedics and medical officers who want to improve their knowledge on conditions pertinent to extra-urban placements and deployment, such as for search and rescue and disaster deployments, expeditions, rigs, or mining operations in Africa. Please note that this module is a part-prerequisite for the DisMeRT module (CHM6029S).

**DP requirements:** Attendance of all coursework commitments.

**Assessment:** Assessment is by coursework (50%), and theory test (50%).

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**CHM6031F PATIENT SAFETY & FLOW**

15 NQF credits at HEQSF level 9

**Convener:** Dr H Tuffin and Dr K Cohen

**Course entry requirements:** None

**Course outline:**

Candidates develop an in-depth knowledge of the principles of continuous quality improvement and its link to patient safety, which they can use to improve the care delivered in their own field of work. Specific topics focused on include quality measures; risk assessments; communication; teams and teamwork in emergency medicine; the morbidity and mortality meeting; bedside teaching of error in EM; and learning how to benchmark and make improvements in one's healthcare environment.

**DP requirements:** Attendance of main contact session.

**Assessment:** Assessment is by virtue of coursework (55%) and a final summative assessment (45%).

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### **CHM6032S CONTINUOUS QUALITY IMPROVEMENT**

15 NQF credits at HEQSF level 9

**Convener:** Dr H Tuffin

**Course entry requirements:** CHM6031F

**Course outline:**

Students learn an approach to quality management that builds upon traditional quality assurance methods by emphasising the organisation and systems. It focuses on the “process” rather than the individual, recognises both internal and external “customers” and promotes the need for objective data to analyse and improve processes. They learn to question the quality of healthcare and the consequences for patient safety of many of the currently applied practices. Building on the introduction of LEAN processes from CHM6032S, a number of tools and processes are explored theoretically and practically in this course. Specific aspects which are explored include the need for quality improvement in resource-poor countries, principles and models of quality improvement, challenges and successes in implementing quality improvement and how to disseminate improvements rapidly through the health care system.

**DP requirements:** Attendance of main contact session.

**Assessment:** Assessment is by virtue of assignments (40%), project (30%) and a final summative assessment (30%).

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### **CHM6036W BASIC ANATOMY & PHYSIOLOGY IN PAEDIATRIC**

**NEUROSURGERY**

50 NQF credits at HEQSF level 9

**Convener:** Dr L Padayachy

**Course entry requirements:** None

**Course outline:**

The course covers the basic anatomical, physiological and pathophysiological characteristics of commonly encountered paediatric neurosurgical conditions. The application of these theoretical concepts in daily practice is assessed and implemented as a part of the ongoing clinical evaluation. An understanding of the basic principles involved in the disease processes is fundamental to improving the quality of care afforded to children with surgical abnormalities of the nervous system. Emphasis is placed on conditions encountered in an African setting, so that the training is most relevant to a local environment. Exposure to anatomical teaching is included in surgical theatre time, where exposure to surgical anatomy forms an integral part of the course. The differences between adults and children in terms of anatomical, pathological and management strategies are emphasised. Teaching includes structured lecture time (both in groups and in one-on-one sessions), grand ward rounds and outpatient clinics. This course provides foundational skills and interface with the remaining components of the training programme to provide a comprehensive theoretical and practical basis for the overall qualification.

**Assessment:** The formative assessment of clinical competence is based on examining aspects of patient care and contributes 40% to the final mark. The oral case-based assessment contributes 60% of the final mark.

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### **CHM6037W MANAGEMENT OF CLINICAL CONDITIONS IN PAEDIATRIC**

**NEUROSURGERY**

45 NQF credits at HEQSF level 9

**Convener:** Dr L Padayachy

**Course entry requirements:** None

**Course outline:**

The learning template that is applied to theoretical and clinical training in the paediatric neurosurgical conditions as described in the course layout includes definition, epidemiology, natural history, classification, diagnosis, management and assessment of associated conditions. Clinical training occurs during grand ward rounds, elective surgical slates and outpatient clinics. Students learn the application of appropriate treatment protocols for new patients, including initiation of acute and emergency care treatment protocols, initiation of acute and emergency care treatment, transition of care to the ward and rehabilitation, as well as interaction within a multidisciplinary team. Students are required to demonstrate a level of competency in a range of clinical, procedural and surgical techniques. Key to development of clinical skills is practical workplace experience, integrated with one-on-one teaching sessions. Didactic lectures are offered, following a weekly teaching roster, and are merged with the departmental academic roster.

**DP requirements:** None.

**Assessment:** The on-going assessment of clinical competence contributes 40% to the final mark for the course. Oral-based assessment contributes 60% to the final mark. A subminimum of 50% is required to pass each of these two components of assessment.

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**CHM6038W SURGICAL AND CRITICAL CARE MANAGEMENT IN PAEDIATRIC NEUROSURGERY**

40 NQF credits at HEQSF level 9

**Convener:** Dr L Padayachy

**Course entry requirements:** None

**Course outline:**

The clinical management of neonates, infants and young children with neurosurgical conditions is profoundly different from that of adults and demands sound knowledge of the characteristics unique to children. A comprehensive care programme involves integrated management from the acute care setting to surgical technique, critical care and rehabilitation. The student is exposed to commonly occurring paediatric neurosurgical conditions, and is expected, by the end of the course, to have a comprehensive working knowledge of the surgical aspects of these conditions. Particular emphasis is placed on locally relevant conditions, such as central nervous system infections like TB, traumatic brain injury, tumours of the central nervous system, and congenital malformations, e.g. myelomeningocele. The student should be able to independently manage the commonly occurring paediatric neurosurgical conditions and decide which conditions need early referral to a specialist centre. Students will also benefit from being exposed to a wider international network of specialists, should advice be sought.

**DP requirements:** None

**Assessment:** The formative assessment of clinical competency will be based on examining aspects of patient care and will contribute 40% to this course. The oral case-based assessment will contribute 60% of the examination. A minimum of 50% will be required to pass each component of the examination. Candidates who fail more than two components of the formative assessments will not be granted a DP and may be asked to withdraw from the programme. Successful completion of this course, together with completion of a logbook, will form part of a DP requirement for entering the final examination.

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**CHM6039W FINAL INTEGRATED CLINICAL EXAMINATION**

0 NQF credits at HEQSF level 9

**Convener:** Dr L Padayachy

**Course entry requirements:** Satisfactory completion of a clinical and theatre case logbook and successful completion of all courses other than the Research Report.

**Course outline:**

The final integrated examination is aimed at testing the student's knowledge as well as his/her ability to integrate and apply this knowledge adequately in a clinical situation.

**DP requirements:** None

**Assessment:** The integrated final examination includes a written component that contributes 40% to the final mark and an oral component that contributes 60%. A subminimum of 50% is required to pass each component of the examination.

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**CHM6040W RESEARCH REPORT**

45 NQF credits at HEQSF level 9

**Convener:** Dr L Padayachy**Course entry requirements:** None**Course outline:**

The Research Report comprises an independent study, under supervision, designed to develop and demonstrate innovative thinking and application of knowledge. The Report, which covers specific areas of interest the student has encountered during the programme, allows the student to integrate and apply various aspects of the training programme. The Report measures the student's ability to assimilate knowledge, access relevant literature, collect data, analyse such data and write up the results independently.

**DP requirements:** None

**Assessment:** The Report is externally examined. The Report should be a well-constructed manuscript that is publishable in a peer-reviewed journal.

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**CHM7004W MMED IN SURGICAL DISCIPLINES PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Varies per surgical discipline**Course entry requirements:** None**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist surgeons in various surgical disciplines. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Surgeons of SA. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards CHM7004W. The purpose of this course is to build a foundation of knowledge in the basic sciences for the clinical practice of the surgical disciplines. The course covers core knowledge of anatomy, including applied anatomy; physiology and applied physiology; and the principles of pathology and microbiology common to all surgical disciplines. For the detailed curriculum, see the regulations of the College of Surgeons at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** None

**Assessment:** Candidates write the primary examination of the College of Surgeons. The examination includes two three-hour papers of MCQs (multiple choice questions) and/or short written questions on basic sciences.

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**CHM7008W MMED IN SURGERY PART 2B**

30 NQF credits at HEQSF level 9

**Convener:** Prof D Kahn**Course entry requirements:** CHM7004W and CHM7010W**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist surgeons. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the College of General Surgeons of SA. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards CHM7008W. The purpose of the last component of the specialist in general surgery is for the candidates to acquire an in-depth knowledge of all aspects relating to paediatric surgery, of cardiothoracic surgical disease that may affect the

general surgeon, gastro-intestinal surgery, head and neck surgery, surgical oncology, trauma surgery, urology, vascular surgery, general surgery, breast disease, malignant skin diseases, and a range of other general surgery areas. The training also covers related radiological and therapeutic aspects where relevant. For the full curriculum and examination details, see the regulations of the College of Surgeons at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates may be admitted to the final examination having passed the primary and the intermediate examinations; having produced evidence of having been qualified to practise for a period of not less than four years (the year of internship not to form part of this period); and having served a period of not less than two and a half years of approved training in general surgery. Candidates must also submit a logbook with details about operative experience and training in Surgery or any other surgical discipline, gained while the candidate was in an approved training centre.

**Assessment:** Candidates take the final examination of the College of Surgeons of South Africa. The examination comprises two written papers and clinical, practical and oral examinations in the theory and practice of general and paediatric surgery, including operative surgery, surgical anatomy, physiology and pathology.

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#### **CHM7009W SURGERY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof D Kahn

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in general surgery. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **CHM7010W MMED IN SURGICAL DISCIPLINES PART 2A**

30 NQF credits at HEQSF level 9

**Convener:** Varies per surgical discipline

**Course entry requirements:** CHM7004W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the College of Otorhinolaryngology of SA. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital accredited by the CMSA. On successful completion of training, they write the final examination of the College and receive credit towards CHM7010W. This course covers the principles of surgery in general applicable to all branches of the surgical speciality disciplines. The objective is to build an understanding of aspects of patient care basic to the perioperative period, namely principles of pre-operative assessment, supportive measures, and complications for both adults and children. The syllabus includes pre-operative care, intra-operative care, post-operative care and complications. This will include trauma, infections and other emergencies as these apply to ENT and ocular emergencies, plastic surgery, orthopaedic surgery, cardiothoracic surgery, urology, paediatric surgery and general surgery. For the detailed curriculum, see the regulations of the College of Surgeons at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** The candidate may be admitted to the intermediate examination having passed the primary; having completed not less than 18 months of approved training in surgery, embracing trauma and intensive care and the surgical specialities (of the 18 months' training called for, not less than six months must be spent in general surgery and not less than six months must be spent in one or more of the following surgical specialities: orthopaedics, urology, neurosurgery, paediatric surgery, cardiothoracic surgery, plastic and reconstructive surgery); and having obtained the ATLS certificate or having registered to take the ATLS certificate examination.

**Assessment:** Candidates write the intermediate examination organised by the College of Surgeons, which comprises such written papers and such oral examinations as determined by the College.

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### CHM7012W MMED IN PLASTIC & RECONSTRUCTIVE SURGERY PART 2B

30 NQF credits at HEQSF level 9

**Convener:** Assoc Prof D Hudson

**Course entry requirements:** CHM7004W and CHM7010W.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist plastic surgeons. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the relevant curriculum of the College of Plastic Surgeons of SA. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards CHM7012W. The purpose of this course is to build on the knowledge of basic sciences and general introduction to surgical disciplines covered in the first two parts of training. The course content covers the theory and practice of plastic and reconstructive surgery, which includes operative surgery and the application of the basic sciences of anatomy, physiology and pathology. Candidates are also trained in aspects of radiology and therapy that relate to plastic and reconstructive surgery. The full curriculum is available from the College of Plastic Surgeons of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** A candidate may be admitted to the final examination having passed the primary and the intermediate examinations or having completed the Fellowship of one of the Colleges with which there is an agreement of reciprocity; having produced evidence of having been qualified to practise for a period of not less than four years (the year of internship not to form part of this period); and having completed a period of not less than 36 months' training prior to the examination date in a recognised plastic and reconstructive surgery training post certified by the academic head of the department of plastic and reconstructive surgery. A maximum of six months of the training called for above may form part of these 36 months, provided this period is spent in a recognised plastic and reconstructive training post.

**Assessment:** Two written papers and clinical, practical and oral examinations in the theory and practice of plastic and reconstructive surgery, including operative surgery, surgical anatomy, physiology and pathology.

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### CHM7013W PLASTIC & RECONSTRUCTIVE SURGERY MINOR DISS (60 CRED)

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof D Hudson

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in plastic and reconstructive surgery. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the

results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**CHM7019W MMED IN CARDIOTHORACIC SURGERY PART 2B**

30 NQF credits at HEQSF level 9

**Convener:** Prof P Zilla

**Course entry requirements:** CHM7010W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist cardiothoracic surgeons. Candidates follow the curriculum of the College of Cardiothoracic Surgeons of South Africa. They undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards CHM7019W. For the detailed curriculum, see the regulations of the College of Cardiothoracic Surgeons, at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** CHM7010W; Pre-requisites: successful completion of at least 18 months of approved training in surgery including trauma, intensive care and the surgical specialities. Of the 18 months, at least six months must be spent in general surgery and six months in one or more of the surgical specialities (orthopaedics, urology, neurosurgery, paediatric surgery, cardiothoracic surgery, and plastic and reconstructive surgery). In addition, the candidate must have obtained the ATLS certificate. At least four years must have been spent in a registrar post in cardiothoracic surgery. Candidates are also required to submit a completed logbook and have prepared a dissertation for submission for the MMED Part 3 prior to writing the final College examinationFor full details see [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za). - College of Cardiothoracic Surgeons: Regulations including Curriculum, and Logbook

**Assessment:** Two written papers and an oral examination, set by the College of Cardiothoracic Surgeons.

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**CHM7020W CARDIOTHORACIC SURGERY MINOR DISSERTATION (60 CRED)**

60 NQF credits at HEQSF level 9

**Convener:** Prof P Zilla

**Course entry requirements:** None

**Course outline:**

Candidates produce a minor dissertation under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in cardiothoracic surgery. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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**CHM7026W MMED IN NEUROSURGERY PART 2B**

30 NQF credits at HEQSF level 9

**Convener:** Prof A G Fiegen

**Course entry requirements:** CHM7010W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist neurosurgeons. Candidates complete the training programme of the College of Neurosurgeons of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards CHM7026W. The curriculum includes the principles and practice of neurosurgery, including applied anatomy, physiology and pathology and related radiological and therapeutic aspects. For the detailed curriculum and examination rules, see the regulations of the College of Neurosurgeons at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates must have obtained the ATLS certificate and must have passed the intermediate examination of the College of Neurosurgery.

**Assessment:** Candidates write the final examination of the College of Neurosurgery. The examination comprises three written papers, as well as clinical, practical and oral examinations in the theory and practice of neurosurgery, including operative surgery, surgical anatomy, physiology and pathology.

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#### **CHM7027W NEUROSURGERY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof A G Fiegen

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in neurosurgery. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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#### **CHM7030W MMED IN OPHTHALMOLOGY PART 2**

30 NQF credits at HEQSF level 9

**Convener:** Prof C Cook

**Course entry requirements:** CHM7069W

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist ophthalmologists. Candidates complete the curriculum of the South African College of Ophthalmologists. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards CHM7030W. Training includes all aspects of medical and surgical ophthalmology. For the full curriculum, see the regulations of the College of Ophthalmologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** A candidate may be admitted to the final Part 2 examination after producing evidence of having been qualified to practice medicine for a period of not less than four years, including the year of internship; and after completing a period of not less than three years of training in ophthalmology in a full-time post-internship post approved by the HPCSA.

**Assessment:** Candidates write the final examination of the College of Ophthalmologists. The examination comprises written, clinical and oral examinations.

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#### **CHM7031W OPHTHALMOLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Prof C Cook

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in ophthalmology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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#### **CHM7032W MMED IN OPHTHALMOLOGY PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Prof C Cook

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist ophthalmologists. Candidates complete the Part 1 curriculum of the South African College of Ophthalmologists. The aim of the curriculum is to provide foundational knowledge in a range of basic science disciplines to prepare candidates to apply such knowledge to the clinical conditions and management strategies in ophthalmology. The curriculum includes anatomy and embryology of the visual system, and ocular and visual physiology. For the detailed curriculum and the examination rules, see the regulations of the College of Ophthalmologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** None

**Assessment:** Candidates write the Part 1 examination of the College of Ophthalmologists. There are two written papers and a subminimum of 50% is required for each.

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#### **CHM7035W MMED IN ORTHOPAEDIC SURGERY PART 2B**

30 NQF credits at HEQSF level 9

**Convener:** Prof R Dunn

**Course entry requirements:** CHM7004W and CHM7010W.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist orthopaedic surgeons. The Health Professions Council of South Africa stipulates training requirements, and candidates complete the curriculum of the South African College of Orthopaedic Surgeons. They undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College of Orthopaedic Surgeons and receive credit towards CHM7035W.

Content includes the theory and practice of orthopaedic surgery, including operative surgery and the applied basic sciences; orthopaedic trauma (adult and paediatric); reconstructive orthopaedic surgery; orthopaedic pathology; material aimed at covering a range of orthopaedic cognitive and affective objectives; hand surgery; elective adult reconstructive surgery; and a range of other orthopaedic topics.

For the detailed curriculum and the examination details, see the regulations of the College of Orthopaedic Surgeons at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least four years' practice excluding internship and community service, three of which are in a recognised orthopaedic training post certified by the academic head of the department of orthopaedic surgery; logbook; ATLS certificate.

**Assessment:** Candidates write the final examination of the College of Orthopaedic Surgeons. The examination includes three three-hour written papers on applied orthopaedic knowledge of anatomy,

pathology, physiology, radiology and biomechanics; two papers on the full spectrum of orthopaedics, including adult and paediatric trauma, paediatric orthopaedics, spinal surgery, surgical rheumatology and arthroplasty, hand and foot surgery, sports injuries and arthroscopy, amputations, orthotics and prosthetics; a final clinical examination; and an oral examination.

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**CHM7036W** ORTHOPAEDIC SURGERY MINOR DISSERTATION (60 CREDITS)

60 NQF credits at HEQSF level 9

**Convener:** Prof R Dunn

**Course entry requirements:** None.

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in orthopaedic surgery. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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**CHM7040W** MMED IN OTORHINOLARYNGOLOGY PART 2

30 NQF credits at HEQSF level 9

**Convener:** Prof J Fagan

**Course entry requirements:** CHM7010W.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist otorhinolaryngologists. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College of Otorhinolaryngology and receive credit towards CHM7040W. The aim of this course is to build on the foundational knowledge in the basic sciences offered in Part 1. The course content covers applied anatomy, applied physiology, special pathology, and audiology. Candidates cover the full spectrum of otorhinolaryngological medicine and otorhinolaryngological surgery, including head and neck surgery. The spectrum of congenital anomalies and acquired pathologies and their clinical management, upon which this examination is based, will include all conditions pertinent to modern otorhinolaryngological practice and head and neck surgical practice. For the detailed curriculum, see the regulations of the College of Otorhinolaryngology of SA, at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** CHM7004W and CHM7010W; and at least four years' clinical practice, at least three of which should be in an approved training position in otorhinolaryngology. Candidates must also produce a logbook covering all activities of their training and must have obtained the ATLS certificate.

**Assessment:** Candidates take the final examination of the College of Otorhinolaryngology. This comprises a written paper and a clinical, practical and oral examination in each of the special basic sciences and audiology, in the theory and practice of otorhinolaryngology, and in the theory and practice of head and neck surgery, including operative surgery.

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**CHM7041W** OTORHINOLARYNGOLOGY MINOR DISSERTATION (60 CREDITS)

60 NQF credits at HEQSF level 9

**Convener:** Prof J Fagan

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in otorhinolaryngology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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#### **CHM7044W MMED IN UROLOGY PART 2B**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof J M Lazarus

**Course entry requirements:** CHM7010W.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist urologists. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College of Urologists and receive credit towards CHM7044W. The final component of training includes the theory and practice of the full spectrum of clinical urology, including (but not limited to) congenital anomalies of the urogenital system, trauma of the kidney, ureter, bladder, urethra and external genitalia, infections of the urinary tract and male genital system, obstructive uropathy, neuromuscular dysfunction of the lower urinary tract, disorders of continence and voiding, urethral stricture disease, interstitial cystitis and prostatitis, urolithiasis, renal cystic diseases, renovascular diseases, principles of dialysis, renal transplantation and immunosuppression, neoplasms of the kidney, adrenal, retroperitoneum, ureter, bladder, prostate, urethra, penis, testis and spermatic cord, scrotal swellings, erectile dysfunction and ejaculatory disorders, and male infertility. For the full curriculum and examination details, see the regulations of the College of Urologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates may be admitted to the final examination having passed the primary and intermediate examinations or having completed the Fellowship of one of the Colleges with which there is an agreement of reciprocity; having produced evidence of having been qualified to practise for a period of not less than four years (the year of internship not to form part of this period); and having served a period of not less than two and a half years of approved training in urology. Candidates must also submit a completed logbook.

**Assessment:** Candidates take the final examination of the College of Urologists. The examination comprises two written papers; and clinical, practical and oral examinations.

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#### **CHM7045W UROLOGY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof J M Lazarus

**Course entry requirements:** None.

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in urology. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting

literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

#### **CHM7052W MPHIL IN VASCULAR SURGERY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Dr N Naidoo

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of specialist surgeons to become subspecialists in vascular surgery. Students follow the relevant curriculum of the College of Surgeons of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards CHM7052W. The curriculum is divided into mandatory and desirable components. Mandatory components include a strong foundational knowledge of basic sciences relevant to this subspecialty, including applied anatomy, vascular haemodynamics, vascular physiology, vascular pathology, as well as the basics of ultrasound, aspects of cardiology, pulmonology, nephrology, neurology, diabetes, ICU care, haematology, coagulation, and thrombolysis. Candidates learn to diagnose and clinically manage a range of diseases, ranging from carotid artery disease, aortic aneurysms, renal artery disease, mesenteric artery disease and venous thrombosis to venous incompetence. A strong foundation in research methodology and statistics is included in the training. For the detailed curriculum, see the regulations of the relevant College of Surgeons of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At least eighteen months as a subspecialty trainee in accredited specialist unit(s) of vascular surgery, registered and approved by the Health Professions Council of South Africa; submission of the prescribed logbook; written report(s) by the Head of the Unit and a curriculum vitae.

**Assessment:** Candidates undergo the final examination of the College of Surgeons related to this subspecialty. The examination comprises a multiple choice written paper of three hours' duration, and two half-hour oral evaluations of the candidate's knowledge of vascular surgery conducted by two sets of two examiners for each half-hour period.

#### **CHM7053W VASCULAR SURGERY MINOR DISS (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Dr N Naidoo

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after successful completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in vascular surgery. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Registration as a specialist surgeon; certification of having completed at least eighteen months as a subspecialty trainee in accredited specialist unit(s) of vascular surgery, registered and approved by the Health Professions Council of South Africa; submission of the

prescribed logbook, filled in and up to date, and certified by the head of the department; written report(s) by the Head of the Unit and a curriculum vitae.

**Assessment:** External examination of the minor dissertation.

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**CHM7056W MMED IN EMERGENCY MEDICINE PART 1**

60 NQF credits at HEQSF level 9

**Convener:** Prof L Wallis

**Course entry requirements:** Current ATLS, ACLS and APLS/PALS certification.

**Course outline:**

This training programme forms part of the process of certification of general practitioners as emergency medicine specialists. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College of Emergency Medicine and receive credit towards CHM7056W. The aim of the course is to provide foundational knowledge in a range of basic science disciplines to enable candidates to apply such knowledge to the clinical conditions and management strategies in the speciality of emergency medicine. The Part 1 course covers a wide range of disciplines and topics within those disciplines that relate to the field of emergency medicine, including clinical anatomy; clinical pathology; infectious diseases and diseases of the immune system; physiology; and clinical pharmacology and toxicology. For the detailed curriculum, see the regulations of the relevant College of Emergency Medicine at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates are required to successfully complete the FCEM I examination or its approved equivalent within the first 18 months of training.

**Assessment:** Examination (FCEM I) = 100%. Two multiple-choice question papers of three hours each. Emphasis is on clinical anatomy, physiology, pathology and pharmacology relevant to the practice of emergency care.

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**CHM7057W MMED IN EMERGENCY MEDICINE PART 2**

60 NQF credits at HEQSF level 9

**Convener:** Prof L Wallis

**Course entry requirements:** CHM7056W

**Course outline:**

This training programme forms part of the credentialling process as specialists in emergency medicine. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College of Emergency Medicine and receive credit towards CHM7057W. Content includes pre-hospital emergency care; resuscitative problems and techniques; acute signs and symptoms in adults and in children; emergency wound management; cardiovascular, pulmonary, gastro-intestinal, infectious diseases and allergy; toxicology; environmental emergencies; endocrine, haematologic, oncologic, and neurological emergencies; eye, ear, nose, throat and oral emergencies; trauma; fractures and dislocations; muscular, ligamentous and rheumatic disorders; psychosocial disorders, abuse and assault; imaging modalities; and common implantable devices. A wide range of lectures is offered and a number of short courses recommended, such as Emergency Management of Severe Burns, Disaster Medicine, and Aviation Medicine. See full syllabus at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** A candidate has to complete at least six short courses, the following four of which are obligatory: Neonatal Advance Life Support, Disaster Medicine, Aviation Medicine, and Clinical Research Methods I (CHM6005F). The choice of recognised elective short courses is available from the convener. Prior to writing the final College of Emergency Medicine examination, applicants must have: (a) Successfully completed the primary examination; (b) Been qualified to practice for a period of not less than four years post-internship; (c) Completed a minimum of 36 months' clinical training; (d) Submitted a CMSA-approved comprehensive critical performance

portfolio; (e) Completed the Level 1 Emergency Ultrasound certification, AND (f) Submitted and passed the part 3 dissertation (CHM7058W) prior to sitting the Part 2 examination.

**Assessment:** Examination (FCEM II) = 100%. The final examination consists of written, OSCE, clinical and oral assessments. For the detailed curriculum, see the regulations of the relevant College of Medicine at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

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#### **CHM7058W EMERGENCY MEDICINE MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof L Wallis

**Course entry requirements:** None

**Co-requisites:** CHM6005F

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in emergency medicine. The dissertation must be based on a study for which the work was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** Students are required to have obtained approval of a research topic for the minor dissertation and to have signed an MOU with his/her supervisor setting out the conditions of the candidate's research towards his/her minor dissertation within 24 months of first registration.

**Assessment:** External examination of the minor dissertation.

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#### **CHM7059W MMED IN PAEDIATRIC SURGERY PART 1**

60 NQF credits at HEQSF level 9

**Convenor:** Prof A Numanoglu

**Course entry requirements:** None

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the College of Paediatric Surgeons of South Africa. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College and receive credit towards CHM7059W. The aim of the course is to provide foundational knowledge in a range of basic science disciplines to prepare candidates to apply such knowledge to the clinical conditions and management strategies in the speciality of paediatric surgery. The course content covers anatomy, including applied anatomy, applied physiology, principles of pathology and the applications of the principles to clinical surgery. For the full curriculum and examination details, see the regulations of the College of Paediatric Surgeons at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates are required to have successfully completed the Basic Surgical Skills course prior to applying for admission to the primary examination.

**Assessment:** Candidates write the examination of the College of Surgeons. The examination usually consists of one or more written papers about the basic sciences.

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#### **CHM7060W MMED IN PAEDIATRIC SURGERY PART 2**

60 NQF credits at HEQSF level 9

**Convenor:** Prof A Numanoglu

**Course entry requirements:** CHM7059W; CHM7010W.

**Course outline:**

This training programme forms part of the credentialling process of general practitioners as specialist paediatric surgeons. The Health Professions Council of South Africa stipulates the training requirements. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. On successful completion of training, they write the final examination of the College of Paediatric Surgeons and receive credit towards CHM7060W. The course content covers the principles and practice of paediatric surgery, including embryology, applied anatomy, physiology and pathology, and related radiological and therapeutic aspects, including foetal diagnosis and treatment. For the full curriculum and examination details, see the regulations of the College of Paediatric Surgeons at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** Candidates must have passed the primary examinations; must have completed not less than 12 months of approved post-community service training as a registered medical practitioner, in surgery, with at least 6 months in general surgery, not less than 3 months in ICU and not less than 3 months in trauma/emergency surgery; and must have obtained the ATLS certificate.

**Assessment:** Two three-hour papers of MCQs (multiple choice questions) and/or short written questions on basic sciences.

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**CHM7061W PAEDIATRIC SURGERY MINOR DISSERTATION (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof A Numanoglu

**Course entry requirements:** None

**Course outline:**

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in paediatric surgery. The dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

**DP requirements:** None.

**Assessment:** External examination of the minor dissertation.

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**CHM7067W MPHIL IN CLINICAL PAEDIATRIC SURGERY PART 1**

120 NQF credits at HEQSF level 9

**Convenor:** Prof A Numanoglu

**Course entry requirements:** None

**Course outline:**

This course is designed to enable trainees to develop the following competencies: to manage patients presenting on an unselected emergency paediatric surgical ‘in-take’, by diagnosing, assessing, and treating or referring them on as appropriate; to manage patients presenting with a range of symptoms and elective conditions as specified in the core syllabus for the speciality of paediatric surgery; and to manage an additional range of elective and emergency conditions that may occur within a given period of training and thereby give rise to opportunities for appropriate training and corresponding assessment.

**DP requirements:** None

**Assessment:** One final examination of all coursework, including a written, oral and clinical component.

**CHM7068W CLINICAL PAEDIATRIC SURGERY MIN DISS (60 CRED)**

60 NQF credits at HEQSF level 9

**Convenor:** Prof A Numanoglu**Course entry requirements:** None**Course outline:**

The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in clinical paediatric surgery. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgement using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences.

**DP requirements:** None**Assessment:** External examination of the minor dissertation.**CHM7069W MMED IN OPHTHALMOLOGY PART 2A**

30 NQF credits at HEQSF level 9

**Convenor:** Prof C Cook**Course entry requirements:** CHM7032W

**Objective:** This training programme forms part of the credentialling process of general practitioners as specialist ophthalmologists. Candidates complete the curriculum of the South African College of Ophthalmologists. Candidates undergo training in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. Content includes ocular pathology and optics. For the detailed curriculum, see the regulations of the College of Ophthalmologists at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** CHM7032W

**Assessment:** Candidates write the examination of the College of Ophthalmologists. The examination includes written, clinical and oral examinations.

**CHM7070W MPHIL IN TRAUMA SURGERY PT 1**

120 NQF credits at HEQSF level 9

**Convenor:** Assoc Prof A Nicol**Course entry requirements:** None**Course outline:**

This training programme forms part of the credentialling process of specialist surgeons to become subspecialists in trauma surgery. Students follow the relevant curriculum of the College of Surgeons of South Africa and, on successful completion of the relevant Part 1 examination of the College, are granted credit towards CHM7070W. The structured academic programme includes multidisciplinary meetings with units and departments which impact on trauma surgery, such as cardiothoracic, diagnostic and interventional radiology, intensive care, and anaesthesiology. Candidates acquire a foundational knowledge of all pertinent aspects of applied anatomy, trauma physiology, haemodynamics, trauma pathology, ultrasonography and non-invasive trauma diagnosis, angiography and trauma radiology, and any aspects of trauma surgery that might be encountered in the day-to-day practice of trauma surgery. Training also covers the co-ordination, evaluation and supervision of a trauma care system, including pre-hospital care and transport; and the evaluation, resuscitation and surgical or non-surgical management of critically injured patients of all ages. Students are assigned to a cardiac/thoracic unit, a burn unit, a surgical nutrition unit, a neurosurgical unit, or other trauma related rotations. The candidate will acquire an advanced level of skill in management of critically injured patients, including the clinical management of patients with critical injuries complicated by chronic cardiac, respiratory, renal or metabolic dysfunction. Candidates acquire expertise in the use of advanced technology and instrumentation to monitor the physiologic

status of trauma patients of all ages; of organisational and administrative aspects of trauma care; and of the ethical, economic, and legal issues as they pertain to trauma care. For the detailed curriculum, see the regulations of the relevant College of Surgeons of South Africa at [www.collegemedsa.ac.za](http://www.collegemedsa.ac.za).

**DP requirements:** At last two years of training in an accredited trauma unit; a logbook and a curriculum vitae; certification by the Heads of Departments in which the training was completed, confirming satisfactory completion of training and achievement of the requisite level of technical and operative skill.

**Assessment:** Candidates undergo the relevant final examination of the College of Surgeons of South Africa. The examination comprises a multiple-choice written paper of three hours duration, and two half-hour oral evaluations of the candidate's knowledge of trauma surgery and trauma critical care, conducted by two sets of two examiners.

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#### **CHM7071W TRAUMA SURGERY MINOR DISS (60 CREDITS)**

60 NQF credits at HEQSF level 9

**Convener:** Assoc Prof A Nicol

**Course entry requirements:** None

**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars who wish to graduate with the MPhil degree. Those who choose not to complete a dissertation may register with the HPCSA as subspecialists after completion of the relevant College of Medicine Part 1 examination. The dissertation must be between 15 000 and 20 000 words in length, and must be on a topic in trauma surgery. It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a postgraduate student. The dissertation should be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Students are trained in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having obtained formal ethics approval, where necessary, they analyse the results of their research and write up the dissertation. In some disciplines they are also required to present the work at a congress and submit the research for publication.

**DP requirements:** None

**Assessment:** External examination of the minor dissertation.

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#### **CHM7073W MUSCULOSKELETAL SCIENCES DISSERTATION**

180 NQF credits at HEQSF level 9

**Convener:** Dr M Held

**Course entry requirements:** Clinical Research Methods I (CRM 1) as offered by the Department of Emergency Medicine – CHM6005F This is a semester based module designed to develop a coherent and basic understanding of the theory, research methodologies and techniques relevant to Emergency Medicine. Basic research methodologies, bias, confounders and basic biostatistics are covered.

**Co-requisites:** None

**Course outline:**

The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in musculoskeletal science. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. The dissertation is externally examined. The requirement for this full master's dissertation, conducted under supervision, is that it is publishable in a peer reviewed journal and therefore submitted in a ready-for publication format. The focus needs to be musculoskeletal science, adhering to the research focus outlined by the Orthopaedic Research Unit at UCT. These are: Trauma, Infections, efficiency of health care, systems, and innovations. As projects require, students will be trained further in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with

their research, analyse the results and submit the dissertation. The dissertation is externally examined.

**DP requirements:** None

**Assessment:** Dissertation 100%.

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#### **CHM7074W TRAUMA SCIENCE DISSERTATION**

180 NQF credits at HEQSF level 9

**Convenor:** Dr M Held

**Course entry requirements:** CHM6005F

**Co-requisites:** None

**Course outline:**

The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in trauma science.

The aim of this course is to allow exploration of the theoretical basis of trauma science and particular specialism for doctors, nurses, engineers, military personnel, physiotherapists and scientists. The requirement of this full master's dissertation, conducted under supervision, is that it is publishable in a peer-reviewed journal and therefore submitted in a ready-for-publication format. Where required, students will be trained further in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and submit the dissertation. The dissertation is externally examined.

**DP requirements:** None

**Assessment:** Dissertation 100%

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#### **CHM7075W INFECTION MANAGEMENT DISSERTATION**

180 NQF credits at HEQSF level 9

**Convenor:** Dr M Held

**Course entry requirements:** CHM6005F Clinical Research Methods I

**Co-requisites:** None

**Course outline:**

The MSc(Med) in Infection Management by full dissertation aims to expose graduates to components of effective control of human pathogens in the hospital and community settings, especially for osteoarticular infections, and will provide knowledge in the monitoring, prevention, diagnosis, and treatment. The main focus will be on the influence of TB and HIV, on musculoskeletal structures. The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in infection management. It must also be publishable in a peer-reviewed journal and therefore submitted in a ready-for-publication format. Where required, students will be trained further in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and submit the dissertation. The dissertation is externally examined.

**DP requirements:** None

**Assessment:** Dissertation 100%.

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#### **CHM7076W SPORTS INJURIES DISSERTATION**

180 NQF credits at HEQSF level 9

**Convenor:** Dr M Held

**Course entry requirements:** CHM6005F Clinical Research Methods I

**Co-requisites:** None

**Course outline:**

The MSc(Med) in Sport Injuries by full dissertation aims to expose, doctors, sport therapists, physiotherapists and other allied health professionals to the science of sports injuries, with a focus on the management and assessment of acute injuries, as well as the rehabilitation and prevention of injuries. The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in sports injuries. It must also be publishable in a peer-reviewed journal and therefore submitted in a ready-for-publication format. Where required, candidates will be trained further in statistics, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and submit the dissertation. The dissertation is externally examined.

**Assessment:** Dissertation 100%.

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**CHM7077W GLOBAL SURGERY DISSERTATION**

180 NQF credits at HEQSF level 9

**Convenor:** Dr M Held

**Course entry requirements:** CHM6005F

**Co-requisites:** None

**Course outline:**

The requirement for this full master's dissertation, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a topic in palliative medicine. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. The dissertation is externally examined.

**DP requirements:** None

**Assessment:** External examination of the dissertation

## RESEARCH STRUCTURES

### Adolescent Health Research Unit (AHRU)

Division of Child & Adolescent Psychiatry, 46 Sawkins Road, Rondebosch, 7700

Adolescents face a wide range of health problems due to a combination of biological, social and psychological factors. There is therefore a clear need for a research facility that focuses specifically on the health needs of adolescents. The AHRU was established in 2003 by Prof Alan Flisher as an interdisciplinary facility to co-ordinate, promote and facilitate research on all aspects of adolescent health. The specific aims of the Unit are to: facilitate cutting edge interdisciplinary research that addresses key national public adolescent-health priorities; promote networking among adolescent-health researchers, practitioners and policy makers; increase the profile of the Faculty of Health Sciences, UCT, with regard to world-class adolescent-health research; provide policy consultation at local, provincial, national and international levels; and increase and improve educational offerings in adolescent health at undergraduate and postgraduate levels. The specific research themes in the AHRU include sexual & reproductive health, adolescent mental health, intimate partner violence in adolescence, abuse & bullying, and health & education systems for adolescents.

Website: [www.ahru.uct.ac.za](http://www.ahru.uct.ac.za)

P J de Vries, MBChB Stell MRC Psych London PhD Cantab  
C Mathews, BA Natal MSc (Med) PhD Cape Town

### Alan Flisher Centre for Public Mental Health

Department of Psychiatry and Mental Health, University of Cape Town, and Department of Psychology, University of Stellenbosch

The Alan J Flisher Centre for Public Mental Health (CPMH, [www.cpmh.org.za](http://www.cpmh.org.za)), based in the Department of Psychiatry and Mental Health, Health Sciences Faculty at UCT, was established in April 2010, through approval by the UCT Senate Executive Committee and a Memorandum of Understanding signed between UCT and Stellenbosch University. Since its establishment the Centre has grown substantially and now conducts research in 8 countries in sub-Saharan Africa and south Asia with a research budget of over US\$14 million. It is one of the leading international research centres in Public Mental Health based in a developing country. The CPMH currently leads two major mental health research consortia: the DfID-funded Programme for Improving Mental health carE (PRIME, [www.prime.uct.ac.za](http://www.prime.uct.ac.za)) and the NIMH-funded Africa Focus on Intervention Research for Mental health (AFFIRM, [www.affirm.uct.ac.za](http://www.affirm.uct.ac.za)), and is a partner in a third European Commission funded consortium, the Emerging mental health systems in low and middle-income countries project (EMERALD, [www.emerald-project.eu](http://www.emerald-project.eu)). The CPMH also runs a distance learning Masters (MPhil) programme in Public Mental Health, with students from 7 African countries, as well as a PhD programme (currently supporting 9 PhD students) and 2 Postdoctoral Fellowships. Fellowships for these programmes are supported through the NIMH AFFIRM grant and the Wellcome Trust funded African Mental health Research Initiative (AMARI). The CPMH is also home to the Perinatal Mental Health Project ([www.pmhpa.org](http://www.pmhpa.org)). The CPMH employs a multi-disciplinary team dedicated to undertake high quality research in the areas of public mental health, mental health policy and services.

C Lund, BA (Hons)(Psych) MA MSocSci (ClinPsych) PhD Cape Town

## **Brain and Behaviour Initiative (BBI)**

*J-Block, Groote Schuur Hospital*

*The Brain and Behaviour Unit is a multi-disciplinary hub for psychiatric neuroscience research based in the Division of Psychopharmacology and Biological Psychiatry of the Dept of Psychiatry & Mental Health. The Brain and Behaviour Unit focuses on psychiatric neuroscience (i.e. psychiatric neurogenetics, psychiatric neuroimaging, translational neuroscience relevant to mental disorders), and provides a mechanism for supporting postgraduate students and postdoctoral fellows; for psychiatric neuroscience education; and for multi-disciplinary collaborative relationships. It comprises three groups; the Psychiatric Neurogenetics Group, the Psychiatric Neuroimaging Group, and the Translational Neuroscience Group. The Brain and Behaviour Unit aims to contribute to issues that are particularly relevant to the South African and African contexts, such as psychological trauma, substance use, and neuroHIV. Members of the Brain and Behaviour Unit employ a range of methods in this work, including phenotyping, cognotyping, genotyping, brain imaging and characterizing molecular signature.*

D J Stein, BSc(Med) MBChB Cape Town FRCPC PhD DPhil Stell

## **Cancer Research Initiative**

*J52-12, Old Main Building, Groote Schuur Hospital*

*Cancer is an important cause of morbidity and mortality worldwide, with an increasing proportion of the burden falling on low- and middle-income countries.*

*The aim of the Cancer Research Initiative is to foster an integrated, interdisciplinary cancer research program, enabling the Faculty to be at the forefront of research endeavors to address the alarming cancer burden in South Africa, Africa and beyond. There are many excellent researchers conducting high quality basic, clinical and population oriented cancer research in the Faculty.*

*The Initiative builds on current strengths and promotes collaborative research into effective and relevant approaches to prevention, diagnosis, and treatment of cancer. It supports translation of this knowledge into preventive, therapeutic and public health strategies. In this context the Initiative encourages and supports local, national and international partnerships.*

*The Initiative will also develop research capacity among clinicians, other health professionals and scientists with a view to developing and maintaining a critical mass of expert cancer researchers.*

**Director:**

Associate Professor J Moodley (PhD, MMed (Public Health Medicine), MBChB)

## **Cape Heart Centre**

*Christiaan Barnard Building, Faculty of Health Sciences*

*This combined research entity is the largest heart research group in South Africa. The Hatter Institute is involved in the study of the molecular and cellular biology of ischaemic heart disease, as well as the molecular and cellular pathophysiology of cardiac hypertrophy and heart failure. The goals of the research programme are to contribute to the fundamental understanding of the mechanisms in the development of ischaemic heart disease, cardiac hypertrophy and heart failure. The Cardiovascular Research Institute is focusing on tissue regeneration, heart valve prostheses and biocompatible materials for vascular and valvular prostheses. Lipidology is concerned with the research into lipid and lipoprotein disorders in patients in the region and novel treatment strategies for these disorders. Additionally, their research includes new diagnostic assays for local problems in healthcare and lipid peroxidation. The University of Cape Town start-up company with its 32 engineers and technologists occupies 2 floors of the Cape Heart Centre. 'Strait Access Technologies' (SAT) is in its 5th year of developing long-lasting, easily insertable heart valve*

*replacements and repairs for the young patients in Africa with Rheumatic Heart Disease who have no access to open heart surgery.*

**Professor, Director and CEO:**

P Zilla (MD, PhD)

Christiaan Barnard Chair

**Cardiovascular Research Unit**

*Third Floor, Chris Barnard Building, Faculty of Health Sciences*

*The Cardiovascular Research Unit is an integral part of the Division of Cardiothoracic Surgery. As such, it provides postgraduate training in the disciplines of Biomaterials, Cardiothoracic Surgery and Computational Biomechanics. Both MSc (Medicine) and PhD degrees by dissertation are offered in these disciplines.*

*Laboratory-based research is carried out in the fields of biomaterials, myocardial regeneration, cardiovascular biomechanics, regenerative vascular grafts and tissue engineering.*

**Professor and Director:**

P Zilla, MD PD Vienna DMed Zurich PhD Cape Town

**Deputy Director:**

P Human, PhD Cape Town

**Associate Professor:**

Neil Davies PhD Oxford

**Associate Professor:**

Deon Bezuidenhout PhD US

**Laboratory Assistant:**

R Michaels

**Financial Officer**

Judy Brooks

**Centre for Environmental and Occupational Health Research (CEOHR)**

*Level 4, Falmouth Building South*

*The Centre, a WHO collaborating centre in occupational health since 2005, was upgraded in 2009, following its initial establishment as a research unit in 1993. The core objectives of the Centre are:*

- *To be a principal centre of occupational and environmental health research, teaching and training occupational medical clinical services, policy advisor, technical consultant services, advocacy and a source of supportive outreach activities in South Africa, in the Southern and Eastern regions of Africa, in Africa more generally, and internationally;*
- *To conduct multidisciplinary research, teaching and service provision integrating laboratory, clinical, epidemiological and policy skills in relation to occupational-health problems that have high priority in Southern Africa in order to facilitate identification and improved characterisation of these and other problems and to better understand the determinants of these problems and their solutions;*
- *To explore and develop means of maintaining the health of individuals and the environment, especially the work environment, and of preventing the development of health problems in those exposed to injurious environments at work or more generally;*

- To conduct public policy research into issues ranging from toxic or injurious exposures through to health surveillance and the functioning of relevant health services including promotive, preventive, curative and rehabilitative/compensation aspects;
- To foster inter-institutional research, teaching and service (including outreach) collaboration with United Nations and other agencies;
- To foster local and global networks for environmental and occupational health promotion through collaboration with United Nations and other agencies; and
- To implement the results of research in teaching, training, policy, service provision and outreach.

**Associate Professor and Director:**

MA Dalvie, BSc BSc(Med)(Hons) MSc (Med) PhD *Cape Town*

**Associate Professor and Deputy Director:**

H-A Rother, BA MA PhD *Michigan*

**Professors:**

M F Jeebhay, MBChB *Natal* DOH MPhil (Epi) *Cape Town* MPH (OccMed) PhD *Michigan*  
L London, MBChB MMed MD *Cape Town* BScMed(Hons) *Stell DOH Witwatersrand*

**Professor Part-time:**

M L Thompson, BSc(Hons) *Natal* PhD *Gottingen*

**Senior Lecturer:**

S Adams, MBChB DOH PhD *Cape Town* MFamMed *Stell FCPHM (OccMed) SA*

**Emeritus Professors:**

R Ehrlich, BBusSc MBChB PhD *Cape Town* DOH *Witwatersrand* FFCH FCPHM (OccMed) SA  
J E Myers, BSc MBChB MD *Cape Town* DTM&H MFOM UK

**Research Officer:**

Z Holtman, MA (ResPsychology) PhD *Cape Town*

**Research Co-ordinator:**

R Baatjies, BTech MTech CPUT MPH *Witwatersrand* PhD *Cape Town*

**Honorary Research Associates:**

R Matzopoulos, BBusSci MPhil (Epi) PhD *Cape Town*

**Post-Doctoral Research Fellow:**

Petr Konecny, BSc MSc PhD *Palacky University*

A Saban, BSc (Zoo & Psych) BSc (Hons) M.A PhD *University of Cape Town*

**Centre for Infectious Disease Epidemiology and Research (CIDER)**

*Level 5, Falmouth Building South*

*The Centre for Infectious Disease Epidemiology and Research conducts multidisciplinary research on priority infectious diseases in Southern Africa, in order to improve disease prevention and management. The Centre has strong links to service providers at provincial and national level, and a long track record of conducting operations research around service delivery challenges. Staff includes epidemiologists, biostatisticians, mathematical modellers, social scientists and public health specialists.*

*Areas of research include:*

- *Observational epidemiology: CIDER is an internationally recognized centre for observational research on HIV care and treatment in both adults and children. As part of this the Centre hosts a global project for cohort research on paediatric HIV treatment, houses a regional data centre for collaborative HIV cohort research in Southern Africa, and provides support not only to provincial and national HIV treatment initiatives but also to a range of individual projects. The Centre is also involved in a range of prospective HIV prevention studies, focused primarily on the prevention of mother-to-child transmission (PMTCT) of HIV and other aspects of maternal and child health.*
- *Health systems research: CIDER is involved in a number of projects that seek to identify novel service delivery approaches to strengthen services relating to antiretroviral therapy (ART), PMTCT, tuberculosis (TB), sexually transmitted infections (STI) and other services for priority conditions in this setting.*
- *Health information systems: The Centre plays a central role in the development and evaluation of health information systems appropriate to the region, with particular emphasis on informatics to support ART, TB and PMTCT services.*
- *Mathematical modelling: CIDER personnel lead the development and application of mathematical modelling to help address key questions in the prevention and treatment of infectious diseases of interest, including HIV and STI.*

**Professor and Director:**

L Myer, BA Brown MA MBChB Cape Town MPhil PhD Columbia

**Associate Professor and Deputy Director:**

M-A Davies, MBChB MMed Cape Town FCPHM SA

**Associate Professors Full-time:**

A Boulle, MBChB PhD Cape Town MSc London PCPHM SA

**Senior Clinical Research Officer Full-time:**

E Kalk, MBBCh Witwatersrand PhD Birmingham MRCP London DipHIVMan SA

**Senior Research Officers Full-time:**

L Johnson, BBusSc PGDipActSc PhD Cape Town

U Mehta, BPharm Wits DPharm Albany DrPH James Cook

M Schomaker, Dip. Stat. Dr.rer.nat. Munich

N Tiffin BSc Cape Town PhD London

M Schomaker, Dip. Stat. Dr.rer.nat. Munich

**Clinical Research Officer Full-time:**

J Odayar MBChB Cape Town

**Clinical Research Officer Part-time:**

R de Waal, MBChB Cape Town DipPharmMed UK

**Research Officers Full-time:**

M Cornell, MPH PhD Cape Town

K Hilderbrand, BSc Sussex MSc London

M Osler, BS Colorado MPH Cape Town

G Patten, BSc Cape Town MSc LSHTM

A Ronan, BCur Zimbabwe MBA Birmingham MPH Cape Town

**Research Coordinators:**

L Dunning BSc MSc Oxon

H Madladla BSc Durban MSc PhD KwaZulu-Natal

T Malaba BSc *Zimbabwe*  
O Olatunbosun BSc *Abeokuta*

**Data Managers:**

A Heekes BSc *Cape Town*  
N Maxwell  
E Mukonda BSc *Zimbabwe* MPhil *Cape Town*  
T Mutemaringa BSc MSc *Zimbabwe* MPhil *Cape Town*  
M Smith BSc *Stellenbosch* MSc *Erasmus*

**Software Managers:**

M Bosland BSc *Stellenbosch*  
R Burley BSc *UNISA*  
J Euvard BA MA *Rhodes*

**Honorary Professors:**

J McIntyre, MBChB *Zimbabwe* FRCOG  
T Rehle, MD *Munich* MPH *London* PhD *Antwerp*

**Honorary Research Associates:**

V Cox BA *Stanford* MD *Colorado*  
L Wilkinson LLB *Wits* MSc *London*

**Post-Doctoral Research Fellow:**

A Slogrove MBChB MMed *Stellenbosch* FCPaed(SA) PhD *British Columbia*

**Children's Institute**

*46 Sawkins Road, Rondebosch*

*Universities play an important role in contributing to strategies that address the circumstances of children. As one of the duty-bearers responsible for intervention to improve children's lives, universities are increasingly being called upon to exercise their social responsibility towards this important sector of society. Against this background, the Children's Institute aims to harness the collective academic capability in the University to promote enquiry into the situation of children, to share this capacity through teaching and training programmes, and to present evidence to guide the development of laws, policies and interventions for children. In addition, in positioning itself as an independent broker of evidence, the Institute is also able to provide evidence to those who are advocating on behalf of children. The work of the Children's Institute is aimed at promoting the principle of taking the best interest of the child into account, and at ensuring that children are given primary consideration by society. In particular, the Institute pays special attention to promoting child participation in its work, and advocates for their voices to be heard, and their opinions to be taken seriously.*

**Functions**

*The Children's Institute is a multi-disciplinary institute aiming to contribute to policies, laws and interventions that promote equality and realise the rights and improve the conditions of all children in South Africa, through research, advocacy, education and technical support.*

**Research**

- *defining research questions in specific child policy areas*
- *conducting quality policy research*
- *stimulating inter-disciplinary research*
- *collating and analysing secondary research and data sets*

**Education**

- *conducting policy research training for graduate students from different disciplines*
- *contributing child policy modules to existing programmes*
- *delivering short courses or other appropriate training to child practitioners and policy makers*

**Technical assistance and support**

- *providing technical assistance to policy makers and practitioners*
- *supporting child policy role players with information, training and practice guidelines*

**Advocacy**

- *using evidence-based communication with government decision-makers*
- *producing publications directed at the policy, service provider, academic and popular fields*
- *information dissemination through a range of platforms*
- *participating in and supporting social movements that prioritise and promote children's well-being*
- *increasing the cadre of practitioners, scholars and researchers versed in evidence-based approaches to child-focused policies and practice.*

**Director and Associate Professor:**

S Mathews (MPH, PhD)

**Chronic Disease Initiative for Africa (CDIA)**

J47/86 Old Main Building, Groote Schuur Hospital

*The CDIA is unique in South Africa, as well as in the region. It strives to connect a wide range of experts in NCD public health, clinical medicine, epidemiology, lifestyle modification, health economics, health behaviour, and implementation research and health service management in an expanding collaborative network. CDIA supports the World Health Organisation's model for innovative, integrated care for chronic conditions (ICCC) and focuses on underprivileged patients attending public sector primary health care facilities. Consequently, CDIA is committed to the development, evaluation and dissemination of methods and programmes to prevent NCD and to improve the quality of care for people with these diseases and their risk factors. This commitment has already impacted on practice in South Africa and other African countries. Further, the initiative is developing the next generation of NCD researchers, by mentoring postgraduate students, as well as developing clinical capacity for NCD in health care providers who participate in CDIA research projects. Many CDIA network members have been actively involved with the Departments of Health in contributing to NCD policy development in South Africa.*

*Originally, CDIA research network members were drawn from three major tertiary academic institutions in Cape Town: (the University of Cape Town (UCT), Stellenbosch University (US) and the University of the Western Cape (UWC), as well as the South African Medical Research Council (MRC) and Harvard University (HU), USA. Since 2012, the membership has expanded to include members from Malawi, Kenya, Botswana, the Universities of Witwatersrand, North-West and Pretoria. In addition, Western Cape and National Departments of Health representatives sit on our management committee and governing board respectively.*

**Professor and Director:**

N Levitt (FCP (SA), MD, MBChB

**Clinical Infectious Diseases Research Initiative (CIDRI)**

*IDM, UCT Faculty of Health Sciences*

*The Clinical Infectious Diseases Research Initiative at the University of Cape Town was established by a Strategic Award from the Wellcome Trust of Great Britain. The Initiative is administered from the IDM under the direction of Professor Robert J Wilkinson and the Initiative Operations Manager, Kathy Wood.*

**Professor and Director:**

RJ Wilkinson (MA PhD BM BCh DTM&H FRCP)

**Collaborating Centre for Optimising Antimalarial Therapy (CCOAT)**

*UCT Division of Clinical Pharmacology, K Floor, Old Main Building, Groote Schuur Hospital*

*UCT's Collaborating Centre for Optimising Antimalarial Therapy (CCOAT, [www.ccoat.uct.ac.za](http://www.ccoat.uct.ac.za)) serves to bring together the expertise of clinical and laboratory researchers, working together to improve malaria treatment. Our strong track record of successful malaria research initiatives has led to our being selected to lead the Pharmacology module of Worldwide Antimalarial Resistance Network (WWARN) and as one of three South African Medical Research Council Collaborating Centres for Malaria Research.*

*Our clinical research studies conducted in Cape Town, and in malaria areas in South Africa and elsewhere in Africa, aim to inform policy-making at national, regional and global levels. As there are now countries where resistance has been confirmed to all currently available malaria medicines, there is an urgent need for new treatments. The first clinical step to develop novel antimalarials involves studies in healthy adults, which we conduct with participants identified from our adult volunteer database comprising a source population who are contactable and willing to be involved in our Cape Town-based clinical research studies. Most recently we conducted the first-in-human clinical trial on the novel antimalarial MMV390048, discovered by the team lead by UCT's Professor Kelly Chibale. We also have an interest in finding optimal methods to evaluate the efficacy and safety of malaria treatments. The world-class quality of all our research is driven by our research staff, who also serve as members of The Global Health Network ([www.tghn.org](http://www.tghn.org)). This creates a synergistic relationship; our staff contribute to and work with the local South African clinical research community to use Global Health Network eLearning and other resources to enhance clinical research standards in this region, while internal resources developed for our clinical research studies are shared with the broader Global Health Network community.*

*WWARN ([www.wwarn.org](http://www.wwarn.org)) aims to provide the information necessary to prevent or slow antimalarial drug resistance and therefore reduce malaria morbidity and mortality. Through WWARN, our data is combined with those contributed by research groups globally, to conduct pooled individual patient data analyses to answer pivotal questions to inform the best use of available antimalarials to prolong their useful therapeutic life and develop regulatory-compliant data standards for malaria clinical trials. Building on WWARN's experience in collating and curating individual patient data from >400 clinical trials in >135,000 malaria patients, we have facilitated the development of CDISC standards for malaria that are now required for submissions for licensing novel treatments by regulatory authorities (e.g. US Food and Drug Administration).*

*As our work involves many different methods to answer key questions on optimising malaria treatments, we collaborate with various other groups including the UCT Clinical Research Centre ([www.crc.uct.ac.za](http://www.crc.uct.ac.za)), the UCT Pharmacometrics unit and Analytical laboratories within the Division of Clinical Pharmacology and H3D ([www.h3d.co.za](http://www.h3d.co.za)), as well as our many WWARN collaborators, the South African National Institute for Communicable Diseases, and the Universities of Pretoria and the Witwatersrand. The dynamic nature of this model results in a sustainable collaborating centre that impacts on malaria treatment policy and practice.*

**Core staff**

Professor and Director: K Barnes (MBChB, MMed Clinical Pharmacology)

Senior Clinical Research Manager: Dr. E Allen (BSc (Hons) Pharmacy, MPH, CHP, PhD)  
 Lead Investigator: Dr. Phumla Sinxadi (MBChB, MMed Clinical Pharmacology, PhD)  
 Senior Data Manager: Mrs. Lesley Workman (RN, MPH)  
 Project coordinator, research nurse: Sister Cody Reddy (RN, MCur)  
 Clinical Research Assistant: Mrs Faikah Davids

## **Community Eye Health Institute**

*H53, Old Main Building, Groote Schuur Hospital*

*The Community Eye Health Institute provides postgraduate training in community eye health and eye care programme management. Both a Postgraduate diploma and an MPH (community eye health) track are offered. Consultancy for programme planning, evaluation and research is provided for blindness prevention programmes in developing countries.*

**Director:** D Minnies MPH

## **Desmond Tutu HIV/AIDS Research Centre**

*IDM, Wernher & Beit Building North*

**Professor and Head:**

R Wood, MBChB *Cape Town DCH DTM&H FCP SA*

**Professor:**

L-G Bekker, MBChB PhD *Cape Town DCH DTM&H FCP SA*

**Associate Professors:**

S Lawn, BMedSci MB BS MRCP UK MD DRM&H Dip HIV Med  
 C Orrell, MBChB *Cape Town MSc DCH SA*

**Senior Research Officers:**

D Crida, MBChB *Stell DipHIVMan SA*

R J Kaplan, Arts Diploma (MD) *Netherlands*

K Middelkoop, MBChB PhD *Cape Town*

**Affiliate Member:**

L Myer BA Brown MA MBChB *Cape Town MPhil PhD Columbia*

**Medical Researchers:**

R J Kaplan, Arts Diploma (MD) *Netherlands*

**Principal Scientific Officer:**

C Morrow, PhD *Cape Town*

**Social Behavioural Scientist**

M Atujuna, PhD *Natal*

**Research Officers:**

N Chigorimbo-Tsikiwa, BSc *Rhodes BSc(Med)(Hons) MSc PhD Cape Town*

S Coovadia, MBChB *Natal MPH Cape Town*

L Fleurs, MBChB *Cape Town*

L Jennings, MBChB, *Cape Town*

M Jose, MBChB *Cape Town*

C Orrell, MBChB *Cape Town MSc DCH SA*

T Radzilani, MBBCh *Witwatersrand*  
S Sattar, MBCChB, *Cape Town*

**Laboratory Managers:**

D Belonje, BA (Hons) Psych, *UNISA*  
M Vogt, NatDip(MedTech) *SA*

**Trials Unit Manager:**

C Heiberg, BSc Dietetics MTechBiomedicalTechnology

**Academic Facilitator:**

M May-Slabbert, B.Ed, M.Ed, *NMMU*

**Research Study Coordinators:**

J Aploon, BA  
E Fielder, SPN  
D Reynolds, DipNursing  
E Sebastian,  
RNJ Van Der Vendt, DipNursing  
M Rattley, SPN

## **Gender, Health and Justice Research Unit**

*Room 101, Entrance 1, Falmouth Building*

*e-mail: [mrd-gender@uct.ac.za](mailto:mrd-gender@uct.ac.za)*

*The Gender, Health and Justice Research Unit is an interdisciplinary research unit at the University of Cape Town, officially launched in August 2004. The mission of the Unit is to improve service provision to victims of violence against women in South Africa through research, advocacy and education. It draws together researchers from various disciplines, including law, criminology, forensic sciences, gynaecology and psychology. The Unit aims to fulfil its mission by focusing on five core areas:*

- *Research – Conducting rigorous, evidence-based research into experiences of and responses to violence against women, particularly exploring the intersections between health and criminology, forensic sciences, gynaecology and psychology.*
- *Advocacy – Developing well-informed, evidence-based advocacy positions to support legal and policy reform in South Africa and similarly situated countries.*
- *Education – Development of university-based courses that allow law and medical students to understand the intersections between these two disciplines in their response to violence against women.*
- *Training – Development and implementation of innovative training programmes to build the capacity of criminal justice and health personnel.*
- *Consultancy services – Providing technical assistance to a wide range of government departments, non-governmental organisations and community-based organisations.*

**Director and Principal Researcher:**

*L M Artz, BA (Hons) SFU MA Cape Town PhD Queens University Belfast*

**Senior Researcher:**

*K Moult, BSocSc (Hons) Cape Town MA George Washington University PhD American University (Washington)*

**Researchers:**

*K G Aschman, BSocSc(Hons) Cape Town MSc Oxon  
K Corral, Licenciatura (Psychol) MA (Clinical Psych) PhD University of Duesto*

T Meer, BA (Hons) *UKZN MA Dalhousie University Halifax*  
 J Mthembu, BA(Hons) MA *UWC*

**Research Affiliates:**

H Combrinck *UWC*  
 B Iur LLB BA (Hons) *Northwest LLM Cape Town PhD UWC*  
 J Flavin (Fordham University), BA *Kansas MA PhD American University (Washington)*

**Geriatric Medicine and the Albertina and Walter Sisulu Institute of Ageing in Africa**  
*L-51 Old Main Building, Groote Schuur Hospital*

*The Albertina and Walter Sisulu Institute of Ageing in Africa conducts interdisciplinary research in Geriatric Medicine, Neurosciences, Neuropsychology, Old Age Psychiatry and Social Gerontology. Current research interests include physical, cognitive and social functioning in old age; quality of life; vascular risk factors and stroke; falls in older persons; quality of care; dementia and cognitive disorders; and social and economic well-being.*

**William P Slater Chair of Geriatrics and Associate Professor:**

M I Combrinck, MBChB BSc(Med)(Hons) PhD *Cape Town FCP SA Neurology MRCP UK DTM&H London*

**Associate Professor:**

J A Joska, MBChB MMed PhD *Cape Town FC Psych SA*  
 S Z Kalula, BSc MBChB *Zambia MMed MPhil PhD Cape Town FRCP UK*

**Senior Lecturers:**

L de Villiers, MBChB *Cape Town FCP SA*

**Senior Lecturers Part-time:**

K Ross, MBChB *Stell FCP Cert Geriatrics SA*  
 K G F Thomas, PhD (Clin Psych) *Arizona*

**Honorary Senior Lecturer:**

C A de Jager, BSc (Hons) HDE *Natal PhD (Medicine) Cape Town*  
 L Geffen, MBChB *Cape Town MCFP SA*

**Honorary Research Associate:**

J R Hoffman, DPhil(Sociology) *Oxon BA(Hons)*

**Hatter Institute for Cardiovascular Research in Africa (HICRA)**

*4<sup>th</sup> and 5<sup>th</sup> floor of the Chris Barnard Building, Faculty of Health Sciences*

*The Hatter Institute for Cardiovascular Research in Africa (HICRA), within the Department of Medicine, is an active and productive arena for the training of both clinician-scientists and biomedical scientists with a focus on condition common in Africa. HICRA is comprised of several groups, namely the Cardiac Disease and Maternity Group, Cardioprotection Group, Cardiovascular Genetics and Heart of Africa Projects. Our state-of-the-art Translational Research hub provides a vibrant and stimulating space for interaction between members from the different research groups. A major focus is on translational research and to serve as a centre of training for post-graduate students from South Africa and other African countries. We are linked with the Institute of Infectious Diseases and Molecular Medicine, University of Cape Town. The vision of HICRA is to facilitate national and international collaborations in its fields of expertise.*

**Aims and Objectives**

- To investigate cardiac disease interlinked with pregnancy (Cardiac Disease in Maternity Group, led by Prof. K. Sliwa);
- To study ways of protecting the heart against insults such as lack of blood flow (ischaemia) (Cardiac Protection Group, led by Prof. S. Lecour);
- To study the genetic basis of cardiomyopathy and other forms of heart disease (Cardiovascular Genetics Group; led by Prof. Mayosi and Dr. G. Shabodien);
- To undertake African population studies, with a focus on translational research (Heart of Africa projects, led by Prof. K. Sliwa).
- To develop awareness projects linked to health education in South Africa and Africa
- In order to achieve research excellence, we strive to produce work that is published in high impact factor journals and that relevant to the society in which we live.
- A major focus is on translational research and serving as a centre of training for post-graduate students from South Africa and other African countries.

**Professor and Director:**

K Sliwa, MD Germany PhD DTM&H Witwatersrand FESC FACC

**Emeritus Professor:**

L H Opie, DPhil Oxon MD DSc(Med) Cape Town FRCP UK

**Associate Professor:**

S Lecour, PharmD PhD Dijon

**Honorary Professors:**

P J Schwartz, MD PhD Pavia

S Stewart, PhD Glasgow NFESC FAHA FCSANZ

D M Yellon, PhD FESC FRCP UK

**Honorary Associate Professor:**

G Cotter, MD FACC FESC Israel

**Honorary Research Associate:**

M Carrington, BA, Postgrad Dip (Psych) PhD Australia

**Health Economics Unit**

*Falmouth Annex*

*The Health Economics Unit (HEU) works to improve the performance of health systems through informing health policy and enhancing technical and managerial capacity in Sub-Saharan Africa. Its foundation is academic excellence in research in health economics and related health systems issues.*

*The four core objectives of the HEU are:*

- To conduct high-quality research in health economics, health policy and health systems;
- To train at the postgraduate level to improve technical research and health systems capacity;
- To develop capacity in health economics and related health systems research in Africa; and
- To provide technical support to facilitate the translation of health policies into practical programmes.

**Associate Professor and Director:**

E Sinanovic, BSc (Econ) Zagreb DipFinMg) Maastricht MCom (HealthEcon) *Cape Town*  
 PhD (Health Econ) *London*

**Professor:**

D McIntyre, BCom(Hons) (Econ) MA (Econ) PhD *Cape Town*

**Associate Professor:**

S Cleary, BA Rhodes BA(Hons)(Econ) MA (Econ) PhD *Cape Town*

**Senior Lecturers:**

O A Alaba, BSc (Econ) MSc (Econ) PhD (Econ) *Ibadan*  
 J E Ataguba, BSc (Econ) *Nigeria* MPH (HealthEcon) PhD (Econ) *Cape Town*  
 A Honda, BA (Sociol) MSc (IntHealth) *Tokyo* PhD (HealthEcon) *London*

**Research Officers:**

L Cunama, BSc (Physio) MPH (HealthEcon) *Cape Town*  
 N Foster, BPharm *UPE* MPH (HealthEcon) *Cape Town*

**Post-doctoral Fellows:**

J Hunter, BA *Wellesley* MA *Witwatersrand* MPH *Boston* PhD *Cape Town*  
 A Obse, BA (Economics) *Addis Ababa* MSc (Economics) *Addis Ababa* PhD *Dublin*

**HIV Mental Health Unit**

*J-Block, Groote Schuur Hospital*

*The HIV Mental Health Research Unit is involved in neurobehavioral (specifically adherence and psycho-therapeutic interventions) and neuro-biological (specifically brain imaging, genetic, neurocognitive aspects, as well as drug interventions) research in HIV-associated neuropsychiatric disorders. The Unit is funded by the NIMH, MRC and NRF, as well as the University. It is collaborating with senior investigators from leading international and local groups.*

J Joska, MBChB MMed (Psych) PhD *Cape Town* FCPsych *SA*

J Hoare, MBChB MPhil (Neuropsychiatry) *Cape Town* MRCPsych FCPsych *SA*

**Institute of Infectious Diseases and Molecular Medicine**

*Wolfson Pavilion, IDM Building*

*The Institute of Infectious Disease and Molecular Medicine (IDM) is a trans-faculty, multidisciplinary postgraduate research enterprise that operates in the fields of infectious disease and molecular medicine research. It is situated on the health sciences campus of the University of Cape Town (UCT) in a 7 100m<sup>2</sup> state-of-the-art facility.*

*The IDM is distinguished by the ability to drive world-class research at the laboratory-clinic-community interface by engaging a wide range of scientific and clinical disciplines.*

*These include medical biochemistry; chemical biology; genetics; clinical and experimental immunology; paediatrics; microbiology; molecular and cell biology; virology; infectious diseases; vaccinology; epidemiology; medicinal chemistry; pre-clinical pharmacology; structural biology; bioinformatics and computational biology.*

*Established in 2004, the IDM has become the largest research entity at UCT and a national leader in research and human capital development in the field of health sciences.*

Web address: <http://web.uct.ac.za/depts/idm>

**Professor and Director:**

V Mizrahi, BSc(Hons) PhD *Cape Town* MSc AfTWAS MASSAf FRSSAfOMS

**Full Members and Professors:**

L-G Bekker, MBChB DCH DTM&H FCP PhD *SA*

J Blackburn, BA(Chem) MA(Chem) DPhil(Chem) *Exeter*

F Brombacher, PhD *Freiburg*

K Chibale, BSc(Ed) *Zambia* PhD *Cantab* FRSSAf

C M Gray, BSc(Hons) *Western England* MSc PhD *Witwatersrand*

W A Hanekom, MBBCh *Stell DCH* FCP(Paed)

G Hussey, MBChB MMed *Cape Town* MSc ClinTropMed *London* DTM&H *UK* FFCH *SA*

A A Katz, PhD *Weizmann Institute*

S Kidson, BSc(Hons) MSc PhD *Witwatersrand* H Dip Ed *JCE*

P N Meissner, BSc(Med)(Hons) PhD *Cape Town* (Fellow of UCT)

R Millar, BSc(Hons) MSc *London* PhD *Liverpool* MRCP FRCP

MP Nicol, MBChB MMed (MedMicro) *Witwatersrand* DTM&H FCPPath(MicroBiol) *SA* PhD *Cape Town*

R S Ramesar, BSc(Hons) MSc *UKZN* PhD *Cape Town*

E P Rybicki, BSc(Hons) MSc PhD *Cape Town* MASSAf FRSSAf (Fellow of UCT)

B T Sewell, MSc *Witwatersrand* PhD *London*

E D Sturrock, BSc(Med)(Hons) PhD *Cape Town* FRSSAf (Fellow of UCT)

A L Williamson, BSc(Hons) PhD *Witwatersrand* MASSAf FRSSAf (Fellow of UCT)

C Williamson, BSc(Hons) PhD *Cape Town* MASSAf FRSSAf (Fellow of UCT)

R Wood, BSc(Hons) MBChB *Oxon* MMed DSc(Med) FCP *SA* (Fellow of UCT)

**Full Members and Associate Professors:**

M Hatherill, MBChB DCH MMed MRCP FCPaed MD *Cape Town*

M Jacobs, BSc(Med)(Hons) PhD *Cape Town*

G Meintjes, MBChB PhD *Cape Town* MRCP UK FCP DipHIVMan *SA* MPH *Johns Hopkins*

N Mulder, BSc(Hons) PhD *Cape Town*

J Passmore, BSc (Hons) *UKZN* PhD *Cape Town*

**Full Member and Honorary Professor:**

R Wilkinson, MA *Cantab* PhD DTM&H FRCP MRC Programme Leader National Institute for Medical Research *London* MBBCh *Oxon* (Wellcome Trust Senior Fellow in Clinical Science and Professor of Infectious Diseases *Imperial College (London)*)

**Full Member and Senior Lecturer:**

D P Martin, BSc(Hons) MSc *UKZN* PhD *Cape Town*

**Affiliate Members and Professors:**

K Dheda, MBBCh *Witwatersrand* FCP *SA* FCCP PhD FRCP *London*

J Greenberg, BSc (Physiol&Chem) *Stell* PhD *Cape Town*

G Maartens, MBChB MMed FCP *SA* DTM&H

B M Mayosi, BMedSc MBChB *UKZN* FCP *SA* DPhil *Oxon* FESC FACC FRCP MASSAf

M I Parker, BSc(Hons) PhD *Cape Town* MASSAf FIAS fTWAS

K Sliwa-Hahnle, MD PhD FESC FACC

D J Stein, BSc(Med) MBChB *Cape Town* FRCPC PhD *Stell* DPhil

H J Zar, MBBCh *Witwatersrand* FAAP BCPaed BCPaed Pulmonology *USA* PhD FCPaed *SA*

**Affiliate Members and Associate Professors:**

A Boulle, MBChB PhD *Cape Town* MSc *London* FCPHM *SA*

D Coetze, BA *Cape Town MBBCh DPH DTM&H DOH Witwatersrand FCPHM SA MS Columbia*

B S Eley, MBChB FCP(Paed) SA BSc(Med)(Hons) *Cape Town*

H McIlheron, MBChB PhD *Cape Town*

L Myer, BA Brown MA MBChB *Cape Town MPhil PhD Columbia*

**Associate Members and Associate Professors:**

V Leaner, PhD *Cape Town*

T Scriba, BSc(Hons) MSc *Stell DPhil Oxon*

**Associate Member and Honorary Associate Professor:**

K A Wilkinson, MSc (Chem) PhD (Chem&PetideImmunol) *Budapest MRC Senior Investigator Scientist, National Institute for Medical Research London*

**Associate Members and Researchers:**

W Burgers, BSc(Hons) MSc *Cape Town PhD Cantab*

H Cox, BSc(Hons) MPH PhD *UniMelb*

W Horsnell, BSc(Hons) *Leeds PhD London*

H Jaspan, BSc USA MD PhD *Tulane FAAP PaedsID Washington*

D F Warner, BCom BSc(Hons) PhD *Witwatersrand*

**Kidney and Hypertension Research Unit**

*E13, Groote Schuur Hospital*

*The Kidney and Hypertension Research Unit is a group of approximately 40 staff and students, who through their academic and clinical activities seek to reduce death rates and improve the quality of health of people with kidney disease and hypertension particularly in the Black population of South Africa. This would be in keeping with the strategic goal of the University of Cape Town namely expanding and enhancing South Africa's Development Challenges.*

*The focus areas of research will concentrate on aspects of hypertension and kidney disease in African (Black) people of our country, who are prone to excess morbidity and mortality from both hypertension and chronic kidney disease. For example HIV associated nephropathy is an almost exclusive disease of Blacks. The thrust of the research will explore the underlying causes and translate this into preventive and treatment strategies. The specific focus areas are resistant hypertension in indigenous people, genetics of salt sensitive hypertension, genetics of hypertensive kidney disease, therapeutic drug monitoring, physiological treatment of hypertension, classification of HIV and the kidney or HIVAN, effects of antiretroviral treatment of blood pressure and vascular stiffening, MRI findings in HIVAN, effects of tenosovir on renal function, kidney biopsy finding in HIV+ve to HIV+ve kidney transplants, outcomes of systemic lupus erythematosus (SLE), bioinformatics of SLE and glomerulonephritis in Africa. In the past 5 years the unit has published 84 peer reviewed publications.*

*From the capacity point of view the Unit has at least 16 post graduate students registered for Master's degrees and 1 intended PhD candidate, and is involved in the teaching of post graduate students through degrees, lectures, seminars, and courses. Teaching and training of nephrologists from Sub-Saharan Africa through the International Society of Nephrology is a major component of our programme. Acquisition of a state of the art ultrasound machine has resulted in upskilling of post graduate registrars in the insertion of vascular access and performance of renal biopsies. Two major NRF research grants to the value of nearly R3 million were awarded to Brian Rayner and Ike Okpechi.*

**Professor and Head:**

B Rayner (MBChB, FCP, MMed, PhD)

**Other staff:**

A/Prof I Okpechi MBBS, FWACP, PhD, Cert Nephrol (SA) Phys  
Dr Z Barday MBChB (UCT), FCP (SA), Cert Nephrology  
Dr N Wearne BA Med Sci, MBChB (honors) USyd Aust, FCP, Cert Nephrology  
Dr E Jones MBBCh (Wits), PhD (UCT), FCP, Cert Nephrology  
A/Prof C Swanepoel MBChB (UCT), MRCP (UK), FRCP (Edin)  
Dr M Pascoe MBCHB (UCT), FCP (SA)  
Prof P Heering (MD, FASN)

**Surgeons (Transplants and Dialysis Access):**

A/Prof E Muller  
Prof D Kahn  
Dr D Thomson  
Dr Tinus Du Toit

**Social Worker:**

Mr L Hlakudi

**Transplant coordinators**

Ms Fiona McCurdie  
Ms Maryn Reyneke

**Transplant Clinic/Unit Nursing Staff**

Ms K Goliath  
Ms R Solomon  
Ms F Du Plessis

**Admin and Clerical Staff**

Ms D Blankenberg  
Ms A Oosthuizen  
Ms J Eiman  
Mr A Daniels

**Lung Institute**

*George Street, Mowbray*

*The University of Cape Town Lung Institute is a privately registered company, wholly owned by the University of Cape Town. The Institute opened for business in 2000 and as a private registered company retains its own separate corporate identity, administration department, staffing procedures and finance. The Institute benefits from representation from the University on its Board and Finance committees, and the Institute collaborates with many departments within the Health Sciences Faculty. Associate Professor Rod Dawson has been Director of the UCT Lung Institute since January 2016.*

***There are five Clinical Research Units (CRU'S) that are part of the Lung Institute:***

***Allergy Diagnostic and Clinical Research Unit***

*University of Cape Town Lung Institute, George Street, Mowbray*

*The Allergy Diagnostic & Clinical Research Unit (ADCRU) of the UCT Lung Institute serves as a centre for the investigation, diagnosis and management of allergic diseases.*

*It has 5 main areas of operation:*

- *A state of the art diagnostic and research Allergology laboratory for investigation of allergic reactions to environmental agents, including several allergens unique to Southern Africa.*
- *A clinical trial section research unit focusing on studies of paediatric and adult asthma, rhinitis, urticaria, eczema, allergen immunotherapy, drug allergy and allergy diagnosis.*
- *Specialist allergy clinics for investigation and treatment of children and adults with allergic diseases, with a special focus on sublingual and subcutaneous allergen immunotherapy, food allergy, chronic urticaria and drug allergy.*
- *Training of undergraduates and postgraduates students in clinical and laboratory aspects of Allergology.*
- *Postgraduate training of subspecialist allergists*

**Head:****Dr Jonny Peter (MBChB, FCP (SA), MMED, PhD (UCT))****Centre for TB Research Innovation***2<sup>nd</sup> Floor, University of Cape Town Lung Institute, George Street, Mowbray*

*Tuberculosis is one of the most important global health problems. The vast majority of TB cases are in developing countries and South Africa has an exceedingly high TB case rate. New drug treatment regimens for tuberculosis are a global priority and the current TB regimen although effective in drug sensitive disease but is not user friendly and requires prolonged observed therapy. Developing drug- resistance fuelled by poor compliance is a growing concern.*

*Our mandate at the CTBRI is to facilitate the development of innovative new drug compounds aimed at reducing duration of therapy, pill burden and improved patient outcomes. We have developed extensive clinical experience in conducting relevant and quality tuberculosis drug research.*

**Our particular strengths are:**

- *An experienced team of dedicated research staff dedicated to improving quality of life in our patients living with tuberculosis.*
- *A proven patient recruitment network and established relationships with local TB authorities with excellent patient compliance profiles developed through our day to day experience with monitoring patients on clinical trials.*
- *Broad experience gained through an extensive network of collaborating institutions, funders and NGO's.*
- *A proven academic record at the University of Cape Town Lung Institute.*
- *Extensive experience in bronchial lavage studies and lung immunology studies in tuberculosis.*
- *Access to a state of the art, FDA compliant digital database.*
- *Our state of the art inpatient drug testing unit is situated on Level 1 of the UCT Lung Institute. Our medical staff of TB research sisters and an on-site clinicians and pulmonologists handle the clinical and regulatory aspects required for quality research. We also are able to provide advice and guidance on investigating new treatments for multi drug resistant (MDR) tuberculosis.*

**Associate Professor and Head:****Rod Dawson (MBChB, FCP (SA), Cert Pulm (UCT))****Knowledge Translation Unit***4<sup>th</sup> Floor, University of Cape Town Lung Institute, George Street, Mowbray*

*The Knowledge Translation Unit is a Clinical Research Unit of the University of Cape Town Lung Institute. It was formally established in 2005 to continue work begun in 2000 to provide primary care guidelines and training on respiratory disease. It has since expanded its scope to address*

*priority conditions in primary care in line with the Lung Institute's mandate to "address priority health issues in Southern Africa through education, research and service."*

*Knowledge Translation defines the interactions between researchers, health services and patients to expedite the implementation of research findings into practice, to strengthen health services and to improve patient outcomes. It is about bridging the gap between evidence based research (what we know) and its use and implementation by health services (what we do). The Knowledge Translation Unit has developed, rigorously tested and implemented at provincial and national scale programmes that have helped to standardize and integrate healthcare delivered at primary level. At the core of these programmes are clinical practice guidelines that are evidenced-based, aligned with policy and regularly updated, and that use an evidence-based implementation strategy called educational outreach.*

**Associate Professor and Head:**

L Fairall (MBChB, PhD)

**Lung Clinical Research Unit**

*3rd Floor, University of Cape Town Lung Institute, George Street, Mowbray*

*The LCRU has been in existence from the beginning of the Lung Institute, and has gained international recognition for work done on asthma COPD drug and clinical management in addition to the epidemiology of lung disease in South Africa. The Unit's strategic focus remains in three areas – airways disease drug evaluation, Poverty related respiratory disease and tobacco cessation, with a broad objective "to perform research and provide highly specialized services in the field of pulmonology, relevant to the needs of Africa".*

*Research:*

*Research in the LCRU is in four distinct directions: Asthma and COPD drug development with Industry partners, Clinical research in COPD and non-tobacco COPD epidemiology and mechanisms, Clinical research in smoking cessation strategies and laboratory research in environmental exposures and infectious diseases (tobacco, indoor air pollution and pneumonia, tuberculosis).*

*Clinical service:*

*The Unit provides a dedicated world class clinical trial unit capable of conducting phase II-IV clinical trials including detailed respiratory physiology and radiology. The Unit houses a dedicated research laboratory focusing on tobacco and indoor air pollution and respiratory infection. The unit also serves as a referral centres for complicated asthma and COPD review for the public and private sectors.*

**Associate Professor and Head:**

R van Zyl-Smit (MBChB, MRCP (UK), Dip HIV (Man), MMED, FCP (SA), Cert Pulm (SA), PhD)

**Lung Infection and Immunity Unit**

*University of Cape Town Lung Institute, George Street, Mowbray*

*The Lung Infection and Immunity Unit is a WHO-associated Center for Diagnostic Excellence. The group's main research interests are the study of pulmonary regulatory immunological pathways in relation to infection, development and validation of rapid and field-friendly diagnostics for pulmonary infections, and outcome and intervention studies of drug-resistant tuberculosis.*

*The Lung Infection and Immunity unit has been associated with the University of Cape Town Lung Institute since 2009 and has conducted seminal studies into new diagnostics for tuberculosis. The unit has successfully managed and completed multiple national and international research grants*

and has published widely in the fields of tuberculosis immunology, new TB diagnostics and drug-resistant TB. Prof Dheda's team of experienced researchers conduct studies ranging from basic science to pragmatic clinical trials of new tuberculosis drugs.

**Holder of the SARChI Research Chair in “Lung Infection and Immunity in Poverty-related Diseases” Professor and Head:**

K Dheda, MBChB (*Wits*), FCP (*SA*), FCCP, PhD (*Lond*), FRCP (*Lond*)

**Senior Lecturer and Pulmonologist:**

R Van Zyl-Smit, MBChB MMed PhD *Cape Town* MRCP UK FCP Dip HIV Man Cert Pulm Phys *SA*

**Chief Research Officer Part-Time:**

G Theron, BSc(Hons) MSc PhD *Cape Town*

**Principal Scientific Officer:**

M Tomasicchio, BSc BSc (Hons) MSc PhD *Rhodes*

**Medical Officer and Clinical Trial Co-ordinator:**

M Pascoe, MBChB *Cape Town*

**Honorary Professor:**

T G Clark, BCom, MSc *New Zealand* DPhil, *oxon*

**Honorary Associate Professors**

R McNerney, CBiol PhD *UK*

K Steingart, MD PhD *USA*

**Honorary Research Associates:**

A Binder, PhD(Biology) *Germany*

R Hendricks, BChD MChD, *Cape Town*

B Young-Gqamana, BSc PhD

**Laboratory Technologists:**

R Meldau, BSc(Med)(Hons) *Cape Town*

V Woodburne, Lab Technician

**Medical Research Council (MRC) Unit on Anxiety & Stress Disorders**

*Department of Psychiatry & Mental Health, University of Cape Town, and Department of Psychiatry, University of Stellenbosch.*

*The Medical Research Council (MRC) Unit on Anxiety and Stress Disorders was founded with the mandate of: 1) establishing a unit that focused specifically on research on the anxiety disorders; 2) fostering a multidisciplinary approach to these conditions, incorporating a bio-psycho-social focus; 3) promoting increased awareness of these conditions in the community; and 4) building capacity. The anxiety disorders are the most prevalent of the psychiatric disorders, and amongst the most disabling of all medical disorders. At the same time, given advances in basic and clinical neuroscience methodologies, there are now unique opportunities to advance our understanding and management of these conditions.*

**Professor and Head:**

D J Stein, BSc(Med) MBChB *Cape Town* FRCPC PhD DPhil *Stell*

## **MRC/NHLS/UCT Molecular Mycobacteriology Research Unit**

*The MRC/NHLS/UCT Molecular Mycobacteriology Research Unit (MMRU) is based in the Institute of Infectious Diseases and Molecular Medicine (IDM) and forms the UCT node of the DST/NRF Centre of Excellence for Biomedical TB Research (CBTBR). Research in the MMRU is focused on aspects of mycobacterial physiology and metabolism that are of relevance to drug discovery and drug resistance, and the Unit is best known for its work on mechanisms of DNA metabolism, resuscitation and culturability, respiration and cofactor biosynthesis in mycobacteria. In pursuing this focus, the MMRU has developed specific expertise in mycobacterial molecular genetics and applied these skills in the construction of approximately 150 single and multiple mutant strains of *M. tuberculosis* H37Rv and several hundred targeted mutants of *M. smegmatis*. The recipient of two major grants from the South African government, the Unit makes research capacity development a key focus of laboratory work. The Unit, which currently comprises senior scientists, post-doctoral fellows, and both PhD and MSc students, also participates in several major TB drug discovery consortia funded by grants from the Bill & Melinda Gates Foundation under the TB Drug Accelerator programme (HIT-TB), the Seventh Framework Programme of the European Union (MM4TB), and the Technology Innovation Agency of South Africa (SATRII).*

### **Professor and Director:**

V Mizrahi, BSc(Hons) PhD Cape Town AFTWAS MASSAf FRSSAfOMS

### **Senior Research Officer:**

D F Warner, BCom BSc(Hons) PhD Witwatersrand

## **MRC/UCT Child & Adolescent Health Unit**

*Red Cross War Memorial Children's Hospital, Cape Town,*

*The MRC Unit on Child & Adolescent Health undertakes translational research focused on priority childhood diseases including TB, pneumonia, HIV and the intersection of infectious diseases and non-communicable diseases such as asthma. Research integrates perspectives from basic, clinical and population science. A flagship study is a longitudinal birth cohort study, the Drakenstein Child Health study, to investigate the antenatal and early life determinants of child health, with a focus on childhood pneumonia, growth, development and the impact of early infection on chronic disease. This study is unique in integrating the impact of maternal factors, environmental exposures and childhood exposures with the development of child health in a low and middle income country context.*

### **Professor and Director:**

H Zar, Head of the Department of Paediatrics & Child Health at UCT and Red Cross Children's Hospital (MBBCh, FCPaeds, BC Pediatr (USA), BC Pediatr Pulm (USA), PhD)

## **MRC/UCT Drug Discovery and Development Research (DDD) Unit**

*Institute of Infectious Disease and Molecular Medicine (IDM), Wernher & Beit Building North*

*The MRC/UCT Drug Discovery and Development Research (DDD) Unit, amongst other things, focuses on:*

- *Becoming a principal Drug Discovery and Development Research (DDD) Unit in South Africa, in Africa and internationally;*
- *Establishment of a scientific infrastructure as well as capacity for drug discovery and development of natural products in the broad sense using general biodiversity, including traditional medicines;*
- *Development of infrastructural and operational systems for new drug discovery and*

*development, with special reference to natural product-guided medicinal chemistry as well as biological screening platforms against infectious and other diseases;*

- *Performing customised synthesis of compounds with important biological activities;*
- *Attracting young South African scientists, and scientists from elsewhere on the African continent, and in doing so to make a concerted effort at transformation and capacity building;*
- *Providing career development opportunities for mid-career researchers;*
- *The introduction of modern innovative drug-discovery tools including novel accessible screening;*
- *Enhancing the value of the identified therapeutics, by strengthening pre-clinical development capacity including the introduction of predictive (in silico and in vitro) drug metabolism and pharmacokinetic (DMPK) studies as reflected in the processes of Absorption, Distribution, Metabolism and Excretion (ADME).*

**Professor and Director:**

K Chibale, BScEd Zambia PhD *Cantab* FRSSAF

**Affiliate Members and Professors:**

K I Barnes, MBChB MMed *Cape Town*

T J Egan, BSc Hons PhD *Wits* MSACI

V Mizrahi, BSc(Hons) PhD *Cape Town* AfTWAS MASSAf FRSSAf OMS

E D Sturrock, BSc(Med)(Hons) PhD *Cape Town* FRSSAf (Fellow of UCT)

**Associate Professors:**

P J Smith, BSc BSc(Hons) PhD *Cape Town*

D Warner, BCom BSc (Hons) PhD *Witwatersrand*

**Senior Lecturer:**

L Wiesner, PhD *Cape Town*

**Lecturer**

S Sunassee PhD *Rhodes*

**Drug Discovery and Development Scientist:**

D Taylor, BSc BSc(Med)(Hons) *Cape Town*

**Researchers/ Affiliates:**

C Lategan, PhD *Cape Town*

S Schwager, MSc *Cape Town*

**Postdoctoral Fellows:**

M Njoroge, BSc BSc Pharm MSc *Nairobi* PhD *Cape Town*

E Pavadai BSc MSc *Madras* MPhil *Bharathidasan* PhD *National Taipei University of Technology*

K Singh PhD *Guru Nanak Dev Univ*

**Principal Scientific Officers:**

T Kellerman, BSc BSc(Hons) *Stell* MSc *Witwatersrand* PhD *Cape Town*

**Scientific Officer:**

S Salie

**Laboratory Technologist**

R Seldon

**Technical Officer:**

W Olifant

**MRC/UCT Human Genetics Research Unit**

*Room 3.14, Level 3, Wernher and Beit North, IDM*

*The UCT/MRC Human Genetics Research Unit benefits from the strong history of excellent research within UCT's Division of Human Genetics, and focuses its efforts on the genome research/clinic interface, building capacity as one of its major outcomes.*

*The envisaged expansion of the unit is focused in the areas of:*

- *developing a high throughput genetic analysis facility for the purpose of disease-genomic research;*
- *training researchers to map and identify genes which are of interest in and to our populations; and*
- *understanding the biology of such genetic elements by drawing on the expertise within the Institute of Infectious Diseases and Molecular Medicine on the Faculty of Health Sciences campus, and within other relevant institutions in the country.*

*The core expertise and resident functions in the Unit will ultimately include:*

- *Genetic study co-ordination which helps with the development and co-ordination of patient, family and population-based studies, and the design of such investigations;*
- *assistance with the development of diagnostic criteria and screening for specific research programmes;*
- *subject contact and collection of biological material;*
- *a high-throughput genetic analysis capability to carry out large-scale genotyping and sequencing to identify disease-predisposing elements in our populations.*

**Professor and Director:**

R S Ramesar, BSc(Hons) MSc UKZN PhD Cape Town

**MRC/UCT Immunology of Infectious Diseases Research Unit**

*Room S1.27, Werner and Beit Building South*

*The control and eradication of infectious diseases, leading cause of childhood and adult morbidity and mortality, is a high priority area for South Africa and the African continent. The unit investigates the underlying cellular and molecular immunological mechanisms for host protection or failure thereof in experimental murine models for human diseases like:*

- *Tuberculosis*
- *Leishmaniasis*
- *Helminthis diseases (bilharziosis)*
- *African trypanosomiasis (sleeping sickness)*
- *Allergy*
- *Ulcerative colitis*

*The Unit's mission is to be relevant as an excellent multidisciplinary and international team, embracing both basic and applied research, in order to improve capacity, teaching and training in Immunology.*

**Professor and Director:**

F Brombacher, PhD Freiburg

## **MRC/UCT Medical Imaging Research Unit**

*Room 514, Anatomy Building*

*The late Allan Cormack, who won the Nobel Prize for Medicine in 1979 for his pioneering work on the computed tomography (CT) scanner, was the inspiration that led to the creation of MIRU. Professor Cormack was an alumnus of UCT who performed his research at Groote Schuur Hospital in the mid-1950s. The mission of the Unit is to conduct world-class research in medical imaging that specifically addresses the healthcare needs of Africa. The Unit has a multidisciplinary focus, attracting talented physicists, engineers, computer scientists and clinicians. Research in the Unit focuses on the role of medical imaging in addressing healthcare problems such as trauma, cancer, tuberculosis, cardiovascular disease, neuromuscular disorders, brain disorders and the effects of alcohol abuse.*

**Professor and Director:**

*T Douglas, BScEng MBA Cape Town MS Vanderbilt PhD Strathclyde*

## **MRC/UCT Research Group for Receptor Biology**

*Wernher and Beit Building North*

*The mission of the group is to study the structure and function of G protein-coupled receptors and to apply the research to understanding and treating diseases that have major effects on the social and economic welfare of South Africa. The Group focuses on the gonadotropin-releasing hormone receptors and on the kisspeptin receptor, which are central regulators of reproductive function, on the prostaglandin receptors and their role in cervical cancer and on the CCR5 chemokine receptor and its role in HIV entry and infection.*

**Co-Directors:**

*C A Flanagan, BSc(Hons) PhD Cape Town*

*A A Katz, PhD Weizmann Institute*

*R P Millar, BSc(Hons) MSc London PhD Liverpool*

## **Neurosciences Institute (NI)**

*UCT Faculty of Health Sciences and Groote Schuur Hospital*

*The Neurosciences Institute (NI) was established in 2016 as a flagship interdisciplinary research in initiative of the University. The NI's mission is to create a vibrant environment where clinicians, basic scientists and colleagues from other disciplines can share ideas about the human brain in health and disease, thereby accelerating scientific discovery and innovation.*

**Professor and interim director:**

*Graham Fiegen (MSc MD FCS)*

## **Research Centre for Adolescent and Child Health (REACH)**

*Red Cross Children's Hospital*

*REACH is a paediatric clinical research unit within the Faculty of Health Sciences, University of Cape Town, based at Red Cross War Memorial Children's Hospital (RCH).*

*Opened in October 2013, it follows a decade of successful clinical research at RCH. The centre comprises 50 staff members funded through grant support, is involved in the training of 48 postgraduate students (18 masters, 25 doctoral and 5 post-doctoral) and is host to several African healthcare professionals, building clinical and research capacity to improve child health in Africa.*

*The research program is locally responsive, addressing national priorities such as HIV, TB and childhood pneumonia as well as globally relevant, fostering international, national and local*

*collaborations. Directed by Prof Heather Zar, this centre is a remarkable partnership between RCH, the Western Cape Health Department and the Department of Paediatrics and Child Health, UCT.*

**Professor and Director:**

H Zar, Head of the Department of Paediatrics & Child Health at UCT and Red Cross Children's Hospital (MBBCh, FCPaeds, BC Pediatr (USA), BC Pediatr Pulm (USA), PhD)

**South African Tuberculosis Vaccine Initiative (SATVI)**

*Institute of Infectious Diseases and Molecular Medicine*

*The South African Tuberculosis Vaccine Initiative (SATVI) is a University of Cape Town-based Tuberculosis research group housed within the Institute of Infectious Diseases and Molecular Medicine, accommodating several disciplines including paediatrics, infectious diseases, epidemiology, public health, immunology and clinical/biological sciences. SATVI has a large and well-developed clinical field site in the Boland Overberg region, with the core on the premises of the Brewelskloof TB Hospital in Worcester, from where most clinical/epidemiological studies and clinical trials of new TB vaccines are conducted.*

*The Immunology and Laboratory based work is led by Associate Professor Tom Scriba; and the Clinical Trials work is led by SATVI Director, Associate Professor Mark Hatherill.*

*SATVI has achieved international recognition as a world-leader in the evaluation of the safety, immunogenicity, and efficacy of novel TB vaccines. SATVI's research mandate spans clinical vaccinology and TB immunology, including the search for correlates of risk for TB and correlates of vaccine-induced protection against TB and most recently, application of TB risk tests for prevention of TB. The group's focus on this research agenda has underpinned SATVI's academic success, in terms of research funding secured, students graduated, and papers published.*

*SATVI has been extraordinarily productive in the clinical trials arena, having conducted more than a dozen Phase I-IIb trials of nine novel TB vaccine candidates, among more than 4,000 research participants. Additionally, the group has enrolled more than 20,000 participants in observational and immunological TB studies and clinical trials of BCG vaccine. The SATVI postgraduate program has produced many PhD and Masters graduates since 2006. The group has a prolific publication output with a number of high-impact and highly cited papers.*

**Associate Professor and Director:**

M Hatherill (MD, FCPaed)

**Associate Professor and Deputy Director (Immunology):**

T Scriba (PhD)

**Chief Operations Officer:**

Dr M Kaskar (MBChB; MBA)

**Worcester Field Site Manager:**

Mrs Marwou de Kock (MPhil)

**Structural Biology Research Unit**

*Institute of Infectious Diseases and Molecular Medicine, Wolfson Pavilion*

*The Structural Biology Research Unit co-ordinates and promotes the experimental determination of biological structure at the University of Cape Town. The Unit is a grant funded entity, operationally located in the Integrative Biomedical Sciences Department in the Health Sciences Faculty. It employs staff, provides a home for post-graduate students and post-doctoral fellows and conducts research. It has members who are UCT academics who wish to conduct structural research and who*

are prepared to apply for grants to fund research in the Unit. The Unit also has affiliates, either from South Africa or abroad, who participate in the activities of the Unit in a variety of ways – including but not limited to: providing advice and expertise, exchanging materials, providing resources and using the resources of the Unit.

The visualization of the structure of biological objects ranging from cells to macromolecules with microscopic or atomic detail is essential for understanding how living systems work. The knowledge of the structures can be exploited to produce medicines and vaccines, ecologically friendly industrial processes and agricultural products. The unit specializes in determining structures experimentally by electron microscopy and X-ray crystallography and makes extensive use of computer based modelling to extend the results. The unit has access to unique resources for the purification and preliminary characterization of proteins, cryo-electron microscopy and X-ray diffraction at a synchrotron beamline. It plays a pivotal role in South Africa's BioEconomy strategy by providing the core expertise for establishment of the discipline of Structural Biology in the whole country and applying the technology to a wide range of problems of scientific, medical and industrial interest.

**Professor and head:**

T Sewell (PhD (*Lond*))

**UCT Leukaemia Unit**

*Room 6.06, Chris Barnard Building*

**Director:**

N Novitzky, PhD *Cape Town FCP SA*

**Researchers:**

L du Pisani, MBChB FPath(Haem)  
 C du Toit, MBChB MMed(Int Med) *UFS*  
 R Mohamed, NDMedTech  
 S Mowla, PhD *Cape Town*  
 M Ntombogwana, MBChB FPath(Haem)  
 J Opie, MBChB FCP *SA*  
 K Shires, PhD *Cape Town*  
 W van Schalkwyk, MBChB FCPPath(Haem) MMed(Haem)

**Women's Health Research Unit**

*Level 3, Falmouth Building South*

The Women's Health Research Unit (WHRU) was established in the Faculty of Health Sciences at the University of Cape Town (UCT) in 1996. The Unit is involved in research, teaching and technical health service support in the area of women's health and gender and health. It is made up of a multidisciplinary team of researchers with expertise in public health, epidemiology and anthropology. The overall aim of the Unit is to improve the health of women through research that informs policy and practice.

**Objectives**

- *Act as a centre for women's health research in South Africa*
- *Conduct interdisciplinary and translational research in high priority areas*
- *Conduct health systems research aimed at influencing policy*
- *Support the public health sector*
- *Develop capacity in the field of women's health, and gender and health*
- *Be involved in advocacy efforts*
- *Network and collaborate nationally and internationally*

*The research focus can be summarized in terms of the following three thematic areas:*

- 1) *Socio-behavioural research*
- 2) *Health services operational research*
- 3) *Quantitative/epidemiological research*

*The Unit has established a model of work that is consultative and socially responsive and at the same time scientifically rigorous. The WHRUs strong links with government departments, civil society organisations and non-governmental organisations (NGOs), enables the voices of diverse stakeholders to be heard in both describing the issues and shaping solutions. The focus on women's health is aligned with national and international concerns in addressing the health needs of women.*

**Associate Professor and Director:**

J Harries, BA(Hons) MPhil MPH PhD *Cape Town*

**Associate Professor:**

J Moodley, MBChB *Natal* MMed PhD *Cape Town*

**Emeritus Associate Professor:**

M Hoffman, BSc(Med)(Hons) MBChB DCM *Cape Town*

**Research Officer:**

D Constant, BSc (Physio) BSc(Hons) MSc (Med) MPH *Cape Town*

**Honorary Professor:**

D Cooper, BSocSc BA(Hons) PhD *Cape Town*

**Honorary Associate Professor:**

C Mathews, BA(Hons) MSc (Med) PhD *Cape Town*

**Honorary Senior Lecturer:**

C Morroni, MPhil MBChB *Cape Town* PhD (Epi) *Columbia DTM&H LSHTM DFSRH*

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# ADDITIONAL INFORMATION

Process to investigate impairment or unprofessional conduct

## INTRODUCTION

In terms of its mandate to guide health professionals and to protect the public, the Health Professions Council of South Africa (HPCSA) is responsible for ensuring that practitioners are fit to practise. This means that the HPCSA has no authority to licence an impaired person to practice.

The Health Professions Council Act and the associated regulations relating to impairment of students and practitioners oblige students, practitioners and faculties of health sciences to report impairment when observed in students or in fellow students or members of the health professions to the HPCSA. The HPCSA is required to consider any report it receives and to make a decision on the merits of the case.

In cases where a registrar or senior registrar is allegedly impaired or allegedly guilty of unprofessional conduct, the allegations shall be reported to both (a) the relevant medical superintendent and/or Executive Regional Manager of the National Health Laboratory Services, representing the provincial health authority or NHLS as employer, and (b) the Dean of the Faculty for investigation. In the event that there are two parallel processes of investigation, the outcome of (a) may be taken into account in deciding the course of action and/or outcome of (b). The focus of the employing authority is likely to be on possible disciplinary action; the focus of the Faculty shall be on whether the student is fit to undergo training in a clinical context.

## DEFINITIONS

**Impaired:** The Health Professions Council (HPCSA) defines impairment as “a condition which renders a practitioner incapable of practising a profession with reasonable skill and safety”.

The University understands this to mean that a student may be reported as impaired where he/she:

- has become physically or mentally disabled to such an extent that the student is unable to perform the clinical duties of his/her chosen profession, or it is not in the public's interest to allow that student to practice the profession;
- has become unfit to purchase, acquire, keep, use, administer, prescribe, order, supply or possess any scheduled substance;
- has used, possessed, prescribed, administered or supplied any substance contrary to prescribed regulations; or
- has become addicted to the use of any chemical substance.

The University understands this to include but not to be limited to:

- failure to attend academic, clinical or clinical service commitments, and continuing to be absent from academic or clinical commitments without permission;
- unethical behaviour (e.g. deliberate misrepresentation or dishonesty; abusive or foul language towards teachers, fellow students or patients; performing unnecessary or inappropriate clinical procedures that may/do pose a risk to patient health and safety).

In the event of a reported disability, advice may be sought from the Disability Unit or other expert body.

## IMPAIRMENT REVIEW PROCESS

**Note:** The **Dean's nominee** will ordinarily be the Deputy Dean: Postgraduate Education.

- 1                   Report
  - Any clinical programme convener or other clinician who becomes aware of a postgraduate student who is possibly impaired must, in the first instance and as a matter of urgency, bring this to the attention of the Head of Department or head of the relevant unit.
  - It is also incumbent upon the student himself/herself or a fellow student or colleague who is aware of the problem to report any impairment, or any physical or emotional or behavioural problem that may be or may become an impairment in terms of the HPCSA Act, to the Head of Department or unit concerned.
- 2                   The HOD, if he/she deems there to be sufficient evidence to justify an investigation, shall report the alleged impairment to both the relevant provincial health/employing authority (in the case of a registrar senior registrar) and to the Dean of the Faculty of Health Science
- 3                   Once the HOD has reported the matter to the Dean, the Dean (or Dean's nominee) will assess the report and, if he/she believes that there is reason to do this, he/she will:
  - (a) in the event that the report did not contain sufficient or clear evidence in support of the claim, convene a meeting of an ad hoc investigating group, to be chaired by the Deputy Dean: Postgraduate Education (or nominee), at which the clinical staff teaching or training or supervising the student shall be asked to report on whether they deem the student to be impaired, and/or unfit to undergo training and/or practise the relevant profession. The investigating group will record its findings in a written report; or
  - (b) in the event that sufficient evidence exists in support of the claim, appoint an independent committee as described in 4 below.
- 4                   The Dean's nominee, having received the report of the ad hoc investigating group, will decide whether to drop the matter, or, if he/she believes there is reason to proceed, shall:
  - (a) inform the student of the concerns and explain the procedure that will be followed;
  - (b) appoint a senior academic staff member who does not teach the student, to chair an Impairment Review Committee of two or more academic staff members who do not teach or train or supervise the student in the current year.
- 5                   The Impairment Review Committee (IRC) shall comprise at least two senior academic staff members who are, in the opinion of the Dean(s) nominee, able to act independently and objectively in their assessment of evidence from (amongst others) academic staff and the student concerned relating to the student's alleged impairment.
- 6                   The Impairment Review Committee:
  - (a) will provide the student with a copy of the report of the ad hoc investigating group described under 3 above and invite the student to submit a written response to it, and assess the written report of the ad hoc group and assess any written response by the student;
  - (b) may require the student to undergo a professional assessment by an

independent healthcare professional or other expert (e.g. an expert who is knowledgeable about the skills required for the relevant discipline, or who can assess a psychiatric or a substance abuse problem, and who is not teaching the student in the current year);

(c) will consider the evidence and may, depending on the circumstances, interview the student, and then report its finding and the reasons for its finding in writing to the Dean(s) nominee.

7 The Impairment Review Committee may decide:

(a) to await the outcome of the investigation by the provincial health/employing authority, where this applies; and/or

(b) that the student's University registration will be cancelled with immediate effect in terms of the relevant Faculty rule(s); or

(c) there will be strict conditions for continued University registration, with regular monitoring and with reassessment by a due date, if necessary, after which a final decision about continued registration is taken; and/or

(d) that the student be granted a leave of absence period during which he/she shall be required to address the problems, with strict conditions for re-registration; and/or

(e) that the student's impairment be reported to the Health Professions Council of South Africa, at the time or when the student leaves the university and/or upon graduation.

8 The IRC shall record its findings and the reasons for its findings in a report to the Dean(s) nominee. If the finding of the Impairment Review Committee is that the student is unable to perform procedural skills or is unfit to undergo training and/or practise clinically as required by the profession, the Committee shall also report its decision about whether or not the outcome should be reported to the HPCSA and to the provincial health authority, where this applies.

9 The Dean's nominee shall inform the student and provide the student with the finding of the Impairment Committee, orally and in writing. If the student was found unfit for training, the student's University registration will be cancelled. The student will be informed of the Committee's reasons and of the student's right of appeal to the Vice-Chancellor or nominee.

## UNPROFESSIONAL CONDUCT

1 Any unprofessional conduct observed by a fellow student, tutor, course convener or other person shall be reported to the Deputy Dean: Postgraduate Education in writing.

2 The Deputy Dean shall, if he/she believes there is reason to do so, shall:

(a) nominate the programme convener, or another suitable academic staff members, to chair an ad hoc committee (made up of the teaching staff involved in the training of the student) to discuss the reported misconduct and make a recommendation as to whether the reported misconduct should be referred to a Professional Conduct Review Committee; and/or

(b) ask an independent academic staff member (who does not teach the student) to appoint a Professional Conduct Review Committee; and/or

(c) report the alleged impairment to the relevant provincial health/employing authority (in the case of a registrar/senior registrar) and to the Dean of the Faculty of Health Science, indicating that a Faculty process has been introduced to investigate the allegations.

In the event that an ad hoc group is appointed, the Deputy Dean shall then proceed to appoint the PCRC as described in (b) above and make the ad hoc group's report available to the PCRC.

- 3 The Professional Conduct Review Committee (PCRC) shall comprise at least two senior academic staff members who are, in the opinion of the Dean's nominee, able to act independently and objectively in their assessment of evidence from (amongst others) academic staff and the student concerned relating to the student's alleged transgression of UCT, Faculty or HPCSA rules and regulations on misconduct and/or unprofessional behaviour.
- 4 The Professional Conduct Review Committee shall provide the student with a copy of the report of the ad hoc group described in 2 above. If the matter has been considered by such an ad hoc group, and shall invite the student to respond in writing to this/these report(s).
- 5 The PCRC shall assess the evidence, including the student's written submission, and may invite the student to an interview. It shall then, on the basis of its finding, decide a course of action with reasons in writing, namely that:
  - (a) the student's University registration be cancelled with immediate effect in terms of the relevant Faculty rule(s); or
  - (b) the student's action be referred for action under the rules on disciplinary jurisdiction and procedures; and/or
  - (c) there be strict conditions for continued registration, with regular monitoring and with reassessment by a due date, if necessary, after which a final decision about continued registration is taken.
- 6 The PCRC shall report its findings in a report to the Dean's nominee, who shall inform the student of the outcome in writing.
- 7 The student will be advised that he/she may appeal to the Vice-Chancellor or nominee against the findings of the PCRC.

## **GUIDELINES FOR MASTER'S AND DOCTORAL STUDENTS**

- 1 **Introduction**  
This section is an attempt to explain some of the more important administrative issues related to the postgraduate experience. Your time and energy should be spent enjoying the excitement of your research, rather than wrestling with bureaucracy, and you are encouraged to take the time to read through these pages so that you are more aware of the processes that will affect your life as a postgraduate student.

Postgraduate education at UCT commonly results in one of two outputs: a Doctor of Philosophy degree (PhD) or a master's degree (MSc/MPhil/MMed). Master's degrees in the Health Sciences Faculty may be obtained in one of two ways: (i) by a research dissertation; (ii) by coursework and a minor dissertation. MMed degrees are obtained through clinical training, relevant Colleges of Medicine examinations and a minor supervised research component.

Note that this handbook is intended to serve as a guide to postgraduate students. Whilst it draws on other published University documents and Handbooks, it does not replace them. The rules for the various higher degrees are set out in the Handbook of General Rules & Policies (Handbook 3 in the UCT series) and the Faculty of Health Science Student Handbook (Handbook 8 in the UCT series).

2

### **What is the difference between a master's and doctoral degree?**

The most basic difference between a master's degree and a PhD is that the PhD is the higher degree: it requires more effort and time to obtain. However, in practice the difference is more subtle than this. Indeed, by convention a master's degree is normally awarded following the successful examination of a dissertation, which means a discourse or discussion. A PhD is awarded on the basis of a thesis (an assertion or tenet that has to be proved against critical argument). In practice, however, the two terms are commonly used interchangeably.

A master's degree is frequently a student's first encounter with real research. Its primary function is training in research. It is a clearly circumscribed piece of work that the supervisor feels confident can be undertaken within, or close to, the minimum time period (generally within two years). The skills imparted, and which the candidate hones through the process, include posing a research question, undertaking a relevant literature review, engaging rigorously with research methods, drawing valid conclusions and communicating findings in a clear, logical and scholarly way. Importantly, the work does not have to contain original findings – it must simply demonstrate a mastery of the methods of research.

The degree of Doctor of Philosophy, on the other hand, demands that the candidate is able to conduct independent research on his/her own initiative. Through the thesis the candidate must be able to demonstrate in his/her thesis that he/she is at the academic forefront in the topic selected, that the work is original and that it advances knowledge.

3

### **Master's degrees in Health Sciences**

A candidate entering a master's programme must generally have a BSc (Honours) degree, a four-year undergraduate equivalent (i.e. a four-year degree post NSC equivalent) or an MBChB degree. In the case of the Master of Medicine degree, applicants need to be registered doctors, and in the case of the MPhil for subspeciality training purposes, applicants must be registered specialists.

Departments in the Health Sciences Faculty offer the following master's degrees: Master of Science in Medicine: this is a research-based degree in which a dissertation on a selected research topic is completed under the guidance of a supervisor. Entrance requirements are an Honours degree or four-year equivalent. Many MSc(Medicine) degrees are in laboratory-based disciplines.

- Master of Science (by coursework and dissertation): in this degree a candidate completes 50% of the requirement through coursework, and 50% by way of a dissertation on a piece of supervised research. The dissertation is by definition smaller in scope than one completed where the dissertation counts for the full degree. Entrance requirements are an honours degree or four-year equivalent.
- Master of Philosophy (MPhil): this is either a research degree, or a degree obtained by coursework and dissertation, for candidates engaged in *cross-faculty research dissertations* or where a candidate comes from a *non-science* academic background. Entrance requirements are an Honours degree or four-year equivalent.
- Master of Medicine: this is a speciality training degree. Applicants need to be qualified medical doctors, have done internship and community service, and occupy Health Professions Council training numbers. They usually write the College of Medicine examination and then complete a minor dissertation (60 credits) under supervision.
- Master of Philosophy for subspeciality purposes: this is a subspeciality

training degree.

- Some master's degrees have specific nomenclatures to align them with international practice (e.g. Master of Public Health).

4

### **Doctoral degrees in Health Sciences**

There are three types of doctoral degrees offered in Health Sciences – a PhD (Doctor of Philosophy), an MD (Doctor of Medicine) and DSc(Med) (Doctor of Science in Medicine). The first two are obtained via research submitted as a thesis and is in practice by far the most common mechanism for obtaining a doctoral degree. The DSc(Med) degree has very rarely been awarded at UCT, and is normally based on a career of high quality publications focused on some or other topic; in this regard it is more relevant to senior researchers late in their careers. The entrance requirement to the PhD is a master's degree or MBChB with appropriate experience. An MD has as an entrance requirement an MBChB degree, but it is sometimes possible to upgrade to a PhD after completing the first year of master's research.

5

### **Academic location of the degrees**

Master's and MD degrees are awarded by the Health Sciences Faculty. Master's and MD degrees are discipline-specific and students are located within the appropriate department. The MD is always in a clinical medical discipline. A PhD can also be done in a clinical discipline. (There was a historical difference between the two – at a time that the MD was an unsupervised degree – that no longer exists, except for the fact that the MD is always in a clinical discipline.) The PhD is a University-wide degree (the award of the degree is the responsibility of the Doctoral Degrees Board), but students are academically located in the department of the principal supervisor.

6

### **Student funding**

There are a number of potential sources of postgraduate student funding:

- National and International Foundations (private and government).
- University-wide scholarships. All students are eligible to compete for these.
- Discipline-specific scholarships. A list of these pertinent to the Health Sciences Faculty can be found in the University's Handbook 14 in the UCT series.
- Financial Assistance for Postgraduate Study and Postdoctoral Research.
- National Research Foundation Bursaries. These take two forms:
  - ❖ Scholarships awarded directly to students, on application.
  - ❖ Bursaries awarded to supervisors for distribution to students, at the discretion of the supervisor but within a framework of conditions laid down by the NRF.
- Industry funding to academic staff members to undertake research projects may include a component to be awarded as a student bursary.

Students are encouraged to apply for financial support to a full range of potential sources early in their final year of undergraduate study, or in the year before they wish to initiate their postgraduate studies. For further information please visit the website: [www.uct.ac.za/research/pgfo](http://www.uct.ac.za/research/pgfo)

7 **Applying for admission**7.1 **Application Procedure**

The Faculty will consider an application to register for a master's or PhD degree from anyone who meets the academic entrance requirements. For a master's degree this is an Honours degree or equivalent. An Honours degree is a post-Bachelor degree qualification. A four-year Bachelor's degree that is considered equivalent to a South African Honours degree may be accepted. Entrance requirement for registration as a PhD student is a master's degree or equivalent. Where a candidate does not have a master's degree, initial registration for a master's will be required, with the possibility of upgrading to a PhD registration at the start of the second year of registration if satisfactory progress is made (see section 8.4). International students might require certification of their degree equivalence by the South African Qualifications Authority (contact the Postgraduate Administrator in the Faculty Office for the address); the Faculty reserves the right to make a final judgement on the South African equivalence of a foreign degree.

- a *curriculum vitae* which includes your personal details, your academic history and any work experience;
- an official transcript of your university results (non-UCT students);
- in the case of an application for the PhD, provide a summary of your master's research and list any publications which have arisen from this;
- the names and contact details (including e-mail addresses) of two referees who are familiar with your recent academic studies;
- a brief outline of your area of interest for research towards your master's or PhD degree;
- the names of prospective supervisors if you have a preference;
- an indication of when you will be available to start your studies;
- an indication of whether you will require funding to cover the costs of study fees and living expenses, and details of any scholarships that you have applied for.

Only once you have some commitment from the HOD or potential supervisor should you apply formally to the University. Students from non-English speaking backgrounds will be required to take the international TOEFL test. Acceptance by a Department is provisional, and you will still require formal acceptance by the Faculty of Health Sciences.

The formal University application procedure requires that an applicant complete an online UCT application at [www.uct.ac.za/apply/applications/postgraduates](http://www.uct.ac.za/apply/applications/postgraduates) for admission to the Health Sciences Faculty. Advice on application procedures can be obtained from the Postgraduate Admissions Officer in the Health Sciences Faculty Office.

*Do not arrive at UCT until you have been formally notified by the Faculty of Health Sciences that you have been accepted for postgraduate study.*

Places on coursework master's degree programmes are normally limited and applicants are accepted on a competitive basis.

7.2 **Finding a supervisor**

Once a student has decided on the broad research area in which he/she wishes to work, a suitable supervisor needs to be identified. Except in exceptional

circumstances, the principal supervisor must be a full-time permanent member of the academic staff of the Faculty. Co-supervision by persons within or outside the University is possible, but a person employed outside of the University may not act as principal supervisor.

The choice of supervisor has to be approved by the Head of Department. It is important that the Head of Department is satisfied that the proposed supervisor has adequate knowledge, time and resources to do the job properly. In the case of Doctoral candidates, the Doctoral Degrees Board is also responsible for the adequacy of the supervisor. Academic staff who do not have a PhD will not normally supervise PhD degrees. In rare cases people who are experts in their fields and have prior supervisory experience, but who do not have a PhD, are approved by the Doctoral Degrees Board to be the primary supervisor of a PhD thesis.

In the case of a student currently registered at UCT the process of finding a supervisor which is outlined above will normally take place during the year prior to embarking on postgraduate study.

**7.3****Selecting a research topic**

The selection of a topic for research for a master's or PhD may occur in two ways. The topic of research is identified by the prospective student, or a supervisor might provide a number of possible projects from which the student can choose; either way, the supervisor and student need to agree on the selected research topic. The suitability of a research topic depends not only on its intrinsic academic merit, but also on funding realities. It is, however, the responsibility of the candidate to make the final selection, and it is wise to choose a topic of strong interest rather than one offering the better funding.

**8****Registration****8.1****First registration and annual re-registration****8.1.1****Thesis/dissertation students**

There is no specific date for first registration of newly entering postgraduate students who are registering for a PhD or master's degree (by dissertation only) – commencement is by mutual arrangement with the supervisor. However, master's and PhD students who need to have the year of first registration counted as an academic year for their minimum period of registration (1 year for a master's, 2 years for a PhD) must have been registered for the degree concerned by 30 April. Registration follows formal acceptance by the Faculty of an application for admission and involves completion of three forms – a registration form, a curriculum form and most importantly a Memorandum of Understanding (MoU). Registration at any time in the second semester incurs 50% fees.

Final responsibility for registration and acceptance of a PhD student lies with the Doctoral-Degrees Board. New PhD students will generally be required to develop a full research proposal during the first six months of their registration, and this may be a stated condition in the MoU. Failure to produce a satisfactory proposal within the allotted time frame will lead to termination of registration at the end of the first year of registration. Acceptance of the full PhD proposal may involve the candidate presenting a seminar, based on a written research proposal, to departmental staff, other postgraduate students and others with specialist knowledge in the field of study, which demonstrates, *inter-alia*, that:

- The candidate is familiar with the main literature in the field;

- There is sufficient scope in the topic for a PhD and there is a clear definition of the hypotheses proposed;
- The candidate has the ability to undertake the work;
- The potential contribution to knowledge has been identified and there is a clear definition of the key questions to be addressed in the context of the proposed hypothesis;
- The method of research is sound and achievable and there is a clear knowledge of the experimental procedures to be used and the methodology to be pursued in analysing the results;
- There is sufficient scope in the topic for a PhD and there is a clear definition of the hypotheses proposed;
- The candidate has the ability to undertake the work;
- The potential contribution to knowledge has been identified and there is a clear definition of the key questions to be addressed in the context of the proposed hypothesis;
- The method of research is sound and achievable and there is a clear knowledge of the experimental procedures to be used and the methodology to be pursued in analysing the results.

In the case of master's degrees, the Head of Department and supervisor must be satisfied that the student is equipped for master's degree study and has a suitable research topic before he/she is accepted and registered. Candidates are commonly expected to submit, via the proposed supervisor, a written proposal to the Head of Department (as a guideline) 3-6 pages which outlines, *inter alia*, the topic to be investigated, familiarity with the central literature within the broad field of study and clarity on the research methods.

#### 8.1.2

##### **Master's by coursework and dissertation**

Students registering for a coursework master's need to do so by the first day of lectures. Normally a specific day is set aside (consult with the Department concerned in this regard) to complete registration procedures which involve completing a registration form and curriculum form. When registering for the dissertation component (as a separate course code), either simultaneously or the following year, a Memorandum of Understanding (MoU) will also need to be completed. Registration must have been completed by the third week in February at the latest, or there is a fee penalty for late registration.

#### 8.2

##### **International Students**

#### 8.2.1

##### **Study permits, health insurance, fees**

In terms of current legislation, no international student may register at the university or participate in an academic programme unless he/she is in possession of a valid study permit and proof of medical insurance cover. Once a formal offer of acceptance has been received from the Faculty international students are required to gain clearance from the International Academic Programmes Office (IAPO), which requires: (i) a certified copy of passport showing photograph and passport number; (ii) the page containing the valid study permit for study at UCT; (iii) documentary evidence of health insurance cover; (iv) proof of payment of fees. This will lead to provision of an "International Students' Pre-registration" form from IAPO. These documents must be submitted with the registration forms to the Postgraduate Officer – Faculty of Health Sciences. The registrations of International Students will not be approved without these documents, nor will they be approved unless the necessary fee payments have been made. Any queries should be directed to the International Academic Programmes Office (IAPO) at: (021) 650 2822/3740 or

iaop@world.uct.ac.za.

8.2.2

**Bursaries towards International Fees**

From 2011, fee waivers for international students no longer exist. Students from countries on the African continent may apply for a bursary to contribute towards the cost of international fees. They should apply via the supervisor and HOD to the Faculty Office, using the appropriate form.

8.3

**Renewal of Registration**

Each candidate is responsible for maintaining the continuity of his/her registration. Registration and Progress & Planned Activity forms for returning candidates, with instructions, are distributed to Departments in November of the preceding year. Candidates who for some reason do not receive their forms by mid-January are expected to follow up and obtain them from the Department. Registration must be completed by the last Friday of February each year. A penalty fee is charged for late registration. Students who have exceeded two years registration for the master's degree or three years registration for the PhD degree, and who are allowed to return on probation will have received a letter from the Faculty Office to this effect. Before being re-registered such students will be required to describe on the Progress & Planned Activity form, with Supervisor and Head of Department endorsement, how they aim to complete their thesis/dissertation by November of the probation year. PhD candidates must maintain unbroken registration between admission and graduation, unless granted leave of absence.

8.4

**Change of registration**

8.4.1

**Upgrading to a PhD/downgrading to a master's**

It is possible to change the status of registration during the process of study. Thus, it is possible for a master's degree to be upgraded to a PhD if the supervisor and HOD believes that the student has made good progress, has shown suitable potential and that there is scope within the project to lead to a higher qualification. This would normally occur at the start of the second year of master's registration, and at the latest must occur by the end of the second year of master's registration. It normally follows departmental requirements being met (such as the upgrade proposal being written, presented and interrogated by an adhoc expert committee). It is not possible to backdate registration to the first year. It is also not possible to use the work of the master's degree towards a PhD after the examination process. It is possible to downgrade from a PhD to a master's degree before the thesis is submitted for examination. It is not possible for a master's degree to result from a failed PhD.

The documents to be submitted to the Faculty Office in order to process an upgrade from master's to PhD are a letter of motivation signed by the supervisor(s) and Head of Department, a PhD research proposal, and a D5 (upgrade application form).

The documents to be submitted to the Faculty Office in order to process a downgrade from PhD to master's are a letter signed by the student requesting a downgrade, together with a motivation from the supervisor(s) and Head of Department.

8.5

**Leave of Absence or Cancellation/Discontinuation of Studies**

8.5.1

**Leave of absence**

If it is impossible for a candidate to continue with his/her studies/research in any

given year (for example due to serious illness, work commitments) but he/she intends continuing in the following year then he/she must apply for leave of absence, in writing, to the Dean. Leave of absence can be awarded for a full year, the first six months or the second six months of the year. At PhD level a maximum of one year LOA is allowed by the Doctoral Degrees Board. The request for leave of absence must state the period, the reasons and include supporting documentation (e.g. medical certificate), and have the signed support of the supervisor and Head of Department. Applications to grant leave of absence retrospectively will only be considered in exceptional circumstances.

#### 8.5.2

##### **Cancellation/discontinuation of studies**

If a candidate will be discontinuing studies permanently then he/she must formally cancel registration in writing on the prescribed form. The cancellation form is obtainable from [www.uct.ac.za/students/postgraduates/administration](http://www.uct.ac.za/students/postgraduates/administration). This is of considerable importance because if a candidate leaves without cancelling he/she will still be liable for fees that are payable. Applications for retrospective cancellation of registration are not accepted: there are specified dates after which a cancellation cannot be accepted or any fees refunded (details are in the Fees Handbook).

#### 9

### **Supervision**

#### 9.1

##### **Supervisors**

All students registering for a degree by dissertation will be formally allocated a supervisor, who is responsible for giving guidance. Co-supervision by people from within or outside of the University is possible, but the principal supervisor must always be a full-time academic member of staff within the Department in which the student is registered. Emeritus Professors may act as co-supervisors but not as principal supervisor. However, they may continue as principal supervisors of students who were registered under them before their retirement. In the first instance, the allocation of supervisors is the responsibility of the Head of Department, even though a student may have approached an individual staff member, or vice versa. The Head must be satisfied that the supervisor has the necessary expertise, knowledge and skills to supervise the research programme in question. If the Head is not satisfied that the experience/expertise of the supervisor is sufficient, he/she may insist on a co-supervisor being appointed.

Generally, members of staff should have a PhD in order to supervise a PhD student, but this does not necessarily exclude a member of staff without a PhD from supervising a PhD. Without exception, however, any member of staff without a PhD seeking to be the primary supervisor of a PhD candidate will require formal acceptance by the Doctoral Degrees Board. The application to the DDB should be brought by the Head of Department, via the Dean, motivating the case. In the case of applicants with a track record of successful supervision and research experience, this accreditation will not normally be withheld.

#### 9.2

##### **Memorandum of Understanding between Postgraduate Student and Supervisor**

For master's and PhD registration, the Faculty has introduced a Memorandum of Understanding (MoU) to be signed in the first year of registration by both supervisor and candidate, clarifying issues relating to respective roles and responsibilities, timing, funding (if appropriate) and intellectual property. A copy of the MoU form is shown in Appendix A. The MoU is an important 'contract' between candidate and supervisor and needs to be taken seriously and filled out in

as much detail as possible. An electronic copy of the MoU is available on the Health Sciences Postgraduate Students' Vula site.

Before the start of the second and subsequent years of registration, a Progress & Planned Activity form (Appendix B) needs to be completed and signed by both the candidate and supervisor. This process represents an annual review of progress and should be seen as an extension to the initial MoU. If, in the opinion of the supervisor, adequate progress is not being made the Progress & Planned Activity form should clearly lay down criteria (such as submission dates and milestones) against which further progress shall be measured. If progress continues to be unsatisfactory, the Dean and, in the case of PhD candidates, the Doctoral Degrees Board, may refuse re-registration. This is a formal document and the student and supervisor will be held to it.

If, after two years in the case of master's candidates and 3 years in the case of PhD candidates, dissertations/theses have not been submitted, the Dean will normally send candidates a formal letter of warning giving them one year to submit, failing which re-registration will be refused.

### **9.3 Roles and responsibilities of student and supervisor**

#### **9.3.1**

##### **Responsibility of the student:**

- To acknowledge and accept primary responsibility for his/her education.
- To demonstrate a good work ethic, in order to meet the expected throughput rate (2 years for a master's student, 3-4 years for a PhD student).
- To inform the supervisor of their research progress on a regular basis.
- To share ideas and to work collegially.
- To participate in and to contribute to the life of the department, including being available to demonstrate at undergraduate practicals/tutorials.
- To commit to co-publication with the supervisor.
- To familiarise him/her with the University rules, particularly with regard to plagiarism, and to commit to respecting those rules.

#### **9.3.2**

##### **Responsibility of the Supervisor:**

- To provide information relating to relevant literature and sources.
- To facilitate access to necessary samples, field areas and analytical equipment.
- To discuss and critically evaluate the candidate's findings and ideas.
- To read, criticise and annotate draft chapters and progress reports within a reasonable time.
- To advise the candidate on the form and structure of the dissertation/thesis.
- To train the candidate in the conventions of scholarly presentation.
- To arrange for a suitable replacement (with agreement from the HOD) if absent for any substantial period of time.
- To be familiar with the rules of the degree and advise the candidate on such matters.
- To help integrate the student into the academic and social life of the department.

#### **9.4**

##### **Appeals**

The relationship between supervisor and postgraduate student is an important one:

if it is unsatisfactory it can significantly and negatively impact on the educational experience. If serious problems develop in this relationship, the student should normally:

- Raise the matter with the supervisor and seek to resolve the matter personally.
- If this does not resolve the matter, the problem should be referred to the Head of Department.
- If the supervisor is the Head, it should be referred directly to the Chair of the Health Sciences Postgraduate Liaison Committee.

In the event that the above preferred route is not easily followed, the Chair of the Postgraduate Student's Association should be approached for advice.

9.5

### **Supervision and Attendance at the University**

During the period of his/her registration, a higher degree candidate will be expected to be available on-campus for discussion with his/her supervisor. For persons who are based outside Cape Town there is generally an expectation that the candidate will spend some period of time on-campus interacting with the supervisor; the expected time spent on-campus varies from Department to Department, and needs to be clarified with the supervisor and department concerned. In any event, a candidate must be prepared to make him/herself available for discussion and interaction at the University if required.

9.6

### **Unsatisfactory progress**

Heads of Departments report each year, to the Faculty Examinations Committee, the names of master's and PhD students whose progress is considered unsatisfactory. In the case of master's degrees, these would be students who have already been registered for two years and not yet submitted. In the case of PhD degrees, these are students who have been registered for four years and have not yet submitted. Extenuating circumstances, if any, will be tabled at that meeting. If, in the view of the Committee, there are insufficient mitigating circumstances, the Dean will send a warning letter informing the candidate that he/she will be permitted to register in the following year on condition that his/her thesis/dissertation is submitted in that year. He/she will not be permitted to register thereafter, except with the special permission of Senate.

10

### **Ethics**

The issues of ethics and intellectual honesty are vital to university life. The Faculty takes the issue of ethics in research very seriously and to this end has established a Faculty Research Ethics Committee. The terms of reference of this Ethics Committee include:

- to consider all ethical matters related to research in the Faculty including, but not exclusively, conflicts of interest, authorship, the relationships between junior and senior research workers, and the role of the scientist in society;
- to deal with any ethical issues brought to the attention of the Committee by researchers in the Faculty;
- to screen and approve, or otherwise, all research proposals in the Faculty that relate to human or animal subjects; this includes proposed research involving students or staff, by UCT researchers or by outside visiting researchers;
- to be aware that research questionnaires involving human subjects have ethical dimensions, and that research involving staff or student perceptions of race, identity or ethnicity also have ethical dimensions;

and

- to report all instances of unethical or improper research practice to the Dean for referral to the Chair of the University Research Committee.

At the time of first registration, the supervisor will have had to sign a statement in the MoU relating to the need for any ethical clearance required for a student's research.

A particular (and unfortunately growing) ethical issue is that of plagiarism. Plagiarism, in essence, is passing off someone else's work as your own: it results from inadequately acknowledging sources of data, analyses and ideas, and includes direct copying of passages of text. It is dishonest and it has no place at a university. If students are in any doubt on issues relating to plagiarism, they must consult their supervisor or the Ethics Committee. Instances of plagiarism will be taken to the University Court and may have very serious consequences, including rustication or even expulsion.

All master's candidates, at the time of submission, are required to make a declaration, which should be included in the dissertation, stating: "I know the meaning of plagiarism and declare that all of the work in the dissertation, save for that which is properly acknowledged, is my own".

The PhD declaration is discussed in the next section.

If in any doubt regarding ethical issues relating to research, seek advice from your supervisor or Head of Department.

## 11 Submission of a thesis/dissertation

### 11.1 Timing and process of submission

At the conclusion of research, the candidate must submit a dissertation or thesis for examination. This normally occurs after receiving an indication from the supervisor that the product is in a form which is acceptable for submission. However, a candidate is not prevented from submitting without the supervisor's approval.

If a candidate intends submitting a master's dissertation for examination he/she must inform the Postgraduate Office in writing, by completing form D8, of such an intention four weeks in advance of the planned submission date. The Head of Department, with input from the supervisor, will then nominate suitable examiners for approval by the Dean. If submitting a PhD thesis, the candidate must inform the Doctoral Degrees Board Officer (Masingene Building) in writing of such intention one month prior to planned submission.

The dates for submission of dissertations and theses are:

- Friday before the start of the academic year in February for persons hoping to graduate in June;
- 15 August for persons hoping to graduate in December.

*Please refer to the University Fees Booklet for submission dates with respect to fee rebates.*

Candidates who submit their thesis/dissertation before the beginning of the start of the first term are not required to register. If submitted after the start of the first term a candidate must register for that year, and a pro-rata fee will be charged, depending

on the date of submission. Where a student who submitted prior to the start of term is required to revise and resubmit a dissertation/thesis, they must register and pay the academic fee for that year. Further information can be found at [www.uct.ac.za/students/postgraduates/fees/handbook](http://www.uct.ac.za/students/postgraduates/fees/handbook)

## 11.2

### **Format**

There is no standard format for the submission of a dissertation or thesis: formatting is at the candidate's discretion, but using A4 paper is the expected norm. Reasonable width margins (2 – 2.5cm) are desirable to ensure that binding does not impede reading of the text. However, candidates should consult their supervisor early on in the process. The contents must be printed in either double or one and a half spacing using a common font throughout. Printing on both sides of the page is allowed, but a reasonable weight paper must then be used. Although it is expected that the dissertation/thesis be written in English, it is possible with prior support of the supervisor and prior permission from the Doctoral Degrees Board, to submit a PhD in another language.

For master's degrees a candidate must upload the dissertation as one continuous pdf file to the PeopleSoft system. Once the dissertation has been finally accepted, the final, corrected dissertation must be uploaded to the PeopleSoft system.

For a PhD, a candidate must upload the thesis as one continuous pdf file to the PeopleSoft system. Once the thesis has been finally accepted, the final, corrected thesis must be uploaded to the PeopleSoft system.

See section below for guidelines for inclusion of publishable papers in a PhD.

## 11.3

### **Length**

In the case of a PhD, the thesis may not exceed 80 000 words. If it is felt that it is essential to exceed this length, special permission must be obtained from the Dean. It is the expectation that master's degrees should be substantially shorter than this with a maximum of 50 000 words allowed for a full research master's, 25 000 to 30 000 for a 90 credit minor dissertation, or 16 000 to 20 000 for a 60 credit minor dissertation.

## 11.4

### **Title page**

There must be a title page on which should appear the dissertation/thesis title, name of candidate (plus qualifications if you wish), student number, name of Department, University and the month and year of submission. The following is the recommended wording used after the dissertation/thesis title and name of the candidate:

Dissertation (or Thesis) presented for the degree of Master of Science (Medicine) (or Doctor of Philosophy) in the Department of University of Cape Town, Month and Year.

For a coursework master's dissertation the wording should read "Dissertation presented in partial fulfilment of the requirements for the degree of..."

## 11.5

### **Plagiarism declaration**

Following the title page there should be a page containing the following signed statement by the candidate:

"I know the meaning of plagiarism and declare that all of the work in the dissertation (or thesis), save for that which is properly acknowledged, is my own".

## 12 Guidelines for inclusion of publications in a doctoral thesis

When a student contemplates inclusion of publication(s) in their PhD thesis, the Faculty of Health Sciences requires that the following be considered:

## General

- All rules as laid out by UCT must be satisfied. It must be borne in mind that the PhD is a UCT degree (with the oversight of the DDB) and not a Faculty degree. Further, that a UCT PhD is considered a research degree of high international standing and recognition.
- A plan to include publications in a thesis should be developed by the student in consultation with their supervisor. The best time to do this will vary from project to project. Advice may be sought from their Departmental Postgraduate Committee (or equivalent) and their Faculty Higher Degrees Committee (or equivalent).
- In addition to considering a plan and structure for the thesis, Rule 6.7 must be satisfied, viz. “A binding decision can only be given by the Doctoral Degrees Board”. Thus, formal permission must be sought from the DDB prior to submission for examination.
- It is best that the Faculty committees (on behalf of the DDB) only consider the plan once publications have been submitted, accepted or published, as it is theoretically impossible for a committee (or the DDB) to give advice (or approval) if no publications have appeared, been submitted or at the very least written.
- Requests to include publications in a thesis must be considered on an individual basis i.e. ‘blanket’ approval for a group of student PhD’s cannot be sought nor given.

## 13 The PhD thesis

## 13.1 Scope of the PhD thesis

- The thesis (and also its motivation) must acknowledge, wherever appropriate, that it is a doctoral thesis that includes publication(s), and that the thesis itself is not simply a compilation of relevant publications. It must be a thematically coherent and substantive and scholarly discourse, presented as a composite body of work with all the necessary elements as to make it comparable (and therefore examinable) to a PhD presented in the traditional way. It is important to note that UCT does not offer a PhD “by publications”. The University offers a PhD which requires a thesis to be produced in accordance with standard requirements – and in fulfilling these requirements it is possible, if the prescribed permission has been obtained, to include publications in the thesis.
- A PhD examiner has to be satisfied that a candidate has formulated appropriate research questions and mastered the relevant methodologies, analytical processes necessary to answer such questions in a discipline-specific, scholarly defensible way – publications alone cannot be adequate to demonstrate this aspect of a candidate’s work.
- The main aim(s) and answer(s) to the research questions must be apparent and they must permeate the thesis as a whole. Even though there are publication(s) included, the thesis must nonetheless show acceptable academic style, scholarly content and coherence as a connected account with a satisfactory introduction, statement of thesis and conclusion.

- The thesis must include a thorough and critical literature review that also succeeds in demonstrating acceptable academic style and scholarly content – as would be true of any PhD thesis. This must be in addition to any literature review sections appearing in the included publications. The exception would be where the student has published the literature review in the form of a systematic or meta-analysis, and is included as one or more of the complete publications (in which case the literature review may form a significant piece of ‘original’ research in its own right).
- There must be a significant academic discussion leading to clearly articulated conclusions, based on the thesis as a whole.
- There should be consistency in referencing style throughout the thesis (other than in the publications themselves where different journals may require different styles).

### 13.2

#### **Nature of the publications included in the PhD thesis**

It should be clear to the reader/examiner what the rationale for including papers is. It should demonstrate specifically how including the publication(s) assist(s) in fulfilling the thesis. We suggest that each paper is prefaced with a synopsis of how the paper contributes to the thesis aims and objectives. This is in addition to full discussion in the appropriate place(s).

It is expected that the publication is published in an international peer-reviewed journal. For a publication to be considered as an ‘included publication’, it should be already published or ‘in press’ (i.e. accepted for publication) or at the least submitted and under review by the editorial team of a UCT-accredited international peer-reviewed journal.

In some circumstances it may be that the ‘included publication’ is of another type (e.g. a policy document or technical report). In such cases the motivation and ‘publication’ would have to be considered on its specific merits and strongly motivated.

It is expected that the student is the lead author of each included publication, as the student should be the primary researcher. All included publications must have been written under the supervision of the supervisor(s) while registered as a PhD student.

Publications that have not been written under the supervision of the supervisor as a part of the PhD may not constitute “included” publications.

There should be a consistent format style throughout the thesis (font, layout, table and figure numbering etc).

Rule GP6.8 stipulates a maximum word count for a PhD thesis of 80 000. In the case of a thesis including publications this remains so – the included publications are not over and above the 80 000 and must be included in the total word count (references are not included in the word count).

### 13.3

#### **Support from co-authors (of publications included in the PhD thesis)**

Rule 6.3 states that: “The thesis must constitute a substantial contribution to knowledge in the chosen subject and may embody only the original work of the candidate with such acknowledged extracts from the work of others as may be pertinent”. In accordance with this, it should be made unambiguously clear at what HEQSF levels the candidate was involved in the research and publication(s) and what the role of the co-authors was/ were. This should be verified by the

supervisor(s). There is no rule regarding a maximum number of allowed co-authors but it must be understood that the more co-authors listed, the more difficult it will be for a student to demonstrate their own intellectual drive and lead. It is best that written letters of support be obtained from each co-author, attesting to their agreement on the stated contributions that the candidate and they made to the study. In certain cases, where there are a large number of co-authors, the principal investigator and supervisor can sign such support on behalf of the group. If co-authors themselves are PhD students, they should verify that they will not be including this publication(s) in their own PhD thesis.

**13.4****Publication**

When a candidate submits a dissertation/thesis he/she shall be deemed to have granted the University free license to publish it in whole or part in any format the University deems fit.

**13.5****Declaration of Free Licence**

In the case of PhD students, the candidate is required to sign a declaration stating: "I hereby:

- (a) grant the University free license to reproduce the above thesis in whole or in part, for the purpose of research;
- (b) declare that the above thesis is my own unaided work, both in conception and execution, and that apart from the normal guidance of my supervisor, I have received no assistance apart from that stated below; except as stated below, neither the substance nor any part of the thesis has been submitted in the past, nor is being, nor is to be submitted for a degree at this University or any other University. I am now presenting the thesis for examination for the Degree of PhD".

**13.6****Referencing**

Forms of referencing must be standard for the discipline and must adhere to a recognised international convention, agreed to with the supervisor.

**14****Examination****14.1****Overview**

The system of independent external examination lies at the heart of credible quality assurance. The examination of master's dissertations involves two examiners, both external to UCT (at least one of whom must be at an institution of high academic standing outside of South Africa).

The examiners are selected on the basis of their knowledge in the field within which the research is located. Appointments of examiners of master's dissertations are subject to approval by the Dean. Supervisors cannot serve as examiners of their own student's work.

At the doctoral level, the thesis is examined by three external experts in the field, at least two of whom are based at an institution of high academic standing outside of South Africa. Appointments of examiners of PhD theses are subject to approval by the Doctoral Degrees Board.

In all cases, the identity of the examiners is kept strictly confidential from the student. This confidentiality remains in force until the examiners give permission for their identities to be known after the examination process has run its full course (note that the examiners have the right not to give this permission). Supervisors are

not permitted to make contact with external examiners during the examination process. No dissertation or thesis will be examined under conditions of secrecy, though it is possible to apply for temporary confidentiality of a dissertation or thesis under examination where there is good reason for a short delay in making the research public.

#### 14.2

##### **What is expected of a master's dissertation?**

In order for the degree to be awarded a master's dissertation must indicate that a candidate has successfully completed a programme of training in research in that he/she:

- understands the nature, objectives and scientific principles underlying the investigation;
- is adequately acquainted with the relevant literature;
- has mastered appropriate techniques and analytical methods;
- assesses the significance of findings in a thorough and logically-coherent manner;
- reports on the study in an acceptable scientific format (in accordance with Faculty rules and norms) that is satisfactory in both presentation and literary style.

A master's degree is essentially a training course to equip a candidate with skills necessary either for employment in a given field, or for further independent research. Consequently, the dissertation need not involve original research, distinctly advance knowledge of the subject or be potentially publishable in a peer-reviewed scientific journal. To obtain a distinction for the degree, these factors are considered together with evidence of critical and independent thought. It is important to note that master's degrees are awarded with distinction in exceptional cases only. Usually a unanimous decision from both examiners is required but a distinction may be awarded by the Faculty's Doctoral and Master's Committee (DMC) if both examiners recommend this and/or if one examiner recommends it and the second examiners does not object. Examiners are asked to clearly indicate their recommendation, and to provide a detailed report in which they comment on the strengths and weaknesses of the dissertation. The detailed comments in the examiners' reports are integral to the final decision on whether to award a distinction or not, and are particularly relevant when the examiners are not unanimous.

To recommend that the degree be awarded with distinction, the examiner must be of the opinion that the work is outstanding at the master's level, bearing in mind the methodological complexities involved, and the intellectual difficulty of the particular subject matter. As a guideline, it is suggested to examiners that they might consider a dissertation to be worthy of a distinction if it fulfils the following criteria:

- the standard is in the top 20%, approximately, of the master's dissertations that they have examined that;
- the structure of the dissertation is appropriate;
- the presentation is excellent. Minor editorial errors (such as formatting, grammatical or spelling mistakes) may be tolerated and referred back to the candidate for correction. Ubiquitous and careless errors in presentation that point to a lack of exactitude should militate against the award of a distinction.

Where the work reported in the dissertation is original and directly contributes to knowledge in, or an understanding of, the subject and/or is potentially publishable

as a refereed international paper in the field, this should play a part in the decision. However, publication of results contained in one or more chapters of the dissertation prior to submission is neither in itself sufficient nor necessary to gain a distinction, as it is the submitted master's dissertation that is examined and on which a decision of a distinction will be based. Publications arising from the work subsequent to submission are, for obvious reasons, not considered.

14.3

**Assessment of examiners' reports**

Examiners of master's dissertations and PhD theses are asked to recommend one of the following outcomes:

- that the dissertation/thesis be passed without the need for corrections and the degree be awarded;
- that the dissertation/thesis be passed and the degree be awarded only after specified changes have been made to the text of the dissertation;
- that the dissertation/thesis is unsatisfactory and should be substantially revised and resubmitted for examination;
- that the dissertation/thesis be rejected, and the degree not be awarded.

In addition, in the case of a master's dissertation, the examiners are asked to clearly indicate if a distinction should be awarded, or whether or not the examiner would object to the award of a distinction should the other examiner so recommend. Distinctions are not awarded to PhD theses.

In the case of master's degrees, the examiners' reports are submitted to the Chair of the relevant Higher Degrees Committee, who writes a recommendation for consideration by the committee taking all examiners' comments into account. The Dean, in consultation with the relevant Higher Degrees Committee, will then make the final decision on the outcome. In the case of doctoral degrees, the reports are received by a Committee of Assessors, chaired by the Dean, who evaluate the reports and recommend a result (categories A, B, C, or D – see above) to the Doctoral Degrees Board who makes the final decision.

In the case of master's by coursework and dissertation, to obtain the degree with distinction, a candidate must obtain a distinction in each of the coursework and dissertation components. Likewise, both components must be separately passed to achieve an overall pass.

After a decision is reached, the Faculty Office (Master's) or Doctoral Degrees Board (PhD) sends a letter to the candidate, the Head of Department and the supervisor informing them of the outcome.

Where improvements and corrections are required, the student must consult with the supervisor for advice on what needs to be done. It is the responsibility of the supervisor and the Head of Department and, in the case of master's dissertations, the Dean to sign off on these once the candidate has completed the necessary revisions. Such corrections should be completed within one year of notification. It is important to note that in the event of a C result, the candidate has only one chance of resubmission, i.e. option C is not available in the re-examination. Thus supervisors and students must consider this seriously, with attention to detail and ensure that an accompanying document outlines in detail how and where each correction/suggestion critique has been handled, (e.g. a document simply stating "all corrections done" – is insufficient and will be rejected).

Once a decision is taken to award the degree, copies of the dissertation/thesis are

lodged on the open shelves of the library.

15 **Issues relating to ownership of intellectual property**

15.1 **Secrecy conditions**

A thesis or dissertation accepted by the University for a higher degree may not be subject to secrecy restrictions of any kind. Any thesis or dissertation approved for a higher degree is placed on the open shelves of the Library. In exceptional cases, should a moratorium on publication of results have been agreed to, the dissertation/thesis may be examined with a confidentiality requirement for a fixed period.

15.2 **Copyright**

The University recognises the rights of those who have ownership of copyright. Members of the University are explicitly prohibited from infringing copyright, either in terms of publications or software.

A candidate may, subject to prior approval of his/her supervisor, publish part or the whole of the work done under supervision for the degree before presenting it for the examination. Copyright rests with the author. However, no publication may, without the consent of Senate, contain a statement that the published material was, or is to be, submitted in part or in full requirement for the degree.

Further, when presenting a dissertation or thesis, the candidate is deemed, by doing so, to be granting the University free licence to publish it in whole or in part, in any format that the University deems fit.

15.3 **Patents**

This is a complex issue and is governed by University rules and guidelines. Students wishing to pursue it should consult with their supervisor(s) and the Department for Research and Development.

16 **Joint publication**

It is common practice for joint publications between the candidate and the supervisor to be generated through the research process. There are differing conventions across the Faculty about the ordering of authors. This should be clarified and jointly agreed between the student and the supervisor early in the research process.

Guidelines for the inclusion of publications in a doctoral thesis

*These guidelines are intended to assist in answering the 'frequently asked questions' that PhD students and their supervisors ask with regard to inclusion of publications in a PhD thesis as envisaged in Rule GP 6.7, which states (inter alia):*

*'A PhD candidate who contemplates including published papers in his/her thesis must accept that approval to do so is not automatic. If a candidate contemplates doing this, he/she must note this in his/her MoU with his/her supervisor each year. In addition he/she and his/her supervisor are advised to seek the advice of the Faculty's higher degrees committee about his/her plan to do so at an early stage (acting in accordance with any internal procedures and guidelines that a particular faculty may require). While the relevant faculty committee will not be able to give a binding answer, it will be able to indicate to the candidate and his/her supervisor whether: (i) it is likely to support the proposal; or (b) it is unlikely to support submission according to the plan outlined and why. A binding decision can only be given by the DDB. It is accepted that this may not be possible until sometime into the PhD work' (taken from UCT Handbook 3, 2012, page 29).*

This rule specifically refers to those cases where a candidate is including in the thesis, a literal and word-for-word rendition of a paper already published, in full. It is understood that there may be minor inter-faculty differences in theses including such publications, which reflect the variation in publishing norms between disciplines.

It is generally accepted that elements of a thesis may already be published, but not necessarily *verbatim* nor in full. Such instances are covered by Rule GP7, in which permission of the supervisor, and not the DDB, is required. Rule GP7 states:

*'A candidate may, subject to the prior written approval of his or her supervisor and subject to the provisions of rule GP9, publish a part or the whole of the work done by him or her under supervision for the degree before presenting his or her thesis for examination' (taken from UCT Handbook 3, 2012, page 29).*

## **GUIDELINES**

When a student contemplates inclusion of publication(s) in his or her PhD thesis as envisaged under Rule GP6.7, the DDB requires that the following is considered:

### **General**

- All rules as laid down by UCT must be satisfied. It must be borne in mind that the PhD is a UCT degree (with the oversight of the DDB) and not a Faculty degree. Further, that a UCT PhD is considered a research degree of high international standing and recognition.
- A plan to include publications in a thesis should be developed by the student in consultation with the supervisor. The best time to do this will vary from project to project. Advice may be sought from their Departmental Postgraduate Committee (or equivalent) and their Faculty Higher Degrees Committee (or equivalent).
- In addition to considering a plan and structure for the thesis, Rule 6.7 must be satisfied, viz. "A binding decision can only be given by the DDB". Thus, formal permission must be sought from the DDB prior to submission for examination.
  - It is best that the Faculty committees (on behalf of the DDB) only consider the plan once publications have been submitted, accepted or published, as it is theoretically impossible for a committee (or the DDB) to give advice (or approval) if no publications have appeared, been submitted or at the very least written.
  - Requests to include publications in a thesis must be considered on an individual basis – i.e. 'blanket' approval for a group of student PhD's cannot be sought nor given.

### **Scope of the PhD thesis**

- The thesis (and also its motivation), must acknowledge wherever appropriate, that it is a doctoral thesis that includes publication(s), and that the thesis itself is not simply a compilation of relevant publications. It must be a thematically coherent and substantive and scholarly discourse, presented as a composite body of work with all the necessary elements as to make it comparable (and therefore examinable) to a PhD presented in the traditional way. It is important to note that UCT does not offer a PhD "by publications". The University offers a PhD which requires a thesis to be produced in accordance with standard requirements – and in fulfilling these requirements it is possible, if the prescribed permission has been obtained, to include publications in the thesis.
  - A PhD examiner has to be satisfied that a candidate has formulated appropriate research questions and mastered the relevant methodologies, analytical and presentation processes necessary to answer such questions in a discipline-specific, scholarly defensible way – publications alone cannot be adequate to demonstrate this aspect of a candidates' work.

- The main aim(s) and answer(s) to the research questions must be apparent and they must permeate the thesis as a whole. Even though there are publication(s) included, the thesis must nonetheless show acceptable academic style, scholarly content and coherence as a connected account with a satisfactory introduction, statement of thesis aims and conclusion.
- The thesis must include a thorough and critical literature review that also succeeds in demonstrating acceptable academic style and scholarly content – as would be true of any PhD thesis. This must be in addition to any literature review sections appearing in the included publications. The exception would be where the student has published the literature review in the form of a systematic or meta-analysis, and is included as one or more of the complete publications (in which instance the literature review may form a significant piece of ‘original’ research in its own right).
- There must be a significant academic discussion leading to clearly articulated conclusions, based on the thesis as a whole.
- There should be consistency in referencing style throughout the thesis (other than in the publications themselves where different journals may require different styles).

#### **Nature of the publications included in the PhD thesis**

- It should be clear to the reader/examiner what the rationale for including papers is. It should demonstrate specifically how including the publication(s) assist(s) in fulfilling the thesis. We suggest that each paper is prefaced with a synopsis of how the paper contributes to the thesis aims and objectives. This in addition to full discussion in the appropriate place(s).
- It is expected that the publication is published in an international peer-reviewed journal. For a publication to be considered as an ‘included publication’, it should be already published or ‘in press’ (i.e. accepted for publication), or at the least submitted and under review by the editorial team of a UCT-accredited international peer-reviewed journal.
- In some circumstances it may be that the ‘included publication’ is of another type (e.g. a policy document or technical report). In such cases the motivation and ‘publication’ would have to be considered on its specific merits and motivated accordingly.
- It is expected that the student is the lead author of each included publication, as the student should be the primary researcher.
- All included publications must have been written under the supervision of the supervisor(s) while registered as a PhD student.
- Publications that have not been written under the supervision of the supervisor as a part of the PhD may not constitute ‘included’ publications.
- There should be a consistent format style throughout the thesis (font, layout, table and figure numbering, etc.)
- Rule GP 6.8 stipulates a maximum word count for a PhD thesis of 80 000. In the case of a thesis including publications this remains so – the included publications are not over and above the 80 000 and must be included in the total word count (references are not included in the word count).

#### **Support from co-authors (of publications included in the PhD thesis)**

- Rule 6.3 states that: “The thesis must constitute a substantial contribution to knowledge in the chosen subject and may embody only the original work of the candidate with such acknowledged extracts from the work of others as may be pertinent”. In accordance with this, it should be made unambiguously clear at what levels the candidate was involved in the research and publication(s), and what the role of co-authors was/were. This should be verified by the supervisor(s). There is no rule regarding a maximum number of allowed co-authors but it must be understood that the more co-authors listed, the more difficult it will be for a student to demonstrate their own intellectual drive and lead.

- It is best that written letters of support be obtained from each co-author, attesting to their agreement on the stated contributions that the candidate and they made to the study. In certain cases, where there are a large number of co-authors, the principal investigator and supervisor can sign such support on behalf of the group.
- If co-authors themselves are PhD students, they should verify that they will not be including this publication(s) in their own PhD thesis.

*[Note: See Handbook 3 (General Rules) for requirements for doctoral degree studies.]*

### **Avoiding Plagiarism:A Guide for Students**

#### **What is Plagiarism?**

You commit plagiarism – intentionally or not – in written work when you use another person's sentences, ideas or opinions without acknowledging them as being from that other person.

In academic work, researchers build on the ideas of others. This is a legitimate and accepted way of doing research. Plagiarism is using someone else's ideas or words and presenting them as if they are your own. It is therefore a form of academic cheating, stealing or deception. Because plagiarism is an offence, all universities take a very serious view of anyone who is found cheating. Those who are suspected of having plagiarized will be referred to the Vice-Chancellor or nominee for possible disciplinary action in terms of the rules on disciplinary jurisdiction and procedures (DJP1.1).

Not all plagiarism is deliberate, but even inadvertent plagiarism will be severely penalized. It is therefore your responsibility to know what will be regarded as plagiarism and to know how to avoid it.

What makes plagiarism tricky to avoid and dangerous is that it can take many forms.

#### **Forms of Plagiarism**

Academic writing requires of you to discuss existing literature but at the same time to come up with your own ideas; to rely on the findings of other researchers, but also to say something new and original; to give an exposition of key readings on the topic, but to express it in your own structure and own words. It is academically difficult to manage a path between these seemingly contradictory demands.

Plagiarism can range from deliberate academic dishonesty to accidental academic sloppiness, and can range from serious and clear forms of plagiarism to instances that are less obvious.

#### **Obvious forms of plagiarism include:**

1. Buying or borrowing a paper and copying it.
2. Hiring someone to write the paper or thesis for you.
3. Cutting and pasting large portions of text from the web or from someone else's paper or book without any quotation marks (or clear indentation for block quotes) or proper reference to the source. The ease of cutting-and-pasting from electronic sources makes this a form of plagiarism that is particularly widespread.
4. Word-for-word copying of a sentence, or paragraph without any proper acknowledgement.
5. Direct translation into English of a paper – or large sections of writing – written in another language.
6. Citing sources that you didn't actually use.
7. Using substantive extracts from your own earlier work without acknowledgement.

**Less obvious forms of plagiarism include:****8. Not giving proper credit to someone else's ideas or findings.**

When is it proper to give credit and when not? As a general rule, you need to give a reference for any text, diagram, table, illustration or an idea if it comes from:

- (a) a book, journal, website, or any other public medium;
- (b) what someone has said in an interview you have conducted;
- (c) someone's personal correspondence in the form of a letter or email.

You don't need to give a reference or give credit if the idea, text, diagram, table, illustration or idea comes from:

- (a) your own insights, work or experiences. Ideas from co-authored papers, however, still need to be acknowledged;
- (b) writing up your own field notes or lab reports;
- (c) "common knowledge", common sense observations, well-established facts, historical events (but you would obviously have to give a reference if you use an historical *document*) and myths. It is, of course, difficult to know exactly when something is "common knowledge", but a general rule to follow is: if the same observation is made in multiple sources without any attached references, or if it is something that the general public is well aware of, then no references are needed.

**9. Improper paraphrasing.**

The rule to "put it in your own words" is not always helpful, because many of the accepted key words in academic discourse have precise meaning or are accepted expressions that you shouldn't change. However, whenever you do written work you must distinguish what you have written from what you are paraphrasing or quoting. To paraphrase is to summarize someone else's ideas in your own writing style, sentence structures and, where applicable, own words. This is a particularly demanding task for writers whose first language is not English.

**10. Failing to give a proper reference**

You may copy word for word (but not significant chunks), and you are expected to build on the ideas of others, but then you must give proper credit to the source of the quotation or the paraphrased argument, idea or reasoning.

**11. Not acknowledging outsourcing of substantive data analysis**

You may have someone else do the descriptive statistics or statistical data analysis for you, but you need to acknowledge the extent to which it is not your own analysis. In cases where the statistical analysis (model fitting or estimation) forms the central thesis, instead of just being a minor section, or where the thesis is in a discipline that requires you to demonstrate this skill of analysis, it is unacceptable to outsource it, even if you do acknowledge it.

**How to Avoid Plagiarism**

When you start reading and taking notes, carefully distinguish between material that is quoted, material that is paraphrased in your own words and own structure, and material that is your own and expressed in your own words. The way you can distinguish between these different types of sources is to use a different colour for each one, or to put a big Q for "quote", P for "paraphrase" or M for "mine" after the relevant section. Make sure that you keep scrupulous track of the author, year, title, and page from which you are taking the quote. There are numerous electronic tools that can assist you with this, such as RefWorks and Mendeley. (See section on "resources" below.)

**1. Fully reference and acknowledge the work of others**

While academic staff will teach you about systems of referencing, and how to avoid plagiarizing, you too need to take responsibility for your own academic career. Knowing how

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to give proper credit, cite appropriately, and acknowledge the original source and reference accurately is an essential step in avoiding plagiarism. There are numerous referencing conventions and you are expected to use a referencing convention that is accepted in your discipline. There are many guides on how to reference properly. See “Referencing Conventions” below for resources and guides.

### 2. *Use your own expressions and present your work in your own writing style*

It is tempting to use someone else’s elegantly structured phrase or sentence/s, but doing so without proper quoting (acknowledging your use of their exact words) constitutes plagiarism. It is not enough to change just a word here and there when paraphrasing; you need to use your own sentence constructions. Of course, there are accepted key words in specific academic discourses that have precise meaning or are accepted expressions; you shouldn’t try to put these precise and commonly accepted expressions in your own words.

### 3. *Organise your work and structure your reasoning in your own way*

Don’t merely give properly acknowledged summaries of other people’s work (paraphrasing), develop your own sequence of reasoning and line of argumentation.

### 4. *Use TURNITIN*

Turnitin is an internet-based service that checks the extent of unoriginal content in your paper or thesis. It will identify all the parts where you have copied text from elsewhere. Where you have acknowledged doing so with direct quotes, that is acceptable. Of course, you should not have too many direct quotes since you are required, after all, to demonstrate your own academic writing and critical thinking skills. Identified copied content that is not acknowledged is plagiarism and you must reword and restructure these identified sections. Note that Turnitin is not a guarantee that there is no plagiarism – it is only a guide. See more about Turnitin [here](#).

Note that you should not submit the same re-worked draft multiple times because the system will then compare your new version with the earlier one you submitted and indicate a very high unoriginality score.

## UCT Rules and Senate Policy

### RULES ON CONDUCT FOR STUDENTS (Student Rules - Academic conduct)

#### RCS2.4 A student:

- (a) must refrain from dishonest conduct in any examination, test or in respect of completion and/or submission of any other form of academic assessment. Dishonest conduct includes but is not limited to plagiarism;
- (b) may not submit the work of any other person in any examination, test or in respect of the completion and/or submission of any other form of academic assessment without full and proper attribution and acknowledgement.

### RULES FOR DEGREES (Rules relating to examinations – Examination sessions and class tests)

#### G18.12 Dishonesty, including plagiarism or the submission by a student of other people’s work as his/her own, in an examination or any other form of assessment will be dealt with in terms of the disciplinary rules.

**SENATE POLICY**

Senate policy (PC11/99 dated 6.12.1999), sets out the following:

- (i) For each course, academic staff must prescribe a referencing convention, or allow a student to choose from a set of referencing conventions prescribed by the academic staff member (and by implication must teach this key academic literacy skill to junior students) when setting assignments; *and*
- (ii) All undergraduates are required to make and include a declaration each time they submit written work for assessment.

**Declaration**

Each time your work is assessed, you will need to insert the declaration (see shaded block) or one like it.

**Plagiarism Declaration:**

1. I know that plagiarism is a serious form of academic dishonesty.
2. I have read the document about avoiding plagiarism, am familiar with its contents and have avoided all forms of plagiarism mentioned there.
3. Where I have used the words of others, I have indicated this by the use of quotation marks.
4. I have referenced all quotations and properly acknowledged other ideas borrowed from others.
5. I have not and shall not allow others to plagiarise my work.
6. I declare that this is my own work.
7. I am attaching the summary of the Turnitin match overview (when required to do so).

Signature:

**Declaration**

I, ..... hereby declare that the work on which this thesis is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university. I authorise the University to reproduce for the purpose of research either the whole or any portion of the contents in any manner whatsoever.

Signature: ..... Date: .....

**Referencing conventions**

The responsibility is on your lecturer to ensure that you are (or become) familiar with, and observe, one of the internationally recognised guides to scholarly conventions on presentation, documentation of sources and referencing. It is your responsibility to question any part of this that you do not understand, to apply the rules, and to be aware of the consequences of plagiarism.

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There are many ways of referencing, and the University has not set one way as preferable to another. The Library and Writing Centre, however, recommend one of the following forms:

the Harvard system  
American  
Modern Language Association (MLA) or  
Footnoting

They also have a standard for referencing articles in electronic journals.

For advice and guides on referencing see:

UCT Library Referencing Help:  
<http://libguides.lib.uct.ac.za/refworks>

and  
<http://www.lib.uct.ac.za/research-help/referencing-help/>  
and  
<http://libguides.lib.uct.ac.za/refworks-referencing>

Harvard UCT: Handbook on citation:

<http://www.lib.uct.ac.za/wp-content/uploads/2014/02/harvard-uct-2014.pdf>

Common citation styles (University of Melbourne): <http://www.lib.unimelb.edu.au/cite/>

If you are confused because each lecturer tells you to reference your work in a different way, discuss this with him or her.

### Consequences of plagiarising

By committing plagiarism you will get zero for the plagiarised work, and may fail the course or your thesis. In addition, the matter must be referred to the Vice-Chancellor or nominee for possible disciplinary action in terms of the rules on disciplinary jurisdiction and procedures (DJP1.1) against you.

If this is the case, and the plagiarism is substantial, the Registrar has indicated that, unless there are unusual circumstances, the prosecution will ask for your expulsion. Even if you are not expelled, a conviction for cheating on your academic record is likely to limit your career opportunities. If you are preparing for a profession, you should know that a conviction for cheating in academic work may bar you from professional licensing temporarily or permanently.

### Web-based information and resources

There are many sites and guides on the internet regarding plagiarism.

Video on how to avoid plagiarism: <https://www.youtube.com/watch?v=2XUPZ9jx4gs>

*A Student's Guide to Avoiding Plagiarism* (UCT Philosophy department): this handy and concise resource looks at forms of plagiarism, gives tips on how to avoid it and provides some examples.

UCT Faculty of Health Sciences Guide A site listing different referencing conventions and guide to Turnitin

UCT information on RefWorks

Information on APA referencing convention

Guide on the Harvard referencing convention

UCT Writing Centre on referencing

UCT writing Centre on postgraduate writing

UCT Writing Centre on resources in grammar

The UCT Senate policy declaration on plagiarism

Turnitin services – Student Guide

Contact the Vula Team for further support: [help@vula.uct.ac.za](mailto:help@vula.uct.ac.za) or 021-650 5500

### **Assistance for staff and students**

The Library Staff, the Writing Centre and the Office for Research Integrity are willing to assist you, by providing details of referencing conventions, and helping you use them.

UCT Library staff for general queries about referencing:

Amina Adam; Jen Eidelman; Cyrill Walters

UCT Library staff for queries about RefWorks:

Dilshaad Brey; Dianne Steele; Gill Morgan; Khumbulele Faltein

UCT Library staff for queries about Mendeley:

Tamzyn Suliaman

Research Ethics:

Dr Robert McLaughlin (UCT Office for Research Integrity)

UCT Writing Centre

<http://www.writingcentre.uct.ac.za/writing/talk/contacts>

Tel: 021 650 5021

## PRIZES

### GENERAL NAMED PRIZES

#### JOSEPH ARENOW PRIZE

For the student submitting the most meritorious MSc(Medicine) or MPhil dissertation (for MSc(Medicine) or MPhil by dissertation only).

#### BRÖNTE STEWART RESEARCH PRIZE

For the student (preferably 35 years or under) submitting the most meritorious thesis for the degree of MD, PhD or ChM

### NAMED PRIZES BY DEPARTMENT:

#### **ANAESTHESIA AND PERIOPERATIVE MEDICINE**

##### 3M SOUTH AFRICA (PTY) LTD RECOGNITION AWARD

##### JACK ABELSOHN PRIZE

##### TOM RUTTMANN INTENSIVE CARE PRIZE

##### THEMI AUGOUSTIDES MEMORIAL PRIZE

For the best registrar in Anaesthesia.

For the most meritorious article published by a postgraduate student in Anaesthesia.  
For the best Anaesthesia registrar in intensive care medicine.

For the best registrar in Cardiovascular Anaesthesia.

#### **HEALTH & REHABILITATION SCIENCES**

##### ADVANCED MIDWIFERY & NEONATAL CARE AWARD

For the best student in the Advanced Midwifery pathway of the Postgraduate Diploma in Nursing.

##### ADULT CRITICAL CARE AWARD

For the best student in the Adult Critical Care specialisation of the Postgraduate Diploma in Nursing.

##### CHILD CRITICAL CARE AWARD

For the best student in the Child Critical Care pathway of the Postgraduate Diploma in Nursing.

##### CHILD NURSING AWARD

For the best student in the Child Nursing pathway of the Postgraduate Diploma in Nursing.

##### HENRIETTA STOCKDALE TROPHY

For the graduating Postgraduate Diploma in Nursing student who has displayed the highest standard of academic work, clinical ability, professional behaviour, social responsibility, commitment and leadership skills.

##### THE CRITICAL CARE SOCIETY OF SOUTHERN AFRICA AWARD (CAPE WESTERN BRANCH)

For the student who has shown a high level of academic acumen, as well as particular aptitude in the practice of Critical Care Nursing in the Adult Critical Care pathway of the Postgraduate Diploma in Nursing.

##### NEUROSCIENCE NURSING AWARD

For the best student in the Neuroscience

**NEPHROLOGY NURSING AWARD**

Nursing pathway of the Postgraduate Diploma in Nursing.

For the best student in the Nephrology Nursing pathway of the Postgraduate Diploma in Nursing.

**NURSING EDUCATION AWARD**

For the best student in the Nursing Education pathway of the Postgraduate Diploma in Nursing.

**NURSING MANAGEMENT AWARD**

For the best student in the Healthcare and Nursing Management pathway of the Postgraduate Diploma in Nursing.

**OPHTHALMIC NURSING AWARD**

For the best student in the Ophthalmic Nursing pathway of the Postgraduate Diploma in Nursing.

**PROFESSORIAL AWARD**

For the graduating student who has achieved the highest aggregate mark for the Postgraduate Diploma in Nursing.

**HUMAN BIOLOGY****Human Nutrition****ABBOTT NUTRITION JEVITY PLUS PRIZE**

For the top final-year student in Clinical Dietetics in the BMedScHons in Dietetics.

**JOAN HUSKISSON RESEARCH PRIZE**

For the best research project by a BMedScHons in Dietetics student.

**McMAHON COMMUNITY NUTRITION PRIZE**

For the top final-year student in Community Nutrition in the BMedScHons in Dietetics.

**BEST OVERALL STUDENT AWARD**

For the most outstanding final-year student in the BMedScHons in Dietetics.

**FOOD SERVICE MANAGEMENT AWARD**

For the top final-year student in Food Service Management in the BMedScHons in Dietetics.

**UNILEVER AWARD**

For the student who showed the most growth over the full programme.

**MEDICINE****BERNARD PIMSTONE AWARD**

For the best young laboratory investigator.

**DEPARTMENT OF MEDICINE MEDAL**

For the best young clinical investigator.

**JACKSON AWARD**

For the registrar or intern who has made the best presentations at medical rounds during the year.

**OBSTETRICS AND GYNAECOLOGY****ALAN ALPERSTEIN PRIZE**

For the registrar who has shown the greatest improvement in surgical skills.

**BASIL BLOCH AWARD**

For contributions to Oncology.

**S J BEHRMAN AWARD**

For the best dissertation in the Master of Medicine degree in Obstetrics & Gynaecology (Part III).

**BOET DOMMISSE AWARD**

For special contributions to the Department (by any person in the department).

**CECIL CRAIG AWARD**

Registrar award for excellence.

**J C COETZEE AWARD**

For best research (done or in progress).

Golden Speculum award	For the best registrar research presentation in Gynaecology.
Golden fOetus award	For the best Obstetric research registrar.
ROOS PRIZE	For the registrar who conducts him-/herself with the greatest professionalism.
SOETERS PRIZE	For the consultant voted by registrars to be the most supportive in teaching and training.
YVONNE PARFITT PRIZE	For the best paper on original research published ( <i>excludes undergraduates, postgraduates, interns, SHOs and registrars</i> ).

**PATHOLOGY**

LAFRAS STEYN CLINICAL LABORATORY SCIENCES PRIZE  
**Anatomical Pathology**

PAULINE HALL BOOK PRIZE

Awarded at the bi-annual research day for the best student oral presentation of the day.

For the postgraduate student who has produced the best publication in a peer-reviewed journal, or has produced the best master's or doctoral dissertation/thesis, or who has done the best presentation at an international conference on a hepatobiliary subject. (Should there be no suitable postgraduate student nominee, the award may be given to a postdoctoral fellow or a staff member.)

**Medical Virology**

COLIN KAPLAN AWARD

For the student or young researcher whose research in the field of Medical Virology shows the highest impact, and in recognition of leadership and excellence.

**PUBLIC HEALTH & FAMILY MEDICINE**

DAVID BOURNE PRIZE

ETHNE JACKE PRIZE

For the student graduating with the highest marks in the Masters of Public Health, subject to a minimum of 70% overall.

For the student graduating with the best Master of Public Health dissertation provided a minimum of 70% has been obtained (exclusive of the David Bourne prize). Awarded for the best student in the Postgraduate Diploma in Occupational Health.

GEOFF CAMPBELL BOOK PRIZE

**RADIATION MEDICINE**

**Radiology**

PROTEA HOLDINGS PRIZE

For the best registrar in Radiology.

**SURGERY**

GEORGE SACKS PRIZE IN SURGERY

LENNOX GORDON PRIZE

For outstanding postgraduate research in Surgery.

For an original, distinguished publication by a registrar in Surgery

**Emergency Medicine**

Clinical Research Methods 1 Prize

Clinical Research methods II Prize

MPhil Emergency Medicine Award

MMed Emergency Medicine Award

Emergency Medicine Research Methodology Award

Clinical Emergency Medicine Award

MMed Emergency Medicine Research Award

Emergency Medicine Master's Dissertation Award

Emergency Medicine Registrar Excellence Award

Top Achievement MMed Emergency Medicine Award

Top Achievement MPhil Emergency Medicine Award

Emergency Medicine Master's Research Award

Top Emergency Medicine Consultant Award

**Neurosurgery**

JONATHAN PETER PRIZE

SYNTHES PRIZES

**Orthopaedic Surgery**

REGISTRAR RESEARCH PRIZE

Best overall candidate in CHM6005F Clinical Research Methods I for the year

Best overall candidate in CHM6006F Clinical Research Methods II for the year

Best MPhil candidate for the year

Best registrar presentation at a ward round during year X (insert name of year here)

Outstanding achievement in research methodology in CHM6005F &amp; CHM6006F

Clinical Research Methods I and II (first class pass)

Outstanding achievement (first class pass) in the clinical courses in the MPhil in Emergency Medicine (CHM6007F, CHM6008S &amp; CHM6010F)

Outstanding achievement (first class pass) in the MMed Emergency Medicine dissertation and acceptance of article in an accredited journal

Outstanding achievement (first class pass) for a full dissertation in Emergency Medicine, and acceptance of an article in an accredited journal

Emergency Medicine Registrar Award for excellence

Outstanding achievement (first class pass) in Parts 1, 2 and 3 of the MMed in Emergency Medicine

Outstanding achievement (first class pass) in both coursework and dissertation for the MPhil in Emergency Medicine degree

Top achievement award in EM research: having an article published in an internationally accredited journal within a year of completing a master's degree in Emergency Medicine, and having obtained the highest number of downloads for the article as at 01 Dec of the year. (Dissertations may have been published within 24 months of the review cut-off to qualify.

For the Emergency Medicine consultant teacher voted to have been the most supportive during the year

For the postgraduate student who has produced the best journal publication.

For the most outstanding registrar in Orthopaedic Surgery.

For the registrar who has produced the most

outstanding research contribution/s in Orthopaedic Surgery during a calendar year.

**Otorhinolaryngology**

LEON GOLDMAN REGISTRAR PRIZE

For the best publication by a registrar in Otorhinolaryngology.

**Paediatric Surgery**

ARNOLD KATZ PRIZE

For the best postgraduate trainee in Paediatric Surgery.

**Urology**

PHILIP SMITH PRIZE

For the best postgraduate student in Urology.

**FACULTY MISSION STATEMENT**

The Faculty's mission is to:

- Respond to the healthcare needs of South Africa and beyond.
- Educate health professionals, educators and scientist for life.
- Undertake research that is relevant to the needs of our country and beyond.
- Promote health equity through promoting health professional standards in the delivery of quality healthcare.
- To be socially responsive to the needs of the people of our country and beyond.
- To develop interventions to reduce the risk of ill health, disability and mortality.

**FACULTY OF HEALTH SCIENCES CHARTER**

*[Adopted by the Faculty on 9 May 2002]*

**Preamble**

Post-apartheid South Africa is emerging from decades of systematic discrimination that affected every aspect of society, including the health sector, resulting in profound inequities in health status in the population. Central to the reconstruction of South African society is the need to develop a culture of human rights based on respect for human dignity and non-discrimination.

Although there were significant attempts by staff, students and the institution to resist apartheid injustices, UCT was not immune to the racist, sexist, and other discriminatory practices and values that typified society under apartheid. As UCT grapples with transformation, we remain burdened with the legacy of these discriminatory practices.

To overcome this legacy of apartheid and other forms of discrimination, the UCT Health Sciences Faculty has produced this Charter as a basis for transformation of the institutional culture of the Faculty to ensure that students and staff have access to an environment where they are able to realise their full potential and become active participants in the academic life of the Faculty.

**Principles**

*Non-discrimination*

The Faculty will not tolerate any form of negative discrimination and will uphold the University's policy on non-discrimination.

*Supportive culture*

The Faculty will foster a supportive culture, where diversity and difference is respected, in order to encourage students and staff to reach their full potential in their activities of learning, working, teaching, research and service in the Faculty.

*Capacity-building*

The Faculty will strive to develop the skills of its employees and help to build the skills base of South Africans, in particular formerly disadvantaged South Africans, through various strategies at its disposal.

*Employment Equity*

The Faculty will strive to attract and retain talented black professionals by recognising their abilities, affirming their skills and ensuring an environment that is welcoming and supportive.

*Facilitation of learning*

The Faculty will strive to uphold and encourage the highest standards of teaching to create an atmosphere conducive to learning for all students.

*Research*

The Faculty will strive to uphold the highest ethical standards of research and ensure that research seeks to benefit the South African community.

*Service*

The Faculty will strive to ensure that students and staff uphold the highest standards of service to the community, including commitments to ethical principles and human rights.

*Consultation*

The Faculty will strive to consult with staff and students on major policy changes that may be undertaken by the Faculty and that affect them, and will seek to entrench transparency in its workings.

*Monitoring and evaluation*

The Faculty will endeavour to review its performance annually in the light of this Charter.

*Community participation*

The Faculty will strive to ensure participation of the community in decisions in the spirit of the Primary Healthcare Approach adopted by the Faculty as its lead theme.

## Faculty of Health Sciences Declaration

(Taken by all graduating students)

At the time of being admitted as a member of the healthcare profession:

I solemnly pledge to serve humanity.

My most important considerations will be the health of patients and the health of their communities. I will not permit considerations of age, gender, race, religion, ethnic origin, sexual orientation, disease, disability or any other factor to adversely affect the care I give to patients.

I will uphold human rights and civil liberties to advance health, even under threat.

I will engage patients and colleagues as partners in healthcare.

I will practice my profession with conscience and dignity.

I will respect the confidentiality of patients, present or past, living or deceased.

I will value research and will be guided in its conduct by the highest ethical standards.

I commit myself to lifelong learning.

I make these promises solemnly, freely and upon my honour.

## Distinguished Teachers in the Faculty

Students may nominate academic staff for UCT's Distinguished Teacher Awards (nominations to be addressed to the Registrar's office). Faculty of Health Sciences staff members who have received Distinguished Teacher Awards are:

2014	Prof D Kahn (Surgery)
2010	Assoc Prof R Eastman (Neurology, Medicine)
2010	Prof Z Van Der Spuy (Obstetrics & Gynaecology)
2007	Dr I A Joubert (Anaesthesia)

## 518 ADDITIONAL INFORMATION

2005 Dr M Blockman (Pharmacology)  
2004 Assoc Prof V Burch (Medicine)  
(Also received the National Excellence in Teaching and Learning Award from the Council for the Higher Education and the Higher Education Learning and Teaching Association of South Africa in 2009)  
2003 Assoc Prof G Louw (Human Biology)  
2003 Dr P Berman (Chemical Pathology)  
2002 Assoc Prof J Krige (General Surgery)  
2001 Dr C Slater (Human Biology)  
2001 Assoc Prof V Abratt (Molecular & Cell Biology)  
2000 Assoc Prof A Mall (General Surgery)  
2000 Prof D Knobel (Forensic Medicine)  
1998 Prof MFM James (Anaesthesia)  
1993 Prof JC de Villiers (Neurosurgery)  
1989 Prof EJ Immelman (General Surgery)  
1988 Assoc Prof G R Keeton (Medicine)  
1987 Dr C Warton (Anatomy & Cell Biology)  
1985 Prof A Forder (Medical Microbiology)  
1984 Dr AH Robins (Pharmacology)  
1982 Prof W Gevers (Medical Biochemistry)  
1981 Prof R Kirsch (Medicine)

## DEGREE, DIPLOMA AND PLAN CODES

The University of Cape Town uses the PeopleSoft electronic student administration system. In terms of this system, each programme of study must have at least one plan code and all registered students must have at least one plan. Plans represent majors or areas of specialisation. Programmes without majors or specialisations have a single plan, namely General. The plans of each programme are specific to it. Where a postgraduate programme has more than one stream, each stream will have its own plan. Since applicants apply by citing plan codes, and students register against these codes (with effect from 2011), these are given below for ease of reference.

The degree and diploma titles and codes are given below, along with the corresponding plan codes:

DEGREE/DIPLOMA TITLE	DEGREE/ DIPLOMA CODE	PLAN DESCRIPTION	PLAN CODE
PG Diploma in Addictions Care	MG024	Addictions Care	MG024PRY10
PG Diploma in Advanced Midwifery and Neonatal Care	MG043	Advanced Midwifery and Neonatal Care	MG043AHS01
PG Diploma in Child Nursing	MG045	Child Nursing	MG045AHS03
PG Diploma in Child Critical Care Nursing	MG046	Child Critical Care Nursing	MG046AHS04
PG Diploma in Clinical Developmental Paediatrics	MG035	Clinical Developmental Paediatrics	MG035PED01
PG Diploma in Clinical Hepatology	MG044	Clinical Hepatology	MG043MDN25
PG Diploma in Clinical Paediatric Cardiology	MG031	Clinical Paediatric Cardiology	MG031PED04
PG Diploma in Clinical Paediatric Critical Care	MG037	Clinical Paediatric Critical Care	MG037PED05
PG Diploma in Clinical Paediatric Diabetes	MG032	Clinical Paediatric Diabetes	MG032PED20
PG Diploma in Clinical Paediatric Electrophysiology and Epilepsy	MG033	Clinical Paediatric Electrophysiology and Epilepsy	MG033PED21
PG Diploma in Clinical Paediatric Emergency Care	MG036	Clinical Paediatric Emergency Care	MG036PED22
PG Diploma in Clinical Paediatric Gastroenterology	MG034	Clinical Paediatric Gastroenterology	MG034PED15
PG Diploma in Clinical Paediatric Haematology and Oncology	MG029	Clinical Paediatric Haematology and Oncology	MG029PED19
PG Diploma in Clinical Paediatric Nephrology	MG040	Clinical Paediatric Nephrology	MG040PED08
PG Diploma in Clinical Paediatric Physiotherapy	MG028	Clinical Paediatric Physiotherapy	MG028AHS20
PG Diploma in Clinical Paediatric Pulmonology	MG039	Clinical Paediatric Pulmonology	MG039PED13

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PG Diploma in Clinical Paediatric Rheumatology	MG038	Clinical Paediatric Rheumatology	MG039PED18
PG Diploma in Community Eye Health	MG019	Community Eye Health	MG019CHM03
PG Diploma in Community & General Paediatrics	MG027	Community & General Paediatrics	MG027PED16
PG Diploma in Dermatology Nursing	MG025	Dermatology Nursing	MG025AHS17
PG Diploma in Diabetes Mellitus Nursing and Education	MG052	Diabetes Mellitus Nursing and Education	MG052AHS19
PG Diploma in Disability Studies	MG016	Disability Studies	MG016AHS06
PG Diploma in Emergency Care	MG042	Emergency Care	MG042CHM26
PG Diploma in Family Medicine	MG015	Family Medicine	MG015PPH09
PG Diploma in Healthcare Technology Management	MG010	Healthcare Technology Management	MG010HUB10
PG Diploma in Health Economics	MG017	Health Economics	MG017ECO07
PG Diploma in Health Management	MG009	Health Management	MG009PPH04
PG Diploma in Health Professional Education	MG026	Health Professional Education	MG026PPH10
PG Diploma in Interdisciplinary Pain Management	MG055	Interdisciplinary Pain Management	MG055AAE03
PG Diploma in Maternal & Child Health	MG018	Maternal & Child Health	MG018PED02
PG Diploma in Neonatology	MG030	Neonatology	MG030PED03
PG Diploma in Nursing Education	MG053	Nursing Education	MG053AHS13
PG Diploma in Nursing Management	MG054	Nursing Management	MG054AHS14
PG Diploma in Nephrology Nursing	MG049	Nephrology Nursing	MG049AHS11
PG Diploma in Occupational Health	MG007	Occupational Health	MG007PPH06
PG Diploma in Ophthalmic Nursing	MG051	Ophthalmic Nursing	MG051AHS15
PG Diploma in Paediatric Radiology	MG020	Paediatric Radiology	MG020RAY01
PG Diploma in Palliative Medicine	MG011	Palliative Medicine	MG011MDN19
PG Diploma in Pesticide Risk Management	MG021	Pesticide Risk Management	MG021PPH05
PG Diploma in Psychotherapy	MG022	Psychotherapy	MG022PRY04
PG Diploma in TB-HIV Management	MG041	TB-HIV Management	MG041MDN24
Bachelor of Science in	MH002	Applied Anatomy	MH002HUB16

Medicine (Honours)	MH002	Bioinformatics	MH002LAB02
	MH002	Biological Anthropology	MH002HUB03
	MH002	Cell Biology	MH002HUB07
	MH002	Human Genetics	MH002LAB12
	MH002	Infectious Diseases & Immunology	MH002MDN20
	MH002	Medical Biochemistry	MH002LAB14
	MH002	Medical Physics	MH002RAY02
	MH002	Pharmacology	MH002MDN15
	MH002	Physiology	MH002HUB13
	MH002	Radiobiology	MH002RAY05
Bachelor of Science in Medicine (Honours) in Exercise Science	MH003	Exercise Science	MH003HUB08
Bachelor of Science in Medicine (Honours) in Biokinetics	MH004	Biokinetics	MH004HUB09
Bachelor of Science in Medicine (Honours) in Dietetics	MH005	Dietetics	MH005HUB12
Master of Medicine	MM001	Anaesthesia	MM001AAE01
		Anatomical Pathology	MM001LAB01
		Cardiothoracic Surgery	MM001CHM01
		Chemical Pathology	MM001LAB03
		Clinical Pathology	MM001LAB22
		Clinical Pharmacology	MM001MDN03
		Dermatology	MM001MDN04
		Emergency Medicine	MM001CHM02
		Family Medicine	MM001PPH09
		Forensic Pathology	MM001LAB07
		Haematological Pathology	MM001LAB10
		Medical Genetics	MM001LAB15
		Medical Microbiological Pathology	MM001LAB23
		Medicine	MM001MDN12
		Neurology	MM001MDN14
		Neurosurgery	MM001CHM04
		Nuclear Medicine	MM001RAY03
		Obstetrics & Gynaecology	MM001OBS03
		Occupational Medicine	MM001PPH08
		Ophthalmology	MM001CHM05
		Orthopaedic Surgery	MM001CHM06
		Otorhinolaryngology	MM001CHM07
		Paediatric Surgery	MM001CHM08
		Paediatrics	MM001PED11
		Plastic & Reconstructive Surgery	MM001CHM09
		Psychiatry	MM001PRY09
		Public Health Medicine	MM001PPH11
		Radiation Oncology	MM001RAY04

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		Radiology	MM001RAY06
		Surgery	MM001CHM10
		Urology	MM001CHM12
		Virological Pathology	MM001LAB21
Master of Medical Science (by dissertation)	MM051	Nutrition	MM050HUB21
Master of Medical Science (by coursework & dissertation)	MM053	Dietetics	MM053HUB20
Master of Medical Science (by coursework & dissertation)	MM166	Genetic Counselling	MM166LAB09
Master of Nursing in Child Nursing	MM035	Child Nursing	MM035AHS03
Master of Paediatric Neurosurgery	MM036	Paediatric Neurosurgery	MM036CHM31
Master of Philosophy (by coursework & minor dissertation)	MM006	African Emergency Care	MM006CHM18
	MM006	Bioethics	MM006MDN01
	MM006	Biomedical Engineering & Biomedical Sciences	MM006HUB04
	MM006	Biokinetics	MM006HUB22
	MM006	Biomedical Engineering	MM006HUB05
	MM006	Biomedical Forensic Science	MM006LAB23
	MM006	Child & Adolescent Psychiatry	MM006PRY02
	MM006	Clinical Emergency Medicine	MM006CHM17
	MM006	Clinical Haematology	MM006LAB04
	MM006	Clinical Research Administration	MM006PED12
	MM006	Critical Care	MM006AAE02
	MM006	Disability Studies	MM006AHS06
	MM006	Emergency Medicine	MM006CHM02
	MM006	Health Innovation	MM006HUB30
	MM006	Intellectual Disability	MM006PRY06
	MM006	Liaison Mental Health	MM006PRY07
	MM006	Maternal & Child Health	MM006PED02
	MM006	Medical Genetics	MM006LAB15
	MM006	Neuropsychiatry	MM006PRY08
	MM006	Occupational Health	MM006PPH06
	MM006	Paediatric Pathology	MM006LAB19
	MM006	Palliative Medicine	MM006MDN19
	MM006	Sports & Exercise Medicine	MM006HUB14
Master of Philosophy (subspeciality training)	MM016	Addictions Mental Health	MM016PRY01
		Allergology	MM016MDN22
		Advanced Hepatology and Transplantation	MM016MDN23
		Cardiology	MM016MDN02
		Child & Adolescent Psychiatry	MM016PRY02
		Clinical Haematology	MM016LAB04
		Critical Care	MM016AAE02

Master of Philosophy (by full dissertation)	Developmental Paediatrics	MM016PED01
	Endocrinology	MM016MDN05
	Forensic Mental Health	MM016PRY03
	Gastroenterology	MM016MDN06
	Geriatric Medicine	MM016MDN08
	Gynaecological Oncology	MM016OBS01
	Infectious Diseases & HIV Medicine	MM016MDN09
	Maternal & Foetal Medicine	MM016OBS02
	Medical Genetics	MM016LAB15
	Medical Oncology	MM016MDN11
	Neonatology	MM016PED03
	Nephrology	MM016MDN13
	Paediatric Cardiology	MM016PED04
	Paediatric Critical Care	MM016PED05
	Paediatric Endocrinology	MM016PED06
	Paediatric Gastroenterology	MM016PED16
	Paediatric Infectious Diseases	MM016PED07
	Paediatric Nephrology	MM016PED08
	Paediatric Neurology	MM016PED09
	Paediatric Oncology	MM016PED10
	Paediatric Pulmonology	MM016PED13
	Paediatric Surgery	MM016CHM08
	Pulmonology	MM016MDN16
	Reproductive Medicine	MM016OBS04
	Rheumatology	MM016MDN18
	Surgical Gastroenterology	MM016CHM11
	Trauma Surgery	MM016CHM24
	Vascular Surgery	MM016CHM13
Master of Public Health	Bioethics	MM021MDN01
	Biomedical Engineering	MM021HUB05
	Child & Adolescent Psychiatry	MM021PRY02
	MM021 Counselling & Psychotherapy Services	MM021PRY11
	MM021 Emergency Medicine	MM021CHM02
	MM021 Health Sciences Education	MM021HSE01
	MM021 Maternal & Child Health	MM021PED02
	MM021 Paediatric Pathology	MM021LAB19
	MM021 Palliative Medicine	MM021MDN19
	MM021 Public Mental Health	MM021PRY05
	MM021 Sports Medicine	MM021HUB15
	MM021 Sports Physiotherapy	MM021AHS16
	MM021 Surgery	MM021CHM10
	MM012 Clinical Research	MM012PPH01

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(by coursework & minor dissertation)	MM012	Community Eye Health	MM012CHM03
	MM012	Epidemiology	MM012PPH02
	MM012	Environmental Health	MM012PPH15
	MM012	Health Economics	MM012ECO07
	MM012	Health Systems	MM012PPH12
	MM012	Public Health	MM012PPH07
	MM012	Social & Behavioural Sciences	MM012PPH14
Master of Science in Audiology (full dissertation)	MM008	Audiology	MM008AHS02
Master of Science in Audiology (by coursework & minor dissertation)	MM019	Audiology	MM019AHS02
Master of Science in Biomedical Engineering (full dissertation)	MM050	Biomedical Engineering	MM050HUB05
Master of Science in Biomedical Engineering (by coursework & dissertation)	MM052	Biomedical Engineering	MM050HUB05
Master of Science in Exercise and Sports Physiotherapy (by coursework & dissertation)	MM034	Exercise and Sports Physiotherapy	MM034AHS16
Master of Science in Medicine (by full dissertation)	MM095	Anatomical Pathology	MM095LAB01
	MM095	Anatomy	MM095HUB01
	MM095	Bioinformatics	MM095LAB02
	MM095	Biological Anthropology	MM095HUB03
	MM095	Biomaterials	MM095CHM19
	MM095	Biomedical Engineering	MM095HUB05
	MM095	Cardiothoracic Surgery	MM095CHM01
	MM095	Cardiovascular Biomechanics	MM095CHM15
	MM095	Cell Biology	MM095HUB31
	MM095	Chemical Biology	MM095IBS02
	MM095	Chemical Pathology	MM095LAB03
	MM095	Clinical Pharmacology	MM095MDN03
	MM095	Clinical Science and Immunology	MM095LAB05
	MM095	Computational Biomechanics	MM095CHM15
	MM095	Dermatology	MM095MDN04
	MM095	Emergency Medicine	MM095CHM02
	MM095	Exercise Science	MM095HUB08
	MM095	Genetic Counselling	MM095LAB09
	MM095	Global Surgery	MM095CHM32
	MM095	Haematology	MM095LAB11
	MM095	Human Genetics	MM095LAB12
	MM095	Infection Management	MM095CHM29
	MM095	Mechanobiology	MM095HUB

	MM095	Medical Biochemistry	MM095LAB14
	MM095	Medical Cell Biology	MM095HUB07
	MM095	Medical Microbiology	MM095LAB16
	MM095	Medical Physics	MM095RAY02
	MM095	Medical Virology	MM095LAB17
	MM095	Medicine	MM095MDN12
	MM095	Musculoskeletal Science	MM095CHM27
	MM095	Neuroscience	MM095CHM16
	MM095	Nuclear Medicine	MM095RAY03
	MM095	Nutrition	MM095HUB21
	MM095	Obstetrics and Gynaecology	MM095OBS03
	MM095	Paediatrics	MM095PED11
	MM095	Pathology	MM095LAB20
	MM095	Physiology	MM095HUB13
	MM095	Psychiatry	MM095PRY09
	MM095	Public Health	MM095PPH07
	MM095	Radiobiology	MM095RAY05
	MM095	Radiotherapy	MM095RAY03
	MM095	Sports Injuries	MM095CHM30
	MM095	Surgery	MM095CHM10
	MM095	Trauma Science	MM095CHM28
	MM095	Trichology & Cosmetic Science	MM095MDN25
	MM095	Urology	MM095CHM12
	MM095	Vascular Surgery	MM095CHM13
Master of Science in Nursing (by full dissertation)	MM002	Nursing	MM002AHS07
Master of Science in Nursing (by coursework & minor dissertation)	MM017	Nursing	MM017AHS07
Master of Science in Occupational Therapy (by full dissertation)	MM005	Occupational Therapy	MM005AHS09
Master of Science in Occupational Therapy (by coursework & minor dissertation)	MM018	Occupational Therapy	MM018AHS09
Master of Science in Physiotherapy (by full dissertation)	MM004	Physiotherapy	MM004AHS08
MSc in Speech-Language Pathology (by full dissertation)	MM009	Speech-Language Pathology	MM009AHS10
MSc in Speech-Language Pathology (by coursework & minor dissertation)	MM020	Speech-Language Pathology	MM020AHS10
Doctor of Medicine	MD002	Anaesthesia	MD002AAE01
	MD002	Cardiology	MD002MDN02
	MD002	Cardiothoracic Surgery	MD002CHM01

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	MD002	Emergency Medicine	MD002CHM02
	MD002	Medicine	MD002MDN12
	MD002	Neurosurgery	MD002CHM04
	MD002	Obstetrics & Gynaecology	MD002OBS03
	MD002	Orthopaedic Surgery	MD002CHM06
	MD002	Otorhinolaryngology	MD002CHM07
	MD002	Paediatrics	MD002PED11
	MD002	Pathology	MD002LAB20
	MD002	Physiology	MD002HUB13
	MD002	Psychiatry	MD002PRY09
	MD002	Surgery	MD002CHM10
Doctor of Philosophy	MD001	Anaesthesia	MD001AAE01
	MD001	Anatomical Pathology	MD001LAB01
	MD001	Anatomy	MD001HUB01
	MD001	Audiology	MD001AHS02
	MD001	Bioinformatics	MD001LAB02
	MD001	Biological Anthropology	MD001HUB03
	MD001	Biomaterials	MD001CHM19
	MD001	Biomedical Engineering	MD001HUB05
	MD001	Biomedical Forensic Science	MD001LAB25
	MD001	Cardiothoracic Surgery	MD001CHM01
	MD001	Cardiovascular Biomechanics	MD001CHM15
	MD001	Cell Biology	MD001HUB31
	MD001	Chemical Biology	MD001IBS02
	MD001	Chemical Pathology	MD001LAB03
	MD001	Clinical Pharmacology	MD001MDN03
	MD001	Clinical Science & Immunology	MD001LAB05
	MD001	Computational Biomechanics	MD001CHM15
	MD001	Dermatology	MD001MDN04
	MD001	Dietetics	MD001HUB20
	MD001	Disability Studies	MD001AHS06
	MD001	Emergency Medicine	MD001CHM02
	MD001	Exercise Science	MD001HUB08
	MD001	Family Medicine	MD001PPH09
	MD001	Forensic Medicine	MD001LAB26
	MD001	Forensic Pathology	MD001LAB07
	MD001	Forensic Toxicology	MD001LAB27
	MD001	Genetic Counselling	MD001LAB09
	MD001	Haematological Pathology	MD001LAB10
	MD001	Haematology	MD001LAB11
	MD001	Health Communication	MD001PED17
	MD001	Health Innovation	MD001HUB11
	MD001	Health Sciences Education	MD001HSE01
	MD001	Healthcare Technology Management	MD001HUB10
	MD001	Human Genetics	MD001LAB12

	MD001	Maternal & Child Health	MD001PED02
	MD001	Medical Biochemistry	MD001LAB14
	MD001	Medical Cell Biology	MD001HUB07
	MD001	Medical Microbiology	MD001LAB16
	MD001	Medical Physics	MD001RAY02
	MD001	Medical Virology	MD001LAB17
	MD001	Medicine	MD001MDN12
	MD001	Nephrology	MD001MDN13
	MD001	Neuropsychiatry	MD001PRY08
	MD001	Neuroscience	MD001CHM16
	MD001	Neurosurgery	MD001CHM04
	MD001	Nuclear Medicine	MD001RAY03
	MD001	Nursing	MD001AHS07
	MD001	Nutrition	MD001HUB21
	MD001	Obstetrics & Gynaecology	MD001OBS03
	MD001	Occupational Therapy	MD001AHS09
	MD001	Ophthalmology	MD001CHM05
	MD001	Orthopaedic Surgery	MD001CHM06
	MD001	Otorhinolaryngology	MD001CHM07
	MD001	Paediatrics	MD001PED11
	MD001	Physiology	MD001HUB13
	MD001	Physiotherapy	MD001AHS08
	MD001	Psychiatry	MD001PRY09
	MD001	Public Health	MD001PPH07
	MD001	Radiology	MD001RAY06
	MD001	Radiotherapy	MD001RAY07
	MD001	Speech-Language Pathology	MD001AHS10
	MD001	Surgery	MD001CHM10
	MD001	Urology	MD001CHM12
Doctor of Science in Medicine	MD004	Biomedical Engineering	MD004HUB05
	MD004	Exercise Science	MD004HUB08
	MD004	Gastroenterology	MD004MDN06
	MD004	Medical Virology	MD004LAB17
	MD004	Medicine	MD004MDN12
	MD004	Neuropsychiatry	MD004PRY08
	MD004	Obstetrics & Gynaecology	MD004OBS03
International Affiliate	MZ095	Health Sciences General	MZ095DOM01
	MZ095	Paediatrics	MZ095PED11
	MZ095	Psychiatry	MZ095PRY09
Medical Elective Foreign	MZ003	Health Sciences General	MZ003DOM01
Occasional Health Sciences Postgraduate	MZ002	Biomedical Engineering	MZ002HUB05
	MZ002	Clinical Science & Immunology	MZ002LAB05
	MZ002	Health Economics	MZ002ECO07
	MZ002	Health Sciences General	MZ002DOM01
	MZ002	Medical Biochemistry	MZ002LAB14
	MZ002	Occupational Therapy	MZ002AHS09

**528 DEGREE, DIPLOMA AND PLAN CODES**

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Postgraduate Affiliate	MZ002 MZ089	Public Health Health Sciences General	MZ002PPH07 MZ089DOM01
SA Affiliate	MZ094	Health Sciences General	MZ094DOM01
SADC Affiliate	MZ097	Health Sciences General	MZ097DOM01
SADC Affiliate	MZ097	Obstetrics & Gynaecology	MZ097OBS03

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