



2024

FACULTY OF HEALTH SCIENCES POSTGRADUATE STUDIES

Handbook 8b in this series of handbooks



UNIVERSITY OF CAPE TOWN

FACULTY OF HEALTH SCIENCES POSTGRADUATE

2024

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Observatory

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Faculty Office	(021) 650 2516
Accounts and Fees	(021) 650 1704
Admissions	(021) 650 2128

Internet:

UCT's Home Page	http://www.uct.ac.za
Faculty of Health Sciences Home Page	http://www.health.uct.ac.za
Dean's Office	dean.hs@uct.ac.za
Faculty Office	N/A
International Academic Programmes Office	iapo@uct.ac.za

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.

CONTENTS

GUIDE TO THE USAGE OF THIS HANDBOOK	8
GENERAL INFORMATION.....	9
Contact details of University and Faculty administrative offices dealing with student matters	9
Dean, Faculty Office and Other Central Offices within the Faculty.....	10
Associated Teaching Hospitals.....	10
Centre for Bioethics.....	11
Postgraduate Health Sciences Students' Council	12
Definitions of terms used in this handbook	12
Qualification and course codes	13
Term dates	17
GENERAL RULES FOR POSTGRADUATE STUDENTS	18
GENERAL RULES FOR MASTER'S DEGREE STUDIES	23
RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES.....	25
POSTGRADUATE DIPLOMAS	25
Addictions Care	25
Clinical Developmental Paediatrics.....	27
Clinical Hepatology.....	28
Clinical Paediatric Cardiology.....	29
Clinical Paediatric Critical Care	31
Clinical Paediatric Diabetes.....	33
Clinical Electrophysiology and Epilepsy.....	34
Clinical Paediatric Emergency Care.....	35
Clinical Paediatric Gastroenterology	36
Clinical Paediatric Haematology and Oncology.....	38
Clinical Paediatric Nephrology.....	39
Clinical Paediatric Physiotherapy.....	40
Clinical Paediatric Pulmonology	42
Clinical Paediatric Rheumatology	43
Community and General Paediatrics	45
Community Eye Health	46
Computational Health Informatics.....	47
Counselling and Psychotherapy (in abeyance)	49
Disability Studies.....	50
Emergency Care.....	52
Family Medicine.....	54
Health Economics.....	55
Health Management.....	57
Health Professional Education.....	58
Healthcare Technology and Management	60
Interdisciplinary Pain Management	61
Maternal and Child Health.....	63
<i>Midwifery</i>	65
Neonatology.....	66
Nursing, with specialisations in.....	68
Occupational Health	71
Paediatric Radiology.....	72
Palliative Medicine	73
Pesticide Risk Management	74
Pesticide Risk Management.....	76
TB-HIV Management.....	78
<i>Midwifery</i>	79
<i>Child Nursing</i>	68

<i>Critical Care Nursing (Child)</i>	69
<i>Critical Care Nursing (Adult)</i>	69
<i>Nephrology Nursing</i>	69
<i>Ophthalmic Nursing</i>	69
HONOURS DEGREES	80
Applied Anatomy	83
Bioinformatics.....	84
Biokinetics	84
Biological Anthropology.....	85
Biomedical Forensic Science	85
Clinical Pharmacology.....	86
Exercise Science	87
Forensic Entomology	87
Forensic Genetics	88
Forensic Toxicology	89
Human Genetics.....	89
Infectious Diseases and Immunology	90
Medical Biochemistry	90
Medical Cell Biology	91
Medical Physics	91
Neuroscience & Physiology.....	92
Radiobiology.....	92
Structural Biology	93
MASTER'S DEGREES AND SPECIALISATIONS	94
MASTER OF MEDICINE	94
<i>Anaesthesia</i>	99
<i>Cardiothoracic Surgery</i>	99
<i>Clinical Pharmacology</i>	100
<i>Dermatology</i>	101
<i>Diagnostic Radiology</i>	101
<i>Emergency Medicine</i>	102
<i>Family Medicine</i>	103
<i>Medical Genetics</i>	104
<i>Medicine</i>	105
<i>Neurology</i>	105
<i>Neurosurgery</i>	106
<i>Nuclear Medicine</i>	106
<i>Obstetrics and Gynaecology</i>	107
<i>Occupational Medicine</i>	109
<i>Ophthalmology</i>	110
<i>Orthopaedic Surgery</i>	110
<i>Otorhinolaryngology</i>	111
<i>Paediatric Surgery</i>	111
<i>Paediatrics</i>	112
<i>Pathology (Anatomical)</i>	112
<i>Pathology (Chemical)</i>	113
<i>Pathology (Clinical)</i>	113
<i>Pathology (Forensic)</i>	114
<i>Pathology (Haematological)</i>	114
<i>Pathology (Microbiological)</i>	115
<i>Pathology (Virological)</i>	115
<i>Plastic and Reconstructive Surgery</i>	116
<i>Psychiatry</i>	116
<i>Public Health Medicine</i>	117

<i>Radiation Oncology</i>	118
<i>Surgery</i>	120
<i>Urology</i>	120
MASTER OF MEDICAL SCIENCE.....	122
<i>Genetic Counselling</i>	122
MASTER OF PHILOSOPHY.....	124
<i>By coursework and dissertation, in</i>	126
<i>Biokinetics</i>	126
<i>Biomedical Forensic Science</i>	126
<i>Clinical Clinical Paediatric Surgery</i>	128
<i>Clinical Pharmacology</i>	128
Emergency Medicine.....	129
<i>Clinical Emergency Care</i>	129
<i>Disaster Medicine</i>	129
<i>Global Emergency Care</i>	129
<i>Patient Safety and Clinical Decision-making (A)</i>	129
<i>Patient Safety and Clinical Decision-making (B)</i>	129
<i>Health Innovation</i>	132
<i>Intellectual Disability</i>	133
<i>Liaison Mental Health</i>	135
<i>Maternal and Child Health</i>	136
<i>Occupational Health</i>	137
<i>Paediatric Forensic Pathology</i>	138
<i>Paediatric Pathology</i>	139
<i>Palliative Medicine</i>	139
<i>Sport and Exercise Medicine</i>	140
<i>For sub-speciality purposes, in</i>	142
<i>Addictions Mental Health</i>	145
<i>Advanced Hepatology and Transplantation</i>	145
<i>Allergology</i>	145
<i>Cardiology</i>	146
<i>Child and Adolescent Psychiatry</i>	147
<i>Clinical Haematology</i>	147
<i>Critical Care</i>	148
<i>Developmental Paediatrics</i>	148
<i>Endocrinology</i>	149
<i>Forensic Mental Health</i>	149
<i>Geriatric Medicine</i>	150
<i>Gynaecological Oncology</i>	151
<i>Infectious Disease and HIV Medicine</i>	151
<i>Maternal and Foetal Medicine</i>	151
<i>Medical Gastroenterology</i>	152
<i>Neonatology</i>	152
<i>Nephrology</i>	152
<i>Neuropsychiatry</i>	153
<i>Paediatric Cardiology</i>	153
<i>Paediatric Critical Care</i>	154
<i>Paediatric Endocrinology</i>	154
<i>Paediatric Gastroenterology</i>	154
<i>Paediatric Infectious Diseases</i>	155
<i>Paediatric Nephrology</i>	155
<i>Paediatric Neurology</i>	156
<i>Paediatric Oncology</i>	156
<i>Paediatric Pulmonology</i>	156

<i>Paediatric Rheumatology</i>	157
<i>Pulmonology</i>	157
<i>Reproductive Medicine</i>	158
<i>Rheumatology</i>	158
<i>Surgical Gastroenterology</i>	158
<i>Trauma Surgery</i>	159
<i>Urogynaecology</i>	159
<i>Vascular Surgery</i>	160
By dissertation	160
Master of Public Health	162
<i>Master of Public Health</i>	162
<i>Community Eye Health</i>	163
<i>Epidemiology</i>	164
<i>Environmental Health</i>	164
<i>General</i>	165
<i>Health Economics specialisation</i>	166
<i>Health Systems</i>	167
<i>Social and Behavioural Sciences</i>	167
MASTER OF SCIENCE.....	169
<i>MSc in Audiology and MSc in Speech-Language Pathology</i>	169
<i>MSc in Biomedical Engineering</i>	170
<i>MSc in Computational Health Informatics</i>	172
<i>MSc in Epidemiology & Biostatistics</i>	174
<i>MSc in Exercise and Sports Physiotherapy</i>	175
<i>MSc in Nursing</i>	176
By coursework and dissertation	178
By dissertation	179
MSc in Occupational Therapy	180
By coursework and dissertation	180
By dissertation	181
<i>MSc in Physiotherapy</i>	182
MASTER OF SCIENCE IN MEDICINE	183
PROFESSIONAL MASTER'S DEGREES	185
<i>Master of Chemicals Risk Management</i>	185
<i>Master of Nursing in Child Nursing</i>	187
<i>Master of Paediatric Neurosurgery</i>	189
DOCTORAL DEGREES	191
Doctor of Philosophy	191
Doctor of Medicine	196
Doctor of Science in Medicine.....	198
DEPARTMENTS IN THE FACULTY	199
List of Departments, Divisions and Units	199
Anaesthesia and Perioperative Medicine	201
Family, Community and Emergency Care.....	208
Health and Rehabilitation Sciences.....	227
Health Sciences Education.....	252
Human Biology.....	257
Integrative Biomedical Sciences	286
Medicine	292
Obstetrics and Gynaecology	332
Paediatrics and Child Health.....	340
Pathology	386

Psychiatry and Mental Health.....	434
Public Health and Family Medicine	453
Radiation Medicine.....	490
Surgery.....	505
RESEARCH STRUCTURES	540
IMPORTANT INFORMATION.....	565
Faculty of Health Sciences Mission Statement.....	565
Faculty of Health Sciences Charter	565
Faculty of Health Sciences Declaration.....	566
Process to investigate reported student impairment or unprofessional conduct	566
Standard Operating Procedure (SOP) for Dual/Concurrent Registration with Internal or External Institutions	570
Standard Operating Procedure (SOP) for Leave of Absence.....	572
Avoiding Plagiarism: A guide for Students.....	574
Prizes	580
Distinguished Teachers in the Faculty.....	584

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, 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, departments and courses offered by departments: The second half of this book lists all the teaching and research staff in departments and research structures. Courses offered by each department are listed below the staffing section for each department.

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.

GENERAL INFORMATION

Contact details of University and Faculty administrative offices dealing with student matters

[Note: The Academic Administration section of the Faculty Office of Health Sciences is situated in the Wernher & Beit North building, one level down from the Dean's Office.]

Query:	Whom to approach:	Telephone:
Academic transcripts/degree certificates	Records Office	(021) 650 3595
Admission: Postgraduate	Postgraduate Admission section of Faculty Office of Health Sciences	(201) 406 6340 / 6028
Admission: Undergraduate	Undergraduate Admission section of Faculty Office of Health Sciences	(021) 650 3020
Computer laboratory queries	ICTS, Anatomy Building, Health Sciences campus	(021) 406 6729
Deferred examinations	Records Office	(021) 650 3595
Fee problems/accounts	Central Fees Office (Kramer Law Building)	(021) 650 2142
Fee payments	Cashier's Office (Kramer Law Building) (09h30 to 15h30)	(021) 650 2207/ 2146
Financial assistance	Student Financial Aid Office (Kramer Law Building)	(021) 650 2125
Medical Library queries	Medical Librarian, Health Sciences Faculty Library	(021) 406 6130
Registration issues: Postgraduate	Postgraduate Administration section of Faculty Office of Health Sciences	(021) 650 3004
Registration issues: Undergraduate	Undergraduate Administration section of Faculty Office of Health Sciences	(021) 650 3020
Student health matters	Student Wellness	(021) 650 1020
Student support: Postgraduate (other than academic support)	Postgraduate Administration section of Faculty Office of Health Sciences	(021) 406 6327
Provision of non-academic support to FHS Undergraduate and Postgraduate students	Faculty of Health Sciences Student Development & Support Office (FHS SDS Office)	(021) 650 7189 / (021) 650 5393
Undergraduate Curriculum Matters	Undergraduate Administration section of Faculty Office of Health Sciences	(021) 650 3020

10 GENERAL INFORMATION

Dean, Faculty Office and Other Central Offices within the Faculty

DEAN AND FACULTY OFFICE

L2, Barnard Fuller Building
Tel: 021 406 6346

Associate Professor and Dean:

L Green-Thompson, MBBCh *DASA* PhD *FCASA*

Professor and Deputy Dean: Postgraduate Education:

C Dandara, BSc, BSc (Hons), PhD, HPCSA (Medical Biological Scientist), ASSAf Fellow, AAS Fellow

Doctor and Deputy Dean: Undergraduate Education:

K Begg, MBChB *Cape Town* DCH *CMSA* DipObs *CMSA* FCPHM *CMSA*

Associate Professor and Deputy Dean: Health Services:

T Naledi, MBChB FCPHM *SA*

Doctor and Acting Deputy Dean: Research:

TBC

Transformation Co-ordinator:

M Fuma, BA Motion Picture, *AFDA*

Faculty Manager: Academic Administration:

KS Munesar, BA Social Work *UDW* PGDip (Personnel Management) *Durban*

Manager: Postgraduate Academic Administration:

N Khanyile, BSoc Sci *UKZN*. BSoc Sc Hons (Policy and Devt Studies) *UKZN*, PGDip Mngt *UKZN*

Manager: Undergraduate Academic Administration:

C Cloete, LLB *UWC*

Associated Teaching Hospitals

Hospital:

2 MILITARY HOSPITAL

ALEXANDRA HOSPITAL

GEORGE HOSPITAL

GROOTE SCHUUR HOSPITAL

KINGSBURY HOSPITAL

KNYSNA HOSPITAL

LIFE VINCENT PALLOTTI

MITCHELLS' PLAIN DISTRICT HOSPITAL

Chief Executive Officer:

Col (Dr) JJ Molomo

A/Prof Jason Phua

Mr Michael Vonk

Dr Bavna Patel

Mrs Christine Malan

Mr Gavin Pike (Hospital Manager)

Mr Evan Swart

MOWBRAY MATERNITY HOSPITAL	Ms Janine Joemat
MOSSEL BAY PROVINCIAL HOSPITAL	
NEW SOMERSET HOSPITAL	Dr Donna Stokes
ODUTSHOORN HOSPITAL	Dr Charles Dreyer (Medical Manager)
RED CROSS CHILDREN'S HOSPITAL	Dr Anita Parbhoo
TYGERBERG HOSPITAL	Dr Matodsi Mukosi
VALKENBERG HOSPITAL	Mrs Carol Dean
VICTORIA HOSPITAL	Prof Jonathan Vaughan
VREDENBURG HOSPITAL	Dr Silvio Morales-Perez

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 (all emails to this address are confidential). For general enquiries to the Bioethics Centre please email: bioethics@uct.ac.za

Professor and Director:

D Benatar, BSocScHons PhD *Cape Town*

Emeritus Professor:

SR Benatar, MBChB DSc (Medicine) *Cape Town* FFA FRCP (Hon) FCP (Hon) SA

Associate Professors:

J Anthony, MBChB *Cape Town* FCOG SA MPhil *Stell*

J de Vries, MSc *Wageningen* MSc *European University Institute* PhD *Oxon*

T Burgess, BSc (Physiotherapy) BScHons (Medicine) PhD *Cape Town* MHSc (Bioethics) *University of Toronto*

Emerita Associate Professor:

A Pope, LDipLib *Stell* BA LLB *Rhodes* PGDip (International Research Ethics) *Cape Town*

Senior Lecturers:

E Galgut, BAHons MA *Witwatersrand* MA *Cape Town* PhD *Rutgers*

G Hull, BAHons *Cantab* MPhil PhD *London*

Honorary Senior Lecturer:

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

12 GENERAL INFORMATION

Post-doctoral fellow:

A Hartford, BAHons *Cape Town* MA *New York* PhD *Cape Town*

Senior Secretary:

L Davison, BA(Hons) MPhil *Cape Town*

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 PG HSSC's website: <http://www.health.uct.ac.za/fhs/students/societies/pghssc>

Twitter handle: @UCT_PGHSSC

Instagram: uct_pghssc

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 they have passed an equivalent course before. They are then also given credit towards the programme for the course they 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.
- 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.

Academic year of study (AYOS): A suite of courses that must be completed at a specific academic level (e.g.: fourth year MBChB)

Calendar year: A year which starts in January and ends in December and may contain courses from more than one academic 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

Z = Non-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: AAAInnnS, where:

AAA is a 3 alpha group identifying the department.

I 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

14 GENERAL INFORMATION

X = Clinical Block Courses
Q = Online First Semester
R = Online Second Semester
T = Online Full Year - First and Second Semesters
V = Online 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.]

DEGREE/ DIPLOMA CODE	DEGREE/DIPLOMA TITLE
-------------------------------------	-----------------------------

POSTGRADUATE DIPLOMAS

MG007	PG Diploma in Occupational Health
MG009	PG Diploma in Health Leadership
MG010	PG Diploma in Healthcare Technology Management
MG011	PG Diploma in Palliative Medicine
MG015	PG Diploma in Family Medicine
MG017	PG Diploma in Health Economics
MG018	PG Diploma in Maternal & Child Health (in abeyance)
MG019	PG Diploma in Community Eye Health
MG020	PG Diploma in Paediatric Radiology (in abeyance)
MG021	PG Diploma in Pesticide Risk Management
MG022	PG Diploma in Counselling and Psychotherapy (in abeyance)
MG024	PG Diploma in Addictions Care
MG026	PG Diploma in Health Professional Education
MG027	PG Diploma in Community & General Paediatrics
MG028	PG Diploma in Clinical Paediatric Physiotherapy
MG029	PG Diploma in Clinical Paediatric Haematology and Oncology
MG030	PG Diploma in Neonatology
MG031	PG Diploma in Clinical Paediatric Cardiology
MG032	PG Diploma in Clinical Paediatric Diabetes
MG033	PG Diploma in Clinical Paediatric Electrophysiology and Epilepsy
MG034	PG Diploma in Clinical Paediatric Gastroenterology
MG035	PG Diploma in Clinical Developmental Paediatrics
MG036	PG Diploma in Clinical Paediatric Emergency Care
MG037	PG Diploma in Clinical Paediatric Critical Care
MG038	PG Diploma in Clinical Paediatric Rheumatology
MG039	PG Diploma in Clinical Paediatric Pulmonology
MG040	PG Diploma in Clinical Paediatric Nephrology
MG041	PG Diploma in TB-HIV Management
MG042	PG Diploma in Emergency Care
MG043	PG Diploma in Midwifery (in abeyance)
MG044	PG Diploma in Clinical Hepatology
MG045	PG Diploma in Child Nursing (in abeyance)
MG046	PG Diploma in Child Critical Care Nursing (in abeyance)
MG047	PG Diploma in Critical Care Nursing (Adult) (in abeyance)
MG049	PG Diploma in Nephrology Nursing (in abeyance)
MG051	PG Diploma in Ophthalmic Nursing (in abeyance)
MG055	PG Diploma in Interdisciplinary Pain Management
MG056	PG Diploma in Disability Studies

HONOURS DEGREES

MH002	Bachelor of Medical Science (Honours)
MH003	Bachelor of Medical Science (Honours) in Exercise Science
MH004	Bachelor of Medical Science (Honours) in Biokinetics

MASTER'S DEGREES

MM001	Master of Medicine
MM002	Master of Science in Nursing (by full dissertation)
MM004	Master of Science in Physiotherapy (by full dissertation)
MM005	Master of Science in Occupational Therapy (by full dissertation)
MM006	Master of Philosophy (by coursework and dissertation)
MM008	Master of Science in Audiology (full dissertation)
MM009	Master of Science in Speech-Language Pathology (by full dissertation)
MM012	Master of Public Health (by coursework & minor dissertation)
MM016	Master of Philosophy (subspeciality training)
MM017	Master of Science in Nursing (by coursework & minor dissertation)
MM018	Master of Science in Occupational Therapy (by coursework & minor dissertation)
MM021	Master of Philosophy (by full dissertation)
MM025	Master of Philosophy in Emergency Medicine (by coursework & minor dissertation)
MM026	Master of Philosophy in Allergology
MM033	Master of Philosophy in Health Innovation (by coursework and dissertation)
MM034	Master of Science in Exercise and Sports Physiotherapy (by coursework & dissertation)
MM035	Master of Nursing in Child Nursing
MM036	Master of Paediatric Neurosurgery
MM037	Master of Chemical Risk Management
MM051	Master of Medical Science in Nutrition (by dissertation)
MM053	Master of Medical Science in Dietetics (by dissertation)
MM054	Master of Science in Biomedical Engineering (full dissertation)
MM055	Master of Science in Biomedical Engineering (by coursework & dissertation)
MM095	Master of Science in Medicine (by full dissertation)
MM150	Master of Philosophy in Advanced Hepatology & Transplantation
MM151	Master of Philosophy in Paediatric Gastroenterology
MM152	Master of Philosophy in Trauma Surgery
MM153	Master of Philosophy in Addictions Mental Health (by coursework & dissertation)
MM154	Master of Philosophy in Biokinetics
MM155	Master of Philosophy in Forensic Mental Health (by coursework & dissertation)
MM156	Master of Philosophy in Intellectual Disability
MM157	Master of Philosophy in Clinical Research Administration
MM158	Master of Philosophy in Occupational Health
MM159	Master of Philosophy in Palliative Care
MM160	Master of Philosophy in Reproductive Medicine
MM162	Master of Philosophy in Paediatric Pulmonology
MM163	Master of Philosophy in Paediatric Pathology
MM164	Master of Philosophy in Surgical Gastroenterology
MM166	Master of Medical Science in Genetic Counselling (by coursework & dissertation)
MM167	Master of Philosophy in Child & Adolescent Psychiatry
MM168	Master of Philosophy in Liaison Mental Health
MM169	Master of Philosophy in Neuropsychiatry

16 GENERAL INFORMATION

MM170	Master of Philosophy in Critical Care
MM171	Master of Philosophy in in Cardiology
MM172	Master of Philosophy in Endocrinology
MM173	Master of Philosophy in Medical Gastroenterology
MM174	Master of Philosophy in Nephrology
MM175	Master of Philosophy in Pulmonology
MM176	Master of Philosophy in Rheumatology
MM177	Master of Philosophy in Geriatric Medicine
MM178	Master of Philosophy in Infectious Diseases & HIV Medicine
MM179	Master of Philosophy in Gynaecological Oncology
MM180	Master of Philosophy in Maternal & Fetal Medicine
MM181	Master of Philosophy in Paediatric Cardiology
MM182	Master of Philosophy in Paediatric Critical Care
MM183	Master of Philosophy in Developmental Paediatrics
MM184	Master of Philosophy in Paediatric Endocrinology
MM185	Master of Philosophy in Neonatology
MM186	Master of Philosophy in Paediatric Neurology
MM187	Master of Philosophy in Paediatric Nephrology
MM188	Master of Philosophy in Paediatric Infectious Diseases
MM189	Master of Philosophy in Clinical Haematology
MM190	Master of Philosophy in Vascular Surgery
MM191	Master of Science in Epidemiology and Biostatistics (by coursework & dissertation)
MM192	Master of Philosophy in Sport and Exercise Medicine

DOCTORAL DEGREES

MD001	Doctor of Philosophy
MD002	Doctor of Medicine
MD004	Doctor of Science in Medicine

OCCASIONAL STUDIES

MZ002	Occasional Health Sciences Postgraduate
MZ089	Postgraduate Affiliate
MZ094	SA Affiliate
MZ095	International Affiliate
MZ097	SADC Affiliate

This is to confirm that by virtue of inclusion on the Institution's DHET approved Programme and Qualification Mix (PQM), all qualifications included in this Handbook are **accredited** by the Council on Higher Education's permanent sub-committee - the Higher Education Quality Committee. Where a SAQA ID has not been provided, the qualification is awaiting the SAQA ID. The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework and thus all institutions are awaiting the finalisation of the process and completion of the awarding of SAQA ID's. *Affected qualifications are marked **

Please consult Handbook 2 or the HEQSF Programme and Qualification Mix (PQM) on the Institutional Planning Department's website, as approved by the Department of Higher Education and Training, for a list of all UCT's accredited qualifications.

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”.

Term Dates for 2024

Please refer to the website: <https://www.uct.ac.za/main/calendar/terms>.

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 their dissertation, they should contact the Faculty Office in order to register for the dissertation component.
- FGP1.3 Registrars (MMed students) and subspeciality trainees (MPhil: subspeciality) students are required to register annually with the Health Professions Council of South Africa.
- FGP1.4 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.
- FGP1.5 Students registering for the Postgraduate Diploma in Nursing or the Postgraduate Diploma in Midwifery are required to be registered with the South African Nursing Council. Students registering for the (i) MSc(Nursing) by dissertation only OR by coursework and minor dissertation OR the Master of Nursing in Child Nursing should be registered with the South African Nursing Council; (ii) If students from outside South Africa plan to engage with research participants in South Africa they should be registered with the South African Nursing Council; (iii) If students from outside South Africa plan to engage with research participants in their home country they should be registered with the relevant Nursing and/or Midwifery Council

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.

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 or South African Nursing Council, as appropriate. 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 they are registered, or where a student, in the course of their 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 Nursing Act states impairment refers to “a condition which renders a practitioner incapable of practising nursing with reasonable skill and safety.” (Nursing Act no. 33 of 2005 p.37)

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

- *have 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;*
- *have become unfit to purchase, acquire, keep, use, administer, prescribe, order, supply or possess any scheduled substance;*
- *have used, possessed, prescribed, administered, or supplied any substance irregularly for any reason other than medicinal purposes; or*
- *have 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 Nursing Act states “unprofessional conduct means a conduct which, with regard to the profession of a practitioner, is improper, disgraceful, dishonourable or unworthy.” (Nursing Act No. 33 of 2005, p.6)

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; or*
 - *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 they were convinced that such other student or practitioner was impaired as defined in the Act; or
 - (b) self-report their impairment to the Council if they were aware of their own impairment or have been publicly informed of being impaired or have 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.*]

20 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 their 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.

FGP4 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 them in that course and/or their progression to the next year of study in the programme for which they are registered.

FGP4.2 Except by permission of Senate, a candidate shall not be admitted to register in the following academic year of study unless they have 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 leading to registration as a health professional, 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 they:

- (a) have 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 or clinical service commitments;
 - ii failure to make sufficient academic (including clinical, where relevant) progress.
- (b) have been found guilty of unethical behaviour or unprofessional conduct; or
- (c) have, 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 denied readmission in the subsequent year.

[Notes:

- *A person doing a higher degree or specialist training will ordinarily have been given ongoing feedback on their 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 their supervisor. If a candidate fails to make this progress, they shall be given an opportunity to explain this and may 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.

Leave of Absence

- FGP6 The rules below should be read in conjunction with the UCT General Rules and Policies Handbook3 and the Faculty LoA SOP.
- FGP6.1
- (a) Students may be granted leave of absence for a specified period for medical, maternity, compassionate or external study opportunity reasons, usually to the end of the academic year.
 - (b) The permitted duration for a LoA request is either for a semester or a maximum of a full year depending on the programme registered for; no approvals will be granted for periods of lesser duration.
 - (c) Save in exceptional circumstances,
 - (i) students in year courses (W or H courses) or semester courses (F or S courses) will be considered for LoA provided they apply within the first 10 weeks of each semester
 - (ii) Leave of absence shall not be granted retrospectively.
 - (iii) An application for an extension for a LoA is not automatically granted.
- FGP6.2
- (a) A student who has been granted leave of absence for a medical reason is required to apply to the UCT Fit for Study Panel (FSP) to return from leave of absence. Students are provided with the dates and timelines by which to submit their application to return from leave of absence (ACA43) including the reports from their treating health care professional/s.
 - (b) For students within the clinical years of study, the Faculty requires, in addition to the Fit for Study Panel's initial decision, a secondary assessment by a health professional of the Faculty's choice with a view to establishing whether the student is fit to return to the programme and /or work with patients/clients.
 - (c) The Faculty's Student Development and Support Committee (SDSC) will ensure that the secondary assessment is expedited.
 - (d) Once the FSP has considered the secondary assessment report, the FSP will communicate outcomes at the end of the respective LoA period. The faculty may set additional conditions for return which may include, for example, return to clinical shadowing to upgrade clinical skills and/or on-going monitoring of continued fitness for training/practice. (e) If the FSP decides that the student is not fit to return, the student must apply for an extension of leave of absence with the relevant documents, following which the student must again apply via the FSP to return.
- FGP6.3 A student who has been granted leave of absence as per rule FGU7.1 and fails to register subsequently, will be required to apply formally for readmission to the programme. The student's academic record, period of absence and relevant supporting documents will be considered by the relevant programme convener/supervisor in deciding whether the student may return.
- FGP6.4
- (a) A student who is admitted to a treatment facility without having been able to apply for leave of absence (LoA) prior to the admission, or has had a change in the management or treatment plan while on an approved LoA, may not

22 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

return to academic activities/ training/practice until the student's treating healthcare professional has recommended to the Faculty's Student and Development Support Committee (SDSC) in writing that the student is fit to return.

- (b) The Faculty's SDSC may, in addition, require the student to undergo an assessment by an independent healthcare professional of the Faculty's choice about the student's fitness to return.
- (c) If the student is deemed not fit to return, the student will be required to take formal leave of absence or apply for an extension, after which they must apply to return via the Fit for Study Panel (as described in FGP5.2).

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 entails prior approval of a research proposal by a Research Ethics or Animal Ethics Committee. In cases where prior approval is not required, the research proposal should be subjected to appropriate deliberative procedures, according to faculty-specific guidelines with a formal waiver from the ethics committee. 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 and been approved via 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 they propose to undertake, not later than six months before submitting the work for examination, to allow for the appointment of examiners.

Submission

FGM2.1 Where a candidate intends to submit their dissertation or research project for examination they must complete the intention to do so six weeks before submitting the dissertation for examination.

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; and
- (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).

24 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- 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 their 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 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.

Changing of degree

- FGM4.1 Senate may, on the recommendation of the Faculty Board and the candidate's supervisor, change 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 For students who are interrupting MBChB studies to pursue a Master's and/or PhD fulltime (i.e., for a period longer than a year), the following applies to return to the remaining years of the MBChB programme:
- Each student is required to obtain approval from the MBChB Programme Convener before applying for the fulltime Master's or PhD programme.
 - While undertaking the fulltime MSc/PhD, students are required to maintain their clinical knowledge and skills under the supervision of a clinician tutor and to submit reports as indicated by the MBChB programme convener.
 - In the year before the return to resume the MBChB programme, the student must apply for readmission to the MBChB programme via the online application system for this to be reviewed by Admissions Committee.

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 their dissertation. No candidate shall be invited more than once to revise and resubmit their dissertation.
- FGM6.2 A candidate whose dissertation is failed will not be allowed to present themselves as candidates 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.

RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

POSTGRADUATE DIPLOMAS

ADDICTIONS CARE

[MG024] [SAQA ID:83606]

Convener:

F Ashburner (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 their 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 their internship.
- FPA1.3 Applicants may be asked to attend an interview.

26 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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:

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

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:

Professor K Donald (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 their 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:

Code	Course	NQF Credits	NQF Level
PED4039W	Clinical Management in Developmental Paediatrics	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
	Total NQF credits	120	

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.

28 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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

[MG044MDN26][SAQA ID:98988]

Conveners:

Professor CWN Spearman and Associate Professor M Sonderup (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

FPC1.1 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 their 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, they will be required to have their 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:

Code	Course	NQF Credits	NQF Level
MDN4037W	Clinical Management in Hepatology	100	8
MDN4038W	Essay: Transition and Translation of Knowledge	20	8
Total NQF credits		120	

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][SAQA ID:99286]

Convener:

Dr G Comitis (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.

30 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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:
- 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;
 - have submitted a letter of support from their employer(s) granting the applicant study leave for the time requiring full-time attendance;
 - have proven proficiency in written and spoken English, including medical terminology (this may be tested if necessary); and
 - 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 their 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:

Code	Course	NQF Credits	NQF Level
PED4034W	Clinical Management in Paediatric Cardiology	40	8
PED4035W	Paediatric Echocardiography	50	8
PED4032W	Essay: Transition and Translation of Knowledge	30	8
	Total NQF credits	120	

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:

Dr S Salie (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, 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 their 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;

32 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- (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:

Code	Course	NQF Credits	NQF Level
PED4041W	Clinical Management in Paediatric Critical Care.....	90	8
PED4032W	Essay: Transition and Translation of Knowledge	30	8
	Total NQF credits.....	120	

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 M Carrihill (Department of Paediatrics and Child Health)

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:

Code	Course	NQF Credits	NQF Level
PED4036W	Clinical Management of Paediatric Diabetes	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
Total NQF credits		120	

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]

Convener:

Professor J Wilmshurst (Department of Paediatrics and Child Health)

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 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 their 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:

Code	Course	NQF Credits	NQF Level
PED4037W	Clinical Management of Paediatric Epilepsy.....	90	8
PED4032W	Essay: Transition and Translation of Knowledge	30	8
	Total NQF credits.....	120	

[See note on page 4 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:

Associate Professor HA 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.

36 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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:

Code	Course	NQF Credits	NQF Level
PED4040W	Clinical Management in Paediatric Emergency Care	90	8
PED4032W	Essay: Transition and Translation of Knowledge	30	8
	Total NQF credits	120	

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 course). All courses must be passed at first attempt.

CLINICAL PAEDIATRIC GASTROENTEROLOGY

[MG034PED15][SAQA ID:96447]

Conveners:

Dr R de Lacy and Dr L Radebe (Department of Paediatrics and Child Health)

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 their employer granting the applicant study leave where applicable;
 - (f) shall submit proof that they will return back to their 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:

Code	Course	NQF Credits	NQF Level
PED4038W	Clinical Management in Paediatric Gastroenterology	90	8
PED4032W	Essay: Transition and Translation of Knowledge	30	8
	Total NQF credits	120	

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.

38 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- 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][SAQA ID:99637]

Convener:

Professor A Davidson (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.

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 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:

Code	Course	NQF Credits	NQF Level
PED4031W	Clinical Management in Paediatric Haematology and Oncology.	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
Total NQF credits		120	

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 between 75% – 100% for all the courses with not less than 70% for any individual course.

CLINICAL PAEDIATRIC NEPHROLOGY

[MG040PED08][SAQA ID:94946]

Convener:

Professor M McCulloch (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.

40 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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.seah.uct.ac.za/apfp/>). Applicants must be supported by a tertiary African centre allied to the APFP:

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

Code	Course	NQF Credits	NQF Level
PED4044W	Clinical Management in Paediatric Nephrology	90	8
PED4032W	Essay: Transition and Translation of Knowledge	30	8
	Total NQF credits.....	120	

CLINICAL PAEDIATRIC PHYSIOTHERAPY

[MG028AHS20][SAQA ID:94787]

Convener:

Professor B Morrow (Department of Paediatrics and Child Health)

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.

Admission requirements

FPL1.1 To be eligible for 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 their 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 their 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 final 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:

Code	Course	NQF Credits	NQF Level
AHS4158W	Clinical Management in Paediatric Physiotherapy	90	8
PED4032W	Essay: Transition and Translation of Knowledge	30	8
	Total NQF credits	120	

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.

42 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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 (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

FPM1.1 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 their 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:

Code	Course	NQF Credits	NQF Level
PED4043W	Clinical Management in Paediatric Pulmonology	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8
Total NQF credits		120	

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 between 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:

Dr K Webb (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 their 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:

Code	Course	NQF Credits	NQF Level
PED4042W	Clinical Management in Paediatric Rheumatology.....	90	8
PED4032W	Essay: Transition and Translation of Knowledge	30	8
Total NQF credits.....		120	

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 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 an average of between 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:

Dr D le Roux and Dr L Jacobs (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 degree in medicine or a degree in Physiotherapy, Occupational Therapy, Audiology, Speech-Language Pathology, Dietetics Clinical Medical Practice or Social Work from this University or another university recognised by the Senate for this purpose; or a degree in Nursing (NQF Level 7).
 - (ii) registration as a medical practitioner with the Health Professions Council of South Africa, (i.e. completed internship and community service); or as a physiotherapist, occupational therapist, audiologist, speech-language pathologist, dietitian, or social worker with the relevant Professional Board of the Health Professions Council of South Africa or as a registered nurse with the South African Nursing Council (SANC) as a general and specialist nurse; or in the case of medical practitioners and health and rehabilitation professionals who reside outside South Africa, with the health professions council in their country of residence;
 - (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 and health and rehabilitation professionals who work at secondary or a regional level of care; and
 - (iv) Doctors who are members of the 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:**

The curriculum consists of 7 compulsory “core courses” (90 NQF credits) and 3 elective courses (30 NQF credits) to generate a total of 120 credits.

Code	Course	NQF Credits	NQF Level
Core Courses:			
PED4003S	Leadership and Management	15	8
PED4005S	Child Health Policies and Programmes	15	8
PED4051F	Experiential Learning Part 1	10	8
PED4052S	Experiential Learning Part 2	15	8
PED4008F	Advocacy and Children’s Rights	10	8

46 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Code	Course	NQF Credits	NQF Level
PED4049F	Basic Epidemiology & Research Appraisal.....	15	8
PED4009S	Health Information Systems.....	10	8
Elective Courses (Select Three):			
PED4006F	Optimising care for long term and disabling conditions.....	10	8
PED4010F	Communication, Education and Training	10	8
PED4062F	Adolescent Health Care	10	8
PED4063F	Child Adolescent Mental Health.....	10	8
PED4064F	Child Palliative care (not offered in 2024).....	10	8
PED4065F	Child Protection	10	8
Total NQF credits.....		120	

[Note: It is possible to register certain courses on an occasional basis subject to course convener approval.]

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 and participation in online activities. 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.
- 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 a second time. Students need to obtain a minimum of 50% in individual courses to pass the Diploma.

Distinction

- FPO4.5 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.

COMMUNITY EYE HEALTH

[MG0019CHM03][SAQA ID:66519]

Convener:

Dr D Minnies (Department of Surgery)

This Diploma programme is based on planning, implementing, and managing an eye care programme for an approximate 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:

Code	Course	NQF Credits	NQF Level
CHM4000F	Community Eye Health for eye care.....	20	8
CHM4028Q	Eye Care and Health Systems.....	10	8
CHM4002F	Management of eye care	20	8
CHM4003W	Implementation of Eye Care	70	8
Total NQF credits		120	

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 a greater than 75% average mark for all four courses with not less than 70% for any individual course. All courses must be passed at first attempt.

**COMPUTATIONAL HEALTH INFORMATICS
[MG099PTY31]**

Conveners:

Dr S Dalvie, Dr V Nembaware and Professor R Ramesar (Department of Pathology)

Admission requirements

- FPA1 (a) To be considered for admission to this programme, a candidate shall :
 - (i) Have average of at least 65% in a bachelor’s degree or an appropriate Advanced Diploma (NQF level 7) with at least a major in one of the following disciplines: genetics, statistics, biomedical sciences, bioinformatics, computer science or related disciplines;
 - (ii) Have passed at least one semester course in a molecular science or bioinformatics subject at third year level.
 - (iii) Have proven proficiency in written and spoken English (this may be tested if necessary);

48 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- (iv) Be computer literate and have access to a computer and the internet
- (b) Applicants will be ranked based on the following criteria:
 - (i) Candidates will be ranked based on overall 3rd year marks
 - (ii) If a candidate rejects the offer, the ranking will be used to select the next offer

Additional notes:

- (a) Applicants may be interviewed telephonically if necessary;
- (b) The selection will be conducted by a departmental selection committee;
- (c) For some exceptional cases, the programme executive committee can consider assessing a candidate (without a formal minimum bachelor's degree) on the basis of Recognition of Prior Learning (RPL) to allow them to be considered for admission to the programme.

Under the discretion of the programme executive committee, this will be in the form of oral interview, written/practical test and/or evaluation of the provided documentation as evidence of informal prior learnings with respect to biomedical science, statistics, bioinformatics and computer science.

Structure and duration of programme

FPAG2 This is a full-time programme, comprising lectures, hands-on, tutorials and self-directed learning. The duration of the programme is one year. The postgraduate diploma consists of specialized coursework (120 credits). The programme offers a series of 8 compulsory courses of 15 NQF credits each.

Curriculum outline

FPAG3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
PTY4012F/S	Knowledge-based Interaction Networks	15	8
PTY4013F/S	Data science for Epidemiology Health Informatics	15	8
PTY4014F/S	Omics Medicine	15	8
PTY4015F/S	Omics data Generation Technologies Platforms	15	8
PTY4016F/S	High-Performance Computing	15	8
PTY4017F/S	Omics-based Scientific Programming with Python	15	8
PTY4018F/S	Biomedical Data Analysis with R	15	8
PTY4021F/S	Omics Research and Bio-Industry Methodology	15	8
	Total NQF credits.....	120	

Assessment overall

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

- FPAG4.1** Assessment is based on performance in coursework and examinations. Each course convener will determine the appropriate form of assessment in specific courses within the programme. Such assessment will consist of some combination of home assignments, test/quiz, or a semester project, and final examination.
- FPAG4.2** To pass the academic year, the student must obtain an overall average of at least 50% with sub-minima of the combined coursework and exams.

- FPAG4.3 The final mark for each course is made up as follows: laboratory/computing techniques (15%); coursework mark (assignment pertinent to data mining, laboratory experiments, approaches description, computation tasks, or research on theories/approaches that cover the course learning objectives) (30%); and final course examination (55%), covering a range of theories and practical with respect to goals assigned to the course.
- FPAG4.4 A student who fails with 45% - 49% may be granted a supplementary examination, at the convener's discretion. A student who gets less than 45% will not qualify for supplementary examination. 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).

Progression rules

Except by permission of the Senate, a candidate registered for a PG Dip in Computational Health Informatics may be refused readmission if they:

- FPAG5.1 Fail half or more of the coursework courses for which they are registered in any year of study;
- FPAG5.2 Have not completed the coursework within the first three years of first registration for the diploma.

Distinction

- FPAG6 The diploma may be awarded with distinction if the student obtains above 75%-in overall coursework marks, with no less than 70% for any course. All courses must be passed at first attempt.

COUNSELLING AND PSYCHOTHERAPY (in abeyance)

[MG022PRY04][SAQA ID:87347]

Convener:

F Ashburner (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

- FPQ1.1 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).

50 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- FPQ1.2 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 their strengths and limitations, and how they intend to address these in the programme; and
 - (e) any additional evidence the candidate offers in respect of the application, including their motivation for admission.

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

- FPQ1.3 Admission to the Diploma programme will be finally assessed on an individual basis and by means of a panel interview.

Duration of programme

FPQ2 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

FPQ3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
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	8
	Total NQF credits	120	

Assessment

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

- FPQ4.1 Students are assessed through formal written assessments – and an integrative oral under examination conditions.

- FPQ4.2 *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

- FPQ5 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.

DISABILITY STUDIES**[MG056AHS06][SAQA ID:99693]****Convener:**

Dr I Nwanze (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

- FPR1.1 An applicant may be considered for admission on the basis of:
- (a) having obtained an approved degree from this University or another institution approved by Senate for the purpose; or
 - (b) 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.
- FPR1.2 Where relevant, the applicant may also submit a letter of support from their 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.
- FPR1.3 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

- FPR2.1 The Diploma comprises four taught courses over a period of one year (full-time) or over two years (part-time). 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.
- FPR2.2 All courses must be completed in a minimum of one year and a maximum of two years. Students can therefore complete the Diploma full-time in 1 year or part-time in 2 years.

52 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Credit/exemption and DP requirement

FPR3 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

FPR4 The curriculum outline is as follows:

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

Assessment and progression rules

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

- FPR5
- 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.
 - 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.
 - 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.
 - 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

FPR6 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

FPR7 To be awarded the diploma with distinction, an overall average of 75%, or above, must be obtained with not less than 70% for any course. All courses must be passed at first attempt.

EMERGENCY CARE

[MG042][SAQA ID:103085]

Convener:

Dr C Cunningham (Department of Family, Community and Emergency Care)

Admission requirements

- FPS1 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;
 - (d) pass a basic computer literacy examination provided by the Division upon shortlisting;
 - (e) have at least one year’s experience working in an emergency care clinical health professional setting;
 - (f) be strongly encouraged to have the support of their employer in undertaking this course (although there are no face to face contact sessions, it will require a good deal of dedicated study time, and attendance remotely at some contact sessions and assessments); and
 - (g) 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 emergency care, and any relevant work experience and past attendance at relevant courses.
- Assessments to identify critical thinking skills in writing and reading may be conducted

Duration of programme

- FPS2 The diploma comprises six courses over one year. All courses must be completed in one year (and a maximum of two years should a student need to repeat any courses).

Curriculum outline

FPS3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
FCE4016Q	Introduction to Postgraduate Studies	10	8
FCE4017R	Research Literacy	15	8
FCE4018F	Concepts of Emergency Care	20	8
FCE4019Q	Adult Emergency Care	30	8
FCE4020R	Child Health for Emergency Care	30	8
FCE4021R	Leadership & Patient Safety in Emergency Care	15	8
	Total NQF credits	120	

DP requirement

- FPS4 Satisfactory completion of the first semester modules is a requirement to be allowed to continue into the second semester.

Assessment

- FPS5 Assessment is done (*inter alia*) by means of assignments, skills sessions, and oral and written examinations.

Progression rules

- FPS6 Except by permission of the Senate, a candidate registered for a PG Dip Emergency Care may be refused reregistration if they:
- (a) fail (a mark of <50%) half or more of the coursework courses for which they are registered in any year of study
 - (b) have not completed the coursework within two years of first registration for the diploma;

54 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- (c) fail a course more than once. Where a candidate fails any course twice, or fails three or more courses a recommendation will be made to the Faculty's Examinations Committee to refuse readmission;
- (d) fails to obtain a sub-minimum of 50% for each of the six courses in the diploma in order to pass the diploma

Distinction

FPS7 The Diploma may be awarded with distinction if the student obtains a greater than 75% average mark for all courses with not less than 70% for any individual course. All courses must be passed at the first attempt.

FAMILY MEDICINE

[MG015FCE09][SAQA ID:67417]

Convener:

Associate Professor T Ras (Department of Family, Community and Emergency Care)

[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

- FPT1 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;
 - (d) have submitted the names and contact details of at least two contactable referees, one of whom should be their current or most recent employer;
 - (e) successfully have undergone a formal interview process;
 - (f) be practising in an approved setting for the duration of their 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% if 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

FPT2 A student shall be registered for a minimum of two years of part-time, on-site study.

Curriculum outline

This program addresses the need to train clinicians in active clinical practice at Primary care level. It includes theoretical and practical training and supervision, and requires the development of consultation and procedural skills as well as the ability to apply theoretical aspects of Family Medicine to clinical practice.

FPT3 The curriculum outline is as follows: Year 1

Code	Course	NQF Credits	NQF Level
FCE4004F	Principles of Family Medicine*	16	8
FCE4028F	Family & Community Orientated Primary Care	20	8
FCE4007S	Professional Practice	12	8

Year 2

Code	Course	NQF Credits	NQF Level
FCE4006S	Clinical Medicine A	21	8
FCE4005S	Evidence-based Medicine	13	8
FCE4011S	Clinical Medicine B	18	8
FCE4029H	Prevention and Promotion and Chronic Illness*	21	8
Total NQF credits		120	

**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.]

- FPT4.1 The following assessment rules apply:
- (a) The year mark for each course is made up of marks obtained for assignments and assessments on modules within each course; and
 - (b) All individual courses must be passed with 50% before a student may be admitted to the final, integrated examination.

FPT4.2 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 they failed no more than two components of the examination at first attempt, or after one year if they failed three or more components at first attempt.

Progression and readmission

FPT5 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

FPT6 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]

Convener:

Professor S Cleary (School of Public Health)

56 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Admission requirements

FPU1 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

FPU2 The Diploma is offered over 24 months on a part-time basis. Students may not be registered beyond four years.

Curriculum outline

FPU3 The curriculum outline is as follows: Year 1

Code	Course	NQF Credits	NQF Level
PPH4018F	Introduction to Health Economics.....	12	8
PPH4021S	Key Features of Economic Evaluations	12	8
PPH4022F	Economic Evaluation for Healthcare Decision-Making	12	8
PPH4020S	Priority Setting and Healthcare Decision Making.....	12	8
PPH4067Z	Modelling and Analysis in Economic Evaluation.....	12	8

Year 2

Code	Course	NQF Credits	NQF Level
PPH4019F	The Economics of Health Systems	12	8
PPH4023F	Strategic Purchasing 1.....	12	8
PPH4024S	Strategic Purchasing 2 – Influencing Providers	12	8
PPH4025S	Strengthening Progress to Universal Coverage.....	12	8
PPH4068Z	Analysing Universal Health Coverage	12	8
Total NQF credits.....		120	

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.]

FPU4 A student who fails to meet the following minimum requirements may be refused permission to renew their registration for the Diploma:

- (a) In each year of study, a student must pass a minimum of 2 courses with the exception of the final year of study, in which a student must complete the requirements for the Diploma;
- (b) A student must complete all requirements for the Diploma within four years;
- (c) A student can not fail a course more than twice.

Assessment

FPU5.1 For the ten courses, students are assessed through a combination of tests and individual written assignments and oral presentations.

FPU5.2 Students must pass each course (with 50% on average) in order to pass the diploma.

FPU5.3 No supplementary or deferred assessments are given.

Distinction

FPU6 The Diploma may be awarded with distinction (an average of 75% - 100%, with not less than 70% for any course or contact block).

HEALTH LEADERSHIP [MG009][SAQA ID:16466]

Convener:

Associate Professor M Shung King (School of Public Health)

Admission requirements

- FPV1 (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 mid- and senior level managers within the South African public health care system, with a limited number of places for other candidates.]

Duration of programme

- FPV2 This programme is offered on a part-time basis. It consists of four 5-day in-person blocks in the first twelve months, with online sessions and intermodular work-placed based assessments in between. An additional four months are required in the second year to complete the final project.

Curriculum outline

FPV3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
	Year 1		
PPH4060F	Working in Complex Health Systems	25	8
PPH4057S	Critical Health Management Practices	25	8
PPH4058Z	Leading Health System Improvement	25	8
PPH4062X	Health System Intervention Project (A).....	5	8
	Year 2 (semester 1 only)		
PPH4059Z	Health System Intervention Project (B).....	40	8
	Total NQF credits:	120	

Attendance

- FPV4 All students are required to attend the residential sessions for each course. Should a student fail to attend the sessions, their registration may be cancelled.

Assessment

- FPV5.1 Students are assessed continuously through work-place based assessments and other related assignment tasks. Late submission of the main assignment task for any course is subject to a penalty unless approval has been sought and received from the convener.
FPV5.2 Students who meet certain pass requirements (see assessments under individual courses) will be eligible for one resubmission of an assignment per course, but no more than two resubmissions across all four courses is permitted.

Progression and readmission

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

- FPV6 (a) A student who has failed two courses, following eligible resubmission, 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, as assessed by the convener, of the resubmission has been demonstrated.

Distinction

FPV7 The Diploma may be awarded with distinction (based on an average of 75% - 100%) across all four courses, with no less than 70% for any individual course and no less than 70% for any of the primary written assignments.

HEALTH PROFESSIONAL EDUCATION

[MG026PPH10][SAQA ID:83666]

Convener:

L Pienaar (Department of Health Sciences Education)

Minimum admissions requirements

- FPW1 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 teaching, facilitating, tutoring or clinical supervision experience in an academic or healthcare context;
 - (d) be proficient in English, both written and spoken;
 - (e) have basic computer literacy;
 - (f) have reliable and continuous computer access and internet connection;
 - (g) have submitted, where applicable, a letter of support from their 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; and
 - (h) 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, 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.
 - (i) At least six months' teaching experience in a healthcare context is a strong recommendation.

Structure and duration of Diploma

FPW2 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

FPW3 The curriculum outline is as follows:

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

Progression and readmission rules

- FPW4
- (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) Three compulsory courses and one elective is needed to complete the programme. 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 their registration for the programme if she/he fails the same course twice or fails two courses.

DP requirements

- FPW5 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;and
 - (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.]

- FPW6.1 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%.

60 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

FPW6.2 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

FPW7 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 L du Plessis (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

FPX1.1 An applicant shall not be admitted as a candidate unless they:

- have 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;
- have preferably worked in a health care environment for at least three years; and
- is proficient in written and spoken English and is computer-literate.

[Note: Access to a computer and connectivity is essential. Students must allow sufficient time for self-study.]

FPX1.2 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 their employing institution would benefit.

Duration of Diploma

FPX2

- The Diploma is offered over two years part-time and 1-week contact sessions will be mandatory at the beginning of each academic year.
- Students may not be registered for more than four years.

Note: Access to a computer and connectivity is essential. Students must allow sufficient time for self-study.

Curriculum outline

FPX3 Students are required to complete all eight courses and do the project course (HUB4032W). Courses will be presented in alternating years.

The curriculum outline is as follows:

Year 1 Coursework

Code	Course	NQF Credits	NQF Level
HUB4027W	Healthcare Technology Assessment	13	8
HUB4028W	Healthcare Technology Planning and Acquisition	13	8
HUB4030W	Healthcare Project Management.....	13	8
HUB4066W	Healthcare Technology Innovation & Entrepreneurship	13	8

Year 2 Coursework

Code	Course	NQF Credits	NQF Level
HUB4032W	Project in Healthcare Technology Management.....	16	8
HUB4065W	Medical Devices and instrumentation Overview.....	13	8
HUB4068W	Asset Management of Healthcare Technology and Infrastructure.	13	8
HUB4070W	Hospital Engineering Practice	13	8
HUB4090W	Health Information Systems, Telemedicine and mHealth	13	8
Total NQF credits:		120	

Assessment and progression

FPX4.1 Students may be permitted to repeat any course that they have failed, at the convenor’s discretion. No course may be repeated more than once

FPX4.2 Students are assessed based on class tests, written/oral examinations, and assignments with a pass mark of >50%.

Distinction

FPX5 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][SAQA ID:99601]**

Convener:

Professor RE 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:

62 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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 convener 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 meet the prerequisite physiology requirements.

- FPY1.1 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 passing a computer skills test;
 - having reliable and continuous computer access and internet connection;
 - having submitted, where applicable, a letter of support from their 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; and
 - 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.
- 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

FPY2.1 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.

FPY2.2 All coursework must be completed in a minimum of one year and a maximum of two years.

Credit/exemption and DP requirement

FPY3 Students must participate in 80% of online activities to obtain DP for each course.

Curriculum

FPY4 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
AAE4009F	Succeeding in Postgraduate Studies	15	8
AAE4008F	Principles of Evidence Based Practice.....	15	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
Total NQF credits		130	

Assessment and progression rules

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

- FPY5
- (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

FPY6 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 (in abeyance)

[MG018][SAQA ID:66629]

Convener:

J Shea (Department of Paediatrics and Child Health)

Admission requirements

FPZ1 This programme is designed for health professionals working in the field of maternal and child health. The minimum entry requirements are:

- (a) An approved undergraduate degree or equivalent in the health sciences;
- (b) At least two years’ work experience in maternal and child health services;
- (c) Proficiency in English, both written and spoken; and
- (d) 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

FPZ2 The Diploma is offered over twenty-four months on a part-time basis. Students may not be registered beyond four years.

Curriculum outline

FPZ3 The curriculum outline is as follows: Year 1

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

Year 2

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

Minimum requirements for re-registration

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

FPZ4 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 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; or
- (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

FPZ5 *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.

MIDWIFERY

[MG043AHS01][SAQA ID:104758]

Programme Convener:

S Walker

Curriculum outline

FPAB3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
AHS4170W	Foundations of Specialist Practice	24	8
AHS4171W	Leading Quality & Safety in Midwifery	16	8
AHS4124W	Principles of Midwifery	40	8
AHS4125W	Midwifery Practice	40	8
Total NQF credits		120	

Clinical requirements

FPAB1.1

- (a) Students who have clinical requirements related to their chosen specialization 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) 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

FPAB1.2

Except by permission of Senate, a student may be refused permission to renew their registration for the programme:

- (a) unless, in each year of study, they complete at least half of the total courses for which they are registered;
- (b) if they fail the same course during more than one examination cycle (a cycle being an examination and, if awarded, a re-evaluation); or
- (c) if they fail 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

FPAB1.3

A student must obtain 50% to pass the Foundations of Specialist Practice (FSP) course, with a minimum of 40% achieved in the summative assessment. If the continuous assessment mark for FSP is above 50%, the student must obtain a minimum of 40% in the summative assessment to pass this course.

66 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

FPAB1.4 In order to be considered for a supplementary examination, a student must achieve at least 45% in the final summative assessment of the course. If a student fails a supplementary examination, they 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%. The dates for supplementary and deferred examinations will be set after the Divisional Examination Board, and usually occur between 15 – 20 January of the following year.

Distinction

FPAB1.5 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).

FPAB1.6 (a) A four-year bachelor's degree in Nursing (includes Midwifery) or have a qualification recognised by Senate as equivalent to the above;
(b) Proof of registration with the SANC as a professional nurse and midwife;
(c) Evidence of professional indemnity/insurance;
(d) Proficiency in written and spoken English; and
(e) Basic computer literacy.

FPAB1.7 Applicants must be registered with the South African Nursing Council (SANC) as a nurse and midwife. International applicants - registration with the South African Nursing Council (SANC) is required for applicants from outside South Africa.

FPAB1.8 Applicants must have two years' post-registration experience as a Professional Nurse which includes at least two years of experience in the field of the Midwifery within the last five years and this excludes the Community Service year.

FPAB1.9 Applicants who are registered as a General Nurse (R683 Legacy Qualification) OR a Staff Nurse (new qualification R171); AND Midwife (R254 Legacy Qualification OR Advanced Diploma in Midwifery new qualification R1497) OR registered as a General Nurse, Midwife, Community Health Nurse and Psychiatric Nurse (R425 Legacy Diploma Qualification) 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 a completed clinical problem-solving exercise as evidence of critical thinking skills in writing and reading.

FPAB1.10 An applicant is also required to submit a letter of support from their 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. This does not apply to self-funded applicants.

Duration of programme

FPAB1.11 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.

NEONATOLOGY

[MG030PED30][SAQA ID:97664]

Conveners:

Associate Professor MC Harrison and Dr NR Rhoda (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

- FPAA1.1 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.
- FPAA1.2 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.
- FPAA1.3 Candidates must have two years' neonatal experience and must have been involved in neonatal care for the past five years.
- FPAA1.4 Applicants may be asked to attend an interview or to take part in a telephonic or Skype interview.

Duration of programme

FPAA2 The Diploma will be completed over one year of full-time study.

Curriculum outline

FPAA3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED4033W	Clinical Management in Neonatology	90	8
PED4032W	Essay: Transition and Translation of Knowledge.....	30	8

68 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Code	Course	NQF Credits	NQF Level
	<i>Total NQF credits:</i>		120

NURSING

Convener:

Dr N Fouché (Department of Health and Rehabilitation Sciences)

To be eligible for admission the applicant must have:

- FPAB1 (a) A four-year bachelor’s degree in nursing (includes midwifery) or have a qualification recognised by Senate as equivalent to the above;
 b) Proof of registration with the SANC as a professional nurse and midwife;
 c) Evidence of professional indemnity/insurance;
 d) Proficiency in written and spoken English; and
 e) Basic computer literacy.

- FPAB2.1 Applicants must be registered with the South African Nursing Council (SANC) as a nurse and midwife. **International applicants** - registration with the South African Nursing Council (SANC) is required for applicants from outside South Africa.

- FPAB2.2 Applicants must have two years’ post-registration experience as a Professional Nurse which includes at least two years of experience in the field of the speciality within the last five years and this excludes the Community Service year.

- FPAB2.3 Applicants who are registered as a General Nurse (R683 Legacy Qualification) OR a Staff Nurse (new qualification R171); AND Midwife (R254 Legacy Qualification OR Advanced Diploma in Midwifery new qualification R1497) OR registered as a General Nurse, Midwife, Community Health Nurse and Psychiatric Nurse (R425 Legacy Diploma Qualification) 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 a completed clinical problem-solving exercise as evidence of critical thinking skills in writing and reading.

- FPAB2.4 An applicant is also required to submit a letter of support from their 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. This does not apply to self-funded applicants.

- FPAB2.5 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.

Child Nursing

[MG045AHS03][SAQA ID:104727]

Convener:

L Rees

FPAB3 Child Nursing

Code	Course	NQF Credits	NQF Level
AHS4170W	Foundations of Specialist Practice.....	24	8
AHS4172W	Leading Quality & Safety in Children's Nursing.....	16	8
AHS4128W	Children's Nursing Practice	40	8
AHS4157W	Principles of Children's Nursing.....	40	8
<i>Total NQF credits</i>		120	

Critical Care Nursing (Child)

[MG046AHS04][SAQA ID:104759]

Convener:

TBA

FPAB4 Critical Care Nursing (Child)

Code	Course	NQF Credits	NQF Level
AHS4170W	Foundations of Specialist Practice.....	24	8
AHS4173W	Leading Quality & Safety in Children's Critical Care Nursing	16	8
AHS4130W	Principles of Children's Critical Care Nursing	40	8
AHS4131W	Children's Critical Care Nursing Practice.....	40	8
<i>Total NQF credits</i>		120	

Critical Care Nursing (Adult)

[MG047AHS05]

Convener:

Dr N Fouché

FPAB5 Critical Care Nursing (Adult)

Code	Course	NQF Credits	NQF Level
AHS4170W	Foundations of Specialist Practice.....	24	8
AHS4178W	Leading Quality & Safety in Adult Critical Care Nursing	16	8
AHS4179W	Principles of Adult Critical Care Nursing.....	40	8
AHS4180W	Adult Critical Care Nursing Practice.....	40	8
<i>Total NQF credits</i>		120	

Nephrology Nursing

[MG049AHS11][SAQA ID:104748]

Convener:

Y van der Nest

FPAB6 Nephrology Nursing

Code	Course	NQF Credits	NQF Level
AHS4170W	Foundations of Specialist Practice.....	24	8
AHS4174W	Leading Quality & Safety in Nephrology Nursing.....	16	8
AHS4144W	Principles of Nephrology Nursing	40	8
AHS4145W	Nephrology Nursing Practice	40	8
<i>Total NQF credits</i>		120	

Ophthalmic Nursing (awaiting SANC accreditation)

[MG051AHS17][SAQA ID:104752]

Convener:
TBA

FPAB7 Ophthalmic Nursing

Code	Course	NQF Credits	NQF Level
AHS4170W	Foundations of Specialist Practice	24	8
AHS4176W	Leading Quality & Safety in Ophthalmic Nursing	16	8
AHS4177W	Ophthalmic Nursing Practice	40	8
AHS4175W	Principles of Ophthalmic Nursing.....	40	8
Total NQF credits.....		120	

- FPAB7.1 (a) Students who have clinical requirements related to their chosen specialization 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) To complete the Diploma, international students are required to meet all the clinical requirements. Such students will not be able to register with the South African Nursing Council on completion of the programme.
- FPAB7.2 Except by permission of Senate, a student may be refused permission to renew their registration for the programme:
- (a) unless, in each year of study, they complete at least half of the total courses for which they are registered;
- (b) if they fail the same course during more than one examination cycle (a cycle being an examination and, if awarded, a re-evaluation); or
- (c) if they fail to complete all course requirements of the programme within three years of study.

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

- FPAB8 A student must obtain 50% to pass the Foundations of Specialist Practice (FSP) course, with a minimum of 40% achieved in the summative assessment. If the continuous assessment mark for FSP is above 50%, the student must obtain a minimum of 40% in the summative assessment in order to pass this course.
- FPAB8.1 (a) In order to be considered for a supplementary examination, a student must achieve at least 45% in the final summative assessment of the particular course
- (b) (d)If a student fails a supplementary examination, they 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%;
- (c) (e)The dates for supplementary and deferred examinations will be set after the Divisional Examination Board, and usually occur between 15 – 20 January of the following year.
- FPAB9 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]

Convener:

Dr IMT Ntatamala (School of Public Health)

[Note: There is a new intake into this Post graduate Diploma annually.]

Admission requirements

FPAC1 A degree in medicine (MBChB, MBBS or equivalent qualification) of this University or another university recognised by Senate for the purpose.

Duration and attendance of the Diploma

FPAC2.1 Every student must be registered for the programme for at least two years (part-time). Retrospective registration is not allowed.

FPAC2.2 All students are required to attend the programme’s four one-week blocks (a blended learning approach is followed with blocks being residential or online). Should a student fail to attend the contact blocks, they will not be considered to have met the DP requirements.

Curriculum

FPAC3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
PPH4072F	Occupational Health Risk Assessment and Management.....	20	8
PPH4071S	Occupational Medicine and Work Ability.....	20	8
PPH4070F	Occupational Health Services Management, Ethics & Legislation	20	8
PPH4069W	Practicing Integrated Occupational Health in Context	60	8
	Total NQF credits	120	

DP requirement

FPAC4 Satisfactory attendance of the course contact block week (at least 80% attendance); and at least a 50% grade point average for the in-course assessments (portfolio assignments and quizzes).

Assessment

FPAC5.1 Students are assessed continuously through both in-course and summative assessments for each course. The mark-breakdown for the courses on occupational health risk assessment and management; occupational medicine and work ability; and occupational health services management, ethics and legislation is as follows: 60% in-course assessment (50% for the portfolio assignments and 10% for the quizzes); and 40% final examination (summative assessment). For the final course on practicing integrated occupational health in context, the mark-breakdown is as follows: 33.3% for the in-course assessment and 66.7% for the final examination (summative assessment).

FPAC5.2 The in-course assessment consists of a combination of a work-based practical portfolio assignment and quizzes for each course. Late submission of the portfolio assignment task for any course is subject to a penalty unless approval has been sought and received from the convener.

FPAC5.3 A student failing to obtain 50% will have an opportunity to repeat the portfolio assignment or course only once. The examination cannot be repeated and there is no supplementary examination.

72 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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

Progression and readmission rules

- FPAC6.1 The first three courses (occupational health risk assessment and management; occupational medicine and work ability; and occupational health services management, ethics and legislation) must be passed before a student is eligible to register for the fourth course and sit for the examination (practising integrated occupational health in context).
- FPAC6.2 A student is allowed to repeat a course if they have failed only once. Where a student fails any course twice, or any two consecutive courses at first attempt, a recommendation will be made to the FEC to refuse readmission (If a failed course is repeated and passed on first attempt, it is still counted as one fail).

Distinction

- FPAC7 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.

PAEDIATRIC RADIOLOGY*

[MG020][SAQA ID:118432]

Convener:

Dr T Kilborn (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.*

Admission requirements

- FPAD1
- A degree in medicine of this University or another university recognised by Senate for the purpose;
 - Successful completion of four years of specialist training in an accredited general radiology training programme;
 - Registration with the Health Professions Council of South Africa as a diagnostic radiologist;
 - Demonstrated proficiency in written and spoken English; and
 - Basic computer literacy.

Duration of programme

- FPAD2 Every student must be registered for the programme for one year of full-time study. Retrospective registration is not allowed.

Curriculum

FPAD4 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
RAY4006W	Postgraduate Diploma in Paediatric Radiology	200	8
	Total NQF credits	200	

DP requirement and assessment

- FPAD4 Continuous coursework assessment includes:

- (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); and
 - (c) Written clinical case reports (12% of total year mark)
- Final summative assessment includes:
- (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%, they may be granted an opportunity to repeat the module test; and
 - (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%, they may be granted one opportunity to repeat the examination once.

Distinction

FPAD5 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/CARE
[MG011FCE1 SAQA ID:24401]**

Conveners:

Dr R Krause (Department of Family, Community and Emergency Care)

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

FPAE1 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

FPAE2.1 Every student must be registered for the Diploma programme for at least one year part-time. Retrospective registration is not allowed.

FPAE2.2 There are two compulsory contact sessions of five days per semester.

Curriculum outline

FPAE3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
FCE4032F	Principles of Palliative Care; plus.....	60	8
FCE4030S	Clinical Palliative Care	60	8
	Total NQF credits:	120	

PALLIATIVE MEDICINE/CARE [MG011PED25][SAQA ID:24401]

Convener:

Dr MA Meiring (Department of Paediatrics and Child Health)

(PGDip in Palliative Medicine – Specialising in Paediatric Palliative Care)

Code	Course	NQF Credits	NQF Level
PED4046F	Principles of Paediatric Palliative Medicine; plus	60	8
PED4045S	Paediatric Palliative Care	60	8
Total NQF credits:		120	

Assessment and progression

FPAE4.1 Students are required to successfully complete written assignments on coursework, a portfolio project, a written examination or final assignment and a communication skills assessment.

FPAE4.2 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.

FPAE4.3 Except with permission of Senate, a student may not repeat more than one course, and may repeat a single course only once.

Distinction

FPAE5 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 (in abeyance) [MG021PPH05][SAQA ID:116437]

Convener:

Dr M Jaganath (School of Public Health)

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

- FPAF1 (a) To be considered for admission to this programme, a candidate MUST have:
- (i) 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;

- (ii) Experience in a relevant pest/pesticide or chemicals management field; applicants must submit a letter of motivation highlighting these skills and current employment;
- (iii) Demonstrated proficiency in written and spoken English (TOEFL required where appropriate);
- (iv) Reliable and continuous computer connectivity
- (v) Proven ability to write technical reports and assessments;
- (vi) Demonstrated numeracy skills.

Structure and duration of programme

FPAF2 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. Attendance at a two-week teaching block at the beginning of the programme is mandatory. Students will be required to be in weekly electronic contact. They may not be registered beyond three years

Curriculum outline

FPAF3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
Year 1			
PPH4033F	Pesticide Risk Management.....	20	8
PPH4041S	International Chemical Management Agreements.....	20	8
PPH4034S	Pesticide Toxicology	20	8
Year 2			
PPH4035F	Pesticide Ecotoxicology.....	20	8
PPH4040S	Containers and Contaminated Site Management.....	20	8
PPH4042S	Pesticide and Integrated Vector Management	20	8
Total NQF credits		120	

Overall Assessment:

- FPAF4 (a) The course marks will be comprised of:
- 60% - forum assignments, discussion forum participation, online quizzes, and assignments
 - 40% - final assignment consisting of a policy brief, policy analysis report or critical review;
- (a) Online assessments are managed through UCT’s online learning system. Each assignment and exercise have a deadline and submission date and time (penalties apply).
- (b) Online quizzes are timed once opened and students are given a week to open the quiz to fit into their work schedule and time zone.
- (c) (d) Students who obtain 45% – 49% for their course mark may be reassessed before the final mark is submitted for approval to the Faculty Examinations Committee.

Minimum requirements for progression and re-registration

FPAF5 A student who fails to meet the following minimum requirements may be refused permission to renew their registration for the Diploma (students are required to pass a course with a minimum of 50% and may not be eligible to proceed to the next course at the discretion of the course convenors):

76 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- (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; and
- (c) The student must be able to complete all requirements for the Diploma within three years;

Distinction

FPAF6 The Diploma will be awarded with distinction to candidates who average 75% or above for all courses, with not less than 70% for any course, subject to all courses being passed in first attempt.

PUBLIC MENTAL HEALTH

[MG023PRY05]

Convener:

S Allie and Associate Professor C van der Westhuizen

The PGDip in Public Mental Health is an Africa-focused coursework-based diploma that aims to guide students in developing a good understanding of the discipline of public mental health, as well as the skills required to: (i) undertake research, (ii) participate in improving services and access to mental health interventions, and (iii) advocate for increased attention to public mental health in Africa. Further, completion of the PGDip will introduce students to the public mental health community and prepare graduates for further Master's level studies. The programme is designed to be accessible to practitioners who work full-time, and who are from a range of backgrounds including social work, psychology, psychiatry, medicine, occupational therapy, nursing, health economics, public mental health, public health, health service management, policy making and non-governmental organisations (NGOs). The training aims to build the professional capacity and leadership of the participants in their work, while contributing to public mental health expertise in Africa.

Admission requirements

FPAF1 To be eligible for consideration for admission, a candidate shall:

- (a) Candidates for this programme should be in possession of a bachelor's degree, or an equivalent three-year qualification, in a health- or development-related field (e.g. occupational therapy, medicine, nursing, social work, psychology, public health, anthropology and sociology).
- (b) show evidence of adequate English language and writing proficiency for postgraduate academic studies; and
- (c) have an acceptable level of computer literacy basic Microsoft Office (or equivalent) packages, have access to a computer/laptop and reliable internet.

In addition, preferably, candidates should:

- have at least 1 year experience of working in a mental health, health or development related field;
- have the capacity for a management or leadership role;
- be currently working in an approved workplace setting, such as a Ministry of Health, NGO or mental health service.

[*Note:*

A programme of this nature requires dedicated time and the ability to work independently. You will require a minimum of 15 hours per week on average to complete the PGDip. Please consider this carefully before applying. The PGDip in Public Mental Health does not lead to a professional qualification that can be registered with the Health Professions Council of South Africa or any other health professions council. It is strictly an academic course with no clinical components.]

Structure and duration of the Diploma

FPAF2 The Diploma is completed over one year and consists of four courses. Students need to complete a 2-week residential training block in Cape Town during January/February in the academic year. All students are required to be available for full weekdays during the 2-week training session. Following the training block, students will commence online learning with ongoing support and mentorship via online platforms. They need to have the necessary resources (laptop, PC, internet) to access learning material, and complete activities. Coursework is completed online (synchronous and asynchronous), and additional time should be set aside for self-study and completion of assignments.

The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PRY4003W	Mental Health Epidemiology.....	30	8
PRY4004W	Research Methodology for Public Health.....	30	8
PRY4005W	Introduction to Public Mental Health	30	8
PRY4006W	Mental Health Interventions	30	8
	Total NQF credits:.....	120	

Assessment, Progression and Readmission

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

FPAF4.1 For each course a Duly Performed certificate (DP) is awarded when students have attended a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account, at the discretion of the course convenor.

FPAF4.2 Students are assessed by means of attendance, participation, engagement and assignments. For each course, in addition to assignments, students need to complete at least 50% of the activities.

The quality of online, asynchronous engagement will be assessed on the following criteria: participation in an activity, engagement with the activity content, and engagement with peers.

FPAF4.3 For each course, all graded assignments should be completed with a sub-minimum of 50%, and students must meet the participation and engagement requirements.

FPAF4.4 Students may be permitted to repeat a course they have failed, at the convener’s discretion. No course may be repeated more than once.

FPAF4.5 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.

FPAF5 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.

TB-HIV MANAGEMENT

[MG041 and MG058][SAQA ID:102150]

Convener:

M May (Department of Medicine)

This PG Diploma seeks to bridge identified training gaps by targeting primary care and community-level clinicians, as well as other professional healthcare workers. It provides them with the knowledge and capacity to manage HIV and TB co-infected patients, as well as implement infection control measures in a primary health care (PHC) setting. By targeting rural and hard-to-reach districts and sub-districts, as well as working with PHC facilities across the African continent, this qualification supports the decentralisation of services and helps increase geographic coverage and access to comprehensive prevention, care and treatment services for HIV and TB. The programme is delivered via an online learning platform. Students will progress through interactive audio-visual course content via their personal device of choice. Students engage with classmates and their lecturer in a live (synchronous) environment via webinars and discussion forums. They also receive a clinical lecture towards the end of each course. All other course requirements are completed asynchronously, i.e., they are self-paced and completed in the student's own time. A practical course assignment is submitted online for each of the courses. End-of-year integrated assessments (exams) are also written online.

Admission requirements

FPAG1 To be eligible for consideration for admission, a candidate must:

- (a) Have an approved bachelor's degree in health sciences (e.g., MBChB, Bachelor of Nursing, BPharm, BCMP 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);
- (d) Have an acceptable level of computer literacy, access to a computer and the internet; and
- (e) Be based in a Primary Healthcare Setting (PHC) and have access to patient files (or deidentified data) for fulfilment of the practical course assignments.

Structure and duration of Diploma

FPAG2 The Diploma is completed over one year and is comprised of four courses – one completed per term. Coursework is completed online, and additional time should be set aside for self-study, practical work, and the completion of assignments. Written examinations are scheduled upon completion of all four courses.

Curriculum outline

FPAG3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN4030Q	Clinical management of HIV in a Primary Healthcare Setting.....	24	8
MDN4031Q	Clinical management of TB in a Primary Healthcare Setting.....	24	8
MDN4032R	TB-HIV co-infection and infection prevention and control.....	37	8
MDN4033R	Operational Research.....	35	8
MDN4035F	Integrated assessment I.....	0	8
MDN4036S	Integrated assessment II.....	0	8
	Total NQF credits	120	

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 are required to participate online in specified e-learning activities. The completion of a reflection-based activity upon completion of each module of coursework (per course) is a mandatory requirement.

- FPAG4.2 The Diploma has three components: TB-HIV Management (core component), Infection Control, and Operational Research. Students must obtain a pass mark for each of the courses in each component to qualify to write the integrated assessment concerned. Students who obtain a grade of <50% in one or more of the integrated assessments will be granted an opportunity to write a supplementary examination during the next examination block period. Students who fail the supplementary examination, will not be permitted an opportunity to rewrite

- 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 of the same course twice or fails the TB-HIV Management component of the programme, a recommendation will be made to the Faculty Examinations Committee to refuse readmission or to allow continuation with the remainder of the programme.

Distinction

This is determined by the Faculty Examination Committee (FEC): - >75% for all courses completed, including integrated assessments, usually qualifies as a distinction.

HONOURS DEGREES

BACHELOR OF MEDICAL SCIENCE HONOURS (BMedScHons) [SAQA ID: 116276]

[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).]

Minimum generic requirements to be considered for admission

- FHA1 An applicant shall not be admitted as a candidate for the degree programme unless they:
- (a) are a graduate; or
 - (b) have 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) have 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 they have the necessary background and ability to undertake the honours study in the subject he/she has selected.

Intercalated honours for MBChB students

- FHA2.1 MBChB students who wish to pursue the intercalated BMedScHons track alongside their MBChB studies, shall be required:

- a) to have successfully passed second year MBChB, and to have obtained an average of at least 70% in the courses listed below, with no less than 60% for any single course:
 - CEM1011F, Chemistry for Medical students,
 - PHY1025F, Physics for Medical students,
 - HUB1006F and IBS1007S, Introduction to Integrated Health Sciences Parts I&II,
 - HUB2017H, PTY2000S Integrated Health Systems I Parts A&B, AND
 - to have undergone a successful interview with a selection committee;
- b) to have successfully passed third year MBChB and to have obtained an average of at least 70% in the courses listed below, with no less than 60% for:
 - MDN2001S, Special Study Module,
 - IBS30320W, Molecular Medicine,
 - PTY3009F, Integrated Health Systems Part II, AND
 - apply and be accepted to the BMedScHons programme; OR
- c) if they have transferred into the MBChB degree programme:
 - to have a Bachelor of Science degree passed with an average of 70%
 - to have passed the equivalent first, second and third year MBChB courses as listed above with an average of at least 70% with no less than 60% in any course, AND
 - have undergone a successful interview with a selection committee
 - apply and be accepted to the BMedScHons programme.

[*NOTE: Students who entered first year of the MBChB programme in the 2018 cohort and were transferred into the ex-Intervention Programme, must refer to the equivalent FBA rule for Intercalated BMedScHonours, Master's and PhD studies for MBChB students in the 2022 Faculty Handbook.]

- 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 MDN3003W 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.

A student in the clinical years of the MBChB degree programme (years 4-6) may be admitted concurrently to either a research master's degree if they hold a BMedScHons with first class pass or to any other master's degree programme on recommendation of the Faculty and with approval of Senate Executive Committee**. The Faculty may require the student to spread the load of the clinical years of the MBChB while registered for the research degree studies to enable progress on the master's degree. (b) A student thus enrolled for a research master's may be eligible, on application and with special approval of the Senate, to change their candidature to a PhD depending on the quality and development of their master's dissertation. The student will then be formally registered with a topic and supervisor, approved by the Doctoral Degrees Board. (c) The student will graduate with the MBChB degree when the requirements for the master's degree have been met and will continue thereafter on the PhD for as many years as is required. [***Note: Refer to the Standard Operating Procedure for a Concurrent registration given in the section Important Information at the front of this handbook.*]

*[*Note: The rules for intercalated and concurrent registration must be read in conjunction with the rules contained in Handbook 3, General Rules and Policies, and with special reference to rule G5.4. Students who plan to apply for concurrent registration must, in the first instance, refer to the Standard Operating Procedure for a concurrent registration given in the section Important Information at the front of this handbook and then provide the relevant information to the Managers of both the undergraduate and postgraduate academic administration.]*

- FHA2.4 The student is permitted to return to the respective remaining year of the MBChB programme after: (a) completing the BMedScHons within one year; and (b) successfully passing MDN3003W, Introduction to Clinical Practice II.

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.

82 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Discipline	Qualification code	Plan code	Department	SAQA registration number
Applied Anatomy	MH002	HUB16	Human Biology	3529
Bioinformatics	MH002	IBS03	Integrative Biomedical Sciences	
Biokinetics	MH004	HUB09	Human Biology	96647
Biological Anthropology	MH002	HUB03	Human Biology	
Biomedical Forensic Science	MH002	PTY25	Pathology	
Clinical Pharmacology	MH002	MDN15	Medicine	
Exercise Science	MH003	HUB08	Human Biology	96646
Forensic Entomology	MH002	PTY30	Human Biology	
Forensic Genetics	MH002	PTY02	Pathology	
Forensic Toxicology	MH002	PTY27	Pathology	
Human Genetics	MH002	PTY12	Pathology	3573
Infectious Diseases and Immunology	MH002	PTY29	Pathology	21526
Medical Biochemistry	MH002	IBS04	Integrative Biomedical Sciences	21525
Medical Cell Biology	MH002	HUB07	Human Biology	3621
Medical Physics	MH002	RAY02	Radiation Medicine	21572
Neuroscience & Physiology	MH002	HUB33	Human Biology	21530
Radiobiology	MH002	RAY05	Radiation Medicine	21533
Structural Biology	MH002	IBS05	Integrative Biomedical Sciences	

Duration of programme

- FHA4
- (a) A student shall during one academic year of full-time study attend, and by examination, complete an honours programme in the discipline selected.
 - (b) 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.
- FHA5.1 Students are required to complete and submit by the stipulated deadline, assessed course components consisting of defined written assignments, written examinations, communications skills assessments.
- FHA5.2 Students are required to complete and submit by the stipulated deadline their research project write up.
- FHA5.3 A combined average mark of 50% or above from assessed course components (i.e. techniques, lecture modules, science communication, comprehension exam) is required to be awarded an Hons degree and a mark of 50% or above for the research component is required to be awarded an Hons degree.
- FHA5.4 All course components and the research project must be completed to pass the programme. If a student fails to complete a course component or the research project, they will not be eligible to complete the programme.
- FHA5.5 If defined assessed components of the coursework are failed or not completed, the student will be required to repeat or complete this assessed coursework component during the course of the current academic year or the following academic year. The time of the repeat submission will be stipulated by the course convenor and approved by the programme convenor.
- FHA5.6 Permission from Senate will be required for students to repeat more than one coursework component. A student may repeat a single coursework component only once.

Award of degree

- FHA6 The degree may be awarded in the First Class to candidates who average 75% or above on coursework plus research, with a subminimum of 70% for each component; and who have passed each component at the first attempt.

[In all cases, see note on page 4 regarding HEQSF levels and NQF credits.]

Applied Anatomy [MH002HUB16]

Convener:

Associate Professor G Gunston (Department of Human Biology)

Admission requirements

- FHB1 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.

84 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Assessment

FHB2 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

FHB3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
HUB4077W	Applied Anatomy Coursework	78	8
HUB4078W	Applied Anatomy Research Project.....	42	8
<i>Total NQF credits</i>		120	

Bioinformatics

[MH002IBS03]

Convener:

Associate Professor D Martin (Department of Integrative Biomedical Sciences)

Admission requirements

FHC1 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

FHC2 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

FHC3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
IBS4006W	Bioinformatics Coursework	78	8
IBS4007W	Bioinformatics Research Project.....	42	8
<i>Total NQF credits</i>		120	

Biokinetics

[MH004HUB09][SAQA ID:96647]

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

- FHD1
- (a) An appropriate undergraduate degree (e.g. BSc/BCom/BA) specialising in Human Movement Science or Sports Science;
 - (b) An undergraduate BSc degree majoring in Human Anatomy and Physiology at the University of Cape Town;
 - (c) 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

FHD2 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
HUB4079W	Biokinetics Coursework.....	90	8
HUB4080W	Biokinetics Research Project	30	8
	Total NQF credits	120	

Biological Anthropology
[MH002HUB03]

Convener:

Associate Professor J Friedling (Department of Human Biology)

Admission requirements

- FHF1 A BSc degree (or equivalent) majoring in relevant biological, chemical, biomedical, or forensic sciences, with completion of mathematics and/or statistics in at least first year; or a MBChB. An aggregate of at least 65% should be obtained. Special entry premised on prior learning and experience may be considered under special circumstances.

Structure and duration

- FHF2 Biomedical Forensic Science Coursework (90 credits, NQF level 8) Biomedical Forensic Science Research Project (30 credits, NQF level 8) Duration: 1 year, as per generic rules.

Curriculum

FHE3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
HUB4081W	Biological Anthropology Coursework.....	78	8
HUB4082W	Biological Anthropology Research Project	42	8
	Total NQF credits	120	

Biomedical Forensic Science [MH002PTY25]

Programme Convener:

Dr L Heathfield (Department of Pathology)

Admission requirements

FHF1 A BSc degree (or equivalent) majoring in relevant biological, chemical, biomedical, or forensic sciences, with completion of mathematics and/or statistics in at least first year; or a MBChB. An aggregate of at least 65% should be obtained. Special entry premised on prior learning and experience may be considered under special circumstances.

Structure and duration

FHF2 Biomedical Forensic Science Coursework (90 credits, NQF level 8) Biomedical Forensic Science Research Project (30 credits, NQF level 8) Duration: 1 year, as per generic rules.

Curriculum

FHF3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY4027W	Biomedical Forensic Science Coursework.....	78	8
PTY4026W	Biomedical Forensic Science Research Project	42	8
Total NQF credits.....		120	

Assessment overall

FHF4 Each module of the course has its own formative and summative assessments which include practical, written, and oral assignments. Submission of any assignment 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.

Distinction

FHF5 The degree may be awarded in the First Class to candidates who average 75% or above on coursework plus research, with a subminimum of 70% for each component; and who have passed each component at the first attempt.

Clinical Pharmacology [MH002MDN15]

Convener:

J Norman (Department of Medicine)

Admission requirements

FHG1 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

FHG2 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

FHG3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
MDN4040W	Clinical Pharmacology Coursework	90	8
MDN4041W	Clinical Pharmacology Research Project.....	30	8
	<i>Total NQF credits</i>	120	

Exercise Science

[MH003HUB08][SAQA ID:21531]

Convener:

Dr S Hendricks (Department of Human Biology)

Admission requirements

- FHH1
- (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

FHH2 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
HUB4085W	Exercise Science Coursework.....	90	8
HUB4086W	Exercise Science Research Project	30	8
	<i>Total NQF credits</i>	120	

Forensic Entomology

[MH002PTY30]

Programme Convener:

Dr L Heathfield (Department of Pathology)

Admission requirements

- FHI1 A BSc degree (or equivalent) majoring in entomology, zoology, molecular biology, or equivalent biological sciences, with completion of mathematics and/or statistics in at least first year; or a MBChB. Courses in biomedical sciences and/or forensic sciences are preferable. An aggregate of at least 65% should be obtained. Special entry premised on prior learning and experience may be considered under special circumstances.

Structure and duration

- FHI2 Forensic Entomology Coursework (90 credits, NQF level 8) Forensic Entomology Research Project (30 credits, NQF level 8) Duration: 1 year, as per generic rules.

Curriculum**FHI3 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
PTY4023W	Forensic Entomology Coursework.....	78	8
PTY4022W	Forensic Entomology Research Project.....	42	8
Total NQF credits.....		120	

Assessment overall

FHI4	Each module of the course has its own formative and summative assessments which include practical, written, and oral assignments. Submission of any assignment 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.
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Distinction

FHI5	The degree may be awarded in the First Class to candidates who average 75% or above on coursework plus research, with a subminimum of 70% for each component; and who have passed each component at the first attempt.
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Forensic Genetics

[MH002PTY02]

Convener:

Associate Professor ER Chimusa (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

FHJ1	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. <i>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.</i>
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Assessment

FHJ2	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.
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Curriculum**FHJ3 The curriculum is as follows:**

Code	Course	NQF Credits	NQF Level
PTY4007W	Forensic Genetics Coursework	78	8
PTY4009W	Forensic Genetics Research Project.....	42	8
Total NQF credits.....		120	

Forensic Toxicology [MH002PTY27]

Programme Convener:

B Davies (Department of Pathology)

Admission requirements

FHK1 A BSc degree (or equivalent) majoring in chemistry or biochemistry or equivalent chemical sciences, with completion of mathematics and/or statistics in at least first year; or a MBChB. Courses in physiology, biomedical sciences and/or forensic sciences are preferable. An aggregate of at least 65% should be obtained. Special entry premised on prior learning and experience may be considered under special circumstances.

Structure and duration

FHK2 Forensic Toxicology Coursework (90 credits, NQF level 8) Forensic Toxicology Research Project (30 credits, NQF level 8) Duration: 1 year, as per generic rules.

Curriculum

FHK3 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY4025W	Forensic Toxicology Coursework.....	78	8
PTY4024W	Forensic Toxicology Research Project	42	8
	Total NQF credits	120	

Assessment overall

FHK4 Each module of the course has its own formative and summative assessments which include practical, written, and oral assignments. Submission of any assignment 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.

Distinction

FHK5 The degree may be awarded in the First Class to candidates who average 75% or above on coursework plus research, with a subminimum of 70% for each component; and who have passed each component at the first attempt.

Human Genetics [MH002PTY12]

Convener:

Associate Professor ER Chimusa (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

FHL1 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. Applications may include motivation letters.

90 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Assessment

FHL2 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

FHL3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
PTY4003W	Human Genetics Coursework	78	8
PTY4004W	Human Genetics Research Project.....	42	8
	Total NQF credits.....	120	

Infectious Diseases and Immunology

[MH002PTY29]

Convener:

Associate Professor JA Passmore (Department of Pathology)

Admission requirements

FHM1 A BSc or equivalent degree majoring in a biological science, completion of molecular medicine course in 3rd year of MBChB or an MBChB degree.

Assessment

FHM2 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

FHM3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
PTY4005W	Infectious Diseases & Immunology Coursework	78	8
PTY4006W	Infectious Diseases & Immunology Research Project.....	42	8
	Total NQF credits.....	120	

Medical Biochemistry

[MH002IBS04]

Convener:

Dr HH Ndlovu (Department of Integrative Biomedical Sciences)

Admission requirements

FHN1 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

FHN2 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

FHN3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
IBS4008W	Medical Biochemistry Coursework	78	8
IBS4009W	Medical Biochemistry Research Project.....	42	8
Total NQF credits		120	

Medical Cell Biology

[MH002HUB07]

Convener:

Dr D Hockman (Department of Human Biology)

Admission requirements

FHO1 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

FHO2 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

FHO3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
HUB4083W	Medical Cell Biology Coursework	78	8
HUB4084W	Medical Cell Biology Research Project.....	42	8
Total NQF credits		120	

Medical Physics

[MH002RAY02]

Convener:

A Groenewald (Department of Radiation Medicine)

Admission requirements

FHP1 A pass of at least 60% in Advanced Physics A and a pass of at least 60% in second year Mathematics and Applied Mathematics; and in cases where the Head of Division of Medical Physics deems it necessary, favourable referee reports. Where an applicant applies only for the Medical Physics courses as an occasional student (RAY4014W, RAY4015W, RAY4016W, RAY4017W, RAY4018W, RAY4019W), and has obtained the BSc Hons in Physics more than 5 years previously, an investigation in liaison with the UCT Physics Department will first be conducted into the course content of the completed courses in order to facilitate access to the programme. Where relevant, work experience may be assessed in addition to the course outlines. Applicants who meet the minimum requirements will write an admissions test, with a pass rate of at least 60%.

92 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

[Note: Students who obtained both a BSc Physics and/or BSc(Hons) in Physics within 10 years prior to application: A limited number of student places are available, and selection is highly competitive.]

Assessment

FHP2 A minimum of 50% in the final mark is required for each of the courses in the programme.

Curriculum

FHP3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
	<i>Compulsory core courses:</i>		
RAY4014W	Physics of Radiology	9	8
RAY4015W	The Physics of Nuclear Medicine	9	8
RAY4016W	Radiotherapy	9	8
RAY4017W	Radiation Protection and Dosimetry	9	8
RAY4018W	Treatment Planning	9	8
RAY4019W	Radiobiology	9	8
RAY4025W	Modern Physics for Medical Physicists	18	8
RAY4026W	Clinical and Advanced Techniques.....	9	8
HUB4045F	Introduction to Medical Imaging and Image Processing	12	8
RAY4020W	Medical Physics Research Project	30	8
	<i>Total NQF credits</i>	120	

Neuroscience & Physiology

[MH002HUB33]

Convener:

Dr Shireen Mentor (Department of Human Biology)

Admission requirements

FHQ1 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

FHQ2 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

FHQ3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
HUB4087W	Neuroscience & Physiology Coursework	78	8
HUB4088W	Neuroscience & Physiology Research Project.....	42	8
	<i>Total NQF credits</i>	120	

Radiobiology **[MH002RAY05]**

Convener:

Associate Professor AJ Hunter (Department of Radiation Medicine)

Admission requirements

FHR1 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

FHR2 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

FHR3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
RAY4021W	Radiobiology Coursework	78	8
RAY4022W	Radiobiology Research Project.....	42	8
	Total NQF credits	120	

Structural Biology **[MH002IBS05]**

Convener:

J Woodward (Department of Integrative Biomedical Sciences)

Admission requirements

FHS1 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

FHS2 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

FHS3 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
IBS4010W	Structural Biology Coursework	78	8
IBS4011W	Structural Biology Research Project.....	42	8
	Total NQF credits	120	

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 subspeciality training must apply for the MPhil degree for subspeciality training.*
- (b) *Foreign-qualified doctors hold limited registration with the HPCSA, which must be renewed annually.*

Minimum generic admission requirements

- FMA1.1 A person shall not be admitted as a candidate for the MMed degree unless they:
- (a) are a graduate in medicine of this University or a university recognised by Senate for this purpose;
 - (b) have, 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) have been appointed against an HPCSA-approved training number
- FMA1.2 Some disciplines have additional admission requirements, such as completion of the Primary and/or Intermediate Colleges of Medicine examination or additional clinical experience (see outlines of programmes below). Applicants who do not meet the additional admission requirements are considered at the discretion of the head of the discipline concerned.

Specialities offered

FMA2 Training is offered in the following branches of medical practice:

Speciality	Programme Code	Academic Plan Code	Department	SAQA Registration Number
Anaesthesia	MM001	AAE01	Anaesthesia and Perioperative Medicine	Awaited
Cardiothoracic Surgery	MM001	CHM01	Surgery	116320
Clinical Pharmacology	MM001	MDN03	Medicine	116320
Dermatology	MM001	MDN04	Medicine	116320
Diagnostic Radiology	MM001	RAY06	Radiation Medicine	116320
Emergency Medicine	MM001	FCE02	Family, Community and Emergency Care	116320
Family Medicine	MM001	FCE09	Public Health & Family Medicine	116320
Medical Genetics	MM001	MDN28	Medicine	116320
Medicine	MM001	MDN12	Medicine	116320
Neurology	MM001	MDN14	Medicine	116320
Neurosurgery	MM001	CHM04	Surgery	116320
Nuclear Medicine	MM001	RAY03	Radiation Medicine	116320
Obstetrics and Gynaecology	MM001	OBS03	Obstetrics and Gynaecology	116320
Occupational Medicine	MM001	PPH08	Public Health	116320

Ophthalmology	MM001	CHM05	Surgery	116320
Orthopaedic Surgery	MM001	CHM06	Surgery	116320
Otorhinolaryngology	MM001	CHM07	Surgery	116320
Paediatric Surgery	MM001	CHM08	Surgery	116320
Paediatrics	MM001	PED11	Paediatrics and Child Health	116320
Pathology (Anatomical)	MM001	PTY20	Pathology	116320
Pathology (Chemical)	MM001	PTY06	Pathology	116320
Pathology (Clinical)	MM001	PTY22	Pathology	116320
Pathology (Forensic)	MM001	PTY07	Pathology	116320
Pathology (Haematological)	MM001	PTY10	Pathology	116320
Pathology (Microbiological)	MM001	PTY23	Pathology	116320
Pathology (Virological)	MM001	PTY21	Pathology	116320
Plastic and Reconstructive Surgery	MM001	CHM09	Surgery	116320
Psychiatry	MM001	PRY09	Psychiatry and Mental Health	116320
Public Health Medicine	MM001	PPH11	Public Health and Family Medicine	116320
Radiation Oncology	MM001	RAY04	Radiation Medicine	116320
Surgery	MM001	CHM10	Surgery	116320
Urology	MM001	CHM12	Surgery	116320

Registration

- FMA3 A candidate for the degree of a Master of Medicine offered by the University:
- must renew their registration as a student at the start of each academic year,
 - may not register for the degree, or renew their registration for the degree, unless they:
 - simultaneously hold 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
 - simultaneously holds an appointment as a supernumerary registrar with the health authority or associated health authority; and
 - is registered with, and in good standing with the HPCSA for the duration of their enrolment in the MMed;
 - in the case of an international student, has met all the requirements set by the Department of Home Affairs and has completed the pre-registration clearance with the UCT International Academic Programmes Office; and
 - has completed the required minimum period of training for their intended specialty, but who has not yet met the requirements for the degree, may be granted a concession to continue and complete (e.g. readmission).
 - who has completed the required minimum period of training for their intended specialty, but who has not yet met the requirements for the degree, shall be required to renew their registration until they have completed such requirements.
- [Note: *Retrospective registration is not allowed.]*

- FMA3.1 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.

96 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- FMA3.2 Students who are granted leave of absence from their registrar roles (for compassionate or medical grounds or maternity leave) must simultaneously apply for leave of absence from the University. See the General Rules for Postgraduate students for detail on applying for leave of absence.

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 the minor dissertation, 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. In the event of special leave, pregnancy or illness, the training programme may be extended for an individual registrar to ensure that they complete the requisite period of training. A student must be registered for the full duration of their training time, and must retain their appointment as a registrar or supernumerary registrar for the duration of their registration as a student. If, for any reason, the student loses their appointment as a registrar or supernumerary registrar, or their status is suspended, their registration as a student will be terminated.
- 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 degree consists of four components: clinical training, a Minor dissertation and the Part 1 and Part 2 examinations. The examination in Part 1 (or 1a and 1b) and Part 2 (or 2a and 2b), 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. The clinical/ practical training is monitored and reported on Bi-annually and the programme convenors and supervisors report on progress of their students Bi-annually.
- (b) Only candidates who have successfully completed Parts 1, 2 and the Minor dissertation and who have 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.
- (c) 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 on completion of training.
- FMA5.2 The candidate may be granted credit for the examination of Part 1 and/or Part 2 if they have 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 they have 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, under the supervision of a UCT appointed supervisor.
- FMA6.2 Students are required to register for the minor dissertation as from the first year of registration and re-register for it in each subsequent year until they submit the minor dissertation for examination. The minor dissertation may be awarded with either a pass or with distinction (75% - 100%).
- FMA6.3 Candidates who have already obtained a degree by dissertation or thesis will not be permitted to use the same dissertation/thesis in the MMed degree.

Progression and readmission

- FMA7.1 A candidate for the degree of a Master of Medicine may be refused permission to renew their registration if they 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 speciality 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 their registration for the degree, or may have their registration for the degree cancelled, if:
- (a) they have failed to acquire and demonstrate:
 - (i) appropriate clinical skills and knowledge as evidenced by in-course assessment and the contents of their logbook and/or portfolio of learning;
 - (ii) academic achievement in terms of prescribed coursework, where this is relevant; and
 - (iii) adequate progress in preparing their dissertation, as defined in the MOU between student and supervisor.
 - (b) they have otherwise failed to meet minimum readmission requirements as laid down in FMA8 and programme- or qualification- specific rules;

- (c) they 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; and
- (d) they have 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 12-18 months or other specified period of training;
 - (b) to have obtained departmental approval of a research topic for the minor dissertation, and to have signed an MOU with their supervisor setting out the conditions of the candidate's research towards their minor dissertation within 18 months of first registration;
 - (c) to have submitted a department approved protocol to the UCT Human Research Ethics Committee (HREC)- within 24 months of first registration; and
 - (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;
 - (ii) to have submitted completed a logbook and/or portfolio of clinical experience in terms of the prescribed requirements before attempting the Part II examination; and
 - (iii) for some Departments, to have submitted the part 3 (minor dissertation) for examination.

[Notes:

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.

It is expected that a student will have submitted their minor dissertation for examination by the time the registrar training period is completed. Where this is not the case, a concession may be granted to allow the student to continue working on the minor dissertation despite no longer holding a registrar post or HPCSA training number.

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.]

Distinction

- FMA8.3 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 plus minor dissertation, with not less than 70% for any single course or the minor dissertation and must have passed all courses and minor dissertation at first attempt.

- FMA8.4 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.

FMA8.5 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).*

Anaesthesia **[MM001AAE01]**

Convener:

Professor JLC 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:

Code	Course	NQF Credits	NQF Level
AAE7003W	MMed Anaesthesia Part 1.....	60	9
AAE7004W	MMed Anaesthesia Part 2.....	60	9
AAE7002W	Anaesthesia Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
	Total NQF credits	180	

Dissertation

FMA12 The dissertation must be submitted to the University of Cape Town (UCT), or the data must be written up as a paper and submitted for peer review in a journal approved by UCT, within 12 months of passing the Fellowship of the College of Anaesthesiologists final examination. Original data must be stored in the Department of Anaesthesia and Perioperative Medicine and students must be compliant with the UCT Data Management Policy. Should the candidate not submit their completed MMed minor dissertation or paper within the stipulated time, the supervisor has the right to publish a paper emanating from the data, as first author, where after the candidate relinquishes their right to use the data for the purposes of registration as a Specialist Anaesthesiologist.

Cardiothoracic Surgery **[MM001CHM01]**

Convener:

T Pennel (Department of Surgery)

Additional admission requirements

FMA13 Applicants must have completed the primary examination of the College of Surgeons of South Africa. The intermediate examination is a recommendation.

Duration of training

FMA14 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

FMA15 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF 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
DOM7002W	MMed Clinical Training – Year 5	0	9
<i>Total NQF credits</i>		180	

Clinical Pharmacology

[MM001MDN03]

Convener:

Professor M Blockman (Department of Medicine)

Additional admission requirements

FMA16 Applicants for the four-year (fulltime) postgraduate MMed in Clinical Pharmacology must have an MBChB as well as two years’ clinical experience since their internship. All applicants must submit proof of registration as a medical practitioner with the HPCSA, a letter of good standing with the HPCSA, and proof of completion of internship and community service.

FMA17 All short-listed applicants will be interviewed and will require confidential referee reports.

Duration of training

FMA18 The duration of the programme is four years, including research and completion of the dissertation. During the training period, students are expected to maintain a portfolio of learning and experience, and complete a research project and minor dissertation or publication ready article (DHET accredited journal).

Curriculum outline

FMA19 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7034W	MMed Clinical Pharmacology Part 1.....	60	9
MDN7035W	MMed Clinical Pharmacology Part 2.....	60	9
MDN7036W	Clinical Pharmacology Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
<i>Total NQF credits</i>		180	

Dermatology **[MM001MDN04]**

Convener:

Dr R Lehloenyha (Department of Medicine)

Additional admission requirements

FMA20 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

FMA21 Four years, including research, completion of the dissertation, and maintenance of a portfolio of learning and experience.

Curriculum outline

FMA22 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7026W	MMed Dermatology Part 1	60	9
MDN7027W	MMed Dermatology Part 2	60	9
MDN7025W	Dermatology Minor Dissertation	60	9
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

Diagnostic Radiology **[MM001RAY06]**

Convener:

Associate Professor S Moosa (Department of Radiation Medicine)

Duration of training

FMA23 Four years, including research and completion of the dissertation.

Curriculum outline

FMA24 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
RAY7017W	MMed Diagnostic Radiology Part 1	60	9
RAY7020W	MMed Diagnostic Radiology Part 2	60	9
RAY7021W	Diagnostic Radiology Minor Dissertation	60	9
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

Progression and Assessment

Progression rules also outlined in college regulations for entry into Part 1 and Part 2 examinations.

FMA23.1 FC Rad Part 1 is an admission requirement to be considered for a registrar training post in this programme. Registration after the first 24 months of training may be refused in either of the following circumstances:

- (i) candidate has not shown satisfactory progress and performance in Continuous Performance Assessment, and/or

102 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- (ii) the candidate has not identified a research topic for the MMed minor dissertation (RAY7001W) and signed an MOU with their supervisor.

FMA23.2 Registration after the first 36 months of training may be refused if a research protocol has not been submitted and approved by the UCT Human Research Ethics Committee (HREC) and data collection completed and/or the candidate has not shown satisfactory progress and performance in their Continuous Performance Assessment.

FMA23.3 The Part 2 examination must be passed within five years of entering the programme.

FMA23.4 Eligibility to write Fellowship of the College of Radiologists of South Africa (FC Rad (Diag)) Part II final exam: acceptance to write this examination is dependent on a letter of suitability issued by the Head of Division Radiology. Such a letter will only be issued if candidates have successfully completed all of the following:

- At least 36 months registration in a registrar post,
- Satisfactory completion of their logbook
- Shown satisfactory progress and performance in their Continuous Performance Assessment.
- Submitted research minor dissertation for marking.

Emergency Medicine **[MM001FCE02]**

Convener:

Dr W Khan (Department of Family, Community and Emergency Care)

The four-year MMed degree in Emergency Medicine is a structured Master's degree with a research assignment component. The programme is a combined programme offered jointly by the University of Cape Town and Stellenbosch University.

Duration of training

FMA25 Training takes place over a period of four years, full-time.

Special Admission Requirements

FMA25.1 Candidates must have successfully completed the Fellowship of the College of Emergency Medicine (FCEM) Part 1 examination. Advanced Life support courses (ACLS, APLS/PALS and ATLS) are required for an emergency medicine registrar post with the Department of Health and Wellness.

Progression rule

FMA25.2 The following criteria will result in the non- progression of the programme: the divisional post-graduate progress committee has reviewed the candidate's overall performance including work-based assessments and at any stage makes the recommendation to the faculty board that the candidate does not continue. If a manager at a training facility denies the candidate entry to the training platform due to significant patient safety or professionalism concerns at any point of the four-year training program.

Assessment rules

FMA25.3 Entry requirements to the final examination are the successful completion of a research assignment and the Part 1 examination (FCEM (SA) Part 1 of the Colleges of Medicine of South Africa. The final examination may only be written following at least 36 months’ training in an accredited registrar post. The final examination entails the successful completion of the Part 2 examination (FCEM (SA) Part 2) of the Colleges of Medicine of South Africa.

Curriculum outline

FMA26 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
FCE7056W	MMed Emergency Medicine Part 1.....	60	9
FCE7057W	MMed Emergency Medicine Part 2.....	60	9
FCE7058W	Emergency Medicine Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
	Total NQF credits	180	

Supernumerary Registrars

FMA27 Supernumerary registrars are subject to the same rules and regulations as any other registrar in the programme.

DP requirements

FMA28 Satisfactory completion of a logbook and/or portfolio of clinical experience in terms of the prescribed requirements before attempting the Part 2 examination

FMA29 Completion of the Level 1 Emergency Ultrasound certification prior to registration for Part 2 examination.

FMA30 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)

FMA31 Except by permission of the Senate, a candidate registered for a MMed in Emergency Medicine may be refused readmission if they:

- (a) fail to complete the Part 1 examination within 18 months from first registration; and/or
- (b) fail to complete the Part 2 examination within 60 months from first registration;

Family Medicine

[MM001FCE09]

Convener:

Associate Professor T Ras (Department of Family, Community and Emergency Care)

Additional admission requirements

FMA31.1 In addition to the general MMed admission requirements, applicants:

- (a) will be interviewed by a panel consisting of representatives of both Metro District Health Service (MDHS) and UCT Division of Family Medicine;
- (b) may 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; and

- (c) are required to submit contact details for references from their current or most recent employer and two other referees.

FMA31.2 Applicants 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

FMA32.1 The Part 1 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 a multiple-choice question examination (25%), a written short answer question examination (25%), the portfolio of learning (25%) and a clinical examination (25%). Knowledge and skills considered essential to practising in primary care are examined.

FMA32.2 Part 2 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) a student may not fail the Part 1 examination twice;
- (b) a student may not fail two end-of-rotation assessments; or
- (c) A student may not fail one end-of-rotation assessment more than once.

Curriculum outline

FM34.1 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
FCE7072W	MMed Family Medicine Part 1.....	60	9
FCE7073W	MMed Family Medicine Part 2.....	60	9
FCE7074W	Family Medicine Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
	Total NQF credits.....	180	

FMA34.2 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

[MM001MDN28]

Convener:

Associate Professor K Fieggen (Department of Medicine)

Additional admission requirements

FMA35 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

FMA36 Four years, including research and completion of the dissertation.

Curriculum outline

FMA37 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7066W	MMed Medical Genetics Part 1	60	9
MDN7067W	MMed Medical Genetics Part 2	60	9
MDN7068W	Medical Genetics Minor Dissertation	60	9
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

Medicine

[MM001MDN12]

Convener:

Associate Professor PJ Raubenheimer (Department of Medicine)

Duration of training

FMA38 Four years, including research and completion of the dissertation.

Curriculum outline

FMA39 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7005W	MMed Medicine Part 1	60	9
MDN7006W	MMed Medicine Part 2	60	9
MDN7007W	Medicine Minor Dissertation	60	9
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

Neurology

[MM001MDN14]

Convener:

Associate Professor A Bryer (Department of Medicine)

Additional admission requirements

FMA40 Applicants for MMed Neurology must preferably have at least one year’s experience in clinical general medicine (excluding internship and community service). Preference will be given to applicants who have completed Part 1 of the fellowship examinations of the College of Neurologists of South Africa.

Duration of training

FMA41 Four years, including research and completion of the MMed minor dissertation.

Curriculum outline**FMA42 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
MDN7028W	MMed Neurology Part 1	60	9
MDN7029W	MMed Neurology Part 2	60	9
MDN7030W	Neurology Minor Dissertation	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
<i>Total NQF credits</i>		180	

Neurosurgery**[MM001CHM04]****Convener:**

Professor AG Fieggen (Department of Surgery)

Additional admission requirements

FMA43 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

FMA44 Five to six years, including research and completion of the dissertation.

Curriculum outline**FMA45 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF 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
DOM7002W	MMed Clinical Training – Year 5.....	0	9
<i>Total NQF credits</i>		180	

Nuclear Medicine**[MM001RAY03]****Convener:**

S More (Department of Radiation Medicine)

Additional admission requirements

- FMA46.1 (a) MBChB or equivalent.
 (b) One year post community service clinical experience.

Progression and Assessment

FMA46.2 Registration after the first 24 months of training may be refused in either of the following circumstances:

- (a) the candidate has not successfully completed the Fellowship of the College of Radiation Oncologists of South Africa Part I examination; and
- (b) the candidate has not identified a research topic for the MMed minor dissertation (RAY7011W) and signed an MOU with their supervisor.
- (c) registration after the first 36 months of training may be refused if a research protocol has not been submitted and approved by the UCT Human Research Ethics Committee (HREC) and data collection completed.

The Part 2 examination must be passed within six years of passing the Part 1 examination. Application to write the Part 2 examination is dependent on a letter of suitability issued by the Head of the Nuclear Medicine Division. Such a letter will only be issued if all the following conditions are met:

- (i) successful completion of the Part I Fellowship of the College of Nuclear Physicians of South Africa examination;
- (ii) completion of at least 36 months in an approved registrar training post;
- (iii) satisfactory completion of the LogBox Academic logbook and portfolio; Satisfactory completion of at least 6 therapy case reports;
- (iv) satisfactory performance and progress in workplace-based assessments, summative assignments and therapy assessments;
- (v) satisfactory progress and performance in the annual formative assessments; and
- (vi) submission of MMed minor dissertation (RAY7014W) for marking at the time of application.

Duration of training

FMA47 Four years, including research and completion of the dissertation.

Curriculum outline

FMA48 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
RAY7012W	MMed Nuclear Medicine Part 1	60	9
RAY7013W	MMed Nuclear Medicine Part 2	60	9
RAY7014W	Nuclear Medicine Minor Dissertation	60	9
DOM7001W	MMed Clinical Training - Year 4	0	9
	Total NQF credits	180	

Obstetrics and Gynaecology

[MM001OBS03]

Convener:

M Patel and Dr L. Schoeman (Department of Obstetrics and Gynaecology)

Additional admission requirements

FMA49 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

108 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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

- FMA50.1 A minimum of four years for clinical training with a possible additional year for clinical experience, research, and completion of a dissertation. Continued registration for MMed beyond 4 years is permissible only if progress reports indicate overall satisfactory performance with acceptable delays in the completion of either logbook requirements or the research project.
- FMA50.2 A candidate shall be required to successfully complete the MMed Part 1A and B examinations or the approved equivalent within the first 24 months of training.
- FMA50.3 Registration **after the first 12 months of training** - The candidate:
- may be denied readmission if the candidate has not attempted the Fellowship of the College of Obstetricians and Gynaecologists of South Africa Part IA and 1B examinations; and
 - will be denied in the case of supernumerary registrars who work in a Medical Officer capacity during the first year of training if the candidate is not considered capable to take on the duties and responsibilities of a registrar.
- FMA50.4 Registration after the first 24 months of training:
- will be denied if the candidate has not obtained Fellowship of the College of Obstetricians and Gynaecologists of South Africa Part 1A and Part 1B examination. In the case of supernumerary registrars, the 24 months of training include the initial months of training while working in the capacity of Medical Officer;
 - may be denied if a research protocol has not been submitted to the UCT Human Research Ethics Committee (HREC); and
 - may be denied in case of failure to adhere to the research project work plan stated in the Research MOU.
- FMA50.5 Eligibility for writing the Fellowship of the College of Obstetricians and Gynaecologists of South Africa Part 2 examination - Candidates must have:
- successfully completed the Part 1A and B examinations;
 - successfully completed 18 months' coursework in obstetrics and 18 months' coursework in gynaecology;
 - at minimum, submitted the research proposal to the HREC prior to registration for Part II written examination
 - In exceptional circumstances, the HOD may grant permission to submit the dissertation at a later stage.

Curriculum outline

FMA51 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
OBS7016W	MMed Obstetrics and Gynaecology Part 1A	20	9
OBS7015W	MMed Obstetrics and Gynaecology Part 1B	40	9
OBS7006W	MMed Obstetrics and Gynaecology Part 2	60	9
OBS7007W	Obstetrics and Gynaecology Minor Dissertation	60	9
DOM7002W	MMed Clinical Training – Year 5.....	0	9
	Total NQF credits.....	180	

Occupational Medicine [MM001PPH08]

Convener:

Associate Professor S Adams (School of Public Health)

Duration of training

FMA52.1 Training takes place over a minimum period of four years full-time, including research and completion of the minor dissertation.

FMA52.2 Recognition of training time as a registrar in a satellite department may be granted for a maximum period of one year.

Curriculum

FMA53 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PPH7056W	MMed Occupational Medicine Part 1.....	60	9
PPH7057W	MMed Occupational Medicine Part 2.....	60	9
PPH7058W	Occupational Medicine Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

- FMA54
- (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 minor dissertation and to have signed an MOU with their supervisor setting out the conditions of the candidate’s research towards their minor dissertation within 24 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 their supervisor indicating satisfactory progress within 36 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 2 examination;
 - (bb) to have completed a portfolio of learning in terms of the prescribed requirements before attempting the Part 2 examination; and
 - (cc) to have submitted and passed their dissertation.
 - (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 track of the Master of Public Health, selected courses from the Divisions of Health Policy and Systems, Health Economics and Environmental Health (offered as part of the MPH), and the Postgraduate Diploma in Occupational Health,
 - (ii) Assessment of the minor dissertation by two external examiners.

Ophthalmology
[MM001CHM05]

Convener:

Dr C Tinley (Department of Surgery)

Additional admission requirements

FMA55.1 Candidates are required to have completed the primary examination of the College of Ophthalmology of South Africa.

FMA55.2 The Diploma of the College of Ophthalmology is a recommendation.

Duration of training

FMA56 Four years, including research and completion of the dissertation.

Curriculum outline

FMA57 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF 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
DOM7002W	MMed Clinical Training – Year 5.....	0	9
Total NQF credits.....		180	

Orthopaedic Surgery
[MM001CHM06]

Convener:

Professor R Dunn (Department of Surgery)

Additional admission requirements

FMA58 Applicants must have passed the primary and intermediate examinations of the College of Surgeons of South Africa.

Duration of training

FMA59 Five years, including completion of the minor dissertation.

Curriculum outline

FMA60 The curriculum outline is as follows

Code	Course	NQF Credits	NQF 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
DOM7002W	MMed Clinical Training – Year 5.....	0	9
Total NQF credits.....		180	

Otorhinolaryngology [MM001CHM07]

Convener:

Professor JJ Fagan (Department of Surgery)

Additional admission requirements

FMA61.1 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.

FMA61.2 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

FMA62 Four years, including research and completion of the dissertation.

Curriculum outline

FMA63 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF 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
DOM7001W	MMed Clinical Training – Year 4	0	9
Total NQF credits		180	

Paediatric Surgery [MM001CHM08]

Convener:

S Cox (Department of Surgery)

Additional admission requirements

FMA64 Applicants must have completed the primary and intermediate examinations of the relevant College of Medicine of South Africa.

Duration of training

FMA65 Four years, including research and completion of the dissertation.

Curriculum outline

FMA66 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF 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

112 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Code	Course	NQF Credits	NQF Level
DOM7002W	MMed Clinical Training – Year 5.....	0	9
	<i>Total NQF credits.....</i>	210	

Paediatrics **[MM001PED11]**

Convener:

Dr A Nondo (Department of Paediatrics and Child Health)

Duration of training

FMA67 Four years, including research and completion of the dissertation.

Curriculum outline

FMA68 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7004W	MMed Paediatrics Part 1.....	60	9
PED7006W	MMed Paediatrics Part 2.....	60	9
PED7007W	Paediatrics Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
	<i>Total NQF credits.....</i>	180	

Pathology (Anatomical) **[MM001PTY20]**

Convener:

Professor K Pillay (Department of Pathology)

Structure and duration of training

FMA69.1 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.

FMA69 The candidate must complete a UCT Human Research Ethics Committee-approved research protocol and obtain an interim research report from their supervisor indicating satisfactory progress within 42 months of first registration.

Curriculum outline

FMA70 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY7010W	MMed Anatomical Pathology Part 1A.....	60	9
PTY7006W	MMed Anatomical Pathology Part 2.....	60	9
PTY7007W	Anatomical Pathology Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
	<i>Total NQF credits.....</i>	180	

The minor dissertation is based on a project relevant to the discipline and requires approval from the research ethics committee. Funding also has to be sought for projects.

Pathology (Chemical) **[MM001PTY06]**

Convener:

Professor R PUNCHOO (Department of Pathology)

Structure and duration of training

- FMA71.1 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 convened by the College of Pathologists of South Africa as for chemical pathology. A minor dissertation (Part 3) must be completed during the training programme.
- FMA71.2 The candidate shall be required to successfully complete the FCPath (SA) (Chemical Pathology) Part 1 examination within the first 18 months of training.

Curriculum outline

FMA72 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY7015W	MMed Chemical Pathology Part 1.....	60	9
PTY7016W	MMed Chemical Pathology Part 2.....	60	9
PTY7017W	Chemical Pathology Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

Pathology (Clinical) **[MM001PTY22]**

Convener:

Associate Professor J OPPIE (Department of Pathology)

Structure and duration of training

- FMA73.1 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.
- FMA73.2 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. The candidate writes the Part 2 examination in Clinical Pathology of the South African College of Pathology. A minor dissertation must be completed during the training programme.

- FMA73.3 The candidate must complete a UCT Human Research Ethics Committee-approved research protocol and obtain an interim research report from their supervisor indicating satisfactory progress within 54 months of first registration

Curriculum outline

FMA784 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF 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
DOM7002W	MMed Clinical Training – Year 5.....	0	9
Total NQF credits.....		180	

Pathology (Forensic)

[MM001PTY07]

Convener:

Professor LJ Martin (Department of Pathology)

Structure and duration of training

- FMA75.1 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.

- FMA75.2 An additional (5th) year is required to do research and complete a minor dissertation

Curriculum outline

FMA76 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF 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
DOM7002W	MMed Clinical Training – Year 5.....	0	9
Total NQF credits.....		180	

Pathology (Haematological)

[MM001PTY10][SAQA ID:214190]

Convener:

Associate Professor J Opie (Department of Pathology)

Structure and duration of training

- FMA77.1 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 may be required to do research and complete a dissertation, should this not be possible within the four years.
- FMA77.2 The candidate shall be required to successfully complete the MMed Part 1 examination, or its equivalent within the first 18 months of training.

Curriculum Outline

FMA78 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY7024W	MMed Haematological Pathology Part 1.....	60	9
PTY7021W	MMed Haematological Pathology Part 2.....	60	9
PTY7022W	Haematological Pathology Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

Pathology (Microbiological)

[MM001PTY23]

Convener:

Professor A Brink and E Prentice (Department of Pathology)

Structure and duration of training

- FMA79.1 A minimum of four years in medical microbiology, three to six months of which will be in virology. Time is allocated to a rotation through the Greenpoint TB Reference Laboratory with a further three weeks spent at the National Institute for Communicable Diseases.
- FMA79.2 The candidate shall be required to successfully complete the MMed Part 1 examination or its approved equivalent within the first 18 months of training. Candidates required to choose research topic and submit for HREC approval, prior to writing MMed Part 1 exam.

Curriculum outline

FMA80 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY7029W	MMed Medical Microbiology Part 1D.....	60	9
PTY7030W	MMed Medical Microbiology Part 2.....	60	9
PTY7031W	Medical Microbiology Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

Pathology (Virological)
[MM001PTY21]

Convener:

Associate Professor DR Hardie (Department of Pathology)

Structure and requirements of training

- FMA81.1 A minimum period of three and a half years in medical virology and an additional six months may be undertaken in medical microbiology or immunology.
- FMA81.2 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

FMA82 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY7034W	MMed Virological Pathology Part 1.....	60	9
PTY7032W	MMed Virological Pathology Part 2.....	60	9
PTY7033W	Virological Pathology Minor Dissertation.....	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
	Total NQF credits.....	180	

[See note on page 4 regarding HEQSF levels and NQF credits.]

Plastic and Reconstructive Surgery
[MM001CHM09]

Convener:

Associate Professor DA Hudson (Department of Surgery)

Additional admission requirements

- FMA83 Applicants must have passed the primary and intermediate examinations of the College of Surgeons of South Africa.

Duration of training

- FMA84 Four years, including research and completion of the dissertation.

Curriculum outline

FMA85 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
CHM7004W	MMed Surgical Disciplines Part 1.....	60	9
CHM7010W	MMed Surgical Disciplines Part 2A.....	30	9
CHM7012W	MMed Plastic and Reconstructive Surgery Part 2B.....	30	9
CHM7013W	Plastic and Reconstructive Surgery Minor Dissertation.....	60	9
DOM7002W	MMed Clinical Training – Year 5.....	0	9
	Total NQF credits.....	180	

Psychiatry [MM001PRY09]

Conveners:

Dr N Dyakalashé and Dr R Ori (Department of Psychiatry and Mental Health)

Duration of training

FMA86 Four years, including research and completion of the dissertation.

Curriculum outline

FMA87 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PRY7007W	MMed Psychiatry Part 1	60	9
PRY7008W	MMed Psychiatry Part 2	60	9
PRY7009W	Psychiatry Minor Dissertation	60	9
DOM7001W	MMed Clinical Training - Year 4	0	9
	Total NQF credits	180	

Public Health Medicine [MM001PPH11]

Convener:

Professor L London (Department of Public Health)

Duration of training

FMA88.1 Training takes place over a minimum period of four years full-time, including research and completion of the minor dissertation.

FMA88.2 Recognition of training time as a registrar in a satellite department may be granted for a maximum period of one year.

FMA89 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF 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
DOM7001W	MMed Clinical Training – Year 4	0	9
	Total NQF credits	180	

Progression and assessment

- FMA90 (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 minor dissertation and to have signed an MOU with their supervisor setting out the conditions of the candidate's research towards their minor dissertation within 24 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 their supervisor indicating satisfactory progress within 36 months of first registration;

- (iv) and to have achieved the following outcomes before attempting the Part 2 examination:
 - (aa) to have completed a minimum of 36 months’ clinical training;
 - (bb) to have completed a portfolio of learning comprising 36 months of clinical training in terms of the prescribed requirements.
 - (cc) to have submitted and passed their minor dissertation.
- (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 track of the Master of Public Health, the Postgraduate Diploma in Health Economics and the Postgraduate Diploma in Health Leadership; and
 - (ii) assessment of Part 3 comprises examination of the minor dissertation by two external examiners.

Radiation Oncology
[MM001RAY04]

Convener:

Professor J Parkes (Department of Radiation Medicine)

Additional admission requirement

FMA91 Applicants must have worked full-time as a medical doctor for at least one year post-internship and prior to entering this programme.

Duration of training

FMA92 Four years (including clinical training, research, and completion of the minor dissertation).

Curriculum

FMA93 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
RAY7009W	MMed Radiation Oncology Part 1	60	9
RAY7010W	MMed Radiation Oncology Part 2	60	9
RAY7011W	Radiation Oncology Minor Dissertation	60	9
DOM7001W	MMed Clinical Training – Year 4.....	0	9
	Total NQF credits.....	180	

Progression and Assessment

**Progression rules also outlined in college regulations for entry into Part 1 and Part 2 examinations*

FMA94.1 Candidates may register to write the Part 1 examinations after a minimum period of 6 months in a registered Radiation Oncology training post.

FMA94.2 Registration after the first 24 months of training may be refused in either of the following circumstances:

- (a), The candidate has not successfully completed the Fellowship of the College of Radiation Oncologists South Africa Part I examination; and
- (b), The candidate has not identified a research topic for the MMed minor dissertation (RAY7011W) and signed an MOU with their supervisor.

- FMA94.3 Registration after the first 36 months of training may be refused if a research protocol has not been submitted and approved by the UCT Human Research Ethics Committee (HREC) and data collection completed.
- FMA94.4 The Part 2 examination must be passed within six years of passing the Part 1 examination. To register for Part 2 CMSA examinations, candidates must have spent a minimum of three years (36 months) in a full-time registered post in a recognised department of radiation oncology. The programme convenor is required to submit a letter of suitability to write this examination to the CMSA. This will be based on:
- (a) Adequate quarterly formative assessments at the end of each three-month clinical attachment; and
 - (b) Adequate annual formative assessments. This includes performance in the clinical blocks, ward attachments, planning and technical radiotherapy, chemotherapy management and research as well as completion of the logbook and portfolio as outlined in the College of Radiation Oncology curriculum.
 - (c) MMed minor dissertation must have been submitted for marking at the time of entrance in the College of Medicine South Africa Part 2 examinations.
- FMA94.2 Registration for each academic year may be refused if the registrar does not maintain satisfactory performance as outlined in the assessments below:
- (a) A quarterly formative assessment at the end of each three-month clinical attachment; and/or
 - (b) An annual formative assessment. At this meeting, performance in the clinical blocks, ward attachments, planning and technical radiotherapy, chemotherapy management and research is reviewed as well as completion of the logbook and portfolio as outlined in the College of Radiation Oncology curriculum.
- FMA94.3 The Part 2 examination must be passed within six years of passing the Part 1 examination.
- FMA94.4 Candidates must have spent a minimum of three years (36 months) in a full-time registered post in a recognised department of radiation oncology. The programme convenor is required to submit a letter of suitability to write this examination to the College of Medicine South Africa. This will be based on:
- (a) Adequate quarterly formative assessments at the end of each three-month clinical attachment; and
 - (b) Adequate annual formative assessments. This includes performance in the clinical blocks, ward attachments, planning and technical radiotherapy, chemotherapy management and research as well as completion of the logbook and portfolio as outlined in the College of Radiation Oncology curriculum.
- FMA94.5 Registration after the first 24 months of training may be refused in either of the following circumstances:
- (a) The candidate has not successfully completed the Fellowship of the College of Radiation Oncologists South Africa Part I examination; and
 - (b) The candidate has not identified a research topic for the MMed Part 3 (RAY7011W) and signed an MOU with their supervisor.
- FMA94.6 Registration after the first 36 months of training may be refused if a research protocol has not been submitted and approved by the UCT Human Research Ethics Committee (HREC).

120 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- FMA94.7 Registration for each academic year may be refused if the registrar does not maintain satisfactory performance as outlined in the assessments below:
- A quarterly formative assessment at the end of each three-month clinical attachment; and
 - An annual formative assessment. At this meeting, performance in the clinical blocks, ward attachments, planning and technical radiotherapy, chemotherapy management and research is reviewed as well as completion of the logbook and portfolio (including case studies and a statistical review) as outlined in the College of Radiation Oncology curriculum.
- FMA94.8
- The candidate must identify a research topic for MMed Part 3 (RAY7011W) and sign an MOU with their supervisor within 24 months of entering the Radiation Oncology registrar rotation.
 - The research protocol must be submitted and approved by the UCT Human Research Ethics Committee (HREC) within 36 months of entering the Radiation Oncology registrar rotation.
 - The finalised minor dissertation must be submitted for examination within one year of successfully completing the Part 2 examination (RAY7010W).

Surgery **[MM001CHM10]**

Convener:
TBC

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:

Code	Course	NQF Credits	NQF Level
CHM7004W	MMed Surgical Disciplines Part 1	60	9
CHM7008W	MMed in Surgery Part 2B.....	30	9
CHM7010W	MMed in Surgical Disciplines Part 2A.....	30	9
CHM7009W	Surgery Minor Dissertation.....	60	9
DOM7002W	MMed Clinical Training – Year 5.....	0	9
	Total NQF credits.....	180	

Urology
[MM001CHM12]

Convener:

Associate Professor JM 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:

Code	Course	NQF Credits	NQF 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
DOM7002W	MMed Clinical Training – Year 5	0	9
	Total NQF credits	210	

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.

Specialisation	Qualification Code	Academic Plan Code	Department	SAQA ID
Genetic Counselling	MM166	PTY09	Pathology	Awaited
Nutrition	MM051	HUB21	Human Biology	Awaited

MMedSc in Genetic Counselling (by coursework and dissertation) [MM166PTY09][SAQA ID:104765]

Convener:

Dr T Wessels (Department of Pathology)

Also see General Rules for Master's Degree Studies in the relevant front section of this handbook. In addition, the course activities and assessments as set out in the MMedSc in Genetic Counselling Course Outlined document, developed by the course convener, apply for assessments and progression.

Admission requirements

- FMB1 An applicant shall not be admitted as a candidate for the degree programme unless they:
- have 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;
 - have an MBChB degree of the University or any other university recognised by Senate for the purpose;
 - are 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;
 - 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 human genetics. Applications from students with other qualifications will be assessed on a case by case basis;
 - have experience of working in a clinical genetic environment/field;
 - are potentially registerable with the HPCSA or equivalent healthcare professional body;
 - have proven proficiency in written and spoken English (this may be tested if necessary); and
 - have 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:

Code	Course	NQF Credits	NQF Level
PTY5009W	Genetic Counselling Practice I	40	9
PTY5008W	Genetic Counselling Practice II	40	9
PTY5003F	Principles of Genetic Counselling (Coursework)	10	9
PTY5004S	Principles of Genetic Counselling (Applied Learning)	10	9
PTY5005F	Medical Genetics I.....	12	9
PTY5006S	Medical Genetics II.....	12	9
PTY5001W	Genetic Counselling Minor Dissertation	60	9
	Total NQF credits	184	

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. Counselling assessments 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 counselling assessment 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 subspecialties 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

FMDB.1 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

FMDB.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	MM154	HUB22	Human Biology	104786
Biomedical	MM006	PTY25	Pathology	Awaited
Forensic Science				
Clinical	MM030	MDN03	Medicine	90821
Pharmacology				
Emergency	MM025	FCE18	Surgery	83486
Medicine (Global				
Emergency Care)				
Emergency	MM025	FCE17	Surgery	83486
Medicine (Clinical				
Emergency Care)				
Emergency	MM025	FCE33	Surgery	83486
Medicine (Disaster				
Medicine				
Emergency	MM025	FCE21	Surgery	83486
Medicine (Patient				
Safety and Clinical				
Decision-making				
A)				
Emergency	MM025	FCE25	Surgery	83486
Medicine (Patient				
Safety and Clinical				
Decision-making				
B)				
Intellectual	MM156	PRY06	Psychiatry and	104771
Disability			Mental Health	

Liaison Mental Health	MM168	PRY07	Psychiatry and Mental Health	104702
Maternal and Child Health	MM006	PED02	Paediatrics and Child Health	Awaited
Occupational Health	MM158	PPH06	Public Health	104724
Paediatric Pathology	MM163	PTY19	Pathology	104757
Palliative Care	MM006	FCE17	Family, Community & Emergency Care	104745
Sport and Exercise Medicine	MM192	HUB14	Human Biology	21424

FMDB.2 Candidates may also be accepted for an MPhil by dissertation only in any discipline.

FMDB.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

FMDC 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

FMDE.1 Unless specified otherwise, the examination consists:

- (a) 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;
- (b) 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); or
- (c) 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.

FMDE.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

FMDF 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****[MM154HUB22]****Convener:**

Dr J Kroff (Department of Human Biology)

Admission requirements

FMC1 A candidate shall not be admitted to the programme unless they hold a BScHons (Medicine) in Exercise Science (Biokinetics) or an approved equivalent.

Structure and duration of training

FMC2 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

FMC3 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.

Code	Course	NQF Credits	NQF Level
HUB4072F	High Performance Athlete	15	8
HUB5016F	Physical Activity and Epidemiology.....	15	9
HUB5017F	Research Methods and Statistics for Physical Activity.....	15	9
HUB5018F	Biokinetics in the Workplace.....	15	9
HUB5020S	Advanced Strength and Conditioning for Athletic Performance ..	15	9
HUB5021S	Biokinetics and Neuromuscular Disorders.....	15	9
HUB5022S	Nutrition and Ergogenic Aids	15	9
HUB5023S	Advanced Clinical Exercise Physiology	15	9
HUB5024W	Biokinetics Minor Dissertation	60	9
	Total NQF credits.....	180	

DP requirements

- FMC4
- 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.
 - Candidates are required to complete all courses for each semester before they may commence the courses for the following semester.
 - Students must attend all lectures during the 'block week' and at least 80% of the lectures for each course.

Assessment and examinations

FMC5 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 [MM006PTY25/LAB25]

Convener:

Dr M Heyns (Department of Pathology)

Admission requirements

- FMC6 An applicant shall not be admitted as a candidate for the degree programme unless they:
- (a) hold a BScHons degree and has completed biochemistry, chemistry, microbiology, biology, genetics, or physical anthropology or equivalent at honours level;
 - (b) hold an approved four-year Bachelor of Science degree or an approved postgraduate diploma; or a qualification deemed by Senate to be equivalent; or
 - (c) have 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

- FMC7 A candidate shall not be awarded the degree unless they have been registered for the programme for at least two academic years.

Curriculum outline

FMC8 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
HUB6014F/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
	Total NQF credits.....	180	

DP requirement

- FMC9 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

- FMC10
- (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:

Professor 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

- FMC11 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

FMB12 Candidates shall be registered for two years of full-time studies.

Curriculum outline

FMC13 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
CHM7067W	MPhil Clinical Paediatric Surgery Part 1	120	9
CHM7068W	Clinical Paediatric Surgery Minor Dissertation	60	9
	Total NQF credits.....	180	

Assessment

FMC14 One final examination of all coursework, including written, oral, and clinical components. The dissertation is externally examined.

Clinical Pharmacology **[MM030MDN03]**

Convener:

Professor M Blockman (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

FMC15 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

FMC16 Candidates shall be registered for two years of full-time study.

Curriculum outline

FMC17 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7058S	Drug Development.....	20	9
MDN7059S	Drug Assays.....	30	9
MDN7060F	Pharmacometrics.....	30	9
MDN7061F	PK-PD Principles.....	10	9
MDN7062W	Clinical Pharmacology Minor Dissertation.....	90	9
	Total NQF credits.....	180	

Assessment

FMC18 Assessment is on the basis of coursework and assignments.

**Emergency Medicine
[MM025]**

Convener:

Associate Professor P Hodkinson (Department of Family, Community and Emergency Care)

Note: This is a degree by coursework and dissertation. There are four streams:

- (a) *The Clinical Emergency Care stream for doctors, nurses, and paramedics in emergency care, each with a 60-credit dissertation.*
- (a) *The Global Emergency Care stream for qualified doctors, which has a 60-credit dissertation.*
- (a) *The Patient Safety and Clinical Decision-making stream for doctors, nurses, and paramedics. Two streams are available: stream A with a 60-credit dissertation and stream B with a 90-credit dissertation.*

130 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- (a) *The Disaster Medicine Stream for doctors, nurses, and paramedics in emergency care, which has a 60-credit dissertation.*

[Also see General Rules for Master's Degree Studies in the relevant front section of this handbook.]

Admission requirements

- FMB24.1 A candidate shall not be admitted to the programme unless they hold a minimum of a NQF Level 8 degree. The Clinical Emergency Care, Patient Safety and Disaster Medicine streams are open to medical practitioners, nurses, and paramedics. The Global Emergency Care stream is open to medical practitioners only.
- FMB24.2 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

- FMB25 The degree is offered over two years of part-time study.

Curriculum outline

- FMB26 The following streams are offered:

FMB26.1 Global Emergency Care stream [Plan code: MM025FCE18]			
Code	Course	NQF Credits	NQF Level
	<i>Year 1 - Compulsory courses:</i>		
FCE6005F	Clinical Research Methods I.....	15	9
FCE6012S	Disaster Medicine.....	15	9
FCE6009S	Healthcare Systems.....	15	9
	<i>Year 2 - Compulsory courses:</i>		
FCE6006F	Clinical Research Methods II.....	15	9
FCE6018W	Global Emergency Care.....	30	9
FCE6028S	Management and Leadership in Healthcare.....	15	9
FCE6016W	Emergency Medicine Minor Dissertation.....	60	9
	<i>Plus, one elective course from the following:</i>		
FCE6029S	Disaster Medical Response Training.....	15	9
FCE6030S	Ambulatory Care and Travel Medicine.....	15	9
FCE6031S	Patient Safety and Flow.....	15	9
FCE6032F	Continuous Quality Improvement.....	15	9
	Total NQF credits	180	
FMB26.2 Clinical Emergency Care stream [Plan code: MM025FCE17]			
Code	Course	NQF Credits	NQF Level
	<i>Year 1 - Compulsory courses:</i>		
FCE6005F	Clinical Research Methods I.....	15	9
FCE6007F	Clinical Emergency Care I.....	15	9
FCE6008S	Clinical Emergency Care II.....	15	9
	<i>Year 2 - Compulsory courses:</i>		
FCE6006F	Clinical Research Methods II.....	15	9
FCE6010F	Resuscitation and Critical Care.....	15	9
FCE6009S	Healthcare Systems.....	15	9

Code	Course	NQF Credits	NQF Level
FCE6016W	Emergency Medicine Minor Dissertation.....	60	9
	<i>Plus, two elective courses from the following:</i>		
FCE6012F	Disaster Medicine	15	9
FCE6013S	Education and Training in Emergency Care.....	15	9
FCE6028S	Management and Leadership in Healthcare.....	15	9
FCE6029S	Disaster Medical Response Training	15	9
FCE6030S	Ambulatory Care and Travel Medicine	15	9
	Total NQF credits	180	
FMB26.3 Disaster Medicine stream [Plan Code: MM025FCE33]			
Code	Course	NQF Credits	NQF Level
	<i>Year 1 - Compulsory courses:</i>		
FCE6005F	Clinical Research Methods I.....	15	9
FCE6012F	Disaster Medicine	15	9
	<i>Year 2 - Compulsory courses:</i>		
FCE6006F	Clinical Research Methods II	15	9
FCE6042F	Event and Expedition Medicine.....	15	9
FCE6044F	Writing Disaster Plans	8	9
FCE6029S	Disaster Medical Response Training	15	9
FCE6043S	Practicing Disaster Plans	7	9
FCE6016W	Emergency Medicine Minor Dissertation.....	60	9
	<i>Plus, two elective courses from the following:</i>		
FCE6030S	Ambulatory Care and Travel Medicine	15	9
FCE6009S	Healthcare Systems.....	15	9
FCE6028S	Management and Leadership in Healthcare.....	15	9
	Total NQF credits	180	
FMB26.4 Patient Safety and Clinical Decision-making (A) stream [Plan code: MM025FCE21]			
Code	Course	NQF Credits	NQF Level
	<i>Year 1 - Compulsory courses:</i>		
FCE6005F	Clinical Research Methods I.....	15	9
FCE6032F	Continuous Quality Improvement	15	9
FCE6009S	Healthcare Systems.....	15	9
FCE6031S	Patient Safety and Flow	15	9
	<i>Year 2 - Compulsory courses:</i>		
FCE6006F	Clinical Research Methods II	15	9
FCE6016W	Emergency Medicine Minor Dissertation.....	60	9
	<i>Plus, three elective courses from the following:</i>		
FCE6012F	Disaster Medicine	15	9
FCE6013S	Education and Training in Emergency Care.....	15	9
FCE6028S	Management and Leadership in Healthcare.....	15	9
FCE6030S	Ambulatory Care and Travel Medicine	15	9
FCE6026S	Critical Thinking in Emergency Care.....	15	9
	Total NQF credits	180	
FMB26.5 Patient Safety and Clinical Decision-making (B) stream [Plan code: MM006FCE25]			
Code	Course	NQF Credits	NQF Level
	<i>Year 1 - Compulsory courses:</i>		
FCE6005F	Clinical Research Methods I.....	15	9
FCE6032F	Continuous Quality Improvement	15	9
FCE6009S	Healthcare Systems.....	15	9

132 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Code	Course	NQF Credits	NQF Level
FCE6031S	Patient Safety and Flow	15	9
	<i>Year 2 - Compulsory courses:</i>		
FCE6006F	Clinical Research Methods II.....	15	9
FCE6019W	Emergency Care Minor Dissertation.....	90	9
	<i>Plus, one elective course from the following:</i>		
FCE6012F	Disaster Medicine	15	9
FCE6013S	Education and Training in Emergency Care:	15	9
FCE6028S	Management and Leadership in Healthcare.....	15	9
FCE6030S	Ambulatory Care and Travel Medicine.....	15	9
FCE6026S	Critical Thinking in Emergency Care	15	9
	Total NQF credits	180	

DP requirements

FMB27 Satisfactory completion of a self-reflection portfolio of clinical experiences submitted to the Division at specified times, as outlined in the Portfolio Guideline.

Assessment

FMB28 Assessment is done (*inter alia*) by means of assignments, skills sessions, and written and oral examinations.

Progression rules

FMB29 Except by permission of the Senate, a candidate registered for a MPhil in Emergency Medicine may be refused readmission if they:

- (a) fail half or more of the coursework courses for which they is registered in any year of study;
- (b) fail a core coursework course more than once;
- (c) have not submitted a portfolio in compliance with the “*Self-reflection Portfolio Guideline*” before the start of every new academic year;
- (d) have not submitted, by the beginning of the second academic year of study, an initial, abbreviated dissertation proposal in terms of the guidelines for the program;
- (e) have not completed the coursework within the first three years of first registration for the degree;
- (f) have not submitted a final research proposal by the beginning of the third year of study since first registration for the degree;
- (g) have had a dissertation proposal rejected three times by the Emergency Medicine Research Committee (EMDRC) as a result of their not following the recommendations of the Committee and/ or those of the internal (Divisional) supervisor; and/or
- (h) have not completed the required dissertation within four years of first registration for the degree.

Health Innovation

[MM033HUB]- In abeyance

Convener:

Dr N Conrad (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

- FMB30 An applicant shall not be admitted as a candidate for the MPhil in Health Innovation unless they:
- (a) hold an approved Honours-equivalent degree;
 - (b) hold an approved four-year Bachelor’s degree or an approved postgraduate diploma; or
 - (c) hold a qualification deemed by Senate to be equivalent.

Duration of programme

- FMB31 A candidate shall not be awarded the degree unless they have been registered for the programme for at least one academic year.

Curriculum outline

FMB32 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
HUB5031F	Health Innovation & Design (A)	21	9
HUB5032S	Health Innovation & Design (B).....	21	9
AHS4089F	Introduction to Disability as Diversity.....	30	8
HUB5033F	Health Innovation & Entrepreneurship.....	12	9
HUB4075W	Biomedical Engineering Overview.....	8	9
HUB4028W	Introduction to Healthcare Technology Management	13	8
HUB4027W	Healthcare Technology Assessment.....	13	8
HUB5029W	Health Innovation Minor Dissertation	60	9
	Electives in Healthcare Technology Management or Biomedical Engineering, chosen in consultation with the Programme Convener.....	12	8 or 9
	Total NQF credits	190	

[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.]

DP requirements

- FMB33 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

- FMB34 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:
- (a) all courses in the first year must be passed; and
 - (b) 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

- FMB35 The degree may be awarded with distinction if the student obtains an average mark of 75% for the coursework and the dissertation components, with no less than 70% for each component.

Intellectual Disability [MM156PRY06]

Convener:

Professor S Kleintjes (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

FMB36 To be eligible for consideration, the candidate must:

- (a) have an approved degree in medicine;
- (b) have obtained an approved master's degree in clinical psychology; or
- (c) 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
- (d) be registered with the Health Professions Council of South Africa or the equivalent professional body.

Duration of programme

FMB37 A candidate shall be registered for two years of full-time study or three years of part-time study.

Curriculum outline

FMB38 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PRY7023W	MPhil Intellectual Disability Part 1	90	9
PRY7024W	Intellectual Disability Minor Dissertation.....	90	9
Total NQF credits.....		180	

DP requirements and progression rule

FMB39 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

FMB40.1 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%.

FMB40.2 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
[MM168PRY07]

Convener:

Associate Professor 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

- FMB41.1 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.
- FMB41.2 All candidates must be practising in or have the intention to practise in the mental health field.

Duration of programme

FMB42 A candidate shall be registered for two years of full-time or three years of part-time study.

Curriculum outline

FMB43 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PRY7020W	MPhil Liaison Mental Health Part 1	120	9
PRY7021W	Liaison Mental Health Minor Dissertation	60	9
	Total NQF credits	180	

DP requirements and progression rule

FMB44 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

- FMB45.1 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.

FMB45.2 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

- FMB46 To be eligible for consideration, a candidate must:
- (a) hold an approved undergraduate degree or postgraduate diploma in the health sciences;
 - (b) have at least two years' work experience in maternal and child health services;
 - (c) be proficient in spoken and written English; and
 - (d) 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

FMB47 A candidate shall be registered for two years of part-time study.

Curriculum

FMB48 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
Year 1:			
PED5005S	Research Methods for Health Professionals I	10	9
PED5017H	Information, Education, and Academic Communication	10	9
PED5013F	Research Methods for Health Professionals II	10	9
PED5025F	Epidemiology	14	9
PED5016S	Maternal, Child and Adolescent Health	14	9
Year 2:			
PED5015H	Biostatistics	12	9
PED5018F	Maternal, Child & Adolescent Health Priorities	20	9
PED5028F	Primary Health Care, Rights and Advocacy for Global Health	12	9
PED5027S	Organisation, Management and Leadership in Health	14	9
PED5011S	Integrated Maternal & Child Health Final Assessment	0	8

Code	Course	NQF Credits	NQF Level
	<i>Students may choose the subject below as an elective, additional to the curriculum above:</i>		
PED5026S	Health Informatics and Surveillance	14	9
	<i>Minor dissertation</i>		
PED5012W	Maternal & Child Health Minor Dissertation	60	9
	<i>Total NQF credits</i>	190	

Occupational Health [MM158PPH06]

Convener:

Professor MF Jeebhay (School of Public Health)

Admission requirements

FMB52	A candidate shall not be admitted to the programme unless they:
(a)	hold an MBChB degree, an honours degree or a four-year bachelor's degree or a relevant NQF 8 qualification in an approved discipline; and
(b)	have access to relevant places of work and/or experience in occupational health clinical practice, management, inspection, or auditing.

Students who have previously completed the Postgraduate Diploma in Occupational Health will be exempted from PPH4072F, PPH4071S, PPH4070F.

Structure and duration of programme

FMB53	A candidate shall be registered for at least two years of part-time study, and is required to complete the required coursework and minor dissertation over the two-year period.
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FMB54 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PPH4072F	Occupational Health Risk Assessment & Management	20	8
PPH4071S	Occupational Medicine & Work Ability	20	8
PPH4070F	Occupational Health Services Management	20	8
PPH7103F/S	Epidemiology & Biostatistics for Occupational Health.....	30	9
PPH7104F/S	Research Methods for Occupational Health	30	9
PPH7060W	Occupational Health Minor Dissertation	60	9
	<i>Total NQF credits</i>	180	

Assessment

FMB55.1	Assessment of coursework is by means of written assignments / portfolios, quizzes, and written examination. A pass of 50% is required for the course. The dissertation is externally examined.
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Progression

FMB55.2	Except by permission of the Senate, a candidate registered for a MPhil in Occupational Health may be refused readmission if they:
(a)	fail two or more of the coursework courses for which they are registered in any year of study;
(b)	fail a core coursework course (Research Methods in Occupational Health) more than once;
(c)	have not completed the coursework within the first two years of first registration for the degree;

- (d) have not submitted a final research proposal by the beginning of the third year of study since first registration for the degree;
- (e) have not completed the required dissertation within four years of first registration for the degree.

Distinction

FMB5531 The degree will be awarded with distinction to candidates who average 75% or above on coursework plus dissertation, with a 70% sub-minimum on each component (i.e. at least 70% average across all courses and at least 70% on the dissertation) and passing all courses at first attempt.

Paediatric Forensic Pathology
[MM006PTY28]

Convener:

Professor LJ 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

FMB56 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

FMB57 Candidates shall be registered for two years full-time study.

Curriculum outline

FMB58 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY7040W	MPhil Paediatric Forensic Pathology Part 1	120	9
PTY7041W	Paediatric Forensic Pathology Minor Dissertation	60	9
	Total NQF credits	180	

DP requirements and progression rule

FMB59 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

FMB60 Coursework assessment is done by means of assignments, practicals, written and oral examinations. The dissertation is externally examined.

Paediatric Pathology [MM163PTY19]

Convener:
TBC

Admission requirements

FMB61 A candidate shall not be admitted to the programme unless they have trained and been registered as an anatomical pathologist.

Duration of programme

FMB62 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

FMB63 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PTY7011W	MPhil Paediatric Pathology Part 1.....	120	9
PTY7012W	Paediatric Pathology Minor Dissertation.....	60	9
Total NQF credits		180	

Assessment

FMB64 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 Care [MM159FCE19/FCE34]

Convener:
Dr L Farrant (Department of Family, Community and Emergency Care)

Admission requirements

FMB65 A Postgraduate Diploma in Palliative Medicine from this University or an approved equivalent recognised by Senate for the purpose.

Duration of programme

FMB66 A candidate shall be registered for at least two years of part-time study.

Curriculum outline

FMB67 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
FCE7080H	Research Methods.....	90	9
FCE7048W	Palliative Care Minor Dissertation	90	9
Total NQF credits		180	

Assessment

FMB68 Assessment of coursework is by means of written assignments. A pass of 50% is required in each component.

Sport and Exercise Medicine**[MM192HUB14]****Convener:**

Associate Professor 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

- FMB69 A candidate shall not be admitted to the programme unless they:
- are a graduate in medicine of the University or any other university recognised by Senate for the purpose;
 - have provided satisfactory evidence of an interest in sport and exercise;
 - are registered with the Health Professions Council of South Africa (or an equivalent registering body outside South Africa) as a medical practitioner; and
 - have at least one year's experience after qualifying as a medical practitioner.

Duration of programme and progression rule

FMB70 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.

Curriculum outline**FMB71 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF 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
HUB5007W	Sport and Exercise Medicine Minor Dissertation	60	9
	Total NQF credits	200	

Examination/Assessment

- FMB72.1 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.

- FMB72.2 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.
- FMB72.3 Part 2: Minor dissertation: Students are required to pass the minor dissertation with 50% or more to successfully complete Part 2.

Distinction

- FMB73 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 they:
- submit proof that they, prior to commencing with education and training in the relevant subspeciality, have complied with all the requirements for registration as a specialist in the base or one of the base specialities listed against the relevant subspeciality; and
 - have been appointed against an HPCSA-approved training number.
(See 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 subspecialities:

Specialisation	Qualification code	Academic plan code	Department	SAQA ID NUMBER
Addictions Mental Health	MM153	PRY01	Psychiatry & Mental Health	104783
Advanced Hepatology & Transplantation	MM150	MDN23	Medicine	91760
Allergology	MM026	MDN22	Medicine	83487
Cardiology	MM171	MDN02	Medicine	104789
Child & Adolescent Psychiatry	MM167	PRY02	Psychiatry and Mental Health	104781
Clinical Haematology	MM189	MDN29	Medicine	104788
Critical Care	MM170	AAE02	Anaesthesia	104780
Developmental Paediatrics	MM183	PED01	Paediatrics and Child Health	104706
Endocrinology	MM172	MDN05	Medicine	104768

Forensic mental Health	MM155	PRY03	Psychiatry & Mental Health	104754
Geriatric Medicine	MM177	MDN08	Medicine	104777
Gynaecological Oncology	MM179	OBS01	Obstetrics and Gynaecology	104764
Infectious Disease and HIV Medicine	MM178	MDN09	Medicine	104770
Maternal and Fetal Medicine	MM180	OBS02	Obstetrics and Gynaecology	104705
Medical Gastroenterology	MM173	MDN06	Medicine	104749
Neonatology	MM185	PED03	Paediatrics and Child Health	104711
Nephrology	MM174	MDN13	Medicine	104775
Neuropsychiatry	MM169	PRY08	Psychiatry & Mental Health	104713
Paediatric Cardiology	MM181	PED04	Paediatrics and Child Health	104726
Paediatric Critical Care	MM182	PED05	Paediatrics and Child Health	104730
Paediatric Endocrinology	MM184	PED06	Paediatrics and Child Health	104740
Paediatric Gastroenterology	MM151	PED15	Paediatrics and Child Health	91724
Paediatric Infectious Diseases	MM188	PED07	Paediatrics and Child Health	104746
Paediatric Nephrology	MM187	PED08	Paediatrics and Child Health	104710
Paediatric Neurology	MM186	PED09	Paediatrics and Child Health	104744
Paediatric Oncology	MM161	PED10	Paediatrics and Child Health	104862
Paediatric Pulmonology	MM162	PED13	Paediatrics and Child Health	104708
Paediatric Rheumatology	MM016	PED18	Paediatrics and Child Health	96438
Pulmonology	MM175	MDN16	Medicine	104728

144 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Reproductive Medicine	MM160	OBS04	Obstetrics and Gynaecology	104729
Rheumatology	MM176	MDN18	Medicine	104738
Surgical	MM164	CHM11	Surgery	104709
Gastroenterology				
Trauma Surgery	MM152	CHM24	Surgery	91758
Urogynaecology	MM016	OBS05	Obstetrics and Gynaecology	Awaited
Vascular Surgery	MM190	CHM13	Surgery	104742

Registration

- FMD3.1 All subspecialist trainees must register with the University as MPhil students at the start of each year and must register annually with the Health Professions Council of South Africa. Retrospective registration is not allowed.
- FMD3.2 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 subspecialists on completion of training. 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.

Duration of training

- FMD4 Training takes place over a period of 18 months to three years, fulltime – 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 minor dissertation is a requirement for completing the MPhil. (Note: candidates 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%).

MPhil subspeciality programmes: Outlines of, and additional entrance criteria for, individual programmes

Addictions Mental Health [MM153PRY01]

Convener:

Dr H Temmingh (Department of Psychiatry and Mental Health)

Admission requirements

FMD6 A candidate shall not be admitted to the programme unless they hold 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:

Code	Course	NQF Credits	NQF Level
PRY7016W	MPhil Addictions Mental Health Part 1	120	9
PRY7017W	Addictions Mental Health Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2.....	0	9
	Total NQF credits	180	

Advanced Hepatology and Transplantation [MM150MDN23]

Conveners:

Professor CWN Spearman and Associate Professor M Sonderup (Department of Medicine)

Duration of training

FMD9 Three years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD10 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7056W	MPhil Advanced Hepatology and Transplantation Part 1	120	9
MDN7057W	Advanced Hepatology and Transplantation Minor Dissertation....	60	9
DOM7013W	MPhil Subspeciality Clinical Training – Year 3.....	0	9
	Total NQF credits	180	

Allergology

[MM026MDN22]

Conveners:

Professor ME Levin (Department of Paediatrics and Child Health) and Associate Professor 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

FMD11 Two years of clinical training plus one year of research and completion of the minor dissertation.

Curriculum outline

FMD12 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7053W	MPhil Allergology (Adult) Part 1; or.....	120	9
PED7043W	MPhil Allergology (Paediatric) Part 1; plus.....	120	9
MDN7054W	Allergology Minor Dissertation; or.....	60	9
PED7044W	Allergology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
Total NQF credits:		180	

Cardiology

[MM171MDN02]

Convener:

Professor M Ntsekhe (Department of Medicine)

Duration of training

FMD13 Three years of clinical training and College of Medicine Cardiology exam (MPhil Part 1), and completion of the minor dissertation.

Curriculum outline

FMD14 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7017W	MPhil Cardiology Part 1	120	9
MDN7038W	Cardiology Minor Dissertation	60	9
DOM7013W	MPhil Subspeciality Clinical Training – Year 3	0	9
Total NQF credits:		180	

Child & Adolescent Psychiatry
[MM167PRY02]

Convener:

Professor PJ de Vries (Department of Psychiatry and Mental Health)

Admission requirements

FMD15 To be eligible for consideration, a candidate must have:

- (a) a Master of Medicine (MMed) 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 at an MMed level, or approved, equivalent experience.

Duration of programme

FMD16 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 time in full-time training. Candidates may submit their minor-dissertation during the two years of minimum registration but may require additional time after the two-year period.

Curriculum outline

FMD17 The prescribed courses are:

Code	Course	NQF Credits	NQF Level
PRY7006W	MPhil in Child & Adolescent Psychiatry Part 1	120	9
PRY7010W	Child & Adolescent Psychiatry Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits	180	

Assessment

FMD18 For registration with the Health Professions Council of South Africa (HPCSA) 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 (CMSA). The examination consists of a three-hour written paper, a clinical examination, and an oral examination.

FMD19 There is ongoing assessment of performance through regular supervision sessions and at seminars. There is also continuous in-course evaluation of observed clinical interviews, clinical case presentations, journal clubs, psychotherapy, and teaching skills. Following these assessments, there is a critical evaluation of the candidate’s progress every 6 months. At the end of the programme, candidates are formally assessed by means of:

- (a) Certificate of Child & Adolescent Psychiatry examination as set by the Colleges of Medicine of South Africa (CMSA);
- (b) in-course assessment reports; and
- (c) presentation and external examination of the minor dissertation.

Clinical Haematology
[MM189MDN29]

Convener:

Professor VJ Louw (Department of Medicine)

Duration of training

FMD20 Three years of clinical and laboratory training, research and completion of the minor dissertation.

Curriculum outline

FMD21 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7069W	MPhil Clinical Haematology Part 1	120	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 1	0	9
MDN7065W	Clinical Haematology Minor Dissertation	60	9
	<i>Total NQF credits</i>	180	

Critical Care

[MM170AAE02]

Convener:

Associate Professor IA Joubert (Department of Anaesthesia and Perioperative Medicine)

Duration of training

FMD22 Two years of full-time clinical training, plus one year of research and completion of the dissertation.

Curriculum

FMD23 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
AAE7005W	MPhil in Critical Care Part 1.....	120	9
AAE7006W	Critical Care Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	<i>Total NQF credits</i>	180	

Developmental Paediatrics

[MM183PED01]

Convener:

Professor K Donald (Department of Paediatrics and Child Health)

Duration of training

FMD24 Two years of clinical training, one year of research and completion of the minor dissertation. (Total 2 years).

Curriculum outline

FMD25 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7029W	MPhil Developmental Paediatrics Part 1	120	9
PED7030W	Developmental Paediatrics Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits	180	

Endocrinology
[MM172MDN05]

Convener:

Professor J Dave (Department of Medicine)

Duration of training

FMD26 Two years of clinical training and completion of the minor dissertation.

Curriculum outline

FMD27 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7021W	MPhil Endocrinology Part 1	120	9
MDN7041W	Endocrinology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits	180	

Forensic Psychiatry
[MM155PRY03]

Convener:

Dr N Dyakalashé (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

- FMD28.1 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.
- FMD28.2 All candidates must be practising in, or have the intention to practise in, the psycholegal field.

150 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Duration of programme

FMD29 A candidate shall be registered for two years of full-time or three years of part-time study.

Curriculum outline

FMD30 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PRY7013W	MPhil Forensic Mental Health Part 1	120	9
PRY7014W	Forensic Mental Health Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits.....	180	

DP requirements and progression rule

FMD31 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

FMD32.1 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.

FMD32.2 Part-time candidates undergo the same in-course assessment and examination procedures but are allowed an extra (third) year to complete coursework and minor dissertation requirements.

Geriatric Medicine [MM177MDN08]

Convener:

Associate Professor SZ Kalula (Department of Medicine)

Duration of training

FMD33 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD34 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7043W	MPhil Geriatric Medicine Part 1	120	9
MDN7044W	Geriatric Medicine Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits.....	180	

Gynaecological Oncology **[MM179OBS01]**

Conveners:

Professor LA Denny and Dr NH Mbatani (Department of Obstetrics and Gynaecology)

Duration of training

FMD35 Two years of clinical training, (full time) or four years of clinical training (part time) and completion of the minor dissertation.

Curriculum outline

FMD36 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
OBS7010W	MPhil Gynaecological Oncology Part 1	120	9
OBS7011W	Gynaecological Oncology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits	180	

Infectious Disease and HIV Medicine **[MM178MDN09]**

Convener:

Professor M Mendelson (Department of Medicine)

Duration of training

FMD37 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD38 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7050W	MPhil Infectious Diseases and HIV Medicine Part 1	120	9
MDN7051W	Infectious Diseases & HIV Medicine Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits	180	

Maternal and Fetal Medicine **[MM180OBS02]**

Conveners:

Associate Professor J Anthony and Dr CJM Stewart (Department of Obstetrics and Gynaecology)

Duration of training

FMD39 Two years of clinical training (full time) or four years of clinical training (part time), one year of research and completion of the minor dissertation.

Curriculum outline**FMD40 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
OBS7013W	MPhil Maternal and Fetal Medicine Part 1	120	9
OBS7014W	Maternal and Fetal Medicine Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits	180	

Medical Gastroenterology**[MM173MDN06]****Convener:**

Professor M Combrinck (Department of Medicine)

Duration of training

FMD41 Three years of clinical training and completion of the minor dissertation.

Curriculum outline**FMD42 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
MDN7022W	MPhil Medical Gastroenterology	120	9
MDN7042W	MPhil Medical Gastroenterology Minor Dissertation.....	60	9
DOM7013W	MPhil Subspeciality Clinical Training – Year 3	0	9
	Total NQF credits	180	

Neonatology**[MM185PED03]****Convener:**

Associate Professor MC Harrison (Department of Paediatrics and Child Health)

Duration of training

FMD43 Two years of clinical training and completion of the minor dissertation.

Curriculum outline**FMD44 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
PED7010W	MPhil Neonatology Part 1.....	120	9
PED7020W	Neonatology Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits	180	

Nephrology **[MM174MDN13]**

Convener:

Dr K Ndlovu (Department of Medicine)

Duration of training

FMD45 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD46 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
MDN7020W	MPhil Nephrology Part 1	120	9
MDN7040W	Nephrology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
Total NQF credits		180	

Neuropsychiatry **[MM169PRY08]**

Convener:

Professor JA 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

FMD47 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

FMD48 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PRY7018W	MPhil Neuropsychiatry Part 1	120	9
PRY7019W	Neuropsychiatry Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
Total NQF credits		180	

Paediatric Cardiology **[MM181PED04]**

Convener:

Dr G Comitis (Department of Paediatrics and Child Health)

Duration of training

FMD49 Three years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD50 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7012W	MPhil Paediatric Cardiology Part 1	120	9
PED7022W	Paediatric Cardiology Minor Dissertation	60	9
DOM7013W	MPhil Subspeciality Clinical Training – Year 3	0	9
<i>Total NQF credits</i>		180	

**Paediatric Critical Care
[MM182PED05]**

Convener:

Professor S Salie (Department of Paediatrics and Child Health)

Duration of training

FMD51 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD52 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7027W	MPhil Paediatric Critical Care Part 1	120	9
PED7028W	Paediatric Critical Care Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
<i>Total NQF credits</i>		180	

**Paediatric Endocrinology
[MM184PED06]**

Convener:

Dr M Carrihill (Department of Paediatrics and Child Health)

Duration of training

FMD53 Two years of clinical training, research, and completion of the minor dissertation.

Curriculum outline

FMD54 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7023W	MPhil Paediatric Endocrinology Part 1	120	9
PED7024W	Paediatric Endocrinology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
<i>Total NQF credits</i>		180	

Paediatric Gastroenterology **[MM151PED15]**

Convener:

Dr R de Lacy (Department of Paediatrics and Child Health)

Duration of training

FMD55 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD56 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7039W	MPhil Paediatric Gastroenterology Part 1	120	9
PED7040W	Paediatric Gastroenterology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
Total NQF credits		180	

Paediatric Infectious Diseases **[MM188PED07]**

Convener:

Professor BS Eley (Department of Paediatrics and Child Health)

Duration of training

FMD57 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD58 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7033W	MPhil Paediatric Infectious Diseases Part 1	120	9
PED7034W	Paediatric Infectious Diseases Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
Total NQF credits		180	

Paediatric Nephrology **[MM187PED08]**

Conveners:

Professor M McCulloch and Dr P Nourse (Department of Paediatrics and Child Health)

Duration of training

FMD59 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline**FMD60 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
PED7009W	MPhil Paediatric Nephrology Part 1	120	9
PED7019W	Paediatric Nephrology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	<i>Total NQF credits</i>	180	

Paediatric Neurology**[MM186PED09]****Convener:**

Professor J Wilmshurst (Department of Paediatrics and Child Health)

Duration of training

FMD61 Two years of clinical training and completion of the minor dissertation.

Curriculum outline**FMD62 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
PED7025W	MPhil Paediatric Neurology Part 1	120	9
PED7026W	Paediatric Neurology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	<i>Total NQF credits</i>	180	

Paediatric Oncology**[MM161PED10]****Convener:**

Professor A Davidson (Department of Paediatrics and Child Health)

Duration of training

FMD63 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline**FMD64 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
PED7011W	MPhil Paediatric Oncology Part 1	120	9
PED7021W	Paediatric Oncology Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	<i>Total NQF credits</i>	180	

Paediatric Pulmonology [MM162PED23]

Convener:

Professor HJ Zar (Department of Paediatrics and Child Health)

Duration of training

FMD65 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD66 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7035W	MPhil Paediatric Pulmonology Part 1	120	9
PED7036W	Paediatric Pulmonology Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2.....	0	9
Total NQF credits		180	

Paediatric Rheumatology [MM016PED18]

Convener:

Dr K Webb (Department of Paediatrics and Child Health)

Duration of training

FMC67 Two years of clinical training and completion of the minor dissertation.

Curriculum outline

FMC68 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
PED7041W	MPhil Paediatric Rheumatology Part 1	120	9
PED7042W	Paediatric Rheumatology Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2.....	0	9
Total NQF credits		180	

Pulmonology [MM175MDN16]

Convener:

Professor K Dheda (Department of Medicine)

Duration of training

FMD69 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline**FMD70 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
MDN7015W	MPhil Pulmonology Part 1	120	9
MDN7037W	Pulmonology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	<i>Total NQF credits</i>	180	

Reproductive Medicine

[MM160OBS04]

Convener:

Professor SJ Dyer (Department of Obstetrics & Gynaecology)

Duration of training

FMD71 Two years of clinical training (full time) or four years of clinical training (part time) and completion of the minor dissertation.

Curriculum outline**FMD72 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
OBS7008W	MPhil Reproductive Medicine Part 1	120	9
OBS7009W	Reproductive Medicine Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	<i>Total NQF credits</i>	180	

Rheumatology

[MM176MDN18]

Convener:

Professor B Hodkinson (Department of Medicine)

Duration of training

FMD73 Two years of clinical training and completion of the minor dissertation.

Curriculum outline**FMD74 The curriculum outline is as follows:**

Code	Course	NQF Credits	NQF Level
MDN7018W	MPhil Rheumatology Part 1	120	9
MDN7039W	Rheumatology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	<i>Total NQF credits</i>	180	

Surgical Gastroenterology **[MM164CHM11]**

Convener:

Professor E Jonas (Department of Surgery)

Duration of training

FMD75 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD76 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
CHM6003W	MPhil Surgical Gastroenterology Part 1	120	9
CHM6004W	Surgical Gastroenterology Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
Total NQF credits		180	

Trauma Surgery **[MM152CHM24]**

Convener:

Associate Professor AJ Nicol (Department of Surgery)

Duration of training

FMD77 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD78 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
CHM7070W	MPhil Trauma Surgery Part 1	120	9
CHM7071W	Trauma Surgery Minor Dissertation	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
Total NQF credits		180	

Urogynaecology **[MM016OBS05]**

Convener:

Dr S Jeffery (Department of Obstetrics and Gynaecology)

Duration of training

FMD79 Two years of clinical training (full time) or four years of clinical training (part time) and completion of the minor dissertation.

Curriculum outline

FMD80 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
OBS7017W	MPhil Urogynaecology Part 1.....	120	9
OBS7018W	Urogynaecology Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits.....	180	

Vascular Surgery
[MM190CHM13]

Convener:

Dr NG Naidoo (Department of Surgery)

Duration of training

FMD81 Two years of clinical training, one year of research and completion of the minor dissertation.

Curriculum outline

FMD82 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
CHM7052W	MPhil in Vascular Surgery Part 1	120	9
CHM7053W	Vascular Surgery Minor Dissertation.....	60	9
DOM7012W	MPhil Subspeciality Clinical Training – Year 2	0	9
	Total NQF credits.....	180	

MPHIL BY DISSERTATION [MM021]

The MPhil by dissertation can be done in a range of disciplines, namely:

Specialisation	Qualification code	Academic plan code	Department	SAQA ID NUMBER
Behavioural Medicine	MM021	PRY14	Psychiatry & Mental Health	Awaited
Disability Studies	MM021	AHS06	Health & Rehabilitation Sciences	Awaited
Emergency Medicine	MM021	CHM02	Surgery	Awaited
Surgery	MM021	CHM10	Surgery	Awaited
Health Sciences	MM021	HSE01	Health Sciences	Awaited
Education	MM021	HUB05	Human Biology	Awaited
Biomedical Engineering	MM021	HUB10	Human Biology	Awaited
Healthcare Technology Management	MM021	HUB30	Human Biology	Awaited
Mechanobiology	MM021	PED02	Paediatrics & Child Health	Awaited
Maternal & Child Health	MM021	PPH06	Public Health	Awaited
Occupational Health	MM021	PPH07	Public Health & Family Medicine	Awaited
Public Mental Health	MM021	PRY05	Psychiatry & Mental Health	Awaited
Psychiatry	MM021	PRY09	Psychiatry & Mental Health	Awaited
Counselling & Psychotherapy Services	MM021	PRY11	Psychiatry & Mental Health	Awaited
Medical Virology	MM021	PRY17	Psychiatry & Mental Health	Awaited
Paediatric Pathology	MM021	PTY19	Pathology	Awaited

Also see "General rules for master's students" and "Guidelines for Master's and Doctoral Students."

NQF credits: 180 at HEQSF level 9

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.

Admission requirements

- FME1 A candidate shall not be admitted to the programme, unless they:
- a. have an approved four-year tertiary degree from this University or another University recognised by Senate for the purpose; or

162 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- b. have 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. have 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 the MPhil in Biomedical Engineering by dissertation may be required to do certain co-requisite courses.

Progression

- 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 PUBLIC HEALTH (MPH) [MM012] [SAQA ID: 21426]

Programme Convener:

Associate Professor J Olivier (School of Public Health)

Assistant conveners: Professor L Myer (Epidemiology specialisation); D Minnies (Community Eye Health specialisation); Dr Lucy Cunnama (Health Economics specialisation); Associate Professor L Knight (Social & Behavioural Science specialisation); Professor HA Rother (Environmental Health specialisation).

Admission requirements

- FMF1.1 (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 they:
- (i) hold 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) hold an approved honours or equivalent four-year degree from this University or another university recognised by Senate for the purpose; and
 - (iii) have attained at least a C-grade pass in higher-grade Senior Certificate Mathematics or an equivalent recognised by Senate for the purpose; and
 - (iv) are 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) their reasons for doing the programme; and
 - (ii) the ways in which they envisages (or hopes) the programme will improve their work skills and/or effectiveness at work.
- FMF1.2 (a) A candidate for the Health Economics specialisation shall not be admitted to the programme unless they:

- (i) hold an approved degree in economics, health sciences or social sciences from this University or another university recognised by Senate as equivalent;
 - (ii) hold an honours or equivalent four-year degree from this University; or another university recognised by Senate for the purpose;
 - (iii) have attained at least a C-grade pass in higher-grade matriculation mathematics or an equivalent recognised by Senate for the purpose; and
 - (iv) are 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) their reasons for doing the course, and (ii) the ways in which they envisage (or hope) the programme will improve their work skills and/or effectiveness at work.

Duration of programme

FMF2 A candidate shall be registered for a minimum of 12 months and a maximum of four years.

Curriculum outline

FMF3 The following specialisations are offered by coursework and dissertation, with streams in:

**FMF3.1 Community Eye Health specialisation
[M012CHM03]**

Convener:

Dr D Minnies (Department of Surgery)

Compulsory courses:

Code	Course	NQF Credits	NQF Level
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
PPH7065S	Epidemiology of Non-communicable Diseases.....	12	9
PPH7070S	Quantitative Research Methods.....	12	9
PPH7093F	Introduction to Health Systems.....	12	9
CHM6046S	Project Management Essentials.....	12	9
PPH7015W	Public Health Minor Dissertation.....	60	9

A further two elective modules should be selected from the below:

Code	Course	NQF Credits	NQF Level
CHM6045F	Fundamentals of Global Surgery.....	12	9
PPH7093F	Introduction to Health Systems.....	12	9
PPH7041S	Health Policy and Planning.....	12	9
PPH7092S	Biostatistics II.....	12	9
PPH7016F	Public Health and Society.....	12	9
PPH7029F	Advanced Epidemiology.....	12	9
PPH7022S	Evidence-based Healthcare.....	12	9

Code	Course Level	NQF Credits	NQF
PPH7063S	Epidemiology of Infectious Diseases.....	12	9
PPH7053F	Public Health and Human Rights.....	12	9
PPH7054S	Gender and Sexual & Reproductive Health.....	12	9
PPH7071F	Qualitative Research Methods.....	12	9
	<i>Total NQF credits.....</i>	180	

FMF3.2 Epidemiology specialisation

[MM012PPH02]

Convener:

Professor L Myer

Compulsory courses:

Code	Course	NQF Credits	NQF 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
PPH7070S	Quantitative Research Methods.....	12	9

And any two or all three of the following:

Code	Course	NQF Credits	NQF 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 or alternative, subject to the discretion of the convener

Code	Course	NQF Credits	NQF Level
PPH7039F	Theory & Application of Economic Evaluation in Healthcare.....	12	9
PPH7093F	Introduction to Health Systems.....	12	9
PPH7094S	Health Systems Research and Evaluation.....	12	9
PPH7090S	Seminars in Epidemiology & Biostatistics (with approval of specialisation convener).....	12	9

Plus:

Code	Course	NQF Credits	NQF Level
PPH7015W	Public Health Minor Dissertation.....	60	9
	<i>Total NQF Credits.....</i>	180/192	

FMF3.3 Environmental Health specialisation

[MM012PPH15]

Convener:

Professor HA Rother

Compulsory courses

Code	Course	NQF Credits	NQF Level
PPH7098F	Environmental Health and Policy.....	12	9
PPH7016F	Public Health and Society.....	12	9

Code	Course	NQF Credits	NQF Level
PPH7018F	Introduction to Epidemiology.....	12	9
PPH7070S	Quantitative Research Methods.....	12	9
PPH7099S	Children’s Environmental Health.....	12	9
PPH7097S	Climate Change and Pollution and Health.....	12	9

Plus four elective courses subject to the discretion of the relevant conveners, from the courses below:

Code	Course	NQF Credits	NQF Level
PPH7021F	Biostatistics I.....	12	9
PPH7053F	Public Health and Human Rights.....	12	9
PPH7089F/S	Public Health Practicum.....	12	9
PPH7071F	Qualitative Research Methods.....	12	9
PPH7091S	Qualitative Data Analysis.....	12	9
PPH7065S	Epidemiology of Non-communicable Diseases.....	12	9
PPH4042S	Pesticide and Integrated Vector Management.....	20	8
PPH4034S	Pesticide Toxicology.....	20	8
PPH4035S	Pesticide Ecotoxicology.....	20	8
EGS5031F	Introduction of Climate Change and Sustainable Development....	23	9
EGS5032F	Climate Change Adaption and Mitigation.....	23	9
PBL5045S	Environmental Law for Non-Lawyers.....	15	9

Plus:

Code	Course	NQF Credits	NQF Level
PPH7015W	Public Health Minor Dissertation.....	60	9
Total NQF credits:		180-194	

FMF3.4 General specialisation

[MM012PPH07]

Convener:

Associate Professor J Olivier

Compulsory courses:

Code	Course	NQF Credits	NQF 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:

Code	Course	NQF Credits	NQF 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:

Code	Course	NQF Credits	NQF Level
PPH7092S	Biostatistics II.....	12	9

Code	Course	NQF Credits	NQF Level
PPH7095F	Biostatistics III	12	9
PPH7022S	Evidence-based Healthcare	12	9
PPH7029F	Advanced Epidemiology	12	9
PPH7039F	Theory & 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 Sexual & Reproductive 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/S	Public Health Practicum.....	12	9
PPH7091S	Qualitative Data Analysis	12	9
PPH7015W	Public Health Minor Dissertation	60	9
Total NQF credits:		180/192	

FMF3.5 Health Economics specialisation **[MM012ECO07]**

Convener:

Dr L Cunnama

Compulsory courses:

Code	Course	NQF Credits	NQF Level
PPH7039F	Theory & Application of Economic Evaluation in Healthcare	12	9
PPH7041S	Health Policy and Planning.....	12	9
PPH7050F	Microeconomics for the Health Sector	12	9
PPH7064F	Quantitative Methods for Health Economists	12	9
PPH7070S	Quantitative Research Methods	12	9
PPH7077S	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:

Code	Course	NQF Credits	NQF Level
PPH7016F	Public Health and Society	12	9
PPH7018F	Introduction to Epidemiology	12	9
PPH7022S	Evidence-based Healthcare	12	9
PPH7053F	Public Health and Human Rights	12	9
PPH7071F	Qualitative Research Methods	12	9
PPH7089F/S	Public Health Practicum.....	12	9
PPH7091S	Qualitative Data Analysis	12	9
PPH7093F	Introduction to Health Systems	12	9
PPH7094S	Health Systems Research and Evaluation	12	9

Plus:

Code	Course	NQF Credits	NQF Level
PPH7087W	Health Economics Minor Dissertation.....	90	9
Total NQF credits		180-186	

FMF3.6 Health Systems specialisation

[MM012PPH12]

Convener:

Associate Professor J Olivier

Compulsory courses:

Code	Course	NQF Credits	NQF 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):

Code	Course	NQF Credits	NQF Level
PPH7039F	Theory & Application of Economic Evaluation in Healthcare.....	12	9
PPH7053F	Public Health and Human Rights.....	12	9
PPH7054S	Gender and Sexual & Reproductive Health.....	12	9
PPH7063S	Epidemiology of Infectious Diseases	12	9
PPH7065S	Epidemiology of Non-Communicable Diseases	12	9
PPH7089F/S	Public Health Practicum	12	9
PPH7091S	Qualitative Data Analysis.....	12	9

Plus:

Code	Course	NQF Credits	NQF Level
PPH7015W	Public Health Minor Dissertation	60	9
Total NQF credits		180	

FMF3.7 Social and Behavioural Sciences specialisation

[MM012PPH14]

Convener:

Associate Professor L Knight

Compulsory courses:

Code	Course	NQF Credits	NQF 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 Sexual & Reproductive Health.....	12	9
PPH7015W	Public Health Minor Dissertation	60	9

168 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Code	Course	NQF Credits	NQF Level
	<i>Plus, another four elective courses, subject to the discretion of the relevant convener, 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 & 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
PPH7065S	Epidemiology of Non-communicable Diseases.....	12	9
PPH7077S	The Economics of Health Systems.....	12	9
PPH7089F/S	Public Health Practicum.....	12	9
	Total NQF credits:	180	

Attendance

FMF4 Any candidate who misses the block teaching at the beginning of a course may not join that course afterwards.

Progression and readmission

FMF5 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

FMF6.1 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; and
- (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.

- FMF6.2 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%); and
 - (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

- FMF7 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]**

Convener:

Associate Professor SA Singh (Department of Health and Rehabilitation Sciences)

Admission requirements

- FMG1 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

- FMG2
- (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

- FMG3 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.

170 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

FMG4 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
AHS5000W	Audiology Dissertation	180	9
	Total NQF credits	180	

OR

Code	Course	NQF Credits	NQF Level
AHS5001W	Speech-Language Pathology Dissertation.....	180	9
	Total NQF credits	180	

Distinction

FMG5 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 by dissertation [MM054HUB05][SAQA ID:21427]

Conveners:

Dr F Robertson and Associate Professor T Mutsvangwa (Department of Human Biology)

Admission requirements

- FMG6 A person shall not be admitted as a candidate for the degree programme unless:
- they hold a four-year degree in Engineering or an Honours degree in Mathematical, Physical or Computer Sciences;
 - they hold a qualification deemed by Senate to be equivalent; or
 - they have 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
 - they have satisfied Senate that they have the necessary background and training to undertake an approved programme of work for the degree of master in the Faculty.

Duration of programme

FMG7 A candidate shall not be awarded the degree unless they have been registered there for at least one academic year.

Prerequisites and co-requisites

FMG8 Candidates will be required to complete the following courses before proceeding to the full dissertation: HUB5002W

Curriculum

Code	Course	NQF Credits	NQF Level
HUB4095F	Anatomy for Biomedical Engineers	12	8
HUB2025H	Physiology for Biomedical Engineers	12	6
HUB4075W	Biomedical Engineering Overview	8	9
	<i>Plus two of the following courses (Students may not receive credit for both HUB5031F and HUB6009F):</i>		
HUB4007F	Biomechanics of the Musculoskeletal System	12	8
HUB4045F	Introduction to Medical Imaging and Image Processing.....	12	8
HUB4071F/S	Applied Electrophysiology*	12	8
HUB6009F	Medical Device Design Part I	21	9
HUB5031F	Health Innovation & Design (A)	21	9

Code	Course	NQF Credits	NQF Level
	Total NQF credits:	56-65	

[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.

**MSc in Biomedical Engineering by coursework and dissertation (in abeyance)
[MM055HUB05][SAQA ID:21427]**

Conveners:

Dr F Robertson and Associate Professor T Mutsvangwa (Department of Human Biology)

Also see General Rules for Master’s Degree Studies of this handbook.

Admission requirements

FMG9 An applicant shall not be admitted as a candidate for the MSc in Biomedical Engineering unless they:

- (a) hold a degree of Bachelor of Science in Engineering or an Honours degree in a quantitative discipline;
- (b) hold a qualification deemed by Senate to be equivalent; or
- (c) have 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) have satisfied Senate that they have the necessary background and training to undertake an approved programme of work for the degree of master in the Faculty.

Duration of programme

FMG10 A candidate shall not be awarded the degree unless they have been registered for the programme for at least one academic year.

Curriculum outline

FMG11 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
	<i>Compulsory courses:</i>		
HUB4095F	Anatomy for Biomedical Engineers.....	12	8
HUB2025H	Physiology for Biomedical Engineers.....	12	6
HUB4075W	Biomedical Engineering Overview	8	9
HUB5031F	Health Innovation and Design (A)	21	9
HUB6009F	Medical Device Design Part I	21	9
HUB6010S	Medical Device Design Part II.....	21	9
HUB6007W	Biomedical Engineering Minor Dissertation.....	90	9
	<i>Plus one of the following elective courses:</i>		
HUB4007F	Biomechanics of the Musculoskeletal system.....	12	8
HUB4045F	Introduction to Medical Imaging and Image Processing.....	12	8
HUB4071F/S	Applied Electrophysiology*.....	12	8
	Total NQF credits	185	

**HUB4071F/S Applied Electrophysiology will run either in first semester or second semester but not both. The course may not be offered.]*

172 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Prerequisites and co-requisites

FMG12 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.

FMG13 HUB6009F is a pre-requisite for HUB6010S.

Distinction

FMG14 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 Computational Health Informatics [MM038PTY31]

Convener:

S Dalvie

The primary purpose of the Master of Science in Computational Health Informatics is to provide advanced and specialised training in biomedical data science and technology.

Admission requirements

FMG15.1 To be eligible for consideration for admission, a candidate shall:

- Have an overall final mark of at least 65% in a NQF level 8 qualification in genetics, statistics, biomedical sciences, bioinformatics, computer sciences, or a related discipline
- Have proven proficiency in written and spoken English, including medical terminology (this may be tested if necessary); and
- have an acceptable level of computer literacy, access to a computer, and the internet.

FMG15.2 Applicants will be ranked based on the following criteria:

- Candidates will be ranked based on overall honours or equivalent degree (NQF level 8) marks:
- If a candidate rejects the offer, the ranking will be used to select the next offer

Additional notes

- Applicants may be interviewed telephonically if necessary.
- The selection will be conducted by a departmental selection committee

Structure and duration

FMG16.1 **Structure:** The programme consists of specialised coursework (120 credits) and a minor dissertation (60 credits). On completion of the coursework and approval of a research project proposal, students will proceed to the research component. The programme offers a series of 12 courses, 3 compulsory (20 credit) and 9 electives (15 credits each). All 12 courses will be offered every year. A student will be required to complete 7 courses, 3 compulsory courses totalling 60 credits and choose 4 elective courses (totalling 60 credits). The elective courses could come from those on offer or equivalent courses with approval from the programme conveners. A maximum of two courses may be re-taken in the second year.

FMG16.2 **Duration:** This is a 2-year programme, comprising lectures, tutorials, self-directed learning, an optional supervised internship and a minor dissertation. The duration of the programme is two years.

Curriculum outline

FMG17 The curriculum outline is as follows:

Code	Course Level	NQF Credits	NQF
	<i>Compulsory courses:</i>		
PTY6024F/S	Bio-Computing.....	20	9
PTY6025F/S	Bio Informatics Programming with Python	20	9
PTY6026F/S	Machine Learning & Bio Medical Data Science.....	20	9
PTY6034W	ISBS Minor Dissertation	60	9
	<i>Plus four of the following elective courses:</i>		
PTY6027F/S	Proteomics and Gene Expression Data Mining.....	15	9
PTY6028F/S	Bioinformatics for Next Generation Sequencing Technologies....	15	9
PTY6029F/S	Computational Population Omics Structure.....	15	9
PTY6030F/S	Omics-wide Association Studies.....	15	9
PTY6031F/S	Pharmacomicromicrobiomics.....	15	9
PTY6032F/S	Computational Forensics Omics	15	9
PTY6033F/S	Computational Phylogenetics.....	15	9
	Total NQF credits	180	

Assessment overall

- FMG18 (a) Assessment is based on performance in coursework and examinations in the first year, and a dissertation in the second year. Each course convener will determine the appropriate form of assessment in specific courses within the programme. Such assessment will consist of some combination of home assignments, test/quiz or a semester project and final examination;
- (b) To pass the academic year, the student must obtain an overall average of at least 50% with sub-minima of the research project and 50% for the combined coursework;
- (c) The overall class mark is 55 % (25% for coursework and 30% for the exam), research project (40%) and an oral presentation of the research project (5%);
- (d) The evaluation of each course is based on the performance in coursework (formative and summative) and the final examination (summative) scheduled at the end of the course. For each proposed course, the final mark is made up as follows: (15%); coursework mark (assignment) (30%) and final module exam (55%);
- (e) Students are required to develop a research proposal using the prescribed format;
- (f) The dissertation is marked by two examiners, both external to the University.

Progression rules

- FMG19 Except by permission of Senate, a MSc student in the Computational Health Informatics Programme, who does not meet the following requirements may be refused permission to re-register in the following year of study:
- (a) all courses in the first year must be passed;
- (b) an overall average of at least 50% of coursework in the first year of registration;
- (c) a written and oral presentation of a research proposal must be approved by the relevant committee of the Department of Pathology, or Department of Integrative Biomedical Sciences in the second semester of the first year.

Distinction Rules

- FMG20 The degree by coursework and dissertation may be awarded with distinction where a candidate obtains an overall average mark of 75% or above for both components, with no less than 70% for each component.

MSc in Epidemiology & Biostatistics
[MM191PPH20]

Convener:

Professor L Myer (School of Public Health)

Admission requirements

- FMG21.1 To be eligible for admission an applicant shall:
- (a) hold an approved degree in a health profession or a related field with at least a four-year degree from this University or of another university recognised by Senate for the purpose; or
 - (b) hold an approved honours or equivalent four-year degree from this University or of another university recognised by Senate for the purpose;
 - (c) have attained at least a C-grade pass in higher grade in National Senior Certificate Mathematics or an equivalent recognised by Senate for the purpose; and
 - (d) be proficient in written and spoken English.
- FMG21.2 In addition, an applicant 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) their reasons for wanting to do the programme, and (ii) the ways in which they envisage the programme will improve their skills and abilities related to quantitative health sciences research.

Structure and duration

FMG22 A candidate shall be registered for a minimum of one academic year and a maximum of four academic years.

Curriculum outline

FMG23 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
	<i>Compulsory courses:</i>		
PPH7018F	Introduction to Epidemiology	12	9
PPH7021F	Biostatistics I.....	12	9
PPH7029F	Advanced Epidemiology.....	12	9
PPH7070S	Quantitative Research Methods	12	9
PPH7092S	Biostatistics II	12	9
PPH7095F	Biostatistics III	12	9
	<i>Plus two of the following:</i>		
PPH7022S	Evidence-based Healthcare	12	9
PPH7063S	Epidemiology of Infectious Diseases.....	12	9
PPH7065S	Epidemiology of Non-communicable Diseases	12	9
PPH7090S	Seminars in Epidemiology & Biostatistics	12	9
	<i>Plus</i>		
PPH9080W	Epidemiology & Biostatistics Minor Dissertation	90	9
	Total NQF credits	186	

Assessment overall

- FMG24 (a) Students are required to pass a minimum of eight courses and the dissertation to qualify for the degree;
- (b) Assessment of the coursework component (eight courses) 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%); and
- (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.

Progression

FMG25 Candidates may be allowed to repeat a course they have failed, at the discretion of the programme committee. No course may be repeated more than once. 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.

MSc in Exercise & Sports Physiotherapy **[MM034AHS16][SAQA ID:100993]**

Convener:

Associate Professor T Burgess (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

FMG27 A candidate shall not be admitted to the programme unless they:

- (a) are a graduate in physiotherapy of the University or of any other university recognised by Senate for the purpose;
- (b) are registered with the Health Professions Council of South Africa as a physiotherapist, or provide evidence of appropriate registration with an equivalent registering body outside of South Africa; and
- (c) have 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 (OMT) certificate is an advantage.]

Duration of programme

FMG28 A candidate shall be registered for a minimum of three years, and a maximum period of five years of part-time study.

Curriculum outline

FMG29 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.

FMG29.1 The prescribed courses are:

Code	Course	NQF Credits	NQF 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.....	60	9
HUB5012W	Exercise and Sports Physiotherapy Minor Dissertation.....	60	9
	Total NQF credits.....	180	

Assessment

FMG30 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

FMG31 The degree may be awarded with distinction if the student obtains an average mark of 75% for the coursework and the dissertation components, with no less than 70% for each component. All courses must be passed at first attempt.

MSc IN NURSING

Convener:

Associate Professor S Clow (Department of Health and Rehabilitation Sciences)

Admission requirements

- FMG32.1 To be eligible for consideration, a candidate shall:
- (a) have a four-year Bachelor's degree in Nursing and have achieved a minimum aggregate of 65% in the final year of the Bachelor's degree; 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 and/or midwife if the dissertation has a clinical component. . If an international applicant, registration with the SANC is required if the dissertation has a clinical component;
 - (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 proposal for departmental review);
 - (e) submit, with the application, a concept paper of the proposed research project, using the guidelines provided. This should be within the research focus areas of the Division of Nursing and Midwifery
 - (f) have an approved level of basic computer literacy; and
 - (g) show evidence of English literacy.

MSc Nursing by coursework and dissertation

- FMG32.2 To be eligible for consideration, a candidate shall:
- (a) have a four-year degree in nursing; or
 - (b) a Postgraduate Diploma in Nursing, i.e., NQF level 8; and
 - (c) have achieved a minimum aggregate of 65% in the final year of the Bachelor's degree or the Postgraduate Diploma in Nursing;
 - (d) have a qualification recognised by Senate as equivalent to the above; and
 - (e) be registered with the South African Nursing Council (SANC) as a nurse and or midwife if the dissertation has a clinical component. If an international applicant registration with the SANC is required if the dissertation has a clinical component; and
 - (f) have an approved level of basic computer literacy; and
 - (g) show evidence of English literacy.

In addition, the application should indicate the intended research topic, purpose, design, scope, and research setting. (The research topic should be within the research focus areas of the Division of Nursing & Midwifery)

MSc Nursing by coursework and dissertation: alternative access through recognition of prior learning

- FMG32.3 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 FMG32.1 ay be considered for admission through recognition of prior learning. Such a candidate:
- (a) shall 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) shall submit for evaluation a full portfolio of prior learning, a curriculum vitae and supporting letters of reference; and may, in addition, be required to:

178 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

- i. attend an interview with the programme convener; and
- ii. successfully complete a prerequisite learning course or courses before registering; and
- (c) maybe required to undergo an interview with the programme convener;
- (d) shall successfully complete a prerequisite learning course or courses before registering;
- (e) shall have an approved level of basic computer literacy; and
- (f) shall show evidence of English literacy.

In addition, the application should indicate the intended research topic, purpose, design, scope, and research setting.(The research topic should be within the research focus areas of the Division of Nursing & Midwifery).

Duration of programme

- FMG33
- (a) The degree must be completed in a minimum of two years full-time registration or a maximum of four years.
 - (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

FMK3 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:

MSc in Nursing by coursework and minor dissertation

[MM017AHS07][SAQA ID:116438]

Convener:

Associate Professor S Clow (Department of Health and Rehabilitation Sciences)

FMK4 Compulsory core courses:

Code	Course	NQF Credits	NQF Level
AHS5014F	Research Methods (or equivalent)	15	9
AHS5022S	Theoretical Foundations of Nursing Practice.....	30	9

Plus, elective courses:

Code	Course	NQF Credits	NQF Level
	Approved by the programme convener, may be taken from courses offered by the DHRS or other faculties/departments, where the student meets the required prerequisites and places are available.*	53	8/9

Plus:

Code	Course	NQF Credits	NQF Level
AHS5024W	Nursing Minor Dissertation	90	9
	Total NQF credits:	188	

***Examples of elective courses:**

Code	Course	NQF Credits	NQF Level
AHS5018S	Research Methods II.....	15	9
PPH7053F	Public Health and Human Rights.....	12	9

Assessment of MSc by coursework and dissertation

FMG34.1 *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) The proposal for the minor dissertation study must be submitted for departmental review: and
 - (i) in the case of full-time students, within six months of registration for the minor dissertation;
 - (ii) in the case of part-time students, within twelve months of registration for the minor dissertation
- (b) Students registered for the minor dissertation must obtain approval for their research study from the Faculty Human Research Ethics Committee before commencing the research.

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.

FMG34.2 The minimum requirement for re-registration is successful completion of 50% of courses for which registered in any given year.

Distinction

FMG35 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 Nursing by dissertation
[MM002AHS07]**

Convener:

Associate Professor S Clow (Department of Health and Rehabilitation Sciences)

Nursing by Dissertation

- FMG36 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 are required to have completed a postgraduate-level course in research methodology prior to submission of the research proposal for departmental review;
- c. The proposal for the dissertation must be submitted for departmental review:
 - c. in the case of full-time students, within six months of registration;

FMG37 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
AHS5007W	Nursing Dissertation.....	180	9
	Total NQF credits	180	

180 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Ethics approval

FMG38 Students registered for the MSc in Nursing by dissertation must obtain approval for their research study from the Faculty Human Research Ethics committee before commencing the research.

Due performance requirement

FMG39 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

FMG40 The degree by dissertation may be awarded with distinction (75% – 100%).

MSc IN OCCUPATIONAL THERAPY [MM005 and MM018]

Convener:

Associate Professor H Buchanan (Department of Health and Rehabilitation Sciences)

Admission requirements

FMG41 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

- FMG42
- (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.

MSc in Occupational Therapy by coursework and dissertation [MM018AHS09][SAQA ID:3437]

Convener:

Associate Professor H Buchanan (Department of Health and Rehabilitation Sciences)

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

FMM4 The curriculum outline is as follows:

All students shall register for the following core courses:

Code	Course	NQF Credits	NQF Level
AHS5014F	Research Methods.....	15	9
AHS5015F	Human Occupation: Theory and Critique.....	15	9
AHS5016F	Occupational Therapy: 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:

Code	Course	NQF Credits	NQF Level
AHS5044S	Occupational Therapy in Primary Healthcare.....	15	9
AHS5045S	Occupation-based Community Development Practice	15	9
AHS4089F	Introduction to Disability as Diversity.....	30	8
Total NQF credits:		180/195	

DP requirement

FMG43 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

- FMG44
- (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]**

Convener:

Associate Professor H Buchanan (Department of Health and Rehabilitation Sciences)

FMM45 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
AHS5027W	Occupational Therapy Dissertation	180	9
Total NQF credits		180	

182 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Recommendation for MSc by dissertation

FMG46 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.

MSc IN PHYSIOTHERAPY **[MM004AHS08][SAQA ID:113564]**

Convener:

Associate Professor N Naidoo (Department of Health and Rehabilitation Sciences)

Admission requirements

FMG47 A candidate shall not be admitted to the programme unless they

- are a graduate in physiotherapy of the University or of any other university recognised by Senate for the purpose;
- are registered as a physiotherapist with the Health Professions Council of South Africa (or provides evidence of appropriate registration with an equivalent registering body outside of South Africa);
- have submitted a study synopsis of approximately 500 words outlining the proposed research; and
- have achieved an average of 60% in the final year of their undergraduate programme.

Duration of programme

FMG48 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.

Curriculum

FMG49 The curriculum is as follows:

Code	Course	NQF Credits	NQF Level
AHS5019W	Physiotherapy Dissertation	180	9
	Total NQF credits.....	180	

Prerequisite and/or co-requisite

FMG50 Students registering for the dissertation are required to have completed a postgraduate-level course in research methodology and research ethics prior to the submission of the research proposal or, at the latest, within the first twelve months following registration for the MSc.

MASTER OF SCIENCE IN MEDICINE

MSc (Medicine) by dissertation [MM095][SAQA ID:3409]

The MSc(Medicine) by dissertation is offered in a large range of disciplines:

Specialisation	Qualification code	Academic plan code	Department	SAQA ID NUMBER
Anatomical Pathology	MM095	PTY20	Pathology	3649
Anatomy	MM095	HUB01	Human Biology	116296
Bioinformatics	MM095	IBS03	Integrative Biomedical Sciences	Awaited
Biological Anthropology	MM095	HUB03	Human Biology	Awaited
Biomaterials	MM095	CHM19	Surgery	Awaited
Biomedical Sciences	MM095	HUB06	Human Biology	Awaited
Cardiothoracic Surgery	MM095	CHM01	Surgery	21413
Cardiovascular Biomechanics	MM095	CHM15	Surgery	Awaited
Cell Biology	MM095	HUB07	Human Biology	Awaited
Chemical Biology	MM095	IBS02	Integrative Biomedical Sciences	Awaited
Chemical Pathology	MM095	PTY06	Pathology	21414
Clinical Pharmacology	MM095	MDN03	Medicine	21416
Clinical Science & Immunology	MM095	PTY05	Pathology	Awaited
Dietetics	MM095	HUB20	Human Biology	3409
Emergency Medicine	MM095	FCE02	Family, Community and Emergency Care	104772
Exercise Science	MM095	HUB08	Human Biology	96646
Forensic Genetics	MM095	PTY02	Pathology	Awaited
Forensic Medical Microbiology	MM095	PTY16	Pathology	Awaited
Forensic Medicine	MM095	PTY26	Pathology	Awaited
Forensic Toxicology	MM095	PTY27	Pathology	Awaited
Global Surgery	MM095	CHM32	Surgery	Awaited
Haematology	MM095	PTY11	Pathology	Awaited
Human Genetics	MM095	PTY12	Pathology	Awaited
Infection Management	MM095	CHM29	Surgery	Awaited
Mechanobiology	MM095	HUB30	Human Biology	Awaited
Medical Biochemistry	MM095	IBS04	Integrative Biomedical Sciences	Awaited
Medical Cell Biology	MM095	HUB07	Human Biology	Awaited
Medical Microbiology	MM095	PTY16	Pathology	Awaited
Medical Physics	MM095	RAY02	Radiation Medicine	Awaited
Medical Virology	MM095	PTY17	Pathology	Awaited
Medicine	MM095	MDN12	Medicine	Awaited
Molecular Forensics	MM095	PTY04	Pathology	Awaited
Musculoskeletal Science	MM095	CHM27	Surgery	Awaited
Nephrology	MM095	MDN13	Medicine	Awaited

184 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Neuroscience (Medicine)	MM095	MDN31	Medicine	Awaited
Neuroscience (Neurosurgery)	MM095	CHM16	Surgery	Awaited
Neuroscience (Paediatrics)	MM095	PED24	Paediatrics	Awaited
Neuroscience (Physiology)	MM095	HUB32	Human Biology	Awaited
Neuroscience (Psychiatry)	MM095	CHM16	Psychiatry & Mental Health	Awaited
Obstetrics & Gynaecology	MM095	OBS03	Obstetrics & Gynaecology	Awaited
Otorhinolaryngology	MM095	CHM04	Surgery	Awaited
Paediatrics	MM095	PED11	Paediatrics & Child Health	Awaited
Physiology	MM095	HUB13	Human Biology	Awaited
Psychiatry	MM095	PRY09	Psychiatry & Mental Health	Awaited
Public Health	MM095	PPH07	Public Health	Awaited
Radiobiology	MM095	RAY05	Radiation Medicine	Awaited
Radiotherapy	MM095	RAY07	Radiation Medicine	Awaited
Sports Injuries	MM095	CHM30	Surgery	Awaited
Surgery	MM095	CHM10	Surgery	Awaited
Trauma Science	MM095	CHM28	Surgery	Awaited
Trichology & Cosmetic Science	MM095	MDN25	Medicine	Awaited
Urology	MM095	CHM12	Surgery	Awaited

NQF credits: 180 at HEQSF level 9

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.

Admission requirements

- FMH1 A person shall not be admitted as a candidate for the degree programme unless:
- they hold a Bachelor of Medical Science Honours degree of the Faculty; or
 - they hold a qualification deemed by Senate to be equivalent; or
 - they have 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
 - they have satisfied Senate that they have the necessary background and training to undertake an approved programme of work for the degree of master in the Faculty.

Duration of programme

- FMH2 A candidate shall not be awarded the degree unless they have been registered for at least one academic year.

Pre- and co-requisites

FMH3 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

FMH4.1 A candidate who is required to do coursework must pass each coursework component as well as the full dissertation with at least 50%.

FMH4.2 The examiners may, in addition, require a candidate to present himself/herself for an oral examination.

Progression

FMH5 A candidate may be refused readmission if they, if registered for an MSc (Medicine) specializing in Emergency Medicine:

- (a) have 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) have not submitted a final research proposal by the beginning of the third year of study since first registration for the degree;
- (c) have had a dissertation proposal rejected three times by the Emergency Medicine Research Committee (EMDRC) as a result of their not following the recommendations of the Committee and/ or those of the internal (Divisional) supervisor; and/or
- (d) have not completed the required dissertation within five years of first registration for the degree.

Master of Chemicals Risk Management
[MM037PPH19][SAQA ID:117985]

Convener:

Professor HA Rother

Admission requirements

- FMI1 (a) Four-year undergraduate degree or a relevant postgraduate diploma. Since chemicals management is an eclectic field and incorporates a broad range of disciplines (e.g., chemistry, science, toxicology, public health, medicine, environmental sciences, agriculture, biology, political science, economics, sociology, anthropology, psychology) and therefore a broad range of four-year degrees will be accepted depending on the experience the applicant has had with chemicals.
- (b) Demonstrated proficiency in written and spoken English (TOEFL, or equivalent, required where appropriate).
 - (c) Proven ability to write technical reports and assessments;
 - (d) Demonstrated numeracy skills.
 - (e) For applicants who have completed courses in UCTs postgraduate diploma in Pesticide Risk Management (DPRM; MG021), a GPA of 65% and at least 60% per course. least 65% GPA must have been achieved for two of the following three courses: PPH4033F (Pesticide Risk Management), PPH4041S

186 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

(International Chemicals Management Agreements) and PPH4034S (Pesticide Toxicology).

Structure and duration

- FMI2 (a) **Structure:** The programme consists of specialised coursework (7 courses; 108 credits), a situational analysis research task (30 credits) and a master's project (42 credits). Three courses are completed under UCT's postgraduate diploma in Pesticide Risk Management (20 credits each at NQF Level 8).
- (b) **Duration:** 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. Attendance at a two-week teaching block at the beginning of the programme is mandatory. Students will be required to be in weekly electronic contact with lecturers and conveners. Students may not be registered beyond three years.

Curriculum

FMI3 Students with a UCT postgraduate diploma degree in Pesticide Risk Management (DPRM; MG021) may apply for credit and exemption for the following courses PPH4033F; PPH4034S; PPH4041S. A GPA of 65% and at least 60% per course must have been achieved.

Code	Course	NQF Credits	NQF Level
Year 1			
PPH4033F	Pesticide Risk Management.....	20	8
PPH4034S	Pesticide Toxicology	20	8
PPH4041S	International Chemical Management Agreements.....	20	8
PPH6032R	Research Literacies.....	12	9
Year 2			
PPH6033Q	Risk Communication and Policy Brief Development.....	12	9
PPH6034Q	Situation Analysis Research Task	30	9
PPH6035Q/R	Core Course in Chemical Risk Management.....	12	9
PPH6036R	Chemical Risk Assessment for Managers	12	9
PPH6037Q/R	Professional Master's Project	42	9
	Total NQF credits:	180	

Overall assessment

- FMI4 (a) The course marks for Courses 1-7 will be comprised of:
- 60% - Semester assignments consisting of discussion exercises, assessment of participation in bi-monthly web-based discussion seminars and, online quizzes;
 - 40% - final assignment consisting of a policy brief, policy analysis report or critical review.
 - Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.;
- (b) A pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%;
- (c) Online assessments are managed through the UCT's online learning platform. Each assignment and exercise have a deadline and submission date and time (penalties apply as described in the course outline);

- (d) Online quizzes are timed once opened and students are given a week to open the quiz on to fit into their work schedule and time zone.
- (e) The situational analysis research task (PPH6034Q) and independent implementation master's project (PPH6037Q/R) will have one final mark each. A milestone and rubric will be provided to students which will consist of marks for completed milestones that will form the final mark.

Progression rules

- FMI5 A student who fails to meet the following minimum requirements may be refused permission to renew their registration for the programme
- (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 masters;
 - (b) Students will be allowed to repeat a course they have failed 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;
 - (c) A student must be able to complete all requirements for the master's degree within three years;
 - (d) Students are required to complete and pass by 50% the three DPRM, NQF level 8, courses in the first year to proceed to the NQF 9 courses (i.e., PPH4033F, PPH4034S, and PPH4041S).
 - (e) Students need to complete and pass by 50% the Research Literacies course (PPH6032R), which is completed in year one of the programme, before they can register for the Situational Analysis Task course (PPH6034Q which is in year two.
 - (f) Students need to pass by 50% the Risk Communication and Policy brief course (PPH6033Q) prior to registering for the Masters project (PPH6037Q/R).
 - (g) Students may not proceed to the Master's Project (PPH6037 Q/R) until they have successfully passed the Situational Analysis Research Task course (PPH6034Q)

FMI6 The Masters degree will be awarded with distinctions to candidates who average 75% or above for all courses, with not less than 70% for any course, subject to all courses being passed during the first attempt.

[Note: Students who have successfully graduated and hold a postgraduate diploma in Pesticide Risk Management (DPRM; MG021) from UCT, will be eligible to apply for exemption through credit accumulation and transfer of the courses completed that are required for the professional master's (i.e., PPH4033F/S; PPH4034S; PPH4041S). They must have achieved at least 65% for two of these courses.

Master of Nursing in Child Nursing

[MM035][SAQA ID:102148]

Convener:

Associate Professor M Coetzee

Admission requirements

- FMI7.1 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 achieved a minimum aggregate of 70% in an approved postgraduate diploma in nursing at HEQSF level;

- (d) be registered with the South African Nursing Council (SANC) as a general and specialist nurse;
- (e) have at least two years' clinical nursing experience in child nursing post-SANC registration;
- (f) if an international applicant, submit proof of registration as a general nurse and paediatric nurse within their home countries. Registration with the SANC is required for any programme which has a clinical learning component;
- (g) have an approved level of basic computer literacy
- (h) provide 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.

- FMI7.2 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 FMP1.1 may be considered for admission through recognition of prior learning. Such candidates:
- (a) shall have a four-year diploma in Nursing and Midwifery;
 - (b) shall have at least a postgraduate diploma in Nursing at HEQSF level 8 with a minimum aggregate of 70% for the postgraduate diploma in Nursing;
 - (c) shall 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) be registered with the South African Nursing Council (SANC) as a general and specialist nurse
 - (e) have at least two years' clinical nursing experience in child Nursing post-SANC registration;
 - (f) if an international applicant, submit proof of registration as a general nurse and paediatric nurse within their home countries. Registration with the SANC is required for any programme which has a clinical learning component;
 - (g) shall have an approved level of basic computer literacy, show evidence of English literacy; and shall successfully have completed a prerequisite learning course or courses before being allowed to register. *Note: May be required to undergo an interview with the programme convener.*

Duration of programme

- FMI8 The Master of Nursing in Child Nursing programme must be completed within a minimum of two years full-time registration or a maximum of four years.

Structure of Master of Nursing in Child Nursing degree

- FMI9 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.

FMI10 The curriculum outline is as follows - Year 1 courses:

Code	Course	NQF Credits	NQF Level
AHS5050W	Clinical Research.....	30	9
AHS5047W	Clinical Leadership.....	30	9
AHS5049W	Advanced Child Nursing Practice A.....	35	9

Year 2 courses:

Code	Course	NQF Credits	NQF Level
AHS5048W	Advanced Child Nursing Practice B.....	40	9
AHS5046W	Independent Study Project.....	45	9
Total NQF credits:		180	

Assessment

FMI11 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.

Distinction

FMI12 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 (in abeyance)
[MM036CHM27][SAQA ID:102149]**

Convener:

Professor AG Fieggen (Department of Surgery)

Admission requirements

FMI13.1 Four years, including research and completion of the dissertation.

FMI13.2 To be eligible for consideration a candidate must have:

- (a) a specialist qualification in neurosurgery registered with the HPCSA; and
- (b) demonstrated a particular interest in and commitment to paediatric neurosurgery, either through attendance of relevant courses and workshops or appropriate journal publications.

DP requirements

FMI14 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.

190 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Assessment

FMI15 Ongoing clinical assessment of performance through regular and interactive supervision sessions. Written and oral examinations will be undertaken during each course.

Duration of training

FMI16 All candidates shall be registered for a minimum of two years.

Curriculum outline

FMI17 The curriculum outline is as follows:

Code	Course	NQF Credits	NQF Level
CHM6036W	Basic Anatomy & Physiology in Paediatric Neurosurgery	50	9
CHM6037W	Management of Clinical Conditions in Paediatric Neurosurgery .	45	9
CHM6038W	Surgical & Critical Care Management in Paediatric Neurosurgery	40	9
CHM6039W	Final Integrated Clinical Examination	0	9
CHM6040W	Research Report	45	9
	Total NQF credits	180	

DOCTORAL DEGREES

DOCTOR OF PHILOSOPHY

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, namely:

Specialisation	Qualification Code	Academic Plan Code	Department	SAQA ID
Anaesthesia	MD001	AAE01	Anaesthesia & Perioperative Medicine	Awaited
Anatomical Pathology	MD001	PTY20	Pathology	Awaited
Anatomy	MD001	HUB01	Human Biology	Awaited
Anatomy & Cell Biology	MD001	HUB02	Human Biology	Awaited
Audiology	MD001	AHS02	Health & Rehabilitation Sciences	Awaited
Bioinformatics	MD001	IBS03	Integrative Biomedical Sciences	Awaited
Biological Anthropology	MD001	HUB03	Human Biology	Awaited
Biomaterials	MD001	CHM19	Surgery	Awaited
Biomedical Engineering	MD001	HUB05	Human Biology	Awaited
Biomedical Forensic Science	MD001	PTY25	Pathology	Awaited
Cardiothoracic Surgery	MD001	CHM01	Surgery	Awaited
Cardiovascular Biomechanics	MD001	CHM15	Surgery	Awaited
Cell Biology	MD001	HUB07	Human Biology	Awaited
Chemical Biology	MD001	IBS02	Integrative Biomedical Sciences	Awaited
Chemical Pathology	MD001	PTY06	Pathology	Awaited
Clinical Pharmacology	MD001	MDN03	Medicine	Awaited
Clinical Science & Immunology	MD001	PTY05	Pathology	Awaited
Computational Health Informatics	MD001	PTY31	Pathology	Awaited
Dermatology	MD001	MDN04	Medicine	Awaited
Dietetics	MD001	HUB20	Human Biology	Awaited
Disability Studies	MD001	AHS06	Health & Rehabilitation Sciences	Awaited
Emergency Medicine	MD001	CHM02	Surgery	Awaited
Exercise Science	MD001	HUB08	Human Biology	Awaited
Family Medicine	MD001	FCE09	Public Health & Family Medicine	Awaited
Forensic Genetics	MD001	PTY02	Pathology	Awaited
Forensic Medicine	MD001	PTY26	Pathology	Awaited
Forensic Pathology	MD001	PTY07	Pathology	Awaited
Forensic Toxicology	MD001	PTY27	Pathology	Awaited
Genetic Counselling	MD001	PTY09	Pathology	Awaited

192 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

Global Surgery (CHM)	MD001	CHM32	Surgery	Awaited
Haematology	MD001	PTY11	Pathology	Awaited
Health Communication	MD001	PED17	Paediatrics & Child Health	Awaited
Health Innovation	MD001	HUB11	Human Biology	Awaited
Health Sciences Education	MD001	HSE01	Health Sciences Education	Awaited
Healthcare Technology Management	MD001	HUB10	Human Biology	Awaited
Human Genetics	MD001	PTY12	Pathology	Awaited
Maternal & Child Health	MD001	PED02	Paediatrics & Child Health	Awaited
Mechanobiology	MD001	HUB30	Human Biology	Awaited
Medical Biochemistry	MD001	IBS04	Integrative Biomedical Sciences	Awaited
Medical Cell Biology	MD001	HUB07	Human Biology	Awaited
Medical Microbiology	MD001	PTY16	Pathology	Awaited
Medical Physics	MD001	RAY02	Radiation Medicine	Awaited
Medical Virology	MD001	PTY17	Pathology	Awaited
Medicine	MD001	MDN12	Medicine	Awaited
Nephrology	MD001	MDN13	Medicine	Awaited
Neuropsychiatry	MD001	PRY08	Psychiatry & Mental Health	Awaited
Neuroscience (Medicine)	MD001	MDN31	Medicine	Awaited
Neuroscience (Neurosurgery)	MD001	CHM16	Surgery	Awaited
Neuroscience (Paediatrics)	MD001	PED24	Paediatrics & Child Health	Awaited
Neuroscience (Physiology)	MD001	HUB32	Human Biology	Awaited
Neuroscience (Psychiatry)	MD001	PRY13	Psychiatry & Mental Health	Awaited
Neurosurgery	MD001	CHM04	Surgery	Awaited
Nuclear Medicine	MD001	RAY02	Radiation Medicine	Awaited
Nursing	MD001	AHS07	Health & Rehabilitation Sciences	Awaited
Nutrition	MD001	HUB21	Human Biology	Awaited
Obstetrics & Gynaecology	MD001	OBS03	Obstetrics & Gynaecology	Awaited
Occupational Therapy	MD001	AHS09	Health & Rehabilitation Sciences	Awaited
Ophthalmology	MD001	CHM08	Surgery	Awaited
Orthopaedic Surgery	MD001	CHM06	Surgery	Awaited
Otorhinolaryngology	MD001	CHM07	Surgery	Awaited
Paediatrics	MD001	PED11	Paediatrics & Child Health	Awaited
Pain Neuroscience (Anaesthesia)	MD001	AAE04	Anaesthesia & Perioperative Medicine	Awaited
Physiology	MD001	HUB13	Human Biology	Awaited

Physiotherapy	MD001	AHS08	Health & Rehabilitation Sciences	Awaited
Plastic & Reconstructive Surgery	MD001	CHM09	Surgery	Awaited
Psychiatry	MD001	PRY09	Psychiatry & Mental Health	Awaited
Public Health	MD001	PPH07	Public Health & Family Medicine	Awaited
Radiology	MD001	RAY06	Radiation Medicine	Awaited
Radiotherapy	MD001	RAY07	Radiation Medicine	Awaited
Speech-Language Pathology	MD001	AHS10	Health & Rehabilitation Sciences	Awaited
Sports & Exercise (Medicine)	MD001	FCE003	Family, Community and Emergency Care	Awaited
Surgery	MD001	CHM10	Surgery	Awaited
Trichology & Cosmetic Science	MD001	MDN25	Medicine	Awaited
Urology	MD001	CHM12	Surgery	Awaited

NQF credits: 360 at HEQSF level 10

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: The thesis is examined by three examiners external to the university.

FDA1.1 To be eligible for admission an applicant must

- (a) have a relevant master's qualification or equivalent in postgraduate study related to Disability Studies, Health, Rehabilitation, or Education and Development as recognised by Senate;
- (b) have obtained at least 60% at a master's level to be eligible for admission to the PhD programme;
- (c) have obtained a mark of at least 60% in a relevant research methods course.

[Note: Students may be advised to complete some of the courses of the PG Diploma in Disability Studies or master's coursework in the Department or Faculty, if deemed necessary as a prerequisite for the PhD]

Duration of programme: PhD in Disability Studies

- FDA1.2
- a. A student shall be registered for at least two years of full-time or five years of part-time study.
 - b. The student is required to attend contact sessions and spend the equivalent of at least one a month per year in Cape Town.

c. The student is required to present their progress to DHRS PG committee's request division annually during their studies.

Progression and assessment: PhD in Disability Studies

FDA1.3 Doctoral students will only be accepted in the research focus areas of the staff in the Division of Disability Studies, except where a student may have a primary supervisor in Department of Health and Rehabilitation Sciences and a co-supervisor from another department or faculty;
 Doctoral students are required to complete their proposals in the first year of registration, unless an alternative agreement is made with the Programme convener;
 The student will submit a research thesis consisting of no more than 80 000 words.
 The thesis is examined by three international external examiners.

[Note: Students need to be aware that funding their studies over the full period of their research will be their responsibility, with guidance and help from their supervisors.]

Prerequisites or co-requisites

FDA2 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. Candidates admitted to a PhD in Public Health or Family Medicine may be required to audit a specified pre- or co-requisite course or courses aimed at building their skills to undertake doctoral research. (Details will be included in the Memoranda of Understanding of individual students.)

Approval of research proposal: PhD in Public Health or Family Medicine

FDA3 Approval of a research proposal by candidates registered for a PhD in Public Health or Family Medicine shall be subject to the following. Once the proposal has been developed to the satisfaction of the supervisors, the candidate will be required to present the proposal at a departmental seminar to a committee of three assessors. Using a structured template and process, the assessors will agree on a score ranging from A-D, as described below: A: The proposal is ready for submission to the Doctoral Degrees Board; B: The proposal requires minor revisions which can be overseen by the supervisors; C: The proposal requires major revisions and re-assessment by the three assessors; D: The proposal is not worthy of doctoral research.

These scores shall be interpreted as follows:

- Score of A or B (first or second assessment): with the support of the supervisor(s) the candidate submits their proposal to the Doctoral Degrees Board and continues with doctoral research.
- Score of C (first assessment): with the support of the supervisor(s), the candidate works to complete the major changes on the proposal and undergoes a second assessment. The candidate may also be asked to present at a second assessment seminar.
- Score of C (second assessment): the candidate is required to terminate their registration for the doctorate but may be permitted to continue with an MScMed by dissertation.
- Score of D (first and/or second assessment): the candidate is required to terminate their registration for the doctorate but may be permitted to continue with an MScMed by dissertation.

Progression: PhD in Public Health or Family Medicine

- FDA4 Except by permission of the Senate, a candidate registered for a PhD in Family Medicine or Public Health may be refused readmission if they:
- (a) have not been ready to undergo (i) a first assessment of their doctoral proposal at a departmental seminar within 12 months of first registration, or (ii) a second assessment (which may or may not be required for presentation at a departmental seminar) within 18 months of first registration;
 - (b) have failed to obtain approval by the UCT Human Research Ethics Committee (HREC) of the research proposal within 24 months of first registration;
 - (c) have not by a specified due date audited the specified pre- or co-requisite course/s aimed at building sufficient skills to undertake doctoral research;
 - (d) have failed to make satisfactory progress for two consecutive years; and/or
 - (e) have failed to complete their thesis within five years of first registration for the degree.

PhD in Computational Health Informatics

Admission criteria

- FDA5.1 To be eligible for admission, an applicant must:
- (a) have a relevant master's qualification or equivalent in a master's degree equivalent to MSc in Computational Health Informatics, or related master's degree in Bioinformatics, Public Health, Computer sciences, Biostatistics, Population Genetics and Genetics Epidemiology at NQF level 9, as recognized by Senate;
 - (b) have obtained an average of at least 60% at master's level to be eligible for admission to the PhD programme;
 - (c) have obtained a mark of at least 60% in a relevant research methods course.

Structure and duration

- FDA5.2
- (a) This is a full-time programme, comprising research and internship in industry. The duration of the programme is three years. The PhD is a research degree under supervision of an appointed supervisor. The PhD thesis is examined by three examiners external to the university.
 - (b) The thesis must consist of the original work of the candidate or published work pertinent to their PhD research, with such acknowledged extracts from the work of others as may be pertinent. The candidate shall declare the extent to which it represents their own work, both in concept and in execution.

Progression rules

Except by permission of the Senate, a candidate registered for a PhD in Computational Health Informatics may be refused readmission if they:

- FDA5.3
- (a) Except by permission of the Senate, a candidate registered for a PhD in Computational Health Informatics may be refused readmission if they:
 - (i) a first assessment of their doctoral proposal at a departmental seminar within 12 months of first registration, or
 - (ii) a second assessment (which may or may not be required for presentation at departmental seminar) within 18 months of first registration;
 - (b) have failed to obtain approval by the UCT Human Research Ethics Committee (HREC) of the research proposal within 24 months of first registration;
 - (c) have not by a specified due date audited the specified pre- or co-requisite course/s aimed at building sufficient skills to undertake doctoral research;
 - (d) have failed to make satisfactory progress for two consecutive years; and/or
 - (e) have failed to complete their thesis within five years of first registration for the degree.

PhD in Sports and Exercise Medicine

Admission requirements

FDA6.1 To be eligible for admission, an applicant must hold an MBChB together with MSc or MPhil in Sports & Exercise Medicine or MMed in Sports & Exercise Medicine.

Structure and Duration

FDA6.2 (a) This is a full-time programme, comprising research. The duration of the programme is typically three years. The PhD is a research degree under supervision of an appointed supervisor. The PhD thesis is examined by three examiners external to the university.

(b) The thesis must consist of the original work of the candidate or published work pertinent to their PhD research, with such acknowledged extracts from the work of others as may be pertinent. The candidate shall declare the extent to which it represents their own work, both in concept and in execution.

Assessment Overall

FDA6.3 The thesis is examined by three examiners external to the university.

Progression Rules

FDA6.4 Except by permission of the Senate, a candidate registered for a PhD in Sports and Exercise Medicine may be refused readmission if they:

- (a) have not been ready to undergo:
 - (i) a first assessment of their doctoral proposal at a department seminar within 12 months of first registration, or
 - (ii) a second assessment (which may or may not be required for presentation at a departmental seminar) within 18 months of first registration;
- (b) have failed to obtain approval by the UCT Human Research Ethics Committee (HREC) of the research proposal within 24 months of first registration;
- (c) have failed to make satisfactory progress for two consecutive years; and/or have failed to complete their thesis within five years of first registration for the degree.

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.

NQF credits: 360 at HEQSF level 10

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: The thesis is examined by three examiners external to the university.

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 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, they 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 their 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.

198 RULES AND CURRICULA FOR POSTGRADUATE PROGRAMMES

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:

- graduates of this University in medicine or related fields; or
- graduates in medicine or related fields of other universities, where the scholarly activities of such graduates have been closely 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, they must submit:

- their curriculum vitae;
- one set of copies of the work to be submitted for the degree, and any collateral evidence;
- a detailed synopsis of the contents of the work, including a statement on the nature and value of the contribution;
- 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
- 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: 360 at HEQSF level 10.

DEPARTMENTS IN THE FACULTY

LIST OF DEPARTMENTS, DIVISIONS and UNITS

Department	Division/Unit
Anaesthesia & Perioperative Medicine	N/A
Family, Community, and Emergency Care	Primary Health Care Directorate Family Medicine Interdisciplinary Palliative Care and Medicine Emergency Medicine Sports and Exercise Medicine
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-Foetal Medicine Reproductive Medicine
Paediatrics & Child Health	Urogynaecology Allergology (Paediatric)

200 DEPARTMENTS IN THE FACULTY

	Associated Paediatric Disciplines
	Child & 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 Health & Family Medicine	Public Mental Health
	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

ANAESTHESIA AND PERIOPERATIVE MEDICINE

D23, New Groote Schuur Hospital

Professor and Head:

JLC Swanevelder, MBChB MMed *Stell DA SA FCA SA FRCA UK*

Professor and Deputy Head:

BM Biccard, MBChB *Cape Town FFARCSI FCA SA MMedSc PhD UKZN*

Professor and Director of Pain Management Unit:

RE Parker, BSc BScHons (Medicine) PGDip (Health Professional Education) *Cape Town MSc (Pain) PhD Queen Margaret University*

Emeritus Professor and Senior Scholar:

RA Dyer, BScHons *Stell MBChB PhD Cape Town FCA SA*

Associate Professors:

MR Hofmeyr, MBChB *Stell Dip (Primary Emergency Care) SA DA SA FCA SA*

IA Joubert, MBBCh *Witwatersrand DA SA FCA SA*

Senior Lecturers Full-time:

C Alphonsus, MBChB *Transkei DA SA FCA SA*

K Bergh, MBChB *Pret DA SA FCA SA*

K Bester, MBChB *Stell DA SA FCA SA*

KH Bhagwan, MBChB *Cape Town DA SA FCA SA*

A Bhattay, MBChB *Cape Town FCA SA*

T Biesman-Simons, MBChB *Cape Town 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 SA FCA SA*

E Coetzee, MBChB *Pret DA SA FCA SA*

M Crowther, MBChB *Pret Dip Obst SA DA SA MMed (Anaes) Cape Town FCA SA*

A de Vaal, MBChB *UFS DA SA FCA SA*

LD Dougall, MBBCh *Witwatersrand DA SA MMed (Anaes) Cape Town FCA SA*

R Duys, MBChB MMed *Cape Town MRCP UK FCA SA*

A Ernst, MBChB *Pret DA SA FCA SA*

NL Fernandes, MBChB *Cape Town FCA SA*

MW Gibbs, MBChB *Stell MMed Cape Town DA SA FCA SA*

RM Gray, MBChB *Cape Town DA SA FCA SA*

RA Haylett, MBChB *Cape Town DA SA FCA SA*

WM Jagga, MBChB *Free State FCA SA*

K Kemp, MBChB *Stell DA SA FCA SA*

L Lambrechts, MBChB *Stell DA SA Dip Pec SA Cert Critical Care SA FCA SA*

RL Llewellyn, MBChB *Cape Town FCA SA*

B Mashanda-Tafaune, MBChB *Limpopo DA SA MMed (Anaes) Cape Town FCA SA*

H Meyer, MBChB *London FRCA UK*

MGA Miller, MBChB *Stell FCA SA Cert (Critical Care) SA*

A Moabelo, MBBCh *Witwatersrand DA SA MMed (Anaes) Cape Town FCA SA*

LF Montoya-Pelaez, MBChB *Zimbabwe FCA SA*

AL Myburgh, MBChB *Pret DA SA FCA SA*

MB Nejtardt, BScHons (Physiology) MBBCh *Witwatersrand DA SA FCA SA*

M Nock, MBChB *Free State DA SA FCA SA*

JL Piercy, BScHons MBBS *London FCA SA Cert (Critical Care) SA*
 AR Reed, MBChB *Cape Town DA SA FRCA UK*
 C Simons, MBChB *Cape Town DA SA FCA SA*
 KJ Timmerman, MBChB *Cape Town DA SA FCA SA*
 D van Dyk, MBChB *Cape Town DA SA FCA SA*
 J van Nugteren, MBBCh *Witwatersrand DA SA FCA SA*
 A Vorster, MBChB *Stell DA SA FCA SA*
 GS Wilson, MBChB *Cape Town FCA SA*

Lecturer:

K Limakatso, BSc(Phys) MSc(Phys) *Cape Town*

Lecturer Part-time:

DJB Batty, MBChB *Cape Town FCA SA*

AAE4003F THE MULTIDIMENSIONAL NATURE OF PAIN

25 NQF credits at NQF level 8

Convener: Professor RE Parker

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.

Assessment: Two assignments, equally weighted (25% each), will make up the coursework mark. The final assessment will consist of a reflective case based essay (50%).

AAE4004F NEUROANATOMY AND NEUROPHYSIOLOGY OF NOCICEPTION AND PAIN

15 NQF credits at NQF level 8

Convener: Professor RE Parker

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%), a series of five weekly online MCQ/SAQ tests (20%), and a group presentation on the neuroscience relating to a paper case (10%). The examination is made up of a three-hour MCQ/SAQ paper (30%).

AAE4005F ASSESSMENT AND MEASUREMENT OF PAIN AND ITS EFFECTS

15 NQF credits at NQF level 8

Convener: Professor RE Parker

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 make up the coursework mark. The first assignment counts 20%, the second assignment counts 30%. The final assessment mark is made up of a final 3,000 word essay and it is weighted 50% towards the overall mark.

AAE4006S COMPREHENSIVE PAIN MANAGEMENT

30 NQF credits at NQF level 8

Convener: Professor RE 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%).

AAE4007S PAIN MANAGEMENT IN COMPLEX CONDITIONS

15 NQF credits at NQF level 8

Convener: Associate Professor RE Parker

Course outline:

In this course students develop the knowledge and skills to work in interdisciplinary teams to manage patients with complex pain conditions. By working in teams, communities of practice are created, and assessment and treatment plans can be developed that are 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%).

AAE4008F PRINCIPLES OF EVIDENCE-BASED PRACTICE

15 NQF credits at NQF level 8

Convener: Professor RE Parker

Course outline:

The course aims to equip the students with the knowledge and skills required to practice as evidence-based healthcare professionals. Students will be introduced to the foundations of evidence-based practice, principles, definitions and basic concepts of clinical epidemiology and research design. A basic understanding of statistical principles will be provided to facilitate skill development in the critique an application of research findings in clinical context.

DP requirements: Completion of all coursework requirements by the due dates. Participation in 75% of online teaching activities including discussion forums, blogs and portfolios.

Assessment: Coursework 50%, final exam 50%

AAE4009F SUCCEEDING IN POSTGRADUATE STUDIES

15 NQF credits at NQF level 8

Convener: Professor RE Parker

Course outline:

This course focuses on the acquisition of the basic skills postgraduate healthcare professional students need to succeed in postgraduate studies. Knowledge and skills will be developed in conducting literature searches using online databases; the ethical principles of plagiarism and tools to avoid plagiarism, and time management for study and research. Students will learn how to structure and write assignments and develop skills for presentations and use of digital media. Skills development include academic critical writing, integration of citations and critical review. The course is delivered in a blended format of one initial week-long contact period, followed by six weeks of online interactive taught material.

DP requirements: Completion of all coursework requirements by the due dates.

Assessment: Assessment is based on coursework (50%), and a final take-home examination assignment (50%).

AAE5002W PAIN NEUROSCIENCE (ANAESTHESIA) DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor R Parker

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 Pain Neuroscience relevant topic. Students are trained in research methods, conducting literature reviews, scientific writing, statistical design and analysis, and in developing 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: The dissertation is examined by two examiners external to UCT.

AAE6002W PHD PAIN NEUROSCIENCE (ANAESTHESIA)

360 NQF credits at NQF level 10

Convener: Professor RE Parker

Course entry requirements: Students who have not completed a research methods course will be required to attend a research methods or critical research literacy course. Students who have not completed the PG Diploma in Interdisciplinary Pain Management or similar Pain Management program may be asked to successfully complete the courses AAE4003F Multidimensional Nature of Pain and AAE4004F Neuroanatomy and Neurophysiology of Nociception and Pain.

Course outline:

The requirement for this PhD thesis, conducted under supervision, is that it must not exceed 50 000 words in length and must be on a Pain Neuroscience relevant topic. Students are trained in research methods, conducting literature reviews, scientific writing, statistical design and analysis, and in developing 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 thesis. The thesis is externally examined.

DP requirements: A candidate may be refused readmission if they: has not submitted, within six months of registration a dissertation proposal for departmental review; and/or has not completed the required dissertation within five years of first registration for the degree.

Assessment: The thesis is examined by three examiners of international standing who are not affiliated to UCT in any way.

AAE7000W ANAESTHESIA THESIS

360 NQF credits at NQF level 10

Convener: Professor JLC Swanevelder

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: The thesis is examined by three examiners external to the university.

AAE7002W ANAESTHESIA MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor BM Biccard and Professor JLC 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.

AAE7003W MMED IN ANAESTHESIA PART 1

60 NQF credits at NQF level 9

Convener: Dr KH Bhagwan

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.

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.

AAE7004W MMED IN ANAESTHESIA PART 2

60 NQF credits at NQF level 9

Convener: Dr KJ Timmerman

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.

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.

AAE7005W MPHIL IN CRITICAL CARE PART 1

120 NQF credits at NQF level 9

Convener: Associate Professor IA 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.

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 they 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.

AAE7006W CRITICAL CARE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor IA 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 a 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 length must be according to the CMSA requirement 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 research proposals. 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.

Assessment: External examination of the minor dissertation.

FAMILY, COMMUNITY AND EMERGENCY CARE

Primary Health Care Directorate

Old Main Building, Groote Schuur Hospital, E47-25, Observatory 7925 (Tel: 021 406 6761/6031)

Chair and Director:

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

Senior Lecturers:

I Datay, MBChB *Cape Town* DPhil *Oxon* FCP *SAA* MMed (Internal Medicine) *UCT*

J Irlam, BSc (Medicine)(Hons) MPhil (Epidemiology) *Cape Town* MSc (Climate Change & Development) *Cape Town*

Lecturer:

S Crawford-Browne, MSocSc *Cape Town*

Honorary Associate Professor:

L Jenkins, MBChB *Stell* MFamMed *UKZN* PhD *Stell* Dip (Anaesthesia)(Obstetrics & Gynaecology)(Health Services Management) *CMCA*

Honorary Lecturers:

K du Pré le Roux, MBChB *Cape Town* MA *Sweden*

B Gaunt, MBChB *Cape Town* MSc *London* Dip (Anaesthesia)(Obstetrics & Gynaecology) *SA*

Honorary Research Associate:

J Corrigan, MBChB *Johannesburg* DMH *South Africa* MMed *Cape Town* FCPHM *SA*

Clinical Teaching Platform Manager:

D Swart, BScHons (Medicine) HDE (Postgraduate) *Cape Town* MPhil *UWC*

CBE Coordinator Garden Route District:

H Reuter, HDE *Rhodes* MBChB Dip (Addictions Care) *Stell*

Academic Coordinator Garden Route District:

F Marais, MBChB *Stell*

Senior Research Officer:

T Assegai, MPH *Pretoria* PHD (PubHlth) *UWC*

Operations Manager:

TBC

Site Facilitators:

C Beauzac, BAHons MA PhD *UWC*

F Jordaan

B Najaar, MNutrit *Stell* BSc (Diet) *UWC*

P Ncamile, BA (HumSci) *Unisa* Dip (DisStudies) *UCT*

T Xapa, Dip (Adult Education) (Business Planning) *Cape Town*

Site Coordinators:

N Daniels

L Felix

Z Geyer, BA *Cape Town* BSc (Medical Bioscience) *UWC*

F Le Roux
A Solomons, Dip (Human Resource Management) *Unisa*

Administrative Officer & PA to Director:

C Johnston, BA *Wits*

Assistant Administrator:

M Swartland FETC (BusAdmin) Certificate

Senior Secretary:

E Kennell, PDSO *Cape Town*

Family Medicine

Level 2, Falmouth Building South

Associate Professor and Head:

K von Pressentin, MBChB *Stell* MMed (Family Medicine) *Stell* FCFP SA PGDip (Health Professions Education and Leadership) *FPD* PhD *Stell*

Associate Professor:

M Namane, MBChB *Cape Town* MPhil *Cape Town* BSc MSc *UNIN* Cert (Community Rheum) *Pret* MSc (Medical Science) *Stell*

T Ras, MBChB *Cape Town* MFamMed *Cape Town* FCFP SA PhD *Cape Town*

Senior Lecturers Full-time:

K Adamson, MBChB *Stell* FCFP SA MMed (Family Medicine) *Stell*

N Beckett, BSc *Rhodes* BSc (Hons) *Stell* MBChB *Stell* PGDip (Family Medicine) *Cape Town* SAFRI Fellow SA

R Christoffels, MBChB *Stell* Dip (Mental Health) SA Dip (Anaesthesia) SA FCFP SA MMed (Family Medicine) *Stell*

N David, MBChB *Witwatersrand* MFGP SA

A de Sa, MBChB *Cape Town* MCFP SA

R Holdman, MBChB *Cape Town* PGDip (Family Medicine) *Stell*

A Isaacs, MBChB *Cape Town* MFamMed *Stell*

D Matthews, MBChB *Witwatersrand* PGDip (Family Medicine) PGDip (Health Professions Education) PGDip (Obstetrics) *Cape Town*

L Morales-Perez, MBChB *Stell* MMed (Family Medicine) *Stell* PGDip (Health Professional Education) *Cape Town*

J Morgan, MBChB *Cape Town* MMed (Family Medicine) *Cape Town* FCFP SA PGDip (Palliative Medicine) *Cape Town*

L Murphy, MBChB MMed *Stell* J Porter, MBChB *Cape Town* MMed (Family Medicine) *Cape Town* FCFP SA

T Ras, MBChB *Cape Town* MFamMed *Cape Town* MFGP SA

B Schweitzer, MBChB *Witwatersrand* Dip (Anaesthesia) SA MFGP SA MPraxMed *Medunsa*

Senior Lecturer Part-time:

S Mathew, MBChB *Witwatersrand* MMed (Family Medicine) *Stell* FCFP SA

MS Saban, MBChB *Cape Town* MFamMed *Stell* FCFP SA

Lecturers Part-time:

C Kalombo, MBChB *Kasapa* PGDip (Family Medicine) *Cape Town* Dip (HIV Management) SA

H Salie, MBChB *Cape Town*

M Visser, MBChB *Witwatersrand* Dip (Primary Emergency Care) SA Dip (Mental Health) SA

Emeritus Associate Professors:

210 DEPARTMENTS IN THE FACULTY

D Hellenberg, MBChB *Cape Town* MFamMed *Stell* FCFP *SA*

Honorary Associate Professors:

E de Vries, MBChB *Stell* MFamMed *Medunsa* FCFP *SA*

S Mazaza, BSc MBChB *Manchester* MLB MFamMed *Cape Town* PGDip *Cape Town* FCFP *SA*

S Prasad, MBBS *Mysore Medical College and Research Institute* MPH *University of Minnesota*

Honorary Adjunct Associate Professor:

G Bresick, MBChB *Cape Town* DCH *SA* MPH *Cape Town*

Honorary Senior Lecturers:

F Christians, MBChB *Cape Town* MCFP *SA* MPH *Sweden* MFamMed *Cape Town* FCFP *SA* Dip (HIV Management) *SA*

A Mendelsohn, BA *Brandeis University* MD/MPH *Tufts University School of Medicine, Boston* Dip (HIV Management) *SA*

S Naidoo, MBChB *Natal* MBA *Cape Town*

A Razak, MBChB MMed (Family Medicine) FCFP *SA*

A Smith, MBChB *Cape Town* Dip (Child Health) *SA* Dip (Geriatric Medicine) *RCGP* MSc (Medical Anthropology) *UCL* MFamMed *Cape Town* Fellow of the European Committee of Sexual Medicine *FECSM*

J Te Riele, MBBCh *Witwatersrand* MMed Fam Med *Cape Town*

J Venter, MBChB *UFS* Higher Diploma in General Surgery *SA*

Honorary Lecturers:

S Craven, MBChB *Oxon* LRCP PhD *Oxford*

S Jacobs, MBChB *Cape Town*

MA Jardine, MBChB *Cape Town*

G Petros, Cert (Adult Education) NDip (Public Health) MPH PhD *Cape Town*

N Wellington, MBChB *Cape Town* DCH *SA* PGDD *Cardiff*

Registrars:

J Booysen

S Dladla

A Fakir

C Johnson

T Lewis

J Moolman

J Ribeiro

T Rubler

A Saunders

C Sekhokoane

J Weenink

C Wiggil

Interdisciplinary Palliative Care and Medicine

Level 2 Falmouth Building

Acting HODiv:

R Krause, MBChB MFamMed *UFS* MPhil (Palliative Medicine) PGDip (Health Professional Education) *Cape Town*

Senior Lecturers Full-time:

M De Swart, MBChB *UFS* MMED (Family Medicine) *SUN* PGDip (Palliative Medicine)

Senior Lecturer Part-time:

L Farrant, MBChB *Wits* Dip HIV Man SA, MPhil Pall Med

Lecturers Part-time:

AJ Barnard, MBChB Dip (Anaesthesia) MFGP SA MPhil *Cape Town*

J Cunningham, MBChB *Wits* PG Dip (Pall Med) *Cape Town* Good Clinical Practice *Wits Health Consortium* DTM&H SA Dip (HIV Management) SA

A Karki, BSc Biology *University of the East MD University of the East Ramon Magsaysay Memorial Medical Center*

Odell, Dip (Child Health) Dip (Obstetrics) SA MPhil (Pall Med) *Cape Town*

K Payne, BSocSc (Psych & Eng) BCur (Nursing) PG Dip (Pall Med) *Cape Town*

M Venter, MBChB MMed (Radiation Oncology) PG Dip (Pall Med) *Cape Town*

Emeritus Associate Professors:

E Gwyther, MBChB MFGP *Cape Town* Dip (Pall Med) MSc *Wales* PhD *Cape Town*

Honorary Professors:

M Chasen, MBChB UP MPhil (Pall Med) *Cape Town* FCP Internal Medicine SA FCP Medical Oncology SA

R Harding, BSc (Hons) *Brunel University* MSc (Social Policy & Social Work Studies) *London School of Economics* PhD *Kings College London*

Honorary Lecturers:

K Stammer, MD

Research Officer:

J Hunter, BA Psychology and Communication Science MPhil in Palliative Medicine *Cape Town*

Emergency Medicine

F51 Old Main Building, Groote Schuur Hospital

The Division of Emergency Medicine is the academic division supporting the emergency care platform of the Western Cape and specifically supporting emergency care clinical services at the UCT training institutions. The Division has a broad clinical and research training footprint, from undergraduate MBChB, PG Dip, Mphil, MMed, MSc to PhD programs. The Division is uniquely multidisciplinary which mirrors the emergency care team encompassing paramedics, doctors and nurses; and encompasses out of hospital care through to hospital emergency centres and critical care. A good deal of the research focus of the division is on strengthening and developing emergency healthcare systems in SA and across the continent.

Associate Professor and Head of Division:

C Hendrikse, MBChB *Stell* MMed (Emergency Medicine) MPhil (Emergency Medicine) FCEM SA

Honorary Professor:

P Brysiewicz, BSocSc (Nursing) *UKZN* BA MCur PhD *UKZN*

Associate Professor:

P Hodkinson, MBChB *Witwatersrand* MPhil PhD *Cape Town* Dip (Primary Emergency Care) DA Dip (Obstetrics & Gynaecology) SA DTM&H *Witwatersrand* PGDip (HPE)

Honorary Associate Professor:

S Bruijns, MBChB Pret MPhil PhD *Cape Town* Dip (Primary Emergency Care) SA FCEM UK FCEM SA

212 DEPARTMENTS IN THE FACULTY

Honorary Senior Lecturer:

S Rambharose, BTech *KZN* BTechHons *KZN* MSc *KZN* PhD *KZN*

Senior Lecturers Full-time:

C Cunningham, BSocSc (Nursing) *UFS* PhD *Cape Town* BTech AdvDip (Management) *MBA Sunderland*

W Khan, MBChB Witwatersrand MMED *Cape Town* FCEM *SA* PGDip (HPE)

L Lai King, MBBCh *Witwatersrand* FCEM *SA*, MMed(EM) *Stell*DipPEC *SA*

C Saunders, BScHons PhD *Cape Town*

W Stassen, BTEMC *UJ* MPhil *Cape Town* PhD *Karolinska & Stell*

Assistant Lecturers Full-time:

W Craig, BEMC MSc(EMC) *CPUT*

M Venter, BEMC

Lecturers Joint staff:

P Cloete, MBChB Pret FCEM *SA* MMed *Cape Town*

K Cohen, MBChB MMed MPhil *Cape Town*

S De Haan, MBChB *Cape Town* FCEM *SA*

M De Man, MBChB PGDip (Family Medicine) *Stell* MMed *Cape Town* FCEM *SA*

R Dickerson, MBBCh *Witwatersrand* Dip (Primary Emergency Care) *DA SA* FCEM *SA* Cert (Critical Care) *SA* ATCL *UK*

D Evans, MBChB FCEM *SA* MMed (Emergency Medicine)

K Evans, MBChB *Cape Town* FCEM *SA* MMed *Cape Town* PgDip Palliative medicine *UCT*

D Fredericks, MBChB *Cape Town* FCEM *SA* Cert Critical Care *SA*

W Jooste, MBChB BMedSci MMed *Stell* FCEM *SA*

A Kropman, MBChB *Cape Town* Dip (FEC) FCEM *SA*

L Phillips, MBChB, FCEM *SA*

W Smith, BSc MBChB *Cape Town* EMDM FCEM *SA*

C van Koningsbruggen, MBChB *UKZN* Dip (Primary Emergency Care) *SA* MMed *Cape Town* FCEM *SA*

P Xafis, MBBCh *Witwatersrand* MMed *Stell* FCEM *SA*

Honorary Lecturers:

TE Mabasa, MBChB *Witwatersrand* FCEM *Cape Town* MMED *Stell*

A Parker, MBChB FCEM *SA* MMed *Cape Town*

L van Rensburg, NDip *Bloemfontein* BTech EMC *CPUT* Mphil *Cape Town*

C Wylie, BTech DUT MPhil *Cape Town*

Honorary Research Affiliate/Associate:

E Callachan, NDip AECT *UJ* MHealSc *Otago* PhD *Cape Town*

E Dippenaar, NDEMC BTEMC MScMed PhD *Cape Town*

A Lourens, NDip *CPUT* BTech *CPUT* MScMed *Stell* PhD *Cape Town*

Junior Research Fellow:

E Theron, MSc Psychology *Sica SA*

FCE4004F PRINCIPLES OF FAMILY MEDICINE

16 NQF credits at NQF level 8

Convener: Associate Professor T Ras

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/behaviour 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%).

FCE4005S EVIDENCE-BASED MEDICINE

13 NQF credits at NQF level 8

Convener: J Irlam and Associate Professor T Ras

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%).

FCE4006S CLINICAL MEDICINE (A)

21 NQF credits at NQF level 8

Convener: Dr B Schweitzer

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%).

FCE4007S PROFESSIONAL PRACTICE

12 NQF credits at NQF level 8

Convener: Associate Professor T Ras

Course outline:

This 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.

FCE4011S CLINICAL MEDICINE (B)

18 NQF credits at NQF level 8

Convener: Dr B Schweitzer

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%).

FCE4016Q INTRODUCTION TO POSTGRADUATE STUDIES

10 NQF credits at NQF level 8

Convener: Dr C Cunningham and Associate Professor P Hodkinson

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. The format of the course is a week-long contact period at the onset, followed by six weeks of predominantly online interactive taught material.

FCE4017R RESEARCH LITERACY

15 NQF credits at NQF level 8

Convener: Dr C Saunders

Course outline:

The course will teach students to think like a researcher and will develop an understanding of the research process. It introduces key concepts necessary for developing a postgraduate research proposal including research ethics, research design and academic writing. In addition, the course introduces students to both quantitative and qualitative research approaches, including the principles of critical thinking and evidence-based medicine.

DP requirements: Completion of all coursework requirements by the due dates. Participation in 75 % of online teaching activities including discussion forums, blogs and portfolios.

Assessment: Assessment is based on coursework (50%) and a capstone assignment/ exam at the end of the course (50%).

FCE4018F CONCEPTS OF EMERGENCY CARE

20 NQF credits at NQF level 8

Convener: Associate Professor P Hodkinson and Dr W Stassen

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.

FCE4019Q ADULT EMERGENCY CARE

30 NQF credits at NQF level 8

Convener: W Khan

Course outline:

This course focuses on adult emergency care. It will be a problem-based course with emphasis on evidence-based medicine and critical thinking. The course will take a system-based approach to the undifferentiated patient presenting for emergency care. It will encompass common problems and differential pathways, as well as relevant basic physiology and anatomy, and deals with the management of common adult medical and surgical emergencies and the evidence-base for these recommendations.

FCE4020R CHILD HEALTH FOR EMERGENCY CARE

30 NQF credits at NQF level 8

Convener: Dr W Stassen and Dr B Cheema**Course outline:**

This course focuses on key aspect of child health for emergency care. We begin with an overview of recent data on global child mortality: How many children die annually, what do they die from and where do they die? Linked to this is an exploration of the causes of these tragic deaths and a look at what the global health community are doing to reduce these unnecessary deaths. We proceed to examine referral pathways and the journeys taken by children seeking emergency care in student's own settings, as well as a look at some of the widely available tools for managing (as well as preventing) childhood emergencies. The next section involves a closer look at the top three causes of child mortality: pneumonia, gastroenteritis and sepsis, including the pathophysiology of these conditions as well as the presenting signs and symptoms, the initial approach to evaluation and management and the usual progression of these pathologies. Finally we explore the concepts of child rights, consent and reporting obligations of health professionals in the emergency care field.

DP requirements: Completion of all coursework requirements by the due dates. Additional coursework in the form of forum discussions and group collaboration exercises will require a minimum of 80% student engagement duly performed (DP). This DP is a prerequisite to sit the final examination.

Assessment: Assessment is based on coursework (50%) and a final examination (50%).

FCE4021R LEADERSHIP & PATIENT SAFETY IN EMERGENCY CARE

15 NQF credits at NQF level 8

Convener: Dr C Cunningham**Course outline:**

The course provides an overview of basic managerial skills, with a focus on skills e.g. objective setting, implementation of plans and review. Resource management e.g. staffing schedules, basic HR processes, financial management. The aim is to make it practical and applicable to senior/shift leader level, not yet first line manager level.

FCE4028F FAMILY AND COMMUNITY ORIENTED PRIMARY CARE

20 NQF credits at NQF level 8

Convener: Professor S Reid and Associate Professor T Ras**Course outline:**

This course will integrate family and community-oriented approaches to primary care. Students will be provided with theoretical input in the form of seminars, and will be required to complete field-based assignments to demonstrate an ability to apply the theory to practice.

DP requirements: Students are required to attend and participate in all seminars and online discussions, and to take part in practical sessions.

Assessment: Written assignment - 50%; Final assessment (oral presentation) - 50%

FCE4029H PREVENTION & PROMOTION OF CHRONIC ILLNESS

21 NQF credits at NQF level 8

Convener: Dr B Schweitzer**Course outline:**

his 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 centre.

Assessment: QI cycle presentation (40%); assignment on rehabilitation (20%); end-of-course MCQ (multiple choice questions) examination (40%).

FCE4030S CLINICAL PALLIATIVE CARE

60 NQF credits at NQF level 8

Convener: Dr R Krause

Course outline:

The aim of this course is to equip experienced health care workers with the knowledge and skills for the practical management of patients with life limiting/ life threatening illnesses; 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.

Lecture times: Weekly online learning material and forum discussions.

DP requirements: Attendance at contact workshops and successful completion of assignments.

Assessment: Continuous coursework assessment contributes 75% of the final mark, with four written assignments (50%) and a portfolio of learning (25%). The final summative assessment comprises a written examination/ final assignment (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.

FCE4032F PALLIATIVE CARE PRINCIPLES

60 NQF credits at NQF level 8

Convener: Dr R Krause

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.

Lecture times: Two compulsory contact sessions.

DP requirements: Attendance at contact workshops and successful completion of assignments.

Assessment: Continuous coursework assessment contributes 50% of the final mark, with four 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.

FCE6005F CLINICAL RESEARCH METHODS I

15 NQF credits at NQF level 9

Convener: Dr C Saunders and E Theron

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%).

FCE6006F CLINICAL RESEARCH METHODS II

15 NQF credits at NQF level 9

Convener: Dr C Saunders

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.

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%.

FCE6007F CLINICAL EMERGENCY CARE I

15 NQF credits at NQF level 9

Convener: Dr L Lai King, Dr W Khan, Dr M De Man, Dr J Head, Dr K Evans, Dr C Van Koningsbruggen

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 two-day 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%).

FCE6008S CLINICAL EMERGENCY CARE II

15 NQF credits at NQF level 9

Convener: Associate Professor P Hodkinson, Dr C Van Koningsbruggen and Dr P Xafis

Course outline:

This semester course focuses on clinical emergency care and continues the themes started in FCE6007F. 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: Formative assessment (3 assignments): 60%; Summative assessment (oral and written examinations): 40%.

FCE6009S HEALTHCARE SYSTEMS

15 NQF credits at NQF level 9

Convener: Dr W Stassen and Dr L Lai King

218 DEPARTMENTS IN THE FACULTY

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.

Assessment: Formative assessment (3 assignments): 60%; Summative assessment (oral and written examinations): 40%.

FCE6010F RESUSCITATION AND CRITICAL CARE

15 NQF credits at NQF level 9

Convener: W Craig, Dr A Parker, Dr W Stassen, and Dr D Evans

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: Assignments (x2), contact day assessments and forum assessments: 60%; summative assessment: 40% (closed-book: 30% and an oral examination: 10%).

FCE6012F DISASTER MEDICINE

15 NQF credits at NQF level 9

Convener: Dr W Smith and Dr M De Man

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.

FCE6013S EDUCATION AND TRAINING IN EMERGENCY CARE

15 NQF credits at NQF level 9

Convener: Associate Professor P Hodkinson, W Craig and Dr W Khan

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: Formative assessment: 65% (assignments: 50% plus forum assessment: 15%); and Summative assessment (oral examination): 35%.

FCE6016W EMERGENCY MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor P Hodkinson

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.

FCE6018W GLOBAL EMERGENCY CARE

30 NQF credits at NQF level 9

Convener: Dr L Lai King, Dr C Cunningham, Dr W Stassen, and Associate Professor P Hodkinson

Course outline:

The objectives of this course are: (a) To develop an understanding of the complexities of emergency care in low resource settings. (b) To understand rational systems-based approach to emergency care system development in low resource settings. (c) To develop further knowledge and skills around emergency burden of disease, epidemiology and resource allocation in these settings. The course will start with the historical origins of global or international health, then explore the epidemiology and health indicators, as well as special considerations for Emergency Care in these settings (including patient safety and ethics). The second half of the course looks at more practical planning for Emergency Care in low resource settings, covering aspects of essential Emergency Care services, and human resources, education and training. Finally, this is brought together looking at technology and innovation, and then health promotion, advocacy and research in low resource settings.

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. Participation in specified contact days and forum discussions

Assessment: Assessment is by means of coursework (50%), oral examination (20%) and a research assignment (30%).

FCE6019W EMERGENCY CARE MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: Associate Professor P Hodkinson

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.

FCE6026S CRITICAL THINKING IN EMERGENCY CARE

15 NQF credits at NQF level 9

Convener: Associate Professor P Hodkinson

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%).

FCE6028S MANAGEMENT AND LEADERSHIP IN HEALTHCARE

15 NQF credits at NQF level 9

Convener: C Cunningham and C Wylie

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: Formative assessment (assignment): 75%; and Summative assessment (examination) 25%.

FCE6029S DISASTER MEDICAL RESPONSE TRAINING

15 NQF credits at NQF level 9

Convener: Dr W Smith

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%).

FCE6030S AMBULATORY CARE & TRAVEL MEDICINE

15 NQF credits at NQF level 9

Convener: Dr L Lai King and Dr N Docrat

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 about conditions pertinent to extra-urban placements and deployment, such as for search and rescue and disaster deployments, expeditions, rigs, or mining operations in Africa. DP requirements: Attendance of all coursework commitments.

DP requirements: Attendance of all coursework commitments.

Assessment: Formative assessment (assignment): 75%; and summative assessment (examination): 25%.

FCE6031S PATIENT SAFETY AND FLOW

15 NQF credits at NQF level 9

Convener: Dr K Cohen and Dr H Tuffin

Course outline:

In this course, 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 include quality measures; risk assessments; communication; teams and teamwork in emergency medicine; the morbidity and mortality meeting; errors in emergency medicine; and how to benchmark and make improvements in ones healthcare environment.

DP requirements: Attendance of main contact session.

Assessment: Assessment is by virtue of coursework (55%) and a final summative assessment (45%).

FCE6032F CONTINUOUS QUALITY IMPROVEMENT

15 NQF credits at NQF level 9

Convener: Dr H Tuffin and Dr K Cohen

Course outline:

In this course, students learn an approach to quality management that builds on 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 FCE6032S, a number of tools and processes are explored theoretically and practically. Specific aspects that 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%).

FCE6042F/S EVENT AND EXPEDITION MEDICINE

15 NQF credits at NQF level 9

Convener: Associate Professor P Hodkinson

Course outline:

Half of this course will focus on large event planning and the other half on expedition and remote site medical support. Large events are becoming a regular occurrence in cosmopolitan urban centres. The correct medical preparedness and response planning is paramount to the success of these events, addressing the specific requirements per nature of event (e.g. rock concert vs. horse race) and coordination with other services, while not overcapitalising on resources. The expedition and remote site medical support component will focus on equipment for expeditions into various terrains, communication solutions, as well as evacuation planning.

DP requirements: Attendance at compulsory contact teaching sessions as prescribed. Attendance and engagement at two local events and reflective portfolio entries on each.

FCE6043S PRACTICING DISASTER PLANS

7 NQF credits at NQF level 9

Convener: Dr W Smith

Course entry requirements: FCE6044F

222 DEPARTMENTS IN THE FACULTY

Course outline:

Candidates will become familiar with the principles and details for practicing all-hazard plans for organisations. This will be both in the form of table-top exercises, limited and full-scale physical exercises. Liaising with local response and recovery organisations will form part of the training. Identifying gaps in the plan, both in the form of training needs and unaddressed local complications and how to feed that back into the original response plan is part of the training. Exercise scheduling will also be covered.

Assessment: Formative assessment (assignments): 75%; and Summative assessment (written examinations): 25%.

FCE6044F WRITING DISASTER PLANS

8 NQF credits at NQF level 9

Convener: Dr W Smith

Course outline:

Candidates will become familiar with the principles and details for writing all-hazard plans for organisations based on local hazard-risk identification and resources. They will learn to apply the resulting gap analysis in disaster preparedness to the institution, lobbying for and justifying the initial and ongoing financial commitment for plans to be lived rather than remaining pure compliance documents. Developing training regimens that fit the plans will also be covered.

Assessment: Formative assessment (6 assignments): 60%; Contact week: 20%; and Summative Assessment (final oral examination): 20%.

FCE7015W PHD SPORTS & EXERCISE MEDICINE

360 NQF credits at NQF level 10

Convener: Associate Professor J Swart

DP requirements: Except by permission of the Senate, a candidate registered for a PhD may be refused readmission if they: 1. have not been ready to undergo (i) a first assessment of their doctoral proposal at a departmental seminar within 12 months of first registration, or (ii) a second assessment (which may or may not be required for presentation at a departmental seminar) within 18 months of first registration; 2. have failed to obtain approval by the UCT Human Research Ethics Committee (HREC) of the research proposal within 24 months of first registration; 3. have failed to make satisfactory progress for two consecutive years; and/or have failed to complete their thesis within five years of first registration for the degree.

Assessment: The thesis is examined by three examiners external to the university.

FCE7048W PALLIATIVE MEDICINE MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: Associate Professor E Gwyther

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.

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.

FCE7051W FAMILY MEDICINE THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor K von Pressentin.

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: The thesis is externally examined.

FCE7055W MSC(MEDICINE) BY DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr C Saunders

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.

Assessment: The dissertation is externally examined.

FCE7056W MMED EMERGENCY MEDICINE PART 1

60 NQF credits at NQF level 9

Convener: Dr W Khan

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 FCE7056W. 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.

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.

FCE7057W MMED IN EMERGENCY MEDICINE PART 2

60 NQF credits at NQF level 9

Convener: Dr W Khan

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 FCE7057W. 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.

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 either Clinical Research Methods I (CHM6005F) or equivalent. 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.

FCE7058W MMED EMERGENCY MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr W Khan

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 their supervisor setting out the conditions of the candidate's research towards their minor dissertation within 24 months of first registration.

Assessment: External examination of the minor dissertation.

FCE7064W PHD EMERGENCY MEDICINE

360 NQF credits at NQF level 10

Convener: Dr W Stassen

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: The thesis is externally examined.

FCE7072W MMED IN FAMILY MEDICINE PART 1

60 NQF credits at NQF level 9

Convener: Associate Professor 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.

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 (FCE7073W). The components that make up Part 1 include knowledge and skills essential for primary care, comprising clinical and coursework.

Lecture times: Seminars for first and second year MMed students take place on alternate Thursdays at the University.

DP requirements: A final mark of 50% for all the coursework is required to be admitted to the final composite examination.

Assessment: The final composite examination comprises two written and a clinical examination and a portfolio assessment, each contributing 250% to the final mark.

FCE7073W MMED IN FAMILY MEDICINE PART 2

60 NQF credits at NQF level 9

Convener: Associate Professor T Ras and Associate Professor K von Pressentin

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. Students also complete components of courses in teaching and learning; community-oriented primary care; organisation and management; and research.

Lecture times: Alternate Thursdays: 08h00-16h30

DP requirements: The Part 2 examination may be taken after a minimum of 36months of full-time post-community service training with an accredited HPCSA training number. 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 a clinical examination.

FCE7074W FAMILY MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor D Hellenberg and Dr T Ras

Course outline:

The minor dissertation is prepared under supervision. The dissertation must be on a topic in family medicine and commenced while the candidate was registered as a postgraduate student. The final submission of the minor dissertation should be in the form of a publication-ready manuscript following the author guidelines of a DHET-accredited 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.

Assessment: External examination of the minor dissertation.

FCE7080H RESEARCH METHODS

90 NQF credits at NQF level 9

Convener: Associate Professor E Gwyther

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. In addition aspects of advanced clinical care are covered to include recent developments in the field of palliative care. 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.

HEALTH AND REHABILITATION SCIENCES

F45, F56 Old Main Building, Groote Schuur Hospital

Professor and Head of Department:

R Galvaan, BSc (Occupational Therapy) MSc (Occupational Therapy) PhD (Occupational Therapy) *UCT*

Communication Sciences and Disorders

F45, F56 Old Main Building, Groote Schuur Hospital

Doctor and Head:

L Petersen, B (Speech & Audiology) *Stell* MSc (Audiology) *Cape Town*

Professor:

H Kathard, B (Speech and Hearing Therapy) M (Speech Pathology) DEd *Durban Westville* L Ramma, BA (Comm Sci & Dis) *Fresno State* MA (Audio) *San Diego State* AuD *Gainesville Florida* MPH *Witwatersrand* PG Dip-Health Econ *UCT*

Associate Professors:

SA Singh, B (Speech and Hearing Therapy) *Durban-Westville* MA PhD *Northwestern*

Senior Lecturers:

M Harty, B (Communication Pathology) MA (Augmentative & Alternative Communication) PhD *Pret*
 V Norman, BSc (Logopaedics) *Cape Town* M (Communication Pathology) *Pret*
 C Rogers, MSc (Audiology) PhD *Cape Town*

Lecturers Full-time:

K Abrahams, BSc (Speech-Language Pathology) MSc (Speech-Language Pathology) PhD *Cape Town*
 VG Hlayisi, BSc (Audiology) MSc (Audiology) *Cape Town*
 S Segoneco, BSc (Audiology) MSc (Audiology) *Cape Town*

Lecturers Part-time:

C Legg, BA (Speech and Hearing) MA (Speech Language Pathology) PhD *Witwatersrand*

Senior Clinical Educators Part-time

F Camroodien-Surve, BSc (Speech-Language Pathology) *Cape Town* M (Early Childhood Intervention) *Pret*
 J le Roux, BSc (Logopaedics) *Cape Town* M (Early Childhood Intervention) *Pret*

Clinical Educators Part-time:

M Benjamin, BSc (Audiology) *Cape Town*
 G Gonsalves, BSc (Audiology) *Cape Town*
 T Kuhn, BSc (Logopaedics) *Cape Town*
 N Luwaca, BSc (Audiology) *Cape Town*
 N Mbele, BSc (Audiology) *Cape Town*
 K Murray, BSc (Speech-Language Pathology) *Cape Town*
 M Orrie, BSc (Speech-Language Pathology), MSc (Speech-Language Pathology) *Cape Town*

Disability Studies

F45, F56 Old Main Building, Groote Schuur Hospital

Professor:

T Lorenzo, BSc (Occupational Therapy) HDEdAd *Witwatersrand* MSc (Communication Disorders) *London* PhD *Cape Town*

Professor:

J McKenzie, BSc (Logopaedics) BA *Cape Town* PGCE *Unisa* MA *York* PhD *Rhodes*

Honorary Lecturer:

J Weber, (PhD) Senior Global Advisor CBID for CBM Honorary Research Affiliate IDEA research unit

Lecturer:

S Gabriels, BSc (Physiotherapy) *UWC* MEd *Cape Town*

I Nwanze, B (Business Systems) BHons (Computing) *Monash* MPhil *Cape Town*

Nursing and Midwifery

F45, F56 Old Main Building, Groote Schuur Hospital

Senior Lecturer and Head:

T de Villiers, BSc (Nursing) MSc (Nursing) PhD *Cape Town* Dip (Nursing Education) *UNISA* PGDip (Nursing Administration) *UNISA* PGDip (Paediatric Nursing Science) *Nico Malan Nursing College* Cert (HIV/AIDS Care and Counselling) *UNISA*

Associate Professor:

SE Clow, BSocSc (Nursing) MSc (Nursing) *Durban Natal* AUDNEd PhD *Cape Town* RN RM CHN

Emeritus Associate Professor:

U Kyriacos, Fellow (Academy of Nursing of SA) MSc BCur IetA Oph N Crit Care RN RM PhD *Cape Town*

Senior Lecturer:

NA Fouche, PhD (Education) *Cape Town*, MSc(Nursing) *Cape Town*, AUDNE *Cape Town* Dip Int Nurs Sc *Carinus Nursing College* Diploma in General Nursing Andrew Fleming Hospital, Diploma in Midwifery *Mowbray Maternity Hospital* RN RM

Lecturers:

L Rees, MSc(Nursing) *Witwatersrand*. BScNursing) *Cape Town* Dip Child Nursing *BG Alexander Nursing College* Dip Comm Health Nursing *Cape Technikon* Certificate Primary Health Care Clinical Skills *Witwatersrand* RN RM Reg. Nurse Educator

Y van der Nest, MSc(Nursing) *Cape Town* BCur Ed et Admin (IetA) *Johannesburg* PGDipNursing (Med & Surgical:Nephrology Nursing) *NMMU* Dip OHN *Witwatersrand*, Dip Nursing (General, Community & Psychiatric) *Coronation Nursing College*

S Walker, MCur (Advanced Midwifery & Neonatology) *UWC* Dip Nursing Education *Stellenbosch*, Dip Nursing (General, Community & Psychiatric) and Midwifery *Sarleh Dollie Nursing College*

Occupational Therapy

F45, F56 Old Main Building, Grootte Schuur Hospital

Head of Division:

P Gretschel, BSc (Occupational Therapy) *US* MSc (Early Childhood Intervention) *Pret PhD* (Occupational Therapy) *UCT*

Professors:

R Galvaan, BSc (Occupational Therapy) MSc (Occupational Therapy) PhD (Occupational Therapy) *UCT*

Associate Professor:

H Buchanan, BSc (Occupational Therapy) MSc (Occupational Therapy) PhD (Occupational Therapy) *UCT*

A Soday, BSc (Occupational Therapy) *UWC* MSc (Early Childhood Intervention) *Pret PhD* (Occupational Therapy) *UCT*

Senior Lecturers:

L Peters, BSc (Occupational Therapy) MSc (Occupational Therapy) *UCT*

Lecturers:

I Abbas, BSc (Occupational Therapy) *UCT* MSc (Occupational Therapy) *UWC*

S Pillay, BSc (Occupational Therapy) *UWC* MSc (Occupational Therapy) *UWC*

Senior Clinical Educators Part-time:

A Ebrahim, BSc (Occupational Therapy) *UCT* BSocSc *UCT MEd CPUT* PhD (Disability Studies) *UCT*

H Flieringa, BArb *Stell* MSc (Occupational Therapy) *UCT* PGDip (Health Professional Education) *UCT*

F Gamielidien, BSc (Occupational Therapy) MSc (Occupational Therapy) *UCT* Dip (Business Management) *Varsity College*

T Mohomed, BSc (Occupational Therapy) *UWC*

L Richards, BSc (Occupational Therapy) *UCT*

Clinical Educators Part-time:

S Damonse, BSc (Occupational Therapy) *UWC* MSc (Occupational Therapy) *UCT*

M Francke, BSc (Occupational Therapy) *UCT*

R Hassam, BSc (Occupational Therapy) *UWC*

M Hannington, BSc (Occupational Therapy) *WITS* MSc (Occupational Therapy) *WITS* PGDip (Health Professional Education) *UCT*

Z Syed, BSc (Occupational Therapy) *UWC* M (Occupational Therapy) *UWC* PGDip (Addiction Care) *SU*

Ad hoc Staff Part-time:

F Cassim, BSc (Occupational Therapy) *UCT*

L Jacobs, B. Occ Ther *UP* MSc *Brunel PhDWITS*

MLM Krenzer, BSc (Occupational Therapy) *UCT* MSc (Occupational Therapy) *UCT*

R Makan, BSc (Occupational Therapy) *UCT*

S Ncogobo, BSc (Occupational Therapy) *UCTpy* *UCT*

Physiotherapy

F45, F56 Old Main Building, Groote Schuur Hospital

Doctor and Head:

S Manie, BSc (Physiotherapy) *UWC MSc Stell PhD UCT*

Associate Professor:

T Burgess, BSc (Physiotherapy) BScHons (Medicine) PhD *UCT MHSc (Bioethics) University of Toronto*

G Ferguson, BSc (Physiotherapy) MSc *UCT PhD Katholieke Universiteit Leuven*

S Maart, BSc (Physiotherapy) MPH *UWC PhD UCT*

N Naidoo, BSc (Physiotherapy) *UDW MMedSci Natal MEd Nata DipMan UKZN PhD UCT*

Lecturers:

N Arends, BSc (Physiotherapy) MPh *UWC*

N Edries-Khan, BSc (Physiotherapy) MSc *UCT*

C Hendricks, BSc (Physiotherapy) MSc *UWC PhD UCT*

M Naidoo, BSc (Physiotherapy) MSc *UWC PhD UWC*

N Ntinga, BSc (Physiotherapy) *UKZN MSc Wits*

H Talberg, BSc (Physiotherapy) MPhil (Education) *UCT*

Senior Clinical Educators:

I Du Plessis, BSc (Physiotherapy) MSc *Pret*

F Harris, BSc (Physiotherapy) *UWC MSc UCT*

L Rustin, BSc (Physiotherapy) *UWC MSc Cape Town*

Clinical Educators:

L Hector, BSc (Physiotherapy) *UWC*

K Kabongo, BSc (Physiotherapy) *UCT MPhil (Ex and Sports Physiotherapy) UCT*

C Sebata, BSc (Physiotherapy) *UCT*

T Sebulele, BSc (Physiotherapy) *UCT*

F Solomons, BSc (Physiotherapy) *UWC*

Assistant Director, Department of Physiotherapy, Groote Schuur Hospital:

C Davids, BSc (Physiotherapy) *UWC*

Honorary Professor:

B Smits-Engelsman, BA *Polytechnic Nijmegen MA Utrecht MEd Maastricht MSc MA Avansplus Breda PhD Nijmegen*

AHS4089F INTRODUCTION TO DISABILITY AS DIVERSITY

30 NQF credits at NQF level 8

Convener: Dr B Watermeyer

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, marginalisation, and exclusion related to class, gender, race, religion and other markers of difference, and their intersections with disability, are analysed. Students gain an understanding of decoloniality, and the ability to formulate an African perspective on disability. An emphasis is placed on the development of reflexivity, allowing students 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 analyses 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, identifying issues of power, privilege, oppression and agency.

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 by 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: Coursework assessment and online participation will count for 50% of the mark and an integrated oral and written examination presentation for the other 50%.

AHS4091F DEVELOPING CRITICAL RESEARCH LITERACY

30 NQF credits at NQF level 8

Convener: Associate Professor J McKenzie and Dr BO Ige

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 a concept note.

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 convener. 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 convener. 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 concept note and oral presentation for the final assessment (50%).

AHS4117S CRITICAL PRIORITIES IN DISABILITY & DEVELOPMENT

30 NQF credits at NQF level 8

Convener: Associate Professor J McKenzie

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, 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 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 by Vula site statistics. A year mark of at least 45% is required for examination entrance, unless approved otherwise by the programme convener.

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.

AHS4118S MONITORING DISABILITY IN SOCIETY

30 NQF credits at NQF level 8

Convener: Professor T Lorenzo

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%).

AHS4128W PRACTICE OF NURSING CHILDREN

40 NQF credits at NQF level 8

Convener: Associate Professor M Coetzee

Co-requisites: AHS4122W, AHS4157W and AHS4165W

Course outline:

This course focuses on the clinical skills refined by research- and practice-based evidence, 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. The course includes the full health assessment of the whole child related throughout to the developmental phase of the infant, child, and adolescent as these affect to health, illness, and critical illness. Recognition of deterioration and emergency care related to children with specific symptoms are included. Students are mentored in the skill of astute and perpetual observation accurate assessment, individualised planning, execution, and evaluation of children's nursing care. The course includes intentional application and learning in actual clinical settings in African health systems where children receive care with a focus on quality and safety in efficient ways.

It ensures the development of skills to communicate in multidisciplinary teams, and with infants, children, parents, and families in ways to promote health. It includes skills required for appropriate referral to the next levels of care, primary, secondary, and tertiary. It includes an appropriate level of competency in WHO and National Child Health approaches and programmes and essential medical management in local child health care settings.

DP requirements: (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed for the 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. 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.

AHS4130W PRINCIPLES OF CRITICAL CARE NURSING OF CHILDREN

40 NQF credits at NQF level 8

Convener: Associate Professor M Coetzee

Co-requisites: AHS4122W, AHS4131W and AHS4167W

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. The course is structured to ensure a clear understanding of deterioration from onset of critical illness or injury, stabilisation, transfer, and ongoing critical care. It includes an understanding of physiology and pathophysiology related to growth and development of the growing and maturing child, and ensures a developing knowledge base in communicating with infants, children, parents, and families in ways that promote health while working as an active, contributory member of the multidisciplinary team. A family-centred approach is integral to the course. The course is structured to ensure a sound knowledge of normal health and development, to recognise deteriorating health and critical illness in children to guide the critical care nurse's approach, diagnosis, plan for intervention, it includes an understanding of complex interdisciplinary team communication, and essential medical management in local paediatric critical care settings.

DP requirements: Two-thirds of contact time and all of the time-on-task activities and assignments prescribed for the course.

Assessment: Continuous coursework assessment contributes 40% towards the final mark. The final 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.

AHS4131W PRACTICE OF CRITICAL CARE NURSING OF CHILDREN

40 NQF credits at NQF level 8

Convener: Associate Professor M Coetzee

Co-requisites: AHS4011W, AHS4130W and AHS4167W

Course outline:

This course focuses on the clinical skills refined by research- and practice-based evidence, knowledge and understanding as these are applied in the practice of nursing critically ill infants and children, intentionally supportive of the mother-child dyad, and using the primary healthcare approach in each encounter with children and their families. The course includes integration of biomedical and psychosocial sciences to do a full assessment of the child, related throughout to the developmental phases of the infant, child and adolescent as these relate to health, illness and critical illness. Recognition of deterioration and emergency care related to children are included. Students are mentored in the skill of astute and perpetual observation, accurate assessment, individualised planning, execution and evaluation of children's nursing care.

The course includes intentional application to and learning in actual clinical settings in African health systems where children receive care with a focus on quality and safety in efficient ways. It ensures the development of skills to communicate in teams, and with infants, children, parents and families in ways to promote health. It also involves facilitation of essential management in local paediatric critical care settings.

DP requirements: (a) Two-thirds of contact time; (b) all of the time-on-task activities, assignments and clinical learning activities prescribed per for the 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: 1) Continuous coursework assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark; 2) In order to pass the Critical Care Child Nursing Practice course, both continuous and summative assessments must be passed, i.e., the student must obtain a minimum of 50% in both components; 3) 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.

AHS4144W PRINCIPLES OF NEPHROLOGY NURSING

40 NQF credits at NQF level 8

Convener: Y van der Nest

Co-requisites: AHS4145W

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. The 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: Two-thirds of contact time, and all of the time-on-task activities and assignments prescribed for the course.

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%.

AHS4145W NEPHROLOGY NURSING PRACTICE

40 NQF credits at NQF level 8

Convener: Y van der Nest

Course entry requirements: AHS4144W

Co-requisites: AHS4122W, AHS4144W and AHS4158W

Course outline:

The aim of this practice-based course is the application of 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 specialist practitioners 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. Palliative and 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 for the 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.

AHS4157W PRINCIPLES OF NURSING CHILDREN

40 NQF credits at NQF level 8

Convener: Associate Professor M Coetzee

Course entry requirements: None **Co-requisites:** AHS4122W, AHS4128W and AHS4165W

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 anatomy and physiology, and related pathophysiology, as these pertain to growth and development of the growing and maturing child, and ensures a developing knowledge base of communicating with infants, children, parents and families in ways that promote health while working as an active, contributory member of the multidisciplinary team. A family-centred approach is integral to the course.

The course is structured to ensure a sound knowledge of normal health and development, to recognise deteriorating health in children as this guides the children's nurse with an approach to assessment, diagnosis, plan for intervention and appropriate referral to the next levels of care, primary, secondary and tertiary. It includes an understanding of WHO and National child health approaches and programmes and essential medical management in local child health care settings.

DP requirements: Two-thirds of contact time and all of the time-on-task activities and assignments prescribed for the course.

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.

AHS4158W CLINICAL MANAGEMENT IN PAEDIATRIC PHYSIOTHERAPY

90 NQF credits at NQF level 8

Convener: Professor B Morrow

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%.

AHS4163S DISABILITY STUDIES IN EDUCATION

30 NQF credits at NQF level 8

Convener: Associate Professor J McKenzie**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%).

AHS4172W LEADING QUALITY AND SAFETY IN CHILD NURSING

16 NQF credits at NQF level 8

Convener: TBA**Co-requisites:** Foundations of Specialist Practice; Principles of Children's Nursing; Child Nursing Practice**Course outline:**

Leading Quality and Safety in Child Nursing is a course that aims to provide students with the knowledge and skills to take a leadership role in ensuring high quality patient care and safety in children's health care settings. This course will facilitate application of knowledge in the core course, to planning and implementing policies, protocols and appropriate evidenced based care within settings where healthcare is provided to children and families. Clinical governance and resource stewardship are core to quality and safety and to this course. It includes skills of accessing and utilising published data and research, data generated from day-to-day nursing practice and epidemiological data pertaining to child health and the provision of healthcare to children. This will be offered in the context of navigating processes of change management and leading practice improvement initiatives at unit level. All teaching and learning are placed within the context of ethico-legal frameworks and includes robust discussion and adherence to ethical principles, an understanding of children as a vulnerable population as per the International Convention on the Rights of the Child (1989) and the Declaration of Helsinki (World Medical association, 2013).

DP requirements: Attendance of two-thirds of contact time; Completion of all of the time- on-task activities, assignments and related learning activities prescribed for this course.

Assessment: Formative assessment during the year contributes 40% of the final year mark; summative evaluation at the end of the year contributes 60% of the final year 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. Details of the coursework and summative assessments are given to the student at the beginning of the course.

AHS4173W LEADING QUALITY AND SAFETY IN CRITICAL CARE CHILD NURSING

16 NQF credits at NQF level 8

Convener: TBA**Co-requisites:** Foundations of Specialist Practice; Principles of Critical Care Adult Nursing; Critical Care Child Nursing Practice

Course outline:

Leading Quality and Safety in Children's Nursing is a course that aims to provide students with the knowledge and skills to take a leadership role in ensuring high quality patient care and safety in children's health care settings. This course will facilitate application of knowledge in the core course, to planning and implementing policies, protocols and appropriate evidenced based care within settings where healthcare is provided to children and families. Clinical governance and resource stewardship are core to quality and safety and to this course. It includes skills of accessing and utilising published data and research, data generated from day-to-day nursing practice and epidemiological data pertaining to child health and the provision of healthcare to children. This will be offered in the context of navigating processes of change management and leading practice improvement initiatives at unit level. All teaching and learning is placed within the context of ethico-legal frameworks and includes robust discussion and adherence to ethical principles, an understanding of children as a vulnerable population as per the International Convention on the Rights of the Child (1989) and the Declaration of Helsinki (World Medical association, 2013).

DP requirements: Attendance of two-thirds of contact time; Completion of all of the time-on-task activities, assignments and related learning activities prescribed for this course.

Assessment: Formative assessment during the year contributes 40% of the final year mark; summative evaluation at the end of the year contributes 60% of the final year 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. Details of the coursework and summative assessments are given to the student at the beginning of the course.

AHS4174W LEADING QUALITY AND SAFETY IN NEPHROLOGY NURSING

16 NQF credits at NQF level 8

Convener: TBA

Co-requisites: Foundations of Specialist Practice; Principles of Nephrology Nursing; Nephrology Nursing Practice

Course outline:

The Leading Quality and Safety in Nephrology Nursing course aims to provide students with the knowledge and skills to take a leadership role in ensuring high quality patient care and safety in various health care settings for: pre dialysis care, dialysis, transplantation, acute dialysis, and ICU. This course will facilitate the application of knowledge from the core Foundations of Specialist Practice (FSP) course to planning and implementing policies, protocols and appropriate evidence-based care within settings where healthcare is provided to patients with renal failure and their affected families. Clinical governance and resource stewardship are core to quality and safety. This course will facilitate the skills of accessing and utilising published data and research, data generated from day-to-day nephrology nursing practice and epidemiological data pertaining to patients with renal failure and their affected family's healthcare. Students will be supported in exploring, and where feasible, navigating processes of change management and leading practice improvement initiatives at unit level. All teaching and learning are placed within the context of ethico-legal frameworks and includes robust discussion and adherence to ethical principles, and the Declaration of Helsinki. This course will complement the knowledge, skills and insights gained from other courses provided in this programme.

DP requirements: Attendance of two-thirds of contact time; Completion of all of the time-on-task activities, assignments and related learning activities prescribed for this course.

Assessment: Formative assessment during the year contributes 40% of the final year mark; summative evaluation at the end of the year contributes 60% of the final year 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. Details of the coursework and summative assessments are given to the student at the beginning of the course.

AHS4175W PRINCIPLES OF OPHTHALMIC NURSING

40 NQF credits at NQF level 8

Convener: TBA

Co-requisites: Foundations of Specialist Practice; Leading Quality and Safety in Ophthalmic Nursing; Ophthalmic Nursing Practice

Course outline:

This course is aimed at the acquisition of knowledge (terms, concepts, and principles), skills and attitudes related to ophthalmic nursing practice in all healthcare settings. In primary healthcare settings, main concepts include a whole-person centred approach for health promotion with the emphasis on promoting eye health, principles of the primary healthcare approach, prevention of eye conditions and avoidable blindness. The development of independence is fostered. Psychosocial considerations of visual impairment are emphasised for individuals of all ages, families and communities. In secondary and tertiary care settings, main concepts include evidence-based perioperative nursing care of the patient having eye surgery. A portion of this course is web-based, guided by a self-paced workbook that builds on prior knowledge of clinical sciences. Links between the biosciences, optics, technology, and ophthalmic 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 skilful practice in health assessment, diagnosis of certain eye conditions, and management and appropriate referral.

DP requirements: Attendance of two-thirds of contact time; and completion of all of the time-on-task activities, assignments and related learning activities prescribed for this course.

Assessment: Formative assessment during the year contributes 40% of the final year mark; summative evaluation at the end of the year contributes 60% of the final year 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. Details of the coursework and summative assessments are given to the student at the beginning of the course.

AHS4176W LEADING QUALITY AND SAFETY IN OPHTHALMIC NURSING

16 NQF credits at NQF level 8

Convener: TBA

Co-requisites: Foundations of Specialist Practice; Principles of Ophthalmic Nursing; Ophthalmic Nursing Practice

Course outline:

Leading Quality and Safety in Ophthalmic Nursing is a course that aims to provide students with the knowledge and skills to take a leadership role in ensuring high quality patient care and safety in eye health care settings. This course will facilitate application of knowledge in the core course, to planning and implementing policies, protocols and appropriate evidenced based care within settings where eye healthcare is provided to persons of all ages. Clinical governance and resource stewardship are core to quality and safety and to this course. It includes skills of accessing and utilising published data and research, data generated from day-to-day ophthalmic nursing practice and epidemiological data pertaining to eye health and the provision of eye healthcare services to persons of all ages. This will be offered in the context of navigating processes of change management and leading practice improvement initiatives at unit level. All teaching and learning is placed within the context of ethical-legal frameworks and includes robust discussion and adherence to ethical principles, an understanding of visually challenged persons as a vulnerable population in terms of the VISION 2020: THE RIGHT TO SIGHT project, a global initiative for the elimination of avoidable blindness, a joint programme of the WHO and the International Agency for the Prevention of Blindness.

Lecture times: Formative assessment during the year contributes 40% of the final year mark; summative evaluation at the end of the year contributes 60% of the final year 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. Details of the coursework and summative assessments are given to the student at the beginning of the course.

DP requirements: Attendance of two-thirds of contact time; Completion of all of the time- on-task activities, assignments and related learning activities prescribed for this course.

AHS4177W OPTHALMIC NURSING PRACTICE

40 NQF credits at NQF level 8

Convener: TBA

Co-requisites: Foundations of Specialist Practice; Leading Quality and Safety in Ophthalmic Nursing; Principles of Ophthalmic Nursing

Course outline:

The aim of this practice-based course is the application of knowledge of the biosciences, technology and ophthalmology to inform clinical decision-making in ophthalmic nursing practice in all healthcare settings to ensure patient safety. Emphasis is on the whole-person approach and education strategies for the promotion of eye health and the prevention of visual impairment and blindness of individuals of all age groups and within all communities, particularly in patients with systemic conditions that affect the eye. In the clinical laboratory, guided clinical practice and simulation includes eye screening and examination. In primary care settings and within communities, students engage with individuals of all age groups for the diagnosis, management, appropriate referral and follow-up of certain specified eye conditions. Students incrementally develop skills as a specialist practitioner alongside other team members within the healthcare system. Students gain experience in providing in-service training in primary eye care to primary healthcare workers. In secondary and tertiary surgical settings, students manage perioperative aspects of the care of patients of all ages, and discharge planning and follow-up within the context of the family social structure. In all clinical settings, students use evidence-based studies to manage all aspects of the care of patients. When needed, end-of-life care is provided with sensitivity and cultural relevance.

DP requirements: Two-thirds of contact time; All of the time-on-task activities, assignments and clinical learning activities prescribed per for the course; and 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 study

Assessment: Formative assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the Ophthalmic Nursing Practice course, both formative and summative assessments must be passed, i.e., the student must obtain a minimum of 50% in both components. Details of the formative and summative assessments are given to the student at the beginning of the course. The final summative assessment is externally moderated.

AHS4178W LEADING QUALITY AND SAFETY IN CRITICAL CARE ADULT NURSING

16 NQF credits at NQF level 8

Convener: TBA

Co-requisites: Foundations of Specialist Practice; Principles of Critical Care Adult Nursing; Critical Care Adult Nursing Practice

Course outline:

Leading Quality and Safety in Critical Care (Adult) Nursing is a course that aims to provide students with the knowledge and skills to take a leadership role in ensuring high quality patient care and safety in critical care settings. This course will facilitate application of knowledge in the core course, to planning and implementing policies, protocols and appropriate evidenced based care within settings where critical care is provided to adult persons. Clinical governance and resource stewardship are core to quality and safety and to this course. It includes skills of accessing and utilising published data and research, data generated from day-to-day Critical Care (Adult) Nursing practice and epidemiological data pertaining to critical care and the provision of critical care services to adult persons. This will be offered in the context of navigating processes of change management and leading practice improvement initiatives at unit level. All teaching and learning is placed within the context of ethical-legal frameworks and includes robust discussion and adherence to ethical principles, an understanding of persons requiring critical care nursing as a vulnerable population.

DP requirements: Attendance of two-thirds of contact time; Completion of all of the time-on-task activities, assignments and related learning activities prescribed for this course.

Assessment: Formative assessment during the year contributes 40% of the final year mark; summative evaluation at the end of the year contributes 60% of the final year 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. Details of the coursework and summative assessments are given to the student at the beginning of the course.

AHS4179W PRINCIPLES OF CRITICAL CARE ADULT NURSING

40 NQF credits at NQF level 8

Convener: TBA

Co-requisites: Foundations of Specialist Practice; Leading Quality and Safety in Critical Care Adult Nursing; Critical Care Adult Nursing Practice

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. The 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: Attendance of two-thirds of contact time; Completion of all of the time-on-task activities, assignments and related learning activities prescribed for this course.

Assessment: Formative assessment contributes 40% towards the final mark. The final 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.

AHS4180W CRITICAL CARE ADULT NURSING PRACTICE

40 NQF credits at NQF level 8

Convener: TBA

Co-requisites: Foundations of Specialist Practice; Leading Quality and Safety in Critical Care Adult Nursing; Principles of Critical Care Adult Nursing

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. The aim of this practice-based course is the application of knowledge of the biosciences, technology and principles of critical care nursing to inform clinical decision-making in all critical settings to ensure patient safety. Emphasis is on the whole-person approach and early detection of clinical deterioration. For this purpose students are required to become competent in clinical assessment skills and in interpreting early warning systems for signs of physiological deterioration.

If present, students gain competence in initiating interventions with urgency to avert episodes of critical illness. Students also gain experience in a nurse-led outreach/rapid response service provided by competent critical care nurses to assess patients on general wards who show signs of clinical deterioration to avert critical illness. If critical illness is established, students gain experience in resuscitation techniques. When needed, end-of-life care is provided with sensitivity and religious and cultural relevance.

DP requirements: Two-thirds of contact time; All of the time-on-task activities, assignments and clinical learning activities prescribed per for the course; and 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.

Assessment: Formative assessment contributes 50% towards the final mark. The final summative assessment contributes 50% towards the final mark. In order to pass the Critical Care Adult Nursing Practice course, both continuous and summative assessments must be passed, i.e., the student must obtain a minimum of 50% in both components. Details of the formative and summative assessments are given to the student at the beginning of the course. The final summative assessment is externally moderated.

AHS5000W AUDIOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor L Ramma

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.

Assessment: The dissertation is externally examined.

AHS5001W SPEECH-LANGUAGE PATHOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor L Ramma

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.

Assessment: The dissertation is externally examined.

AHS5007W NURSING DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor SE Clow

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.

Assessment: The dissertation is externally examined.

AHS5011W OCCUPATIONAL THERAPY MINOR DISSERTATION

90 NQF credits at NQF level 9; Four seminars.

Convener: Associate Professor HA Buchanan

Course entry requirements: AHS5014F and AHS5018S

Objective: To plan and execute a research project at a master's level.

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.

AHS5014F RESEARCH METHODS

15 NQF credits at NQF level 9; 36 hours of contact time delivered in 2 blocks of 3 days each (usually in January and March/April).

Convener: Associate Professor R Galvaan

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 introduces key concepts necessary for developing a postgraduate research proposal. Facilitation of learning draws from different expertise available in the Department of Health and Rehabilitation Sciences.

Lecture times: 09h00-16h00.

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.

AHS5015F HUMAN OCCUPATION: THEORY & CRITIQUE

15 NQF credits at NQF level 9; Forty hours of contact time.

Convener: L Peters

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.

Lecture times: Two one-week lecture blocks (mornings only) in the first semester – usually January and March/April.

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 NQF level 9; Forty hours of contact time.

Convener: Dr A Sunday

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.

Lecture times: Two one-week lecture blocks (mornings only) in the first semester – usually January and March/April.

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 NQF level 9; Thirty-six hours of contact time.

Convener: Associate Professor H Buchanan and Dr P Gretschel

Course entry requirements: 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.

Lecture times: Two blocks of three full days in the second semester – usually July and September.

DP requirements: Attendance and participation in all lectures.

Assessment: Formative assessment: Qualitative research assignment - 25%; Evidence-based practice presentation - 25%. Summative assessment: Examination mark - 50%.

AHS5019W PHYSIOTHERAPY DISSERTATION

180 NQF credits at NQF level 9

Convener: TBC

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.

Assessment: The dissertation is externally examined.

AHS5022S THEORETICAL FOUNDATIONS OF NURSING PRACTICE

30 NQF credits at NQF level 9

Convener: Dr T de Villiers

Objective: The aim of this course is to explore theory development in nursing in an attempt to understand the relationship between theory and research, theory and management, theory and education and theory 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 appropriate for a master's level nurse/midwife. Such understanding should also contribute to the development of new knowledge in nursing science. You will be introduced to several 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. You are expected to consider how these concepts are reflected in their own practice. Theory construction, levels of theories, their function in nursing and contextual application 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 50% of the final mark. The summative assessment (externally moderated) contributes 50% of the final mark.

AHS5024W NURSING MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: Associate Professor SE Clow

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 discipline of nursing. 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 nursing in appropriate formats, such as publications or other documents for the information of nurses or nursing organisations.

DP requirements: None

Assessment: The dissertation is externally examined.

AHS5027W OCCUPATIONAL THERAPY DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor HA Buchanan

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.

Assessment: The dissertation is externally examined.

AHS5032H RESEARCH METHODOLOGY 1

12 NQF credits at NQF level 9

Convener: Associate Professor T Burgess

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.

AHS5033W EXERCISE & SPORTS PHYSIOTHERAPY

36 NQF credits at NQF level 9

Convener: Associate Professor T Burgess

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 MINOR DISSERTATION

When the primary supervisor is in the Department of Health and Rehabilitation Sciences

60 NQF credits at NQF level 9

Convener: Associate Professor T Burgess

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.

Assessment: External examination of the minor dissertation.

AHS5044S OCCUPATIONAL THERAPY IN PRIMARY HEALTH CARE

15 NQF credits at NQF level 9; 40 contact hours in the second semester.

Convener: Associate Professor H Buchanan and Dr M Ramafikeng

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.

Lecture times: Two one-week lecture blocks (mornings only) in the second semester – usually July and September.

DP requirements: Attendance and participation in all lectures.

Assessment: Formative assessment: Minor assignment - 20%; Major assignment - 30%. Summative assessment: Examination mark - 50%

AHS5045S OCCUPATION-BASED COMMUNITY DEVELOPMENT PRACTICE

15 NQF credits at NQF level 9; Forty hours of contact time.

Convener: Associate Professor R Galvaan

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.

Lecture times: Two one-week lecture blocks (mornings only) in the second semester – usually July and September.

DP requirements: Attendance and participation in all lectures.

Assessment: Formative assessment: Minor assignment - 20%; Major assignment - 30%. Summative assessment: Examination mark - 50%

AHS5046W INDEPENDENT STUDY PROJECT

45 NQF credits at NQF level 9

Convener: Associate Professor M Coetzee

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.

AHS5047W CLINICAL LEADERSHIP

30 NQF credits at NQF level 9

Convener: Dr U Kyriacos

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 NQF level 9

Convener: Associate Professor M Coetzee

Course entry requirements: AHS5049W

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.

248 DEPARTMENTS IN THE FACULTY

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 NQF level 9

Convener: Associate Professor M Coetzee

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.

AHS5050W CLINICAL RESEARCH

30 NQF credits at NQF level 9

Convener: Dr U Kyriacos

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.

AHS5051W RESEARCH METHODOLOGY II

12 NQF credits at NQF level 9

Convener: Associate Professor T Burgess

Course entry requirements: AHS5032H

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.

AHS5052W MANAGEMENT OF EXERCISE- AND SPORTS-RELATED CONDITIONS

12 NQF credits at NQF level 9

Convener: Associate Professor T Burgess

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.

AHS6000W OCCUPATIONAL THERAPY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor HA Buchanan

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.

250 DEPARTMENTS IN THE FACULTY

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: The thesis is externally examined.

AHS6001W PHYSIOTHERAPY THESIS

360 NQF credits at NQF level 10

Convener: TBC

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: The thesis is externally examined.

AHS6007W DISABILITY STUDIES DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr B Watermeyer

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.

Assessment: The dissertation is externally examined.

AHS7000W AUDIOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor L Ramma

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: The thesis is externally examined.

AHS7001W SPEECH-LANG PATHOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor L Ramma

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: The thesis is externally examined.

AHS7002W NURSING THESIS

360 NQF credits at NQF level 10

Convener: Dr N Fouche

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: The thesis is externally examined.

AHS7006W DISABILITY STUDIES THESIS

360 NQF credits at NQF level 10

Convener: Professor T Lorenzo

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: The thesis is externally examined.

HEALTH SCIENCES EDUCATION

E52, Old Main Building, Groote Schuur Hospital

Professor and Head of Department:

JM van Wyk, PhD *UKZN* MEd *UKZN* BEd (UND) BSC[Ed] *UWC*

Administrative Assistant and PA to HoD:

S Basterman, NDip Office Management and Technology *CPUT*

Programme Administrator (Postgraduate):

S Nutt, BA PGCE PGDip (HIV/AIDS Management) *Stell*

Clinical Skills Unit

G13, New Groote Schuur Hospital

Head of Division:

M Jansen, NDip (Emergency Medical Care) *CPUT* B (Emergency Medical Care) *CPUT* MPhil (Emergency Medicine) *Cape Town* PhD *UCT*

Senior Lecturer:

R Weiss, MBChB MPhil PhD *Cape Town*

Lecturer:

J Muller-Stuurman, BCur(Hons) *UWC* RGN RCHN RPN RA MCur (N.Education) *UWC* PGDip (Paediatric Critical Care) *UCT* PGDip (Health Service Management & Administration) *Stell* PG (Specialist) Cert. (Paediatric Cardio-Thoracics) *Net. Ed* Cum Laude

Clinical Educators:

S Buthelezi, BNurs MNurs (Nursing Education) *UWC*

Technical Assistants:

F Adams

A Gelderbloem

Clinical Skills Senior Secretary:

N Marais

Education Development Unit

E52, Old Main Building, Groote Schuur Hospital;

Senior Lecturer and Director: Education Development Unit:

E Badenhorst, BAHons *Stell* MPhil *Cape Town*, PhD *Erasmus University Rotterdam*

EDU Fundamentals of Health Sciences:

S Simpson

Lecturer:

FJ Cilliers, MBChB BScHons (Medical Science) MPhil *Stell* PhD *Maastricht*

BO Ige, BAHons *Ilorin Nigeria* PGDip (Health Professional Education) *Cape Town* MA PhD *UKZN*

L McNamee, PhD, *UKZN*

L Pienaar, BSc (Physiotherapy) *UWC* MSc (Physiotherapy) *Stell* PhD *UCT*

IT Education Manager:

G Doyle, BScHons HDE *Rhodes MSc (Information Technology) Cape Town*

E-Learning Technologists:

S Mandyoli, BAHons *UWC*

F van Breda, ND *CPUT BA (Communication Science) UNISA*

Web developer (e-learning):

F Hendricks, BA *UNISA*

The Writing Lab

E53 – 27, Old Main Building, Grootte Schuur Hospital

Lecturer and Coordinator:

N Muna, *Bsc UCT BScHons (Zoology) Stell MSc PhD (Molecular and Cell Biology) UCT*

Lecturer:

T Goolam Hoosen, *BSc UKZN BScHons (Medicine) PGCE MSc (Medicine) UCT*

Consultants:

N Mkwazazi

N Mthembu

S Ngecobo

V Samuels

HSE4000F LEARNING THEORIES IN HEALTH PROFESSIONAL EDUCATION

30 NQF credits at NQF level 8

Convener: E Badenhorst and Dr BO Ige

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 NQF 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.

254 DEPARTMENTS IN THE FACULTY

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.

HSE4002S ASSESSMENT IN HEALTH PROFESSIONAL EDUCATION

30 NQF credits at NQF level 8

Convener: Professor FJ Cilliers

Course entry requirements: Full-time: HSE4001F; Part-time: HSE4000F (in the first year)

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 their 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.

HSE4003S CURRICULUM DEVELOPMENT AND COURSE DESIGN

30 NQF credits at NQF level 8

Convener: Dr L McNamee

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; 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 they are 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.

HSE4004S INTEGRATED ASSESSMENT

0 NQF credits at NQF 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.

HSE4005S ACADEMIC LITERACY FOR HEALTH PROFESSIONAL EDUCATION

30 NQF credits at NQF level 8

Convener: L Pienaar

Course entry requirements: Full-time: HSE4002S; Part-time: HSE4001F (in the second year).

Course outline:

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. At the end of the course the student should be able to critically engage with the theory of the traditional model and approach of academic literacy and the more contemporary view, which is informed by the academic literacy requirements of their own discipline; evaluate scholarly texts and other disciplinary modes of communication to identify meaningful themes and features of the disciplinary discourse and be equipped to enhance student understanding of core content, by explicitly teaching and supporting the development of academic literacy skills within the discipline, through purpose-designed teaching activities and assessments.

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.

HSE4006S TECHNOLOGY-ASSISTED TEACHING AND LEARNING

30 NQF credits at NQF level 8

Convener: G Doyle

Course entry requirements: Full-time: HSE4002S; part-time: HSE4001F (in the second year).

Course outline:

The course aims to enable students to evaluate educational technologies suitable for use within health professions education. It investigates which technologies and teaching approaches would be appropriate in a technology-enhanced teaching and learning environment. At the end of the course the student should be able to critically engage with the discourses around the use of technology as an important element in present day curriculum design, demonstrate an understanding of how different types of technology can be used for various teaching and learning activities and critically engage with the practical aspects of technologies in teaching and learning.

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.

HSE5000W HEALTH SCIENCES EDUCATION DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor FJ Cilliers

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.

HSE6000W HEALTH SCIENCES EDUCATION THESIS

360 NQF credits at NQF level 10

Convener: Professor FJ Cilliers

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.

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:

D Shamley, BSc (Medicine) BScHons(Physiotherapy) PhD *Wits* EMBA *Cape Town*

Professors:

MR Collins, BScHons *Stell* PhD *Cape Town* FECSS

T Franz, PhD *Bremen*

EV Lambert, BA MSc *South Carolina* PhD *Cape Town*

E Meintjes, BScHons MSc *UKZN* MS PhD *Oregon State*

S Prince, BScHons HDE PhD *Cape Town*

AV September, BScHons (Medicine) MSc (Medicine) PhD *Cape Town* FECSS

S Sivarasu, B.Eng (Electronics & Instrumentation Engineering) M.Eng (Biomedical Engineering)

PhD *VIT University India*

Emeritus Professors:

LA Kellaway, BScHons MSc PhD *Cape Town*

S Kidson, BScHons MSc PhD *Wits* H Dip Ed *Jhb College of Education*

MI Lambert, BSc (Agriculture) *UKZN* BAHons *Rhodes* MSc *South Carolina* PhD *Cape Town*

GJ Louw, BVSc DVSc *Pret* MPhil *Cape Town*

AG Morris, BSc *WLU* PhD *Witwatersrand*

TD Noakes, OMS MBChB MD DSc (Medicine) *Cape Town* FACSM(Hon) FFSEM *UK*

VA Russell, BScHons MSc *Cape Town* PhD *Stell*

CL Vaughan, BScHons *Rhodes* PhD *Iowa* DSc (Medicine) *Cape Town*

Emeritus Associate Professors:

EL van der Merwe, BScHons (Med) MSc (Med) PhD *Cape Town*

Honorary Professors:

V Burdin, BS MS *Saint Etienne* PhD *Rennes*

LV Costa-Lotufo, PhD *University of São Paulo*

JH Goedecke, BScHons (Medicine) PhD *Cape Town* RD *SA*

JL Jacobson, MA PhD *Harvard*

SW Jacobson, BA *Brandeis* MA PhD *Harvard*

RP Lamberts, BSc MSc *Netherlands* PhD *Cape Town* FECSS

G Limbert, BSc MSc *Toulouse* MPhil *Bordeaux* PhD *Southampton* CEng FIMEchE

Y Pitsiladis, BA (Hons) *Rhodes* MMedSci *Sheffield University* PhD *Aberdeen University* FACSM

W van Mechelen, MD PhD *VU Amsterdam* FACSM

S Weiss, BSc *Bielefeld University* MSc PhD *Ruprecht-Karls-University* *Germany*

Associate Professors:

Y Albertus, BScHons (Medicine) PhD *Cape Town*

AN Bosch, BSc *UKZN* BAHons MA *Rhodes* PhD *Cape Town*

J Friedling, MSc (Medicine) PhD *Cape Town*

VE Gibbon, BA *Manitoba* PhD *Wits*

G Gunston, MBChB MPhil *Cape Town*

A Gwanyanya, MBChB DA *SA* MMed *Zimbabwe* PhD *Leuven*

J Kroff, BSc BHons (Biokinetics) MSc (Medical Physiology) PhD *Stell*

DM Lang, Dr rer nat *Konstanz* *Germany*

258 DEPARTMENTS IN THE FACULTY

T Mutsvangwa, BSc (Engineering) (Electrical Engineering) MSc (Medicine) PhD *Cape Town*
JV Raimondo, MBChB *Cape Town* DPhil *Oxon*

Adjunct Associate Professor:

J Gray, BSc (Med)(Hons) PhD *Cape Town*
M Posthumus, BScHons (Medicine) PhD *Cape Town*
W van der Merwe, MBChB *UFS* Social Studies *Oxon* BScHons (Medicine) *Cape Town* FCS *SA*
Ortho

Honorary Associate Professors:

B Borotikar, BEng *Kolhapur* MBA *Mumbai* MSc *Arlington* PhD *Cleveland*
RC Carter, MD *Johns Hopkins* MMSc *Harvard*
T Kolbe-Alexander, BAPhysEd *Western Cape* BScMed(Hons) MPubHlth PhD *Cape Town*
F Marais
LC Roden, BSc(Hons) *JHB* PhD *Cambridge*
A van der Kouwe BEng MEng *Pret* PhD *Ohio State*

Senior Lecturers:

A Abrahams, BScHons PhD *Cape Town*
A Bhagwandin, BScHons PhD *Witwatersrand*
K Bugarith, BScHons *UKZN* PhD *Washington State*
T Calvey, BSc, BSc Hons (Human Biology), PhD *Wits*
R Dangarembizi, (BSc Hons *NUST* MSc (Med) *Wits* PhD *Wits*
J Harbron, BSc (Dietetics) MSc PhD *Stell*
S Hendricks, *BSc BSc Hons (Medicine) PhD Cape Town FECSS*
D Hockman, MSc *Cape Town* PhD *Cantab*
D Rae, BA (Human Movement Studies) *AUS* BScHons (Medicine) PhD *Cape Town*

Honorary Senior Lecturers:

JB Fortuin-Abrahams, MSc *Queensland* PhD *Western Cape*
L Gordon, MBChB *Cape Town* MPhil (Sports & Exercise Medicine) *Cape Town* Diplomas in
Obstetrics *SA* Paediatrics and Reproductive Health *MRCGP London*
M Jankiewicz, MS *Nicolas Copernicus* PhD *Vanderbilt*
L Rauch, BSc BScHons (Medicine) PhD *Cape Town*
J Scholefield, BScHons PhD *Cape Town*
J Suter, MBBCh *Witwatersrand* M.Phil (SEM) *Cape Town* Certificate of competence in Travel
Medicine *Witwatersrand*
S Taliip, PhD *Cape Town*

Lecturers:

N Conrad, PhD *Cape Town*
R Dangarembizi, (BSc Hons *NUST* MSc (Med) *Witwatersrand* PhD *Witwatersrand*
L du Plessis, BEng(Chemical) *Stell* MSc PhD *Cape Town*
M Goolam, BScHons MSc *Cape Town* PhD *Cantab*
J Luckrajh, BMedScHons MMedSc *UKZN*
S Mentor, BSc BScHons MSc PhD (Medical Biosciences) *Western Cape*
KS Mpolokeng, BSc BMedScHons *MMedSc UFS* PhD *Cape Town*
L Pio De Paulo, MA *Psych Cape Town*

Adjunct Lecturers:

N Hopkins
K Murphy Bellairs
A Pursad
A Smith

Honorary Lecturers:

MG Kiessig, MBChB MPhil (Exercise Science) *Cape Town*
 A Mendham, B.Ed B.Ex Sc.Hons PhD *Sydney*
 T Oosthuysen
 MK Patrick, MA *Cape Town*
 A Rotunno

Senior Research Officers:

M Holmes, BS *Western Washington* MS PhD *Vanderbilt*
 F Robertson, BSc (Engineering) (Electrical Engineering) MSc PhD *Cape Town*

Research Officers:

M Nglazi, BSc *Zambia* MPH *Cape Town*

Honorary Research Associates:

T Abdalrahman, BSc *Tanta* MSc *Alexandria* PhD *Torino*
 R Ballo, MSc (Medicine) PhD *Cape Town*
 MA Dove, BScHons (Medicine) PhD *Cape Town*
 D Finaughty, MSc (Med), PhD *Cape Town*
 CS Jackson, BSc (Hons) *UFS*, MSc PhD *UP*
 B Jones, PhD *Leeds Beckett University* *United Kingdom*
 K Lakha, MSc (Med) *Wits*, PhD *Cape Town*
 KL Sack, BScHons MSc PhD *Cape Town*
 MS Sirry, BSc *Khartoum* MSc PhD *Cape Town*
 C Readhead, BSc *Physio* *Cape Town*
 EALM Verhagen
 W Viljoen, BSc *Stell* BAHons (Biokinetics) *Pret* PhD *Cape Town*

Junior Research Fellows:

J Fan, MSc(Chemical Eng) PhD *Cape Town*
 S Jermy, MSc *Cape Town*
 MJN Laguette, BScHons (Medicine) PhD *Cape Town*
 B Malila, MSc PhD *Cape Town*

Principal Technical and Scientific Officers:

DA Bowers, BScHons *Cape Town* MSc *Stell*
 M Cassar
 C Harris, NTC *Athlone Technical College*
 P Samuels, BTech(Radiography) MTech *CPUT*
 P Steyn, BScHons MSc PhD *Stell*

Chief Technical and Scientific Officers:

MI Fakier, ND (Electrical Engineering) *CPUT*
 AW Isaacs, BSc (Hons) MSc PhD *Stell*

Senior Technical and Scientific Officers:

N Kariem
 T Mkatazo, BSc BMedScHons *Cape Town*
 M Petersen, MSc (Medicine) *Cape Town*

Senior Radiographers:

M Jaffha, National Diploma Radiography *CPUT* BSc *Queen Elizabeth*
 P Maishi, BTech(Radiography) *CPUT*

Radiographers:

J Lewis

Scientific Officers:

S Biswas, MSc PhD *India*

Technical Officers:

S Benjamin

Technical and Laboratory Assistants:

N Ismail

J Jacobs

M Masha

AK Samuels

W Van Niekerk

HUB2022F ANATOMY FOR BIOMEDICAL ENGINEERS

18 NQF credits at NQF level 6

Convener: Professor GJ Louw

Course entry requirements: HUB4075W

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%.

HUB2025F PHYSIOLOGY FOR BIOMEDICAL ENGINEERS

12 NQF credits at NQF level 6

Convener: Dr F Robertson and Dr T Mutsvangwa

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 self-directed study and/or lectures and/or practicals in selected topics of physiology, for example (1) Introduction to physiology, (2) cells, tissues and membranes, (3) musculoskeletal system, (4) cardiovascular system, (5) nervous system, and (6) respiratory system. 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 (15%; group presentation (10%); assignment (25%); and two class tests (25% each).

HUB4007F BIOMECHANICS OF THE MUSCULOSKELETAL SYSTEM

12 NQF credits at NQF level 8

Convener: Associate Professor S Sivasaru

Course entry requirements: Mathematics 2, Physics 2 or Applied Mathematics 2 or equivalent.

Co-requisites: HUB2022F

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: Continuous course assessments marks along with final class test marks will count towards the total course marks.

HUB4027W HEALTHCARE TECHNOLOGY ASSESSMENT

13 NQF credits at NQF level 8

Convener: Dr L du Plessis

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 with the role of the clinical engineer highlighted; 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: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments. Students must achieve a mark of at least 40% for the coursework throughout the year to qualify for the final exam.

Assessment: Assessments through coursework will consist of a combination of home assignments and tests which will contribute 60% to the final mark. A final examination carries 40% of the assessment weight. Supplementary exams can be awarded for students achieving a final module mark between 45% and 49%.

HUB4028W HEALTHCARE TECHNOLOGY PLANNING AND ACQUISITION

13 NQF credits at NQF level 8

Convener: Dr L du Plessis

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. Topics include technology life cycles; technology transfer; strategic planning; health care technology policy frameworks; tendering and procurement processes and donations guidelines, as well as the role of the clinical engineer in the management of these processes. The benefits and challenges of healthcare technology is discussed extensively.

DP requirements: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments. Students must achieve a mark of at least 40% for the coursework throughout the year to qualify for the final exam.

Assessment: Assessments through coursework will consist of a combination of home assignments and tests which will contribute 60% to the final mark. A final examination carries 40% of the assessment weight. Supplementary exams can be awarded for students achieving a final module mark between 45% and 49%.

HUB4030W HEALTHCARE PROJECT MANAGEMENT

13 NQF credits at NQF level 8

Convener: Dr L du Plessis

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: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments. Students must achieve a mark of at least 40% for the coursework throughout the year to qualify for the final exam.

Assessment: Assessment will be continuous and consist of ten assignments (completing components of a project plan) throughout the year. These assignments will carry equal weight and will contribute 80% to the final mark. A final submission combining all assignments to create a full project plan will contribute 20% to the final mark. Supplementary exams cannot be awarded for this module.

HUB4032W PROJECT IN HEALTHCARE TECHNOLOGY MANAGEMENT

16 NQF credits at NQF level 8

Convener: Dr L du Plessis

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 convener.

DP requirements: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments.

Assessment: Students will be required to submit drafts of the project throughout the year which will contribute 40% of the final mark. Final submission will contribute 60% to the final mark. Supplementary exams cannot be awarded for this module.

HUB4045F INTRODUCTION TO MEDICAL IMAGING & IMAGE PROCESSING

12 NQF credits at NQF level 8

Convener: 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.

DP requirements: A class average of 40% shall be obtained for the course.

Assessment: The assessment is through assignments, written assessment and/or a final project.

HUB4065W MEDICAL DEVICES AND INSTRUMENTATION OVERVIEW

13 NQF credits at NQF level 8

Convener: Dr L du Plessis

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.

The role of the clinical engineer's involvement particularly with regards to safety, regulation of medical devices, standards and quality assurance of devices will be discussed.

DP requirements: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments. Students must achieve a mark of at least 40% for the coursework throughout the year to qualify for the final exam.

Assessment: Assessments through coursework will consist of a combination of home assignments and tests which will contribute 60% to the final mark. A final examination carries 40% of the assessment weight. Supplementary exams can be awarded for students achieving a final module mark between 45% and 49%.

HUB4066W HEALTHCARE TECHNOLOGY INNOVATION AND ENTREPRENEURSHIP

13 NQF credits at NQF level 8

Convener: Dr L du Plessis

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: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments. Students must achieve a mark of at least 40% for the coursework throughout the year to qualify for the final exam.

Assessment: Assessments through coursework will consist of a combination of home assignments and tests which will contribute 60% to the final mark. A final examination carries 40% of the assessment weight. Supplementary exams can be awarded for students achieving a final module mark between 45% and 49%.

HUB4068W ASSET MANAGEMENT OF HEALTHCARE TECHNOLOGY AND INFRASTRUCTURE

13 NQF credits at NQF level 8

Convener: Dr L du Plessis

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: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments. Students must achieve a mark of at least 40% for the coursework throughout the year to qualify for the final exam.

Assessment: Assessments through coursework will consist of a combination of home assignments and tests which will contribute 60% to the final mark. A final examination carries 40% of the assessment weight. Supplementary exams can be awarded for students achieving a final module mark between 45% and 49%.

HUB4070W HOSPITAL ENGINEERING PRACTICE

13 NQF credits at NQF level 8

Convener: Dr L du Plessis

Course outline:

The first aim of the course is to provide relevant skills to ensure a quality estate by developing expertise in strategic healthcare service and estate planning, with a focus on sound business approaches to health service delivery, sustainable estate development, evidence-based inclusive design, and the healing environment. The course further covers the engineering and technical areas associated with the operation of health facilities. Topics include occupational safety legislation and its implications for health facilities, hazards in the hospital environment, overview of occupational health and safety management, legal compliance and general engineering strategies, air flow and quality guidelines and standards, air conditioning and air distribution systems, steam generation and distribution, hot water reticulation, water storage and distribution, best practice for medical gas installations, electrical reticulation and installations for modern hospitals, operations management and related information systems and indicators, the role of the clinical engineer and case studies'.

DP requirements: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments. Students must achieve a mark of at least 40% for the coursework throughout the year to qualify for the final exam.

Assessment: Assessments through coursework will consist of a combination of home assignments and tests which will contribute 60% to the final mark. A final examination carries 40% of the assessment weight. Supplementary exams can be awarded for students achieving a final module mark between 45% and 49%.

HUB4071F/S APPLIED ELECTROPHYSIOLOGY

12 NQF credits at NQF level 8

Convener: Dr Y Albertus

Course entry requirements: Mathematics 2 and Physics 2, or approved equivalent.

Course outline:

This course introduces 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 clinicals 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%.

HUB4072F HIGH PERFORMANCE ATHLETE

15 NQF credits at NQF level 8

Convener: Dr D Rae

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.

HUB4075W BIOMEDICAL ENGINEERING OVERVIEW

8 NQF credits at NQF level 9

Convener: Professor T Franz

Course outline:

Students are provided with a broad view of biomedical engineering that underpins their postgraduate research projects. Topics include an overview of biomedical engineering activities taking place in the Western Cape, an introduction to local healthcare challenges that could potentially be addressed through biomedical engineering innovation, and intellectual property considerations.

DP requirements: Completion of all assignments and attendance of all class meetings.

Assessment: Written assignments: 70%. Seminar: 30%.

HUB4077W APPLIED ANATOMY COURSEWORK

78 NQF credits at NQF level 8

Convener: Associate Professor Geney Gunston

Course outline:

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

HUB4078W APPLIED ANATOMY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Associate Professor Geney Gunston

Course outline:

The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

HUB4079W BOKINETICS COURSEWORK

90 NQF credits at NQF level 8

Convener: Dr J Kroff**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.

DP requirements: In order to qualify for clinical examinations during the year, students are required to obtain a minimum number of hours collectively throughout the year during clinical rotations. The minimum number of hours per examination are: (i) 60 hours prior to first clinical examination, (ii) 120 hours prior to second clinical examination, and (iii) 160 hours prior to the final clinical examination. Additional DP Requirements are 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: Coursework modules (including tests, evaluations, assignments) (33%); clinical work module (28%); final clinical examination (15%) and final theory examinations (24%). To pass the coursework students must achieve a minimum of 50% for each of the following sections: 1) Final Theory examinations; 2) Biokinetics final clinical examination; 3) Final coursework mark.

HUB4080W BOKINETICS RESEARCH PROJECT

30 NQF credits at NQF level 8

Convener: Dr J Kroff**Course outline:**

This course comprises of two components: 1) Research Methods and Biostatistics and 2) Research Project. 1) Research methods and Biostatistics module comprises of lectures, tutorials, assignments and class tests in basic and applied concepts of Research methods and Biostatistics. 2) The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project. The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: The final mark is made up as follows: The final mark for the Research Methods and Biostatistics module (10%), final project write-up (90%) (80%) and the project oral presentation (10%).

HUB4081W BIOLOGICAL ANTHROPOLOGY COURSEWORK

78 NQF credits at NQF level 8

Convener: Dr J Friedling**Course outline:**

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

HUB4082W BIOLOGICAL ANTHROPOLOGY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr J Friedling

Course outline:

The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

HUB4083W MEDICAL CELL BIOLOGY COURSEWORK

78 NQF credits at NQF level 8

Convener: Dr R Ballo

Course outline:

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

HUB4084W MEDICAL CELL BIOLOGY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr R Ballo

Course outline:

The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

HUB4085W EXERCISE SCIENCE COURSEWORK

90 NQF credits at NQF level 8

Convener: Dr S Hendricks

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 starts with a module covering the physiology of exercise. Practical laboratory techniques modules follow, aimed at teaching students basic and advanced molecular and biochemical techniques, and principles of physiological exercise and biomechanical testing. Students complete a module on research methodology and fundamental concepts of applied exercise science. In addition, students attend six modules. Each module covers a specific field in exercise science.

DP requirements: Completion and attendance of all academic commitments.

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

HUB4086W EXERCISE SCIENCE RESEARCH PROJECT

30 NQF credits at NQF level 8

Convener: Dr S Hendricks

Course outline:

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 course is conducted at the Sports Science Institute of South Africa.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Research project (33%), and oral presentation of research project (2%).

HUB4087W NEUROSCIENCE AND PHYSIOLOGY COURSEWORK

78 NQF credits at NQF level 8

Convener: Dr JV Raimondo

Course outline:

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

HUB4088W NEUROSCIENCE AND PHYSIOLOGY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr JV Raimondo

Course outline:

The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

HUB4090W HEALTH INFORMATION SYSTEMS, TELEMEDICINE AND MHEALTH

13 NQF credits at NQF level 8

Convener: Dr L du Plessis

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: Students will be required to attend a minimum of 80% of contact sessions and complete all assignments. Students must achieve a mark of at least 40% for the coursework throughout the year to qualify for the final exam.

Assessment: Assessments through coursework will consist of a combination of home assignments and tests which will contribute 60% to the final mark. A final examination carries 40% of the assessment weight. Supplementary exams can be awarded for students achieving a final module mark between 45% and 49%.

HUB4095F ANATOMY FOR BIOMEDICAL ENGINEERS

12 NQF credits at NQF level 8

Convener: Associate Professor D Shamley

Course entry requirements: None

Co-requisites: None

Course outline:

This course introduces postgraduate students to selected topics of human anatomy and applied anatomy, such as osteology, chest wall, upper and lower back, head and neck, limbs, thorax, abdomen and pelvis. Students will be prepared to apply their knowledge in anatomy to problems in their dissertation research in biomedical engineering.

DP requirements: Completion of all coursework

Assessment: Class tests: 1 viva (25% of course mark), 1 Objective structured practical examination (25% of course mark). Final examination: 1 written paper (25% of course mark) and 1 Objective structured practical examination (25% of course mark).

HUB5001W BIOMEDICAL SCIENCE DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor T Franz

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.

Assessment: The dissertation is externally examined.

HUB5002W MSC(MED) IN BIOMEDICAL ENGINEERING BY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor T Franz

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.

Assessment: The dissertation is externally examined.

HUB5003W MPHIL IN BIOMEDICAL ENGINEERING BY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor T Franz

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.

Assessment: The dissertation is externally examined.

HUB5004W PHYSIOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor MR Collins

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.

Assessment: The dissertation is externally examined.

HUB5005W EXERCISE SCIENCE DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor MI Lambert

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.

Assessment: The dissertation is externally examined.

HUB5006W MPHIL SPORT AND EXERCISE MEDICINE PART 1A

60 NQF credits at NQF level 9

Convener: Dr J Swart

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.

HUB5007W SPORT & EXERCISE MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr J Swart

Course outline:

Part 2 consists of a minor dissertation, the choice of the topic to be guided by the programme convener. 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.

HUB5010W EXERCISE PHYSIOLOGY

48 NQF credits at NQF level 9

Convener: Associate Professor T Burgess

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.

HUB5012W EXERCISE & SPORTS PHYSIO MINOR DISSERTATION

When the primary supervisor is in the Department of Human Biology

60 NQF credits at NQF level 9

Convener: Associate Professor T Burgess

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.

Assessment: External examination of the minor dissertation.

HUB5014W DIETETICS DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor N Steyn

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.

Assessment: The dissertation is externally examined.

HUB5015W NUTRITION DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor N Steyn

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.

HUB5016F PHYSICAL ACTIVITY & EPIDEMIOLOGY

15 NQF credits at NQF level 9

Convener: Dr J Kroff

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.

HUB5017F RESEARCH METHODS AND STATISTICS FOR PHYSICAL ACTIVITY

15 NQF credits at NQF level 9

Convener: Professor EV Lambert

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.

HUB5018F BIOKINETICS IN THE WORKPLACE

15 NQF credits at NQF level 9

Convener: Dr J Kroff

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.

HUB5020S ADVANCED STRENGTH AND CONDITIONING FOR ATHLETIC PERFORMANCE

15 NQF credits at NQF level 9

Convener: Professor MI Lambert

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.

HUB5021S BIOKINETICS AND NEUROMUSCULAR DISORDERS

15 NQF credits at NQF level 9

Convener: Dr J Kroff

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, Friederich'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.

HUB5022S NUTRITION & ERGOGENIC AIDS

15 NQF credits at NQF level 9

Convener: Dr J Kroff

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, hyponatremia, 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.

HUB5023S ADVANCED CLINICAL EXERCISE PHYSIOLOGY

15 NQF credits at NQF level 9

Convener: Dr M Posthumus

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.

HUB5024W BIOKINETICS MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr J Kroff

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.

HUB5025W MPhil SPORT AND EXERCISE MEDICINE PART 1B

40 NQF credits at NQF 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: *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.

HUB5026W MPHIL SPORT & EXERCISE MEDICINE PART 1C

40 NQF credits at NQF 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.

HUB5029W HEALTH INNOVATION MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor TS Douglas**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.

HUB5030W MSC(MED) IN MECHANOBIOLOGY BY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor T Franz**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.

Assessment: The dissertation is externally examined.

HUB5031F HEALTH INNOVATION & DESIGN (A)

21 NQF credits at NQF level 9; 36 sessions (lectures/tutorials/site visits).

Convener: Dr T Mutsvangwa

Objective: The aim is to introduce participants to human-centred design of solutions to promote health and well-being.

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.

Lecture times: Two to three two-hour sessions per week, by arrangement.

DP requirements: Completion of all assignments with a mark of at least 50%. Attendance at all class sessions and field visits.

Assessment: Coursework: 100%.

HUB5032S HEALTH INNOVATION & DESIGN (B)

21 NQF credits at NQF level 9; 36 sessions (lectures/tutorials/site visits).

Convener: Dr T Mutsvangwa

Course entry requirements: HUB5031F

Objective: Participants apply advanced design thinking to human-centred 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: Two to three two-hour sessions per week, by arrangement.

DP requirements: Completion of all assignments with a mark of at least 50%. Attendance at all class sessions and field visits.

Assessment: Coursework: 100%.

HUB5033F HEALTH INNOVATION & ENTREPRENEURSHIP

12 NQF credits at NQF level 9; 24 sessions (lectures/tutorials/site visits).

Convener: Dr J Fortuin

Course entry requirements: Honours-equivalent degree; HUB5031F or equivalent.

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 innovation prototypes, 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 include: needs assessment; business idea development, business models, drafting of a business plan; funding models; innovation models, risks, costs and rewards; product development and new product management; intellectual property and patenting.

Lecture times: By arrangement.

DP requirements: Attendance and completion of all coursework requirements.

Assessment: Assignment (30%), class test (10%) and written examinations (60%).

HUB5034W MEDICAL CELL BIOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor S Prince

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.

Assessment: The dissertation is externally examined.

HUB5035W BIOLOGICAL ANTHROPOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr J Friedling

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.

HUB6000W BIOMEDICAL ENGINEERING THESIS

360 NQF credits at NQF level 10

Convener: Professor T Franz

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: The thesis is external examined.

HUB6001W PHYSIOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor DM Lang

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: The thesis is externally examined.

HUB6002W BIOMEDICAL FORENSIC SCIENCE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr L Heathfield

Course entry requirements: HUB6014F/S, PTY6004F/S, PTY6005F/S, PTY6006F/S, PTY6007F/S, PTY6010F/S and 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.

HUB6007W BIOMEDICAL ENGINEERING MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: Professor T Franz

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.

HUB6008W PHD IN MECHANOBIOLOGY BY THESIS

360 NQF credits at NQF level 10

Convener: Professor T Franz

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: The thesis is externally examined.

HUB6009F MEDICAL DEVICE DESIGN PART I

21 NQF credits at NQF level 9

Convener: Associate Professor S Sivarasu

Course entry requirements: 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 and design tutorials.

Assessment: Coursework 55% and final assessment 45%. Coursework: Regular project update presentations, attendance and participation in group design discussions. Final assessment: Technical report 15%; demonstration 15% and oral presentation 15%.

HUB6010S MEDICAL DEVICE DESIGN PART II

21 NQF credits at NQF level 9

Convener: Associate Professor S Sivarasu

Course entry requirements: HUB2019F and HUB2022F

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 and design tutorials.

Assessment: Coursework 55% and Final Assessment 45%, made up as follows: Coursework: Regular project update presentations, attendance and participation in group design discussions. Final assessment 45%: consists of technical report 15%; demonstration 15% & oral presentation 15%.

HUB6011W HEALTHCARE TECHNOLOGY MANAGEMENT DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr J Fortuin**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.

HUB6012W BIOLOGICAL ANTHROPOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor Victoria Gibbon**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.

HUB6013W MEDICAL CELL BIOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor S Prince**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.

HUB6014F/S FORENSIC ANTHROPOLOGY & ANATOMY

18 NQF credits at NQF level 9

Convener: Professor VE Gibbon**Course outline:**

The aim of this course is to introduce the field of forensic anthropology, which is the application of biological anthropology methodology to a medico-legal context. In this course students will learn to identify human skeletal remains to assist law enforcement through estimating age, sex, ancestry, stature, and unique features from the skeleton (bone pathology & trauma).

282 DEPARTMENTS IN THE FACULTY

Also, the following skills will be taught: how to determine if human skeletal remains are of forensic context; methods of scene recovery; and how to use decomposition rates to provide an estimate of the postmortem interval. These topics are covered both theoretically and in application. The course also offers foundational information required for students' forensic science programme, which include topics on human osteology and odontology, anatomy and histology.

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: The coursework component carries 60% of the assessment weight and the examination component contributes 40% towards the final mark.

HUB6015W BIOMEDICAL FORENSIC SCIENCE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr VE Gibbon

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.

HUB7000W ANATOMY DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr A Bhagwandin

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.

HUB7001W ANATOMY & CELL BIOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor GJ Louw

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: The thesis is externally examined.

HUB7003W CELL BIOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor S Prince**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.

HUB7006W EXERCISE SCIENCE THESIS

360 NQF credits at NQF level 10

Convener: Professor MI Lambert**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

HUB7007W NUTRITION THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor N Steyn**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: The thesis is externally examined.

HUB7008W DIETETICS THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor N Steyn**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: The thesis is externally examined.

HUB7010W NEUROSCIENCE (PHYSIOLOGY) THESIS

360 NQF credits at NQF level 10

Convener: Professor MR Collins

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: The thesis is externally examined.

HUB7011W ANATOMY THESIS

360 NQF credits at NQF level 10

Convener: Dr A Bhagwandin

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: The thesis is externally examined.

HUB7012W CELL BIOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor S Prince

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: The thesis is externally examined.

HUB7013W HEALTH INNOVATION THESIS

360 NQF credits at NQF level 10

Convener: Professor TS Douglas

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: The thesis is externally examined.

HUB7014W HEALTHCARE TECHNOLOGY MANAGEMENT THESIS

360 NQF credits at NQF level 10

Convener: Dr J Fortuin

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.

INTEGRATIVE BIOMEDICAL SCIENCES

Associate Professor and Head of Department:

DT Hendricks, BScHons (Medicine) PhD *Cape Town*

Medical Biochemistry and Structural Biology

Level 6, Falmouth Building, and Level 2, Wernher and Beit Building North

Professor and Head:

V Leaner, BScHons (Medicine) PhD *Cape Town*

Professors:

PN Meissner, BScHons (Medicine) PhD *Cape Town*

Emeritus Professors:

W Gevers, MBChB DSc *Cape Town* MA DPhil *Oxon* DSc *UPE CMSA*

PN Meissner, BScHons (Medicine) PhD *Cape Town*

RP Millar, PhD *Liverpool* FRCPATH (Chemistry) FRSE

MI Parker, BScHons PhD *Cape Town* MASSAf

BT Sewell, MSc *Witwatersrand* PhD *London*

AA Katz, PhD *Rehovot*

Honorary Professors:

CGP Mathew, BScHons *UPE* PhD *London* FRCPATH *Royal College of Pathologists*

WD Schubert, BScHons MSc *Cape Town* PhD *Berlin*

Associate Professors:

DT Hendricks, BScHons (Medicine) PhD *Cape Town*

Z Woodman, BScHons (Medicine) PhD *Cape Town*

Emeritus Associate Professor:

LR Thilo, MSc *Pret* Dr rer Nat *Heidelberg*

Honorary Associate Professor:

G Schäfer, PhD *Berlin*

Honorary Lecturer

S Cacciatore, MSc Biotechnology PhD *Italy*

MWium, MSc *Pretoria* PhD *Stell*

Honorary Research Associate

AA Varsani, PhD *Cape Town*

Senior Scientific Officer

R Ebrahim, BSc Hons PhD *Cape Town*

Research Officer:

P van der Watt, PhD *Cape Town*

Chemical and Systems Biology

Levels 2 & 3, Wernher and Beit Building North

Professor and Head:

J Blackburn, BScHons DPhil *Oxon*

Professors:

S Barth, PhD *Bonn* DMSc *Cologne*

ED Sturrock, BScHons (Medicine) PhD *Cape Town* FRSSAF

Honorary Associate Professor:

L Zerbini, MSc PhD *São Paulo Brazil*

Senior Lecturer:

HH Ndlovu, BScHons *Natal* PhD *Cape Town*

Lecturer

TA Ganief, BScHons PhD *Cape Town*

Computational Biology

Level 1, Wernher and Beit Building North, IDM

Professor and Head:

NJ Mulder, BScHons PhD *Cape Town*

Honorary Professor:

S Bergmann, PhD *Rehovot*

N Tiffin, MPH *Cape Town* PhD *London*

Associate Professors:

D Martin, PhD *Cape Town*

Lecturers:

H Bendou, PhD *Cape Town*

M Sinkala, PhD *Cape Town*

IBS4006W BIOINFORMATICS COURSEWORK

78 NQF credits at NQF level 8

Convener: Professor NJ Mulder

Course outline:

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

IBS4007W BIOINFORMATICS RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Professor NJ Mulder**Course outline:**

The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.**Assessment:** Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

IBS4008W MEDICAL BIOCHEMISTRY COURSEWORK

78NQF credits at NQF level 8

Convener: Dr HH Ndlovu**Course outline:**

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.

DP requirements: Completion and attendance of all academic commitments.**Assessment:** Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

IBS4009W MEDICAL BIOCHEMISTRY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr HH Ndlovu**Course outline:**

The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.**Assessment:** Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

IBS4010W STRUCTURAL BIOLOGY COURSEWORK

78 NQF credits at NQF level 8

Convener: Dr J Woodward**Course outline:**

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.

DP requirements: Completion and attendance of all academic commitments.**Assessment:** Evaluation is based on performance in the coursework and in the examinations.

To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

IBS4011W STRUCTURAL BIOLOGY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr J Woodward

Course outline:

The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

IBS5000W MEDICAL BIOCHEMISTRY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor V Leaner

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.

IBS5001W BIOINFORMATICS DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor NJ Mulder

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.

IBS5003W CHEMICAL BIOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor J Blackburn

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.

IBS5004Z BIOINFORMATICS FOR HIGH-THROUGHPUT BIOLOGY

15 NQF credits at NQF level 9

Convener: TBC**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.

IBS5005W DATA SCIENCE MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: TBC**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.

IBS6000W MEDICAL BIOCHEMISTRY THESIS

360 NQF credits at NQF level 10

Convener: Professor V Leaner**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.

IBS6001W BIOINFORMATICS THESIS

360 NQF credits at NQF level 10

Convener: Professor NJ Mulder**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.

IBS6002W CHEMICAL BIOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor J Blackburn

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, Grootte 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:

NBA Ntusi, BScHons MBChB MD *Cape Town* FCP SADPhil Oxon Certificate (Cardiology) SA

Professor and Deputy Head:

GA Meintjes, MBChB UCT FRCP (Glasgow) FCP (SA) DipHIVMan SA MPH (Johns Hopkins) PhD UCT

Emeritus Professors:

ED Bateman, MBChB MD *Cape Town* DCH FRCP UK
 SR Benatar, MBChB DSc (Medicine) *Cape Town* FFA FRCP
 PJ Commerford, MBChB *Cape Town* FCP SA FACCG
 G Maartens, MBChB MMed *Cape Town* FCP SA DTM&H LSTMH UK
 R Wood, BScMBCh DTM&H MMED FCP SA
 L Seggie, BScHons MBChB MD *Birmingham* FRCP London FCP SA
 G Todd, BSc UKZN MBChB PhD *Cape Town* FC Derm SA

Emeritus Associate Professors:

RW Eastman, MBChB *Cape Town* FRCP UK
 SR Ress, MBChB *Pret* FCP SA
 R Scott Millar, MBBCh *Witwatersrand* FCP SA
 CR Swanepoel, MBChB *Cape Town* MRCP FRCP UK
 R van Zyl-Smit, MBBCh *Witwatersrand* MD *Cape Town* FRCP
 PA Willcox, BScHons MBChB *Birmingham* FRCP UK

Professors:

LG Bekker, MBChB DCH DTM&H FCP SA PhD
 C Orrell, MBChB MSc MMed PhD

Honorary Professors:

M Badri, BScHons MSc *India* MSc (Medicine) PhD *Cape Town*
 JP Bassand, MD FESC FACC
 TG Clark, BCom MSc *New Zealand* DPhil Oxon
 G Dusheiko, MBChB FCP SA FRCP London FRCP Edinburgh
 T Forrester, DM (Medicine) MBBS MSc PhD *West Indies*
 BJ Gersh, MBChB *Cape Town* DPhil Oxon FCP SA FRCP UK FACC
 P Heering, MD FASN
 AP Kengne, MD PhD *Sydney*
 VJ Louw, MBChB *Stell* MMed (Internal Medicine) *Stell* FCP SA PhD UFS
 C Masimirembwa, BScHons DPhil *Zimbabwe* PhD *Sweden*
 GA Mensah, MD FACC FESC FAHA FACP FCP SA Hon
 A Nel, MBChB PhD *Cape Town*
 MGN Pai, MD PhD
 G Pillai, PhD
 PJ Schwartz, MD PhD
 S Stewart, PhD *Glasgow* NFESC FAHA FCSANZ
 VK Somers, MBChB *Natal* DPhil Oxon

RJ Wilkinson, BMBCh MA PhD DTM&H FRCP *UK*
DM Yellon, PhD FESC FRCP *UK*

Visiting Professors:

B Keavney, BSc BM BCh *Oxon* MRCP DM FRCP *UK*
L Thabane, BSc *Lesotho* MSc (DipSci) *England* PhD *London*

Visiting Associate Professors:

FS Hellig, BSc MBBCh *Witwatersrand*
JR Hoffman, BAHons DPhil *Oxon*
F Thienemann, MD DTMPH PhD MScIH *Germany*

Associate Professors:

ME Engel, BScHons MPH PhD *Cape Town*

Honorary Associate Professors:

G Cotter, MD FACC FESC *Israel*
R Dawson, MBChB *Cape Town* FCP Cert (Pulm Phys) *SA*
LR Fairall, MBChB PhD *Cape Town*
T Gumbo, MD *Zimbabwe*
D Joseph-Davies MPH PhD
C Kassianides MBChB FCP *SA*
AP Kengne, MD PhD *Sydney*
M Khati, BSc BScHons (Medicine) *Cape Town* MSc (Medicine) DIC DPhil *UK*
R McNerney, PhD *UK*
A Medina-Marino BA MS Ph
RN van Zyl-Smit, MBChB MMed *Cape Town* FCP Cert (Pulm Dip) (HIV Management) *SA* MRCP *UK*
K Wilkinson, MSc PhD *Budapest*

Senior Lecturers Part-time:

NP Gina, MBBCh *Witwatersrand* FCP Dip (HIV Management) *SA*
CA Viljoen, MBChB *Pret* FCP *SA*

Honorary Senior Lecturers:

M Abelson, MBChB *Witwatersrand* FCP *SA* MRCP *UK*
L Acquah, MD MSc FACP *USA*
AJ Brink, MBChB MMed *Pret*
J Butler, MBChB *Pret* FCP Neurology *SA*
E Danso, MBChB FCP *SA*
R Davidson, MBChB MD *Cape Town* MRCP DTM&H FRCP *UK*
CA de Jager, BScHons HDE *Natal* PhD *Cape Town*
JMG du Toit, MBChB *Cape Town* FCP *SA*
RJ Freercks, MBChB MPhil *Cape Town* FCP Cert (Neph Phys) *SA*
T Gould, MBChB *Witwatersrand* FCP *SA*
L Geffen, MBChB *Cape Town* FCFP *SA*
M Gniecchi, MD PhD
C Kenyon, MBChB *Cape Town* FCP *SA*
J Kuehne, MBChB *Cape Town* MPhil *Stell* Dip (HIV Management) *SA*
MA Latib, MBChB FCP Cert (Cardiol Phys) *SA*
S Mathee, MBChB *Cape Town* MMed *Stell*
AG Parrish, MBChB *Cape Town* FCP DA *SA*
M Pascoe, MBChB FCP *SA*
K Rebe, MBChB *Cape Town* FCP *SA* DTM&H

294 DEPARTMENTS IN THE FACULTY

A Robins, MBChB *Cape Town MD Witwatersrand DPM RCP London RCS England*
G Smit, MBChB MMed (Med) *Stell*
P Smith, MSocSci BA Hons BSocSci PhD
A Tooke, MBChB *Cape Town FCP SA*
J Turner, MBChB PGDip (Palliative Medicine) MD MMed *Cape Town FCP SA FCCP*
D Woolf, MBChB FCP *SA*

Lecturers Part-time:

A Barnard, MBChB *Cape Town*

Honorary Lecturers:

A Bruning, MBBCh *Witwatersrand FCP SA*
R Cornick, MBChB MPhil *Cape Town*
KD Ebrahim, MBChB *Cape Town FCP SA*
J Hitzeroth, MBChB *Stell DA FCP Cert (Cardiol Phys) SA*
J Hugo, MBChB *Pret MMed UFS FCA SA*

Honorary Research Affiliate:

P Howlett, BSc MBChB *Bristol MRCP UK*

Honorary Research Associates:

A Binder, PhD *Germany*
M Carrington, BA PGDip (Psychology) PhD *Australia*
A Davis, BSc MBBS MRCP *UK*
R Hendricks, BChD MChD *Cape Town*
V Ives-Deliperi, PhD *Cape Town*
A Orren, MBChB MD *Cape Town*
N Peer, MBChB *Natal MPH PhD Cape Town*
M Rangkaka, MBChB *Cape Town MSc MPhil PhD UK*
C Stek, MD *Netherlands*
H Struthers, BSc BScHons MSc MBA *Witwatersrand*
D Watkins, MD MPH *USA*

Senior Research Officers Full-time:

J de Vries, BSc MSc *Netherlands DPhil Oxon*
G Shaboodien, BScHons PhD *Cape Town*

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

Associate Professor and Head of Division:

JG Peter, MBChB MMed PhD *Cape Town FCP SA*

Emeritus Professors:

PC Potter, BScHons MBChB MD *Cape Town DCH FCP (Paediatrics) SA FACAIAI*
E Weinberg, MBChB FCP *SA FAAAAI*

Emeritus Associate Professor:

SR Ress, MBChB *Pret FCP SA*

Lecturer Part-time:

J Holtzhausen, MBChB Dip (Allergology)
R Leaver, MBChB FCP SA

Honorary Lecturer:

S Emanuel, MBChB *Cape Town*

Medical Officer:

D Hawarden, BSc MBChB *Cape Town* Dip (Medical Technology) SA

Research Medical Officers:

K Coovadia, MBChB Dip (Allergology) SA
C Holmgren, MBChB *Cape Town*
A Le Roux, MBChB
R Mistry, MBBS *New Delhi* Dip (Allergology) (HIV Management) SA MBA *Cape Town*

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
S Salie

Cardiology

E17/25, New Groote Schuur Hospital

Full Time Consultant Staff:**Helen and Morris Mauerberger Professor of Cardiology and Head:**

M Ntsekhe, BA *Brown* MD *Columbia* FCP SA Cert (Cardiol Phys) SA MPhil PhD *Cape Town*
FACC

Associate Professor

A Chin, MBChB FCP SA Cert Cardio SA MPhil CEPS CCDS *IBHRE*

Senior Lecturers Full-time:

BJ Cupido, MBChB *Cape Town* FCP Cert (Cardiol Phys) SA
J Hitzerth, MBChB *Stell* DA FCP Cert Cardio SA

Part-Time Consultant Staff:**Professors:**

N Ntusi, BSc *Haverford* MBChB *Cape Town* FCP SA Cert Cardio SA DPhil *Oxon* MD *Cape Town*
K Sliwa-Hahnle, MD *Germany* PhD *Witwatersrand* FESC FACC FAHA DTM&H
L. Zuhlke MD, *Cape Town* FCP Paeds *SAMPH Cape Town* MSc *London* PhD *Cape Town*

Emeritus Professor:

PJ Commerford, MBChB *Cape Town* FCP SA FACC

Emeritus Associate Professor:

RN Scott Millar, MBBCh *Witwatersrand* FCP SA

Senior Lecturer Part-time:

JE Stevens, MD FRCP *UK*

Honorary Professors:

B Gersh, MBChB DPhil *Oxon* FCP SA FRCP *UK*

PJ Schwartz, MD PhD *Italy*

Visiting Associate Professor:

FS Hellig, BSc MBBCh *Witwatersrand*

Lecturer Part-time:

M De Andrade, MBChB *Cape Town* MRCGP *UK*

Honorary Senior Lecturers:

MJ Abelson, MBChB *Witwatersrand* MRCP *UK* FCP SA

AM Latib, MBChB FCP Cert (Cardiol Phys) SA

Fellow in Electrophysiology:

P Mkoko, MBChB *Medunsa* FCP SA Cert Cardio SA

Fellow in Interventional Cardiology:

A Mutyaba, MBChB *Cape Town* FCP SA Cert Cardio SA

Fellows in General Cardiology:

T Auala, MBChB *Cape Town* FCP SA

MM Al-Naili, MBChB *Libya* MMED *SUN* FCP SA

MC deVilliers, MBChB *Free State* MMED *Cape Town* FCP SA

ET Gambahaya, *Zimbabwe* MMED *Zimbabwe*

ZV Jama, MBChB *Medunsa* MMED *Cape Town* FCP SA

J September, MBChB *Stell* MMED *Cape Town* FCP SA

CA Viljoen, MBChB *Pretoria* MMED *Cape Town* FCP SA

Clinical Haematology

New Main GSH E5

Professor and Head:

VJ Louw, MBChB *Stell* MMed *Stell* PhD (HPE) *UFS*

Senior Lecturers Full-time:

C du Toit, MBChB MMed *UFS*

E Verburch, MBChB *UP* MMed *UFS* FCP SA FCPI PhD *Kuleuven*

Senior Registrars / Fellows:

E Poulet, MBChB MMED *UCT* FCP SA

P Loebenberg, MBChB MMED *UCT* FCP SA

K Simba, MBChB MMED *UCT* FCP SA

Y Kheir, MBBS MD MRCP *UK*

Medical Officer:

M Joubert, MBChB

Unit Operational Managers:

E5 Clinic:

Sr S Croy, PRN (Acting Ops Man)

Sr T Weber, PRN (Acting Ops Man)

Ward F4:

Sr Carelse, PRN

Sr Francis, PRN (Acting Ops Man)

Ward G7:

Sr Oliver, PRN

Ward G8:

Sr Faro, PRN

BMT Co-ordinator:

KG Bing, PRN *Cape Town*

Haemophilia Nurse Co-ordinator Western Cape:

AL Cruickshank, PRN *Cape Town*

Medical Technologist:

C Seaton, NDip (Medical Technology) *SA*

Quality Manager:

Y Kramer

Research Co-ordinator:

J Oosthuizen

Research Assistants:

Z Martins

K Michaels

Secretary:

M Davids

Clinical Pharmacology

K Floor, Old Main Building, Groote Schuur Hospital

Associate Professor and Head:

PZ Sinxadi, MBChB MMed PhD *Cape Town DA SA Certificate in Human Pharmacology (RCoP UK)*

Professors:

KI Barnes, MBChB MMed *Cape Town*

M Blockman, MBChB BPharm PG Dip Int Res Ethics MMed *Cape Town*

P Denti, MEng PhD *Italy*

H McIlleron, MBChB PhD *Cape Town*

Honorary Professors:

MJ Bockarie, MSc (Zoology) MSc (Applied Parasitology and Medical Entomology) *Sierra Leone PhD UK*

G Pillai, BPharm MPharm PhD

298 DEPARTMENTS IN THE FACULTY

Associate Professors:

K Cohen, MBChB MMed *Cape Town* MSc (Epid) LSHTM MCFP Dip (HIV Management)(Obstetrics & Gynaecology) *SA*
PZ Sinxadi, MBChB PhD *Cape Town* DA *SA*
L Wiesner, PhD *Cape Town*

Honorary Associate Professor:

AG Parrish, MBChB *Cape Town* FCP *SA* DA *SA*

Emeritus Professor:

G Maartens, MBChB MMed *Cape Town* FCP *SA* DTM&H LSTMH *UK*

Emeritus Associate Professor:

PJ Smith, BScHons PhD *Cape Town*

Senior Lecturer:

HM Gunter, MBChB *Stell* MMed (Clin Pharmacol) FCCP *SA*

Lecturer (part-time):

S Allie, MBChB *Stell*

Honorary Senior Lecturer:

A Robins, MBChB *Cape Town* MD *Witwatersrand* DPM RCP *London* RCS *Eng*

Research Officer:

R Wasmann, PharmD PhD *the Netherlands*

Registrars:

RT Mpofo, MBChB *UCT* DipHIVman *SA*
JH Taylor, MBChB *Stell* DipHIVman DipPEC *SA*
N Madikizela MBChB *WSU* DipHIVMan *SA*

Study Managers:

Clinical: E Allen, MPH *Cape Town*
Analytical: S Castel, PhD *Cape Town*

Medicines Information Centre Manager:

A Swart, BSc (Pharmacy) *Stell*

Medicines Information Centre Pharmacists:

BS Chisholm, BPharm *Rhodes*
J Jones, BPharm *UCT*
E Tommy, BPharm *Rhodes*
A Uys, MSc (Pharmacology) BPharm *PU for CHE*
M Ariefdien, BPharm *UWC* PharmD *Nova Southeastern University*
F Abrahams, BPharm *UWC*
R Dippenaar BPharm *NWU* MPH *Liverpool*

South African Medicines Formulary (SAMF) Editor:

D Rossiter, Dip (Pharmacology) *Pret* MPharm PhD *Medunsa*

Principal Technical Officer:

AC Evans, NDip (Medical Laboratory Technology) *CPUT*

Principal Scientific Officers:

A Joubert, BScHons *UFS*

Critical Care Medicine

New Groote Schuur Hospital

Associate Professor and Head:

IA Joubert, MBBCh *Witwatersrand* DA FCA (Critical Care) *SA*

Professor:

PL Semple, MBChB *Cape Town* MMed FCNeurosurg *SA* PhD

Emeritus Professor:

WL Michell, MBChB *Cape Town* DA FFA (Critical Care) *SA*

Associate Professor:

MGA Miller, MBChB *Stell* FCA *SA* Cert Crit Care(Anaes)

Professors Part-time in Critical Care:

K Dheda, MBBCh *Witwatersrand* FCP *SA* FCCP PhD FRCP *London*

T Pennel, MBChB *Stell* FC Cardio *SA* PhD *Cape Town*

RN van Zyl-Smit, MBChB *Cape Town* MMed FCP Cert (Pulm) *SA* Dip HIV(Man) *SA* MRCP *UK*
PhD ATSF

Associate Professor Part-time in Critical Care:

GL Calligaro, MBChB *Cape Town* BScHons *Witwatersrand* FCP *SA*

J Scherman, MBChB *Pretoria* DipOccMed *Stellen* MMed *Cape Town* FC Cardio *SA*

Honorary Associate Professor Part-time in Critical Care:

R Dawson, MBChB *Cape Town* FCP Cert (Pulm Phys) *SA*

Senior Lecturers Full-time:

C Arnold-Day, MBChB *Witwatersrand* MMed(Neurosurg) FCNeurosurg *SA* MPhil(Crit Care) Cert Crit Care(Neuro)

DL Fredericks, MBChB *Cape Town* FCEM *SA* Cert Crit Care(Emer Med)

JL Piercy, BScHons MBBS *London* FCA *SA* Cert Crit Care(Anaes)

DA Thomson, MBChB *Kwa Zulu-Natal* Dip PEC MMed FCS *SA* Cert Crit Care(Surg)

Senior lecturers Part-time in Critical Care:

G Symons, MBChB Dip PEC *Cape Town* FCP Cert (Pulm) *SA*

Fellows in training:

NL Fernandes MBChB *Cape Town* DA MMed(Anaes) FCA *SA*

B Pandaram MBBCh *Witwatersrand* BMedSci(Anatomy) DipPEC FCS(Neurosurg) *SA*

Senior Technology Staff:

G Strathie, BTech *Durban*

Dermatology

G23, New Groote Schuur Hospital

Professor and Head:

R Lehloenya, BSc *Lesotho* MBChB *Medunsa* FC Derm *SA*

300 DEPARTMENTS IN THE FACULTY

Emeritus Professor:

G Todd, BSc *UKZN* MBChB PhD *Cape Town* FC Derm *SA*

Senior Lecturers Full-time:

C Hlela, MBChB MMed *UKZN* FC Derm *SA* PhD *Oxon*

T Isaacs, MBChB *Cape Town* (*MFamMed, FCDerm, MMed*)

Senior Lecturers Part-time:

SJ Jessop, MBChB *Cape Town* FC Derm *SA*

S Pather

A Dhana, MBBCh *Witwatersrand* PhD *UCT*

R Lehloenyane, BSc *Lesotho* MBChB *Medunsa* FC Derm *SA*

MH Omar, MBChB *Cape Town* FCP *SA*

Senior Research Officer:

H Adeola, BDS *Nigeria* PhD *Cape Town*

Research Officer:

J van Wyk, BScHons MSc PhD *Cape Town*

Registrars Full-time:

A Dhana, MBBCh *Witwatersrand*

L Knight, MBChB *Cape Town*

N Spengane, MBChB *Cape Town*

K York, MBBCh *Witwatersrand*

Endocrinology

Ward G13, G-Floor, Groote Schuur Hospital

Associate Professor and Head:

JA Dave, MBChB FCP *SA* PhD *Cape Town* Cert Endocrinology & Metabolism FRCP *London*

Professor:

IL Ross, MBChB *Stell* FCP *SA* FRCP *London* Cert. Endocrinology & Metabolism *SA* PhD *Medicine*
UCT

Associate Professor:

Senior Lecturer:

W Toet, MBChB MBA FCP *SA* Cert Endocrinology & Metabolism

Honorary Professor:

NS Levitt, MBChB FCP *SA* MD *Cape Town*

Clinical Educator:

BC Majikela-Dlangamandla, Dip (Nursing & Midwifery)(Community Nursing Science) BA *Unisa*

General Internal Medicine

G8, New Groote Schuur Hospital

Chief Specialist and Head:

PJ Raubenheimer, MBChB *Witwatersrand* FCP *SA*

Associate Professors:

B Hodgkinson, MBChB *Witwatersrand* FCP Cert (Rheum Phys) SA PhD
 JG Peter, MBChB FCP SA MMed PhD *Cape Town*
 M Setshedi, MBChB UKZN FCP SA MPhil MPH Cert (Gastro Phys) PhD *Cape Town*
 M Sonderup, MBChB *Cape Town* FCP SA

Senior Lecturers Full-time:

T Bana, MBChB *Natal* FCP SA
 NA Gogela, MBChB *Medunsa* FCP SA
 A Kropman, MBChB *Cape Town* FCEM SA
 F Moosajee, MBChB *Cape Town* FCP SA
 G Parolis, MBChB *Cape Town* FCP SA
 G Symons, MBChB Dip (Primary Emergency Care) *Cape Town* FCP Cert (Pulm Phys) SA
 PZ Szymanski, MBChB MMed *Cape Town* FCP SA

Senior Lecturer Part-time:

S Botha, MBChB *Stell* PhD LUMC

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 Geriatric Medicine and Professor:

MI Combrinck, MBChB BSc(Med)(Hons) PhD *Cape Town* FCP SA (Neurol) DTM&H FRCP *London*

Associate Professor and Director of the Albertina and Walter Sisulu Institute of Ageing in Africa:

SZ Kalula, BSc MBChB *Zambia* MMed MPhil PhD *Cape Town* FRCP *London*

Professor:

JA Joska, MBChB MMed PhD *Cape Town* FC Psych SA

Visiting Associate Professor:

JR Hoffman, BA(Hons) DPhil *Oxon*

Professor:

KGF Thomas, BA *Harvard* MA *Southern California* PhD *Arizona*

Honorary Senior Lecturers:

CA de Jager, BScHons HDE *Natal* PhD *Cape Town*
 L Geffen, MBChB *Cape Town* FCFP SA
 F Parker, MBChB *Stell* FCP SA Cert Geriatric Medicine (SA)
 K Ross, MBChB *Stell* FCP SA Cert Geriatric Medicine (SA)

Hepatology

K-Floor, Old Main Building, Groote Schuur Hospital

Professor and Head:

CWN Spearman, MBChB MMed PhD *Cape Town FCP SA FRCP London*

Associate Professor:

M Sonderup, MBChB MMed *Cape Town FCP SA FRCP London*

Senior Lecturer:

NA Gogela, MBChB *Medunsa FCP SA*

Divisional Secretary

F Francis

Infectious Diseases and HIV Medicine

G16 Floor, New Groote Schuur Hospital

Professor and Head:

M Mendelson, BSc MBBS PhD *Cantab FRCP DTM&H*

Professors:

G Meintjes, MBChB PhD *Cape Town MRCP UK FCP Dip (HIV Management) SA MPH Johns Hopkins*

LG Bekker, MBChB PhD *Cape Town DCH DTM&H FCP SA PhD*

Honorary Professor:

RJ Wilkinson, MA *Cantab BM BCh PhD Oxon DTM&H FRCP London*

CC Butler, BA MBChB DCH CCH MD FRCGP FFPH(Hon) FMedSci

Associate Professors:

S Dlamini, MBChB FCP Cert (ID Phys) *SA*

E Charani, MPharm MSc PhD

Adjunct Associate Professor

S Wasserman, MBChB MMed FCP *SA Cert (ID Phys) SA*

Honorary Associate Professor:

K Wilkinson, MSc PhD *Budapest*

Senior Lecturer:

N Papavarnaras, MBChB *Pret Dip HIV Man SA PgDip Derm CF DTM&H LSTM Dip Int Med SA MMed SA FCP SA*

Clinical Fellow:

Y Zhao, MBChB MMED FCP DTM&H

P Arnab, MBChB MMed FCP

Honorary Senior Lecturers:

J Black, MBChB FCP Dip (HIV Management) *SA*

K Rebe, MBChB *Cape Town FCP SA DTM&H*

D Van Den Bergh, BPharm MSc EngD

Senior Registrar:

N Papavarnaras, MBChB *Pret* Dip HIV Man SA PgDip Derm CF DTM&H LSTM Dip Int Med SA MMed SA FCP SA

Honorary Research Associate:

H Struthers, BSc BScHons MSc MBA *Witwatersrand*
S Parker, BSc MBChB

Research Fellows:

O Mbamalu, BPharm MPharm PhD
C Bonaconsa, MSc in Nursing *Cape Town*

Lipidology

Sixth Floor, Chris Barnard Building

Associate Professor and Head:

DJ Blom, MBChB MMed PhD *Cape Town* FCP SA

Medical Officers Part-time:

BC Brice, MBChB *Cape Town*
KH Wolmarans, MBChB *Pret*

Trial Co-ordinator Part-time:

S Surtie, RN *Groote Schuur Hospital*

Medical Gastroenterology

E23, New Groote Schuur Hospital

Professor and Head:

M Setshedi, MBChB UKZN FCP CMSA Cert Gastroenterology CMSA MPH UCT PhD UCT

Associate Professor:

G Watermeyer, MBChB *Cape Town* FCP Cert (Gastro Phys) SA

Senior Lecturers Full-time:

S Hlatshwayo, MBChB FCP SA MPH Cert Gastroenterology
D Levin, MBChB MBA FCP Cert (Gastro Phys) SA
G Watermeyer, MBChB *Cape Town* FCP Cert (Gastro Phys) SA

Senior Lecturers Part-time:

JEC Botha, MBChB *Stell* MPraxMed *Pret*
AK Cariem, MBChB *Cape Town* FCP SA

Nephrology and Hypertension

E13, New Groote Schuur Hospital

N Wearne, MBChB BMedSci Hons *Sydney* FCP SA Cert (Nephrology) SA **Emeritus Professor:**
BL Rayner, MBChB MMed PhD *Cape Town* FCP SA **Honorary Professor:** P Heering,
MD **Associate Professors:** E Jones, MBChB FCP Cert (Nephrology) SA PhD *Cape Town* **Emeritus Associate Professor:** CR Swanepoel, MBChB *Cape Town* MRCP FRCP
UK **Senior Lecturers:** Z Barday MBChB FCP Cert (Nephrology) SA MPhil *Cape Town* ZA
Barday, MBChB FCP Cert (Nephrology) SA B Davidson, MBChB FCP Cert (Nephrology) SA
MPhil *Cape Town* **Honorary Senior Lecturer:** R Freercks, MBChB MPhil *Cape Town* FCP Cert

304 DEPARTMENTS IN THE FACULTY

(Nephrology) *Cape Town* B Cullis MBChB *Cape Town* MRCP UK DICM UK V Luyckx MBChB SA MSc UK, PhD - *Switzerland* **Honorary Lecturer:** JL Ensor, MBChB FCP Cert (Nephrology) SA

Senior Registrars:

Z Barday H Akrabi
M Pema
H. Rage
M. Kamponda
B. Kesenogili

Neurology

E8, New Groote Schuur Hospital

The Division of Neurology provides clinical and neurophysiological services to the population of Cape Town and surrounding communities in the Western Cape. It also conducts research in the fields of myasthenia gravis, motor neuron disease, stroke, epilepsy and neuroinfections, while at the same time playing a leading role in neurological education institutionally, nationally and across sub-Saharan Africa

Head:

Associate Professor Lawrence Tucker MBChB(UCT) MSc(London) FCP(neurol,SA) PhD(cantab)

Emeritus Professor:

A Bryer, MBBCh *Witwatersrand* MMed PhD *Cape Town* FC Neurol FCP SA

Emeritus Associate Professor:

RW Eastman, MBChB *Cape Town* FRCP UK

Professor Full Time:

J Heckman, MBChB *Witwatersrand* MMed PhD *Cape Town* FC Neurol FCP SA

Associate Professor Full Time

S Marais, MBChB *Free State* FCN SA PhD *Cape Town*

Senior Lecturers Full-time:

KJ Bateman, MBChB MRCP UK FC Neurol SA
EB Lee Pan, MBChB *Cape Town* MMed Neurol *Stell*

Chief Registrar and Clinical Fellow

MV Gule, MBChB *Cape Town* FCP SA FCN SA

Clinical Fellows:

M Asukile, BSc *Zambia* MBChB *Zambia* MMed *Cape Town* FCP SA (Epilepsy)
A Ganesh, MBChB *Witwatersrand* MMed *Witwatersrand* FCN SA (Stroke)

Honorary Senior Lecturer:

J Butler, MBChB *Pret* FCP Neurol SA

Honorary Lecturer:

K McMullen, MBChB *Cape Town* MSc *Cape Town* MMed *Cape Town* FCN SA

Honorary Research Associates:

V Ives-Deliperi, PhD *Cape Town*
 S Nightingale, MBChB *London* MRCP *London*

Senior Registrars:

E Assey, MBChB *Tanzania*
 B Basant, Rai MBChB *Mauritius*
 T Europa, MBChB *Cape Town*
 D Koffie, MBChB *Ghana* FCWA
 K Oosthuizen, MBChB *Stellenbosch*
 Y Rugbeer, MBChB *UKZN*
 S Ssemmanda, MBChB *Uganda*
 A Soni, MBChB *Witwatersrand*

Post-Doctoral Researcher

M Nel, MBChB *Cape Town* PhD *Cape Town* (*myasthenia gravis*)

Research Coordinator

F Drummond, SRN *UK*

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:

MF Jeebhay**, MBChB *UKZN* DOH MPhil (Epi) *Cape Town* MPH (Occupational Medicine) PhD *Michigan* FCPHM (Occupational Medicine) *SA*

Emeritus Professor and Senior Scholar:

R Ehrlich, BBusSc MBChB PhD *Cape Town* DOH *Witwatersrand* FFCH FCPHM (Occupational Medicine) *SA*

Emeritus Professor:

G Todd, BSc *UKZN* MBChB PhD *Cape Town* FCDerm *SA*

Associate Professor:

S Adams**, MBChB DOH MMed PhD *Cape Town* MFamMed *Stell* FCPHM (Occupational Medicine) *SA*

Senior Lecturer:

I Ntatamala, MBChB *Cape Town* Dip Public Health *UNISA* MMed *Cape Town* MSc Occupational Health *Birmingham* Dip HIV Man FCPHM (Occupational Medicine) *SA* AHMP *FPD/Yale*
 Z Sondag, MBChB DOH MMed *Cape Town* (Occupational Medicine) *SA*

[Run jointly with Divisions of Pulmonology and Dermatology]*

*[** Jointly appointed with School of Public Health]*

Pulmonology

Respiratory Clinic, Ward E16, Groote Schuur Hospital, and University of Cape Town Lung Institute

Professor and Head:

K Dheda, MBChC *Witwatersrand* FCP SA PhD London FRCP UK FCCP

Emeritus Professors:

ED Bateman, MBChB MD *Cape Town* DCH FRCP UK

SR Benatar, MBChB DSc (Medicine) *Cape Town* FFA FRCP (Hon) FCP (Hon) SA

Associate Professors:

G Calligaro, MBChB *Cape Town* BScHons *Witwatersrand* FCP SA (Cert Pulm) SA

RN van Zyl-Smit, MBChB MMed *Cape Town* FCP Cert (Pulm) SA Dip HIV(Man) SA MRCP UK
PhD ATSF

Emeritus Associate Professor:

GM Ainslie, MBChB *Cape Town* FRCP UK

Honorary Associate Professors:

R Dawson, MBChB *Cape Town* FCP Cert (Pulm Phys) SA

LR Fairall, MBChB PhD *Cape Town*

Senior Lecturers:

L Mottay

R Perumal

RI Raine, MBChB MMed *Cape Town* FCP SA

G Symons, MBChB Dip (Primary Emergency Care) *Cape Town* FCP (Cert Pulm) SA

Senior Registrars:

TBA

Research Officers Full-time:

D Carter, Dip (Nursing)

R Cornick, MBChB MPhil *Cape Town*

G Faris, AdvCert (Adult Education) *Cape Town*

D Georgeu, Dip (Nursing)

J Gershman, NDip (Pharmacy)

HJ Golakai, BSc *Zululand* BScHons *Cape Town* MScMed *Stell*

B Green, Dip (Nursing)

J Holborn, Dip (Nursing)

N James, BTech (Clinical Technology)

K Narunsky, MBChB *Cape Town*

MB Ngobese, Dip (Clinical Technology)

A Olkers, Dip (Clinical Technology)

J Philips, Dip (Nursing)

A Smith, Dip (Nursing)

V Timmermann, MSc *Pret*

K Uebel, BScMed MBBS *Australia* DCH DO MFamMed *UFS*

C Whitelaw, NDip (Pharmacy)

Senior Research Officer:

M Tomasicchio, BSc BScHons MSc PhD *Rhodes*

Research Officers Part-time:

A Esmail, MD FCP SA FCP Cert (Pulmonology) SA
L Semple, BScHons MSc PhD *Cape Town*

Laboratory Technologist:

R Meldau, BScHons (Medicine) *Cape Town*

Rheumatology

J-Floor, Old Main Building, Grootse Schuur Hospital

Professor and Head:

B Hodgkinson, MBCh *Witwatersrand* PhD FCP Cert (Rheum Phys) SA

Senior Lecturer Full-time:

A Gcelu, MBChB *Cape Town* FCP Cert (Rheum Phys) SA MPH

Staff in associated hospitals who teach undergraduate and postgraduate students**BROOKLYN CHEST HOSPITAL****Senior Lecturer and Head:**

P Spiller, MBChB *Cape Town*

GEORGE HOSPITAL**Senior Lecturer and Head:**

TJ Gould, MBChB MMed *Witwatersrand*

KHAYELITSHA COMMUNITY CENTRE**Honorary Senior Lecturers Part-time:**

J Kuchne, MBChB *Cape Town* MPhil *Stell* Dip (HIV Management) SA
S Mathee, MBChB *Cape Town* MMed *Stell*

II MILITARY HOSPITAL**Senior Lecturer and Head:**

G Smit, MBChB MMed *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 Management) FCP SA

Senior Lecturer:

DF Maughan, MBChB *Cape Town* FCP SA

NEW SOMERSET HOSPITAL

Senior Lecturer and Head:

Y Vallie, MBChB *Cape Town FCP SA*

Senior Lecturers Full-time:

I Banderker, MBChB *Cape Town FCP SA*

MS Moosa, MBChB *Natal FCP SA*

Senior Lecturer Part-time:

H Spilg, FCS *SA*

VICTORIA HOSPITAL

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 PGDip (Palliative Medicine) *Cape Town FCP SA FCCP*

Honorary Lecturer:

KD Ebrahim, MBChB *Cape Town FCP SA*

MDN4030Q CLINICAL MANAGEMENT OF HIV IN A PRIMARY HEALTHCARE SETTING

Online Course

24 NQF credits at NQF level 8

Convener: M May

Course outline:

This online 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. Module 1: Epidemiology of HIV; Module 2: Diagnosis of HIV in Adults and Children; Module 3: Diagnosis and Management of Opportunistic Infections; and Module 4: Antiretroviral Therapy (ART) for the Treatment of HIV.

DP requirements: Students need to complete 80% of specified e-learning activities viz. self-assessment tasks, participation in online forum discussions, online webinars and submit course assignments to make DP. In addition, a subminimum of 45% for the assignment is required in order to be granted admission to the online examination.

Assessment: Assignments 40%; and online examination 60%.

MDN4031Q CLINICAL MANAGEMENT OF TB IN A PRIMARY HEALTHCARE SETTING*Online course*

24 NQF credits at NQF level 8

Convener: M May**Course outline:**

This online 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. Module 1: Epidemiology and an Introduction to TB; Module 2: Diagnosis of TB and Drug-Resistant TB; Module 3: Management of Drug-Sensitive TB; and Module 4: Management of Drug-Resistant TB.

DP requirements: Students need to complete 80% of specified e-learning activities viz. self-assessment tasks, participation in online forum discussions, online webinars and submit course assignments to make DP. In addition, a subminimum of 45% for the assignment is required in order to be granted admission to the online examination.

Assessment: Assignments 40%; and online examination 60%.

MDN4032R TB-HIV CO-INFECTION & INFECTION PREVENTION AND CONTROL*Online Course*

37 NQF credits at NQF level 8

Convener: M May**Course outline:**

This online 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. Module 1: Introduction to TB/HIV Co-infection; Module 2: Clinical Management of TB/HIV Co-infected Patients; Module 3: TB/HIV Infection Prevention and Control; and Module 4: Strategies to Improve Adherence.

DP requirements: Students need to complete 80% of specified e-learning activities viz. self-assessment tasks, participation in online forum discussions, online webinars and submit course assignments to make DP. In addition, a subminimum of 45% for the assignment is required in order to be granted admission to the online examination.

Assessment: Assignments 40%; and online examination 60%.

MDN4033R OPERATIONAL RESEARCH

Online Course

35 NQF credits at NQF level 8

Convener: M May

Course outline:

This online 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. Module 1: Introduction to Operational Research; Module 2: Research Protocols; Module 3: Research Ethics; Module 4: Study Designs and Methods; Module 5: Data Collection and Management; Module 6: Research Budgets, Summaries, References and Annexures; and Module 7: Scientific Papers.

DP requirements: Students need to complete 80% of specified e-learning activities viz. self-assessment tasks, participation in online forum discussions, online webinars and submit course assignments to make DP. In addition a subminimum of 45% for the assignment is required in order to be granted admission to the online examination.

Assessment: Assignments 40%; online examination 60%.

MDN4035F INTEGRATED ASSESSMENT I

0 NQF credits at NQF level 8

Convener: Dr S Sattar

Course entry requirements: The student must have passed the Clinical Management of HIV in a Primary Healthcare Setting, and Clinical Management of TB in a Primary Healthcare Setting, courses to be allowed entry to the integrated assessment. This examination must be taken on site at the University of Cape Town.

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.

MDN4036S INTEGRATED ASSESSMENT II

0 NQF credits at NQF level 8

Convener: Dr S Sattar

Course entry requirements: The student must have passed TB-HIV Co-infection and Infection Prevention and Control course, the Operational Research course and Biostatistics course 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.

MDN4037W CLINICAL MANAGEMENT IN HEPATOLOGY

100 NQF credits at NQF level 8

Convener: Professor CWN Spearman and Associate Professor M Sonderup

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%.

MDN4038W ESSAY: TRANSITION & TRANSLATION OF KNOWLEDGE

20 NQF credits at NQF level 8

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.

MDN4040W CLINICAL PHARMACOLOGY COURSEWORK

90 NQF credits at NQF level 8

Convener: J Norman

Course outline:

This course consists of 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.

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.

312 DEPARTMENTS IN THE FACULTY

Assessment: Students are assessed throughout the year in coursework activities, presentations, writing tasks, tests and examinations. Module examinations are written in April and July and a comprehension examination is written in November. In order to pass the course, students must obtain an overall final course average of at least 50%, with sub-minima of 45% for the laboratory and theory modules (including course assessments and examinations). The final mark is made up as follows: laboratory techniques (30%); theory modules (60%); and final comprehension examination (10%).

MDN4041W CLINICAL PHARMACOLOGY RESEARCH PROJECT

30 NQF credits at NQF level 8

Convener: J Norman

Course outline:

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 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: Projects are evaluated by both assessment of the written research project (90%) and an oral presentation (10%) of results.

MDN6007W NEPHROLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor N Wearne

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.

MDN6008F INTRODUCTION TO SYSTEMATIC REVIEW METHODS IN HEALTHCARE

12 NQF credits at NQF level 9

Convener: Associate Professor ME Engel

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%.

MDN7000W MEDICINE DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor NBA Ntusi

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.

MDN7001W MEDICINE THESIS

360 NQF credits at NQF level 10

Convener: Professor NBA Ntusi

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.

MDN7002W MD IN MEDICINE

360 NQF credits at NQF level 10

Convener: Professor NBA Ntusi

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.

MDN7005W MMED IN MEDICINE PART 1

60 NQF credits at NQF level 9

Convener: Associate Professor PJ Raubenheimer

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.

314 DEPARTMENTS IN THE FACULTY

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.

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.

MDN7006W MMED IN MEDICINE PART 2

60 NQF credits at NQF level 9

Convener: Associate Professor PJ 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.

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.

MDN7007W MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor PJ Raubenheimer

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.

MDN7015W MPHIL IN PULMONOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor K Dheda

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.

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.

MDN7017W MPHIL IN CARDIOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor M Ntsekhe

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 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.

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 they 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.

MDN7018W MPHIL IN RHEUMATOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor B Hodkinson

Course outline:

This training programme forms part of the credentialling process of specialist physicians to become subspecialists in adult rheumatology. 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.

DP requirements: 24 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 they 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.

MDN7020W MPHIL IN NEPHROLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor N Wearne

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.

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 they 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.

MDN7021W MPHIL IN ENDOCRINOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor J Dave

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 they 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.

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.

MDN7022W MPHIL IN GASTROENTEROLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor M Setshedi Thomson

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.

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.

MDN7024W MD IN DERMATOLOGY

360 NQF credits at NQF level 10

Convener: Professor NP Khumalo

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.

MDN7025W DERMATOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor R Lehloeny

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.

Assessment: External examination of the minor dissertation.

MDN7026W MMED IN DERMATOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Professor R Lehloeny

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.

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.

MDN7027W MMED DERMATOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Professor R Lehloenyia

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.

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.

MDN7028W MMED IN NEUROLOGY PART 1

60 NQF credits at NQF level 9

Convener: Associate Professor L Tucker

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.

DP requirements: None

Assessment: Candidates write the Part 1 examination of the College of Neurologists. The examination comprises two written papers.

MDN7029W MMED IN NEUROLOGY PART 2

60 NQF credits at NQF level 9

Convener: Associate Professor L Tucker

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.

320 DEPARTMENTS IN THE FACULTY

For the detailed curriculum and the examination details, see the regulations of the College of Neurologists at 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).

MDN7030W NEUROLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor L Tucker

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.

MDN7031W CLINICAL PHARMACOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor L Wiesner

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.

MDN7032W CLINICAL PHARMACOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor L Wiesner

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.

MDN7034W MMED IN CLINICAL PHARMACOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Professor M Blockman**Course outline:**

This training programme forms part of the credentialing 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.

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.

MDN7035W MMED IN CLINICAL PHARMACOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Professor M Blockman**Course entry requirements:** MDN7034W**Course outline:**

This training programme forms part of the credentialing 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.

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.

MDN7036W CLINICAL PHARMACOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor M Blockman**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.

322 DEPARTMENTS IN THE FACULTY

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.

MDN7037W PULMONOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor K Dheda

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.

MDN7038W CARDIOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor M Ntsekhe

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.

Assessment: External examination of the minor dissertation.

MDN7039W RHEUMATOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor B Hodkinson

Course outline:

The minor dissertation, prepared under supervision, is a requirement. The minor dissertation must be according to the CMSA requirement 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 minor 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 minor 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.

MDN7040W NEPHROLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr K Ndlovu

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 NQF credits at NQF level 9

Convener: Professor J Dave

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 NQF level 9

Convener: Professor M Setshedi

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.

324 DEPARTMENTS IN THE FACULTY

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 NQF level 9

Convener: Professor M Combrinck

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.

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 they 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.

MDN7044W GERIATRIC MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor M Combrinck

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.

MDN7050W MPHIL IN INFECTIOUS DISEASES & HIV MEDICINE PART 1

120 NQF credits at NQF level 9

Convener: Professor M Mendelson**Course outline:**

This training programme forms part of the credentialing 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.

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 INFECTIOUS DISEASES & HIV MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor M Mendelson**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.

Assessment: External examination of the minor dissertation.

MDN7053W MPHIL IN ALLERGOLOGY (ADULT) PART 1

120 NQF credits at NQF level 9

Convener: Associate Professor 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.

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 they have 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.

MDN7054W ALLERGOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor ME Levin and Associate Professor JG Peter

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.

MDN7055W DERMATOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor R Lehloenyia

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.

MDN7056W MPHIL IN ADVANCED HEPATOLOGY AND TRANSPLANTATION PART 1

120 NQF credits at NQF level 9

Convener: Professor CWN Spearman and Associate Professor M Sonderup**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 subspeciality (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 2-hour written examination (8 clinical vignettes).

MDN7057W ADVANCED HEPATOLOGY & TRANSPLANT MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor CWN Spearman and Associate Professor M Sonderup**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. 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.

MDN7058S DRUG DEVELOPMENT

20 NQF credits at NQF level 9

Convener: Professor KI Barnes**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.

328 DEPARTMENTS IN THE FACULTY

DP requirements: Successful completion of all assignments.

Assessment: Written assignments: 50%; written examination: 50%.

MDN7059S DRUG ASSAYS

30 NQF credits at NQF level 9

Convener: Associate Professor L Wiesner

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 examination (100%).

MDN7060F PHARMACOMETRICS

30 NQF credits at NQF level 9

Convener: Dr P Denti

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%.

MDN7061F PK-PD PRINCIPLES

10 NQF credits at NQF level 9

Convener: Professor H McIlleron

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%.

MDN7062W CLINICAL PHARMACOLOGY MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: Associate Professor L Wiesner

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: Students must have completed MDN7058F/S, MDN7059F/S, MDN7060F/S and MDN7061F/S.

Assessment: External examination of the minor dissertation.

MDN7064W NEPHROLOGY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor I Okpechi

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.

MDN7065W CLINICAL HAEMATOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor VJ Louw

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 NQF level 9

Convener: Dr K Fieggen

Course outline:

This training programme forms part of the credentialing 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;

330 DEPARTMENTS IN THE FACULTY

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.

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 NQF level 9

Convener: Dr K Fieggen

Course entry requirements: MDN7066W

Course outline:

This training programme forms part of the credentialing 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.

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.

MDN7068W MEDICAL GENETICS MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr K Fieggen

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.

MDN7069W MPHIL CLINICAL HAEMATOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor VJ Louw

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 subspeciality 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 their patients within the scope of their 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.

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 they 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.

MDN7070W TRICHOLOGY & COSMETIC SCIENCE THESIS

360 NQF credits at NQF level 10

Convener: Professor NP Khumalo

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: The thesis is externally examined.

OBSTETRICS AND GYNAECOLOGY

H-Floor, Old Main Building, Grootte Schuur Hospital

Professor and Head:

M Matjila, BSc MBChB *UKZN FCOG SA PhD Cape Town*

Deputy Head:

NH Mbatani, MBChB *Medunsa FCOG SA*

Professor:

SJ Dyer, MBChB *Munich PhD Cape Town MMed FCOG SA*

Professor and Special Projects in the Department of Obstetrics and Gynaecology:

LA Denny, MBChB PhD *Cape Town MMed FCOG SA*

Emeritus Professors and Senior Scholars:

SR Fawcus, MA MBBS *London MRCOG FRCOG UK*

ZM van der Spuy, MBChB *Stell PhD London FRCOG FCOG SA*

Honorary Professors:

D Anumba, MBBS FWACS *FRCOG MD*

I Meinhold-Heerlein

JPWR Roovers, MD. PhD

P Steer, MBBS *London MRCS LRCP MD MRCOG FRCOG*

Honorary Associate Professors:

SW Lindow, MBChB *Sheffield MMed MD FRCOG FCOG SA*

PS Steyn, MBChBMMed *FCOGSA DFFP London MPhil Stell*

Emeritus Associate Professors:

EJ Coetzee, MBChB *Cape Town FRCOG FCOG SA*

A Kent, MBChB MPhil *Cape Town FRCOG*

HA van Coeverden de Groot, MBChB *Cape Town FRCOG (Community Obstetrics)*

J Anthony, MBChB *Cape Town FCOG SA MPhil Stell TO BE CONFIRMED*

Associate Professor, Chief Specialist Level Two Service and Head New Somerset Hospital:

GA Petro, MBChB *Cape Town FCOG SA*

Head Clinical Unit Mowbray Maternity Hospital (Specialist Level Two Service):

CJM Stewart, BA MBChB MMed *Cape Town FCOG SA MRCOG*

Senior Lecturers Full-time:

T Adams, MBChB MMed *Cape Town FCOG SA Cert (Gynaecol Oncol) SA*

C Gordon, MBChB *Cape Town, DMH (CMSA), Dip. HIV (CMSA), MPhil Stell*

TA Horak, MBChB *Stell FCOG SA MMed Cape Town*

M Mandaha MBChB *Cape Town FCOG SA MMed Walter Sisulu*

JK Marcus, MPhil *Stell PGDip (Adv.Mid) Cape Town RM RPN RCN RPsychN Fellow SAFRI (FAIMER)*

A Osman, MBChB MMed MPhil *Cape Town FCOG SA Cert (Maternal Fetal Medicine) SA*

M Patel, MBChB MMed *Cape Town FCOG SA Cert (Reproductive Medicine) SA*

D Richards, MBChB *Stell MMed Cape Town FCOG, Cert (Gynaecol Oncol) SA*

L Schoeman, MBChB *Cape Town MMed FCOG SA*

H van Zyl, MBChB *Stell FCOG SA*

Senior Lecturers Part-time:

C Elliott, MBChB FCOG SA
 BR Howard, MBChB *Cape Town* FCOG SA
 JO Olarogun, MBBS *Ilorin* Dip (Obstetrics & Gynaecology) FCOG SA MMed *Cape Town* Cert (Rep Med) SA
 LJ Rogers, MBChB MMed *Cape Town* DCH SA FCOG SA Cert (Gynaecol Oncol) SA RCOG
 M Venter, MBChB *Pretoria* MMed MPhil *Cape Town* FCOG SA Cert (Maternal Fetal Medicine) SA

Lecturers Full-time:

T Ahmed-Rajie, MBChB *Cape Town* DipObst SA FCOG SA MMed *Cape Town*
 S Allie, MBChB *Cape Town* FCOG SA
 A Blumenthal, MBChB MMed *Cape Town* FCOG SA
 KJ Brouard, MBChB *Cape Town* FCOG SA
 A Fakier, MBChB *Cape Town* FCOG SA MMed *Cape Town*
 K Kadwa, MBChB *UKZN* Dip Obs SA MMed *Cape Town* FCOG SA
 D Kennedy, MBChB *Stell* FCOG SA MMed *Cape Town*
 L Nel, MBChB *Stell*
 L Ras, MBChB MMed *Cape Town* FCOG SA Urogyn SA T Spence FCOG SA
 D Richards, MBChB *Stell* MMed *Cape Town* FCOG Cert (Gynaecol Oncol) SA

Lecturers Part-time:

U Botha, MBChB *Stell* MMed *Cape Town* FCOG SA
 G Breeds, MBChB *Cape Town* FCOG SA
 K Chambers, MBChB *Cape Town* FCOG DCH MMed
 C Floweday, MBChB *Cape Town* Dip Obs
 L Jansen, MBChB *Cape Town* FCOG SA
 A Koomkaran, MBChB *Cape Town*, Advanced Diploma in Aesthetic Medicine (cum laude).
 W Mkhombe, MBChB *Wits*, FCOG SA, MMed *Cape Town*
 E Richardson, MBChB *Cape Town*
 JR Robinson, MBBS *Perth* MRACOG FCOG SA MRCOG
 LF Van Straten, RN, RM, RCommN, RPsychN
 M Wasserman, MSocSc *UFS* DHS *San Francisco*
 H Wright, MBChB *Cape Town*

Fellows Full-time:

JP de Campos, MBChB *Medunsa*, FCOG SA, MMed *UP*.
 S Camroodien, MBChB *Cape Town* FCOG SA MMed *Cape Town* E Arthur-Baiden MBChB FCOG SA MMed *Cape Town*
 AK Ghunney, MBChB *Ghana* MWACS West Africa MGCPs *Ghana*
 F Loggenberg, MBChB *OFS* FCOG SA MMed *UCT*
 EW Maro, MD MMed *OBGYN* KCUM Uco TZ.
 A Moore, MBChB *UCT* FC UROL SA MMed Urology *UCT*

Fellows Part-time:

T Spence, MBChB *Cape Town* DA SA FCOG SA MMed *Cape Town*
 IAE Iwuh, MBBS *Malawi* FCOG SA MMed *Cape Town*

Honorary Senior Lecturers:

L Acquah, MD MSc FACP Diplomat American Board of Internal Medicine Obstetric & Consultative Medicine
 KT Jere, MBBS MMed *Cape Town* FCOG SA Cert. (Urogynaecology) SA
 M Mabenge, MBChB *Pret* MMed FCOG SA Cert. (Gynaecol Oncol) SA
 D Muavha MBChB Dip Obs FCOG SA MMed *Cape Town* Cert (Urogynae) SA

OBS7001W OBSTETRICS & GYNAECOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor M Matjila and Professor SJ Dyer

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.

OBS7002W MD IN OBSTETRICS & GYNAECOLOGY

360 NQF credits at NQF level 10

Convener: Professor M Matjila and Professor SJ Dyer

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.

OBS7006W MMED OBSTETRICS AND GYNAECOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Dr L Schoeman and Dr M Patel

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 fetal 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.

DP requirements: Approved clinical experience in a registrar training post 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 MMed (O&G) is a requirement for registration as a specialist.

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. The research proposal should be at minimum submitted to HREC and ideally approved prior to the FCOG Part II written examination. In exceptional circumstances the Head of Department may grant the candidate permission to submit the dissertation at a later stage.

OBS7007W OBSTETRICS & GYNAECOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr L Schoeman and Dr M. Patel

Course entry requirements: OBS7006W

Course outline:

The minor dissertation is prepared under supervision. The dissertation and successful completion of the part 2 examination is a prerequisite to obtaining the MMed degree. The dissertation should be within the scope of O&G and the requirements. It is advised that the candidate should identify a topic and a supervisor within the first 18 months of becoming a registrar.

DP requirements: The research proposal should be at the minimum submitted to HREC and ideally approved by HREC prior to registration for the FCOG Part II written examination.

Assessment: This is assessed by examiners appointed by external examiners.

OBS7008W MPHIL IN REPRODUCTIVE MEDICINE PART 1

120 NQF credits at NQF level 9

Convener: Dr M Patel

Course entry requirements: Registration as an O&G specialist with the HPCSA

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 subspeciality (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 relevant to the subspeciality. They acquire expertise in surgery designed to correct particularly infertility problems. The curriculum includes aspects of fertility regulation and family planning, gynaecological endocrinology, menopause, pregnancy loss, infertility and in training with various diagnostic techniques.

The student will have applied knowledge of all aspects of assisted reproductive technology, including IVF, 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.

DP requirements: Two years (full time) or four years (part time) training after completion of specialist training in Obstetrics and Gynaecology; a research project; and a portfolio of practical and academic experience must be completed and handed in for assessment at the College of Obstetricians and Gynaecologists.

Assessment: Candidates write the relevant examinations of the College of Obstetricians and Gynaecologists of South Africa. Examination comprises both a written component and a clinical examination (OSCE, clinical problem solving, oral) .

OBS7009W REPRODUCTIVE MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr M Patel

Course entry requirements: OBS7008W

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 on a topic in reproductive medicine. It 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, 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. The dissertation and successful completion of the reproductive medicine part 1 examination (run by the CMSA as the certificate in reproductive medicine) is a prerequisite to obtaining MPhil degree.

Assessment: External examination of the minor dissertation.

OBS7010W MPHIL IN GYNAECOLOGICAL ONCOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor LA Denny, Dr NH Mbatani and Dr TS Adams

Course entry requirements: Registration as an O&G specialist with the HPCSA

Course outline:

This training programme forms part of the credentialling process of specialist obstetricians/gynaecologists as subspecialists in gynaecological oncology. Candidates 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, they 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.

DP requirements: Candidates must have spent two years (full-time) or four years (part time) in clinical training at subspecialist trainee level in gynaecological oncology. A clinical logbook must be completed. Admission to this examination will be permitted following the assessment of the portfolio and the research project.

Assessment: Candidates write the relevant final subspecialist examination of the College of Obstetricians and Gynaecologists of South Africa. The exit assessment will include an objectively structured clinical examination (OSCE), a number of objectively structured practical examinations (OSPE) and a written paper.

OBS7011W GYNAECOLOGICAL ONCOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor LA Denny, Dr NH Mbatani and Dr T Adams**Course entry requirements:** OBS7010W**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.

Assessment: External examination of the minor dissertation.

OBS7013W MPHIL IN MATERNAL & FOETAL MEDICINE PART 1

120 NQF credits at NQF level 9

Convener: Dr A Osman and Dr CJM Stewart**Course outline:**

This training programme forms part of the credentialling process of specialist obstetricians/gynaecologists to become subspecialists in maternal and fetal 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 fetus. 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 fetus (this includes embryology and teratology, endocrinology of pregnancy, fetal 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.

DP requirements: Candidates must have spent two years(full time) or four years (part time) in clinical training at subspecialist trainee level in maternal and fetal medicine, including research relevant to maternal and fetal medicine.**Assessment:** Candidates write the relevant final subspecialist examination of the College of Obstetricians and Gynaecologists of South Africa. The examination comprises two papers, one in maternal medicine and one in fetal medicine, as well as a clinical examination. The latter consists of an OSCE and OSPE and/or a structured viva. The research component is examined as a part of the final assessment.

OBS7014W MATERNAL & FETAL MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr A Osman and Dr CJM Stewart**Course entry requirements:** OBS7013W

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 on a topic in maternal and fetal 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.

Assessment: External examination of the minor dissertation.

OBS7015W MMED IN OBSTETRICS & GYNAECOLOGY PART 1B

40 NQF credits at NQF level 9

Convener: Dr L Schoeman and Dr M Patel

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.

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.

OBS7016W MMED IN OBSTETRICS & GYNAECOLOGY PART 1A

20 NQF credits at NQF level 9

Convener: Dr L Schoeman and Dr M Patel

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.

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.

OBS7017W MPHIL IN UROGYNAECOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Dr S Jeffery

Course entry requirements: Registration as an O&G specialist with the HPCSA

Course outline:

This training programme forms part of the credentialling process of specialist obstetricians/gynaecologists to become subspecialists in urogynaecology. Students follow the relevant curriculum of the College of Obstetricians and Gynaecologists of South Africa and, on successful completion of the relevant certificate examination of the College, are granted credit towards OBS7017W. This is a 2-year full time training programme. The candidate will be integrated into the weekly activities of the unit which include ward rounds, general gynaecology and urogynaecology sub-speciality clinics, surgery and teaching. In addition, the candidate will be involved in the ongoing research activities in the unit. The detailed curriculum is published in the regulations of the College of Obstetricians and Gynaecologists of South Africa at www.collegemedsa.ac.za.

DP requirements: Two years of full-time training (or 4 years part time) after completion of specialist training in Obstetrics and Gynaecology; a research project; and a portfolio of practical and academic experience must be completed and handed in for assessment at the College of Obstetricians and Gynaecologists.

Assessment: Candidates write the relevant examinations of the College of Obstetricians and Gynaecologists of South Africa. Examination comprises both a written component and a clinical examination (OSCE, OSPE and discussion of their research project) Writing the CMSA Certificate examination in Urogynaecology.

OBS7018W UROGYNAECOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr K Brouard

Course entry requirements: OBS7017W

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 certificate examination. The dissertation must be on a topic in urogynaecology. 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.

Assessment: Examination of the minor dissertation.

PAEDIATRICS AND CHILD HEALTH

Professor and Head:

R Muloiwa, MBChB UKZN DCH FCPaed SA MSc LSHTM PhD

Professors:

A Davidson, MBChB Cape Town DCH FCP Cert (Med Onc Paed) SA
K Donald, MBChB Cape Town DCH FCPaed SA MRCPCH UK MPhil(Paed Neuro) PhD BS Eley, BScHons (Medicine) MBChB Cape Town FCP SA
ME Levin, MBChB MMed Cape Town FCPaed Dip (Allergology) SA PhD
M McCulloch, MBBCh Witwatersrand DTM&H FRCPCH London DCH FCPaed SA
B Morrow, BSc (Physiotherapy) PhD Cape Town
S Mathews, BSocSc BSocScHons (Social Work) Cape Town PhD Witwatersrand
J Wilmshurst, MBBS London MRCP UK FCPaed SA MD Cape Town
HJ Zar, MBBCh Witwatersrand FAAP BC Paed BC Paed Pulm USA PhD Cape Town FCPaed SA FRCP
L Zühlke, MBChB Cape Town DCH SA FCPaed SA Card Cert SA MPH Cape Town FESC UK

Emeritus Professors:

AC Argent, MBBCh MMed Witwatersrand MD Cape Town DCH FCPaed Cert (Critical Care) SA FRCPCH UK
Honorary Professors:

Associate Professors:

HA Buys, MBChB Zimbabwe LRCP LRCS Edinburgh MRCP UK FCP SA
M Coetzee, PhD (Nur) Paed Dip Comm Health Dip RN
R De Decker, MBChB MSc Cape Town DCH London FCPaed Cert (Medical Genetics Paed) SA
C Gray, MBChB Cape Town MRCPCH London MSc Surrey DipAllergy Southampton Dip (Paediatric Nutrition)
W Hanekom, MBChB Stell DCH FCP (Paediatrics) SA
MC Harrison, MBChB Cape Town MRCP FRCPCH UK
A Horn, MBChB Cape Town FCPaed DCH CertNeon SA MRCP (Paediatrics) UK PhD Cape Town
C Hlela, MBChB FCDerm MSc GHS MMed PhD Oxon
P Nourse, MBChB MMed Cape Town FCP SA Cert (Paed Nephrol) SA
W Slemming BSc (Physio) (UWC); MPH (University of Warwick); PhD (Witwatersrand)
L Tooke, MBChB MMed Cape Town FCPaed Dip (Obstetrics & Gynaecology) (Primary Emergency Care) SA
A Westwood: M.R.C.P (UK), FCP (SA), MMed Paed (UCT), MD (UCT), FRCP&CH (UK)
M Zampoli, MBChB Cape Town DCH FCPaed Cert (Pulm Paed) SA

Associate Professors Part-Time:

D Gray, MBChB PhD Cape Town FCPaed SA
A Vanker, MBChB MMed Stell FCPaed Cert (Pulm Paed) SA

Honorary Associate Professor:

A Bowen, BA, MBBS, DCH, FRACP, PhD
P Hardien, FRCP London MRCP UK MBChB BSc Dip (Geriatric Medicine) E McCollum, BS Durham MD Virginia FCP Ped Pulm Fellowship MPH Baltimore
T Meguid, MD (Maasstricht) DTM&H (London) MPhil-MCH (Cape Town) LL.B (HONS) MST-IHRL (Oxford)
V Luychx, MBChB Witswaterandss MSc London PhD Zurich

Honorary Adjunct Professor:

T Soko, PhD, MScPH, B Cur (I et A)

Emeritus Associate Professors:

VC Harrison, MBChB Cape Town DCH (RCP & S) MMed Paed UCT MD UCT
 P Hartley, MBChB Cape Town FCPaed SA SAMDC
 M Hendricks: MBChB Cape Town, Dip PED DCH PCPaed CMO (Paediatrics) SA
 ATR Westwood, MRCP (UK), FCP(SA), MMed Paed(UCT), MD(UCT), FRCP & CH (CD Karabus, MBChB MMed Cape Town DCH RCP&S FRCP Edinburgh FRCP London
 AF Malan, MBChB MMed MD Cape Town Dip (Obstetrics & Gynaecology) SA
 M Mann, MBChB PhD MMed Cape Town

Senior Lecturers Full-time:

J Ahrens, MBChB Cape Town DA DCH FCPaed CIC (Paediatrics) SA
 J Alt, MBChB Cape Town DCH SA ATLS APLS FCP
 I Appel, MBChB, DCH, FCPaed SA
 W Breytenbach, MBChB Stell FCP SA
 M Carrihill, MBChB MPhil Cape Town FCPaed Cert (Endo & Metab) SA
 G Comitis, MBChB Cape Town DCH Dip (Anaesthesia) FCPaed SA, Card Cert SA L Cooke, MBChB PCPaed SA
 A Coetzee, MBChB FCPaed Cert (Paediatric Neph)
 S Chippendale, MBChB, DipPEC, DipHIVMan, FCPaed, MMed (Paed), DGDIP (Community Paed)
 H de Quintal, MBChB DCH FCPaed
 R Dunkley, MBChB Cape Town FCPaed SA
 A Daniels: MBChB, FCPaed (SA), MMed (Paed), Cert. Neonatology (SA)
 Y Gogo, MBChB, MMed(UCT)Y Joolay, MBChB Stell FCPaed SA, Cert Neonatology SA, MPhil UCT
 T Kerbelker, MBChB ATLS ACLS BLS PALS Cape Town DCH FCPaed SA Dip (HIV Management) Griffiths Neuro Dip (Allergy) Cert (Paed Rheum) Australia
 SM Kroon, MBChB Cape Town FCPaed SA DTM&H London MRCP UK
 R de Lacey, MBChB MMed Cape Town, FCPaed SA, Cert (Paed Gastro) SA
 D le Roux, MBChB Dip (Obstetrics) FCPaed SA, MMed, MPhil (Paed ID) PhD
 MA Meiring, MBChB Pret FCPaed SA Mmed Witwatersrand
 Z Mukuddem-Sablay: MBChB (UCT), FCPaed, MMed(Paed) (UCT) Cert. Paed ID, DTM&H Witwaterstrand, MPH Baltimore
 S Naidoo, MBChB Cape Town DCH SA FCPaed SA Dip (Allergology) SA
 AP Ndondo, MBChB Medunsa FCPaed SA
 P Nongena, MBChB, DCH SA, FCPaed SA, MDres London
 JC Nuttall, MBChB Cape Town Dip (Obstetrics & Gynaecology) DCH FCPaed SA DTM&H Witwatersrand
 C Procter, MBBS, DCH SA, MMed, FC Paed SA, MPhil, Cert Critical Care (Paed)
 S Pillay, MBChB Witwatersrand DCH FCPaed SA Cert (Neonatology) SA MMed (Paediatrics)
 MT Richards, MBChB Cape Town Cert DCH FCPaed SANR
 Rhoda FCPaed SA Cert (Neonatology) (Dev Paed) SA
 L Radebe, MBChB (UKZN), DCH SA, FCPaed SA, Cer)Paed Gastro) SA S Salie, MBChB Cape Town DCH London FCPaed, Cert (Critical Care) SA, MPH
 G Schermbrucker, MBChB Cape Town DCH FCP SA
 A Spitaels, MBChB Cape Town DCH FCPaed SA
 A Sallo, MBChB (Wits), FCPaed (SA), Cert. Critical Care (SA); Paediatric Critical Care Fellowship – U of Toronto, ECMO/ECLS Speciaiy Fellowship – sick kids
 B van Stormbroek, BSc MBChB MMed Cape Town DCH SA PCPaed SA
 L Swanson, MBChB Cape Twon, FCPaed SA, Card Cert.SA P Wicomb, MBChB Cape Town DCH FCPaed SA
 K Webb, MBBCH Wits FCPaed SA Cert Paed Rheum SA MMed UCT PhD UCT
 M Zampoli, MBChB Witwatersrand DCH FCP (Paediatrics) SA

342 DEPARTMENTS IN THE FACULTY

Senior Lecturers Part-time:

G Riordan, MBChB Cape Town DCH MMed FCP SA

Senior Researcher

K Hall, BMus UCT, MSocSci UCT, PhD Witwatersrand L Jamieson, BA in Arts & Social Sciences, Strathclyde, Hon Politics & European studies Strathclyde, Masters in Democratic Governance UCT

N North, PhD, MSc(Paed), RN(UK)

M Orgill, BA (B.Admin) Honours (B.Admin) Masters Public Policy UCT

P Proudlock, BA:LLB Stellenbosch, MA:LLM UCT

Researcher:

M Gwele, BA Social Science UWC Hon Development Studies UWC Masters Social Science UCT

M Nyathi, BA:LLB Wits MA:LLM Wits

N Titi, B.Psych UWC Masers Research Psychology UWC PhD DPsy UNISA

L October, BA International Studies Stell BA Hons International Studies Stell BA Health Sciences and Social Services Psychology counselling UNISA MA Political Science Stell

Communication and Education Specialist:

L Lake, BA (Hons) BS PGDip

Clinical Educator:

A Amos, MNur (Child Nursing, PGDip (Crit Care Child), RN

B Jama, MNur (Child Nursing, PG Dip (Child) RN

L White, BSc(Nur)(Hons) Paed Dip RN

Honorary Senior Lecturers:

J Buckley, MBChB FCPaed BSc Cert (Paed Neph) SA

B Cheema, MPP, Master of Philosophy, DTM&H(UK), BSc, GHD

B Cullis, Cert in Nephrology UK Cert in Intensive Care Medicine UK Certi in Internal Medicine UK Dip in Intensive care Medicine UK MRCP London

A de Sousa Andrade, MBBCH Dip in Child Health FCPaed SA MMed(Paed) Cert.Med Onc SA

R Dippenaar, Diploma in Child Health SA MMed Stell FCP SA Cert in Neonatology SA

P Gajjar, MBChB, DCH FCPaed SA Cert. in Paed Nephro Diploma in Paed Palliative Care UCT

A Greyling; MBChB MRCPCH UK FCPaed SA Cert. Cardiology SA ECDS ECES

B Fourie, MBChB, FCPaed, Cert Cardo Paeds

F Kritzinger, MBChB Stell FCPaed SA MMed Stell Cert Paed Pulmonology N McKerrow, BA Unisa MBChB MMed Cape Town FCPaed SA DCH S

E McCollum, BS Biology Durham MD Virginia Ped Pulm Fellowship Baltimore MPH Baltimore

S Moodley, MBChB Cape Town, DCH, FCPaed, Cert (Dev Paed) SA

R Petersen, MBChB UCT SA Diploma in Child Health SA FCPaed SA Cert. (Dev Paed) SA MSc Clin Epi SA

V Ramanjam, MBChB Cape Town DCH FCP SA

B Rossouw, MBChB Dip (Tropical Medicine Paed) MSc (Sports Medicine) Pret Cert (Critical Care)

SAPJ Sinclair, MBChB Cape Town DCH FCP SA

P Sinclair, MBChB DCH FcPaed SA

R Sher Msc (Med) Dip HIV DCH(SA) MBBCH Witwatersrand BA(Hons)Witwatersand BA Witwatersrand

GM Walsh, MSc, BSc(Hons) DipHE (Nurs.) RN RSCN

AJ Wright, MBChB Witwatersrand MRCP UK MRCPCH UK MSc UCL BPharmHons Rhodesia

M Wege, MBChB FCPaed Paed SACrit Care

Lecturers Full-time:

C Afonso, MBChB, DCH, MPhil, MCN A Barker, MBChB Cape Town

I Hendry, , MNur (Child Nursing) PG Dip(Child) Dip(Forensic Nur), HDE, RN
 N Mtolo, , MNur (Child Nursing) Bcur(Nurs EducAdmin), Paed Dip RN
 A Ramcharan, MBChB Witwatersrand DCH SA FCPaed SA Cert (Endocrinology & Metabolism SA
 A Radloff-Kingston, MBChB Cape Town
 S Raga, MBChB Wits FCP (Paediatrics) SA MPhil (Paediatric Neurology) K Reichmuth, MBChB DipHIVMan SA
 J Shea, MPhil (MCH) MPhil (CRA) PG Dip (MCH)
 M Wiggelinkhuizen, MBChB Cape Town
 I Webber, MNur (Child Nursing), PG Dip (Crit Care Child) RN

Lecturers Part-time:

C Davis, MSc(Nur), PG Dip(Crit Care Child), RN
 L Jacobs: B.O.T (SA), MSc (UK), PhD in Occ Therapy (SA)
 M Wessels MBChB MMed

Honorary Lecturers:

LA Calvert, MBChB Dip in Comm&Gen L Ferguson, MBChB MMED Paeds, PhD
 MT Groenewald, MBChB (UCT) PGDip HPE
 HR Dirks, BA, B.Tech (Neurophysiology)
 S Karabus, MBChB Cape Town DCH Dip (Allergology) FCPaed SA MRCPCH UK
 T Murray, MBChB DCH SA FCPaed SA Cert. Pulmonogy SA
 D Reddy, MBChB DCH FCPaed SA Mmed Cert (Paed Neph) SA
 V Kander, Mtech UFS BTEch DCNT
 K van Niekerk, MBChB Stell
 D Zieff, FCFP Dip (HIV Management)

Allergology (Paediatric)**Professor and Head:**

ME Levin, MBChB MMed PhD *Cape Town* FCPaed Dip (Allergology) *SA*

Honorary Professors:

J Warner, BSc PhD *London*
 JA Warner, BSc, PhD *London*

Honorary Senior Lecturers:

S Karabus, MBChB *Cape Town* DCH Dip (Allergology) FCPaed *SA* MRCPCH *UK*

Associate Professor Part-time:

C Gray, MBChB *Cape Town* MRCPCH *London* MSc *Surrey* Dip (Allergology) (Paed Nutr) *Southampton*

Associated Paediatric Disciplines**Physiotherapy Department:**

S13 Ground Floor OPD, Red Cross Children's Hospital, Rondebosch
 (Sameer.rahim@uct.ac.za or Sameer.rahim@westerncape.gov.za) 021 658 5033/5130

Head of Department:

S Rahim, BSc (Physiotherapy) *Cape Town*

344 DEPARTMENTS IN THE FACULTY

Occupational Therapy Department:

S10 Ground Floor OPD, Red Cross Children's Hospital, Rondebosch
(Mereille.pursad@westerncape.gov.za) 021 658 5038/5609

Head of Department:

M Pursad, BSc (Occupational Therapy) *Stell*

Speech and Language Therapy Department:

S24 1st Floor OPD, Red Cross Children's Hospital, Rondebosch
(Lezanne.leroux@westerncape.gov.za) 021 658 5264

Head of Department:

L le Roux, BSc (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 of Department:

S Cader, BscHons (Medicine) *Cape Town*

Audiology Department:

S24 1st Floor OPD, Red Cross Children's Hospital, Rondebosch
() 021 658 5406 (silva.kuschke@westerncape.gov.za)

Head of Department:

Dr Silva Kuschke, PhD (Audiology) *University of Pretoria*

Social Work Department:

B8 B Floor Main Hospital, Red Cross Children's Hospital, Rondebosch
(Carla.brown@westerncape.gov.za) 021 658 596

Head of Department:

C Brown, BSocSci(Social Work) *UCT*

Child and Adolescent Psychiatry

[See Department of Psychiatry and Mental Health.]

Children Institute:

W Slemming *BSc (Physio) (UWC); MPH (University of Warwick); PhD (Witwatersrand)*

Senior Researcher Full-time:

K Hall, BMus *UCT MSocSci UCT PhD Witwatersrand*

L Jamieson, BA in Arts & Social Sciences *Strathclyde Hon Politics & European studies Strathclyde*
Masters in Democratic Governance *UCT*

M Orgill, BA (B.Admin) Honours (B.Admin) Masters Public Policy *UCT P Proudlock, BA:LLB*
Stell MA:LLM UCT

Researcher Full-time:

M Gwele, BA Social Science *UWC Hon Development Studies UWC Masters Social Science UCT*

M Nyathi, BA:LLB *Wits MA:LLM Wits*

L October, BA Internaional Studies *Stell BA Hons International Studies Stell BA Health Sciences*
and Social Services Psychology counselling *UNISA MA Political Science Stell*

N Titi, B.Psych *UWC Masers Research Psychology UWC PhD DPsy UNISA*

Communication and education Specialist:

L Lake, BA (Hons) BS PGDip

Honorary Professors:

R Reis BA (Hons) MA PhD

Harry Crossley Children's Nursing Development Unit**Associate Professor:**

M Coetzee, PhD (Nur) Paed Dip Comm Health Dip RN

Senior Researcher:

N North, MSc (Paed) PhD, Msc (Paeds), RN (UK)

Lecturers Full-Time:

I Hendry, MNCH PG Dip(Child) Dip(Forensic Nur) HDE RN

N Mtolo, MNCH Bcur (Nur Educ, Admin) Paed Dip RN

I Webber, MNCH PG Dip (Crit Care Child) RN

Lecturers Part-time:

C Davis, MSc(Nur) PG Dip(Crit Care Child) RN

Clinical Educator:

A Amos, MNCH PG Dip(Crit Care Child) RN

B Jama, MNCH PG Dip(Child) RN

L White, BSc(Nur)(Hons) Paed Dip RN

Honorary Adjunct Professor:

T Soko, PhD, MScPH,B Cur (I et A)

Programme Facilitator:

J Vos, Dip (Nursing) RN

Cardiology (Paediatric)**Associate Professor and Head:**

G Comitis, *MBChB Cape Town DCH Dip (Anaesthesia) FCPaed SA, Card Cert SA*

Professor Part-time:

L Zuhlke, *MBChB MPH Cape Town DCH SA FCPaed SA Card Cert SA FESC UK*

Senior Lecturer Full-time:

G Comitis, *MBChB Cape Town DCH Dip (Anaesthesia) FCPaed SA Card Cert SA*

L Swanson, *MBChB Cape Town FCPaed SA Card Cert SA*

Honorary Associate Professor:

C Hugo-Hamman, MA *Oxon MBChB Cape Town DCH London FCPaed SA*

Honorary Senior Lecturer:

B Fourie, *MBChB FCPaed Cert Cardio Paeds*

A Greyling, *MBChB MRCPCH UK FCPaed SA Cert. Cardiology SA ECDS ECES*

Child Health Unit

Acting Head and Lecturer:

J Shea, MPhil (MCH) MPhil (CRA) PG Dip (MCH)

Critical Care (Paediatric)

Head of Department:

S Salie, MBChB *Cape Town* DCH *London* FCPaed Cert (Critical Care) *SA*

Professors Full-Time:

B Morrow, BSc (Physiotherapy) PhD *Cape Town*

Senior Lecturers Full-time:

J Ahrens, MBChB *Cape Town* DA DCH FCPaed Cert (Critical Care) *SA*

I Appel, MBChB DCH FCPaed *SA*

C Procter, MBBS DCH *SA* MMed FC Paed *SA* MPhil Cert Critical Care (Paed)

A Sallo, MBChB (Wits) FCPaed (SA) Cert. Critical Care (SA) Paediatric Critical Care Fellowship – U of Toronto ECMO/ECLS Speciality Fellowship – sick kids

Dermatology (Paediatric)

Associate Professor and Head:

C Hlela, MBChB FCDerm MSc GHS MMed PhD *Oxon*

Developmental Paediatrics

Professor and Head:

K Donald, MBChB MPhil *Cape Town* DCH FCPaed Cert (Paed Neuro) *SA* MRCPCH *UK*

Senior Lecturers Full-time

S Moodley, MBChB *Cape Town* DCH FCPaed Cert (Dev Paed) *SA*

MT Richards, MBChB *Cape Town* Cert DCH FCPaed *SA* NR Rhoda FCPaed *SA* Cert (Neonatology) (Dev Paed) *SA*

Honorary Senior Lecturer:

V Ramanjam, MBChB *Cape Town* DCH FCPaed Cert (Dev Paed) *SA*

Lecturers Part-time:

S Warner, MBChB *Cape Town* DCH *SA*

Endocrinology (Paediatric)

Head of Department:

M Carrihill, MBChB MPhil *Cape Town* FCPaed Cert (Endocrinology & Metabolism) *SA* (Paed Endo)

Senior Lecturers Full-time:

A Ramcharan, MBChB *Witwatersrand* DCH *SA* FCPaed *SA* Cert (Endocrinology & Metabolism) *SA* Paed

A Spitaels, MBChB *Cape Town* DCH FCPaed *SA*

Gastroenterology (Paediatric)

Head of Department:

RJ de Lacy, MBChB *UCT FC Paeds SA Cer (Paed Gastro) SA*

Senior Lecturer Full-time:

L Radebe, MBChB *UKZN DCH SA FCPed SA Cer (Paed Gastro) SA*

Lecturers Part-time:

RA Brown, MBChB *Cape Town MPhil Stell DCH FCS SA FRCS Edinburgh*

M Ledger, MBChB BSc BScHons (Medicine) *Cape Town DCH FCPaed SA*

General Paediatrics

Professor

R Muloiwa, MBChB *UKZN DCH FCPaed SA MSc LSHTM*

Associate Professors:

HA Buys, MBChB *Zimbabwe LRCP LRCS Edinburgh MRCP UK FCP SA*

Senior Lecturers Full-time:

L Cooke, MBChB *Cape Town FCPaed SA*

S Chippendale, MBChB DipPEC DipHIVMan FCPaed MMED (Paed) DGDIP (Community Paed)

R Dunkley, MBChB *Cape Town FCPaed SA*

Daniels MBChB, Cape Town, FCPaed(SA), MMed (Paed), Cert. Neonatology(SA)

T Kerbelker, MBChB ATLS ACLS BLS PALS *Cape Town DCH FCPaed SA Dip (HIV*

Management) Griffiths Neuro Dip (Allergy) Cert (Paed Rheum) Australia

D le Roux, MBChB Dip (Obstetrics & Gynaecology) FCPaed SA MMed MPhil (Paed ID) PhD Cert.

Paed ID DTM&H *Wits MPH Baltimore*

S Naidoo, MBChB *Cape Town DCH SA FCPaeds SA Dip (Allergology) SA*

G Scherbrucker, MBChB *Cape Town DCH FCP SA*

Lecturer Full-Time:

B van Stormbroek, BSc MBChB MMed Cape Town DCH SA PCPaed SA

Honorary Senior Lecturer:

B Cheema, MPP, Master of Philosophy DTM&H *UK BSc GHD*

K van Niekerk, MBChB *Stell*

Haematology/Oncology (Paediatric)

Professor and Head:

A Davidson, MBChB MPhil *Cape Town DCH FCPaed Cert (Med Onc Paeds) SA*

Senior Lecturers Full-time:

MG Hendricks, MBChB *Cape Town DCH Dip (Primary Emergency Care) FCPaed Cert (Med Onc Paeds) SA*

Honorary Senior Lecturer:

A de Sousa Andrade, MBBCH Dip in Child Health FCPaed SA MMed (Paeds) Cert. Med Onc SA

Infectious Diseases (Paediatric)

Professor and Head:

BS Eley, BScHons (Medicine) MBChB *Cape Town FCP SA*

Senior Lecturer Full-time:

JC Nuttall, MBChB *Cape Town Dip (Obstetrics & Gynaecology) DCH FCPaed SA DTM&H Witwatersrand*

Neonatology

Associate Professor and Head:

MC Harrison, MBChB *Cape Town MRCP FRCPCH UK*

Emeritus Associate Professors:

VC Harrison, MBChB *UCT DCH (RCP & S) MMED Paed UCT MD UCT*

AF Malan, MBChB MMed MD *Cape Town Dip (Obstetrics & Gynaecology) SA*

DL Woods, MBChB MD *Cape Town FRCP DCH RCP&S UK*

Associate Professor Full-time:

A Horn, MBChB *Cape Town FCPaed DCH Cert (Neonatology) SA MRCP (Paediatrics) UK PhD Cape Town*

L Tooke, MBChB *Cape Town FCPaed MMed Dip (Obstetrics & Gynaecology) (Primary Emergency Care) SA*

Senior Lecturers Full-time:

Y Joolay, MBChB *Stell FCPaed SA, Cert Neonatology SA, MPhil UCT*

SM Kroon, MBChB *Cape Town FCPaed SA DTM&H London MRCP UK*

S Pillay, MBChB *Witwatersrand DCH FCPaed SA Cert (Neonatology) SA MMED (Paediatrics)*

NR Rhoda, MBChB *Cape Town FCPaed SA Cert (Neonatology) SA*

AM van Niekerk, MBBCh *Witwatersrand DCH FCPaed Cert (Paediatric Cardiology) SA*

Lecturers Full-time:

C Afonso, MBChB DCH MPhil MCN

Honorary Lecturer:

LA Calvert, MBChB Dip in Comm&Gen

MT Groenewald, MBChB *UCT PGDip HPE*

Nephrology (Paediatric)

Professor and Head:

M McCulloch, MBBCh *Witwatersrand DCH FCPaed SA*

Associate Professor:

P Nourse, MBChB MMed *Cape Town FCP SA Cert (Paed Nephrol)*

Honorary Associate Professor:

P Hardien, FRCP *London MRCP UK MBChB BSc Dip (Geriatric Medicine)*

V Luychx, MBChB *Witwatersrand MSc London PhD Zurich*

Honorary Senior Lecturer:

J Buckley, MBChB FcPaed BSc Cer (Paed Neph) *SA*

B Cullis, Cert in Nephrology *UK* Cert in Intensive Care Medicine *UK* Certi in Internal Medicine *UK*
 Dip in Intensive care Medicine *UK* MRCP *London*
 P Sinclair, MBChB DCH FcPaed *SA*
 AJ Wright, MBChB *Witwatersrand* MRCP *UK* MRCPC *UK* MSc *UCL* BPharm Hons *Rhodesia*

Honorary Lecturer:

D Reddy, MBChB DCH PcPaed MMed Cert (Paed Neph) *SA*

Senior Lecturer Full-time:

A Coetzee, MBChB FCPaed Cert (Paed Neph)

Neurology (Paediatric)

Professor and Head:

J Wilmshurst, MBBS *London* MRCP *UK* FCPaed *SA* MD *Cape Town*

Senior Lecturer Full-time:

AP Nondo, MBChB *Medunsa* FCPaed Cert (Paed Neuro) *SA*

Senior Lecturers Part-time:

G Riordan, MBChB MMed *Cape Town* DCH CPaed *SA*

S Raga, MBChB *Witwatersrand* FCP (Paediatrics) *SA* MPhil (Paediatric Neurology) FCPaed Cert (Paed Neuro) *SA*

Honorary Lecture:

V Kander, MTech *UFS* BTech DCNT

HR Dirks, B.Tech (Neurophysiology), BA (UNISA)

Pulmonology (Paediatric)

Professor and Head:

HJ Zar, MBBCh *Witwatersrand* FAAP BCPaed *USA* BCPaed (Pulmonology) *USA* PhD *Cape Town*
 FCPaed *SA* FRCP

Associate Professor:

M Zampoli, MBChB *Cape Town* DCH FCPPaed Cert (Pulm Paed) *SA*

Associate Professors Part-Time:

D Gray, MBChB PhD *Cape Town* FCPaed Cert (Pulm Paed) *SA*

A Vanker, MBChB MMed *Stell* FCPaed Cert (Pulm Paed) *SA*

Honorary Senior Lecturer:

F Kritzing, MBChB *Stell* FCPaed *SA* MMed *Stell* Cert Paed Pulmonology

Honorary Associate Professor:

E McCollum, BS Biology *Durham* MD *Virginia* Ped Pulm Fellowship Baltimore MPH *Baltimore*

Honorary Lecturer

L Ferguson, MBChB MMED Paeds PhD

Rheumatology (Paediatric)

Head:

K Webb, MBBCH *Wits* FCPaed SA Cert Paed Rheum SA MMed UCT PhD UCL

PED4003S LEADERSHIP AND MANAGEMENT

15 NQF credits at NQF level 8

Convener: Dr T Kerbelker and Dr A Hawkridge

Objective: Understand approaches to the concepts of leadership and management. Be able to define your role as leaders/managers in the context of the public health system. Have conceptual tools for thinking about organisational change. Develop skills for analysing everyday management and service delivery problems, and plan improvements to address these problems. Understand the scope of human resource management and the systems and skills required for managing relationships with people - down, up and out – in your organisational environment. Appreciate systems requirements for managing information, finances and other resources to achieve better health. Have reflected on your own management practices and how to improve these.

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 healthcare professional 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 the main child health components within the district health system (DHS), decentralisation within the DHS, a team approach to addressing child health priorities within the district, intersectoral links and referral systems. It explores resource allocation, management, monitoring, and evaluation of child health programmes. Students are also introduced to economic concepts, financial planning and management, and 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 assessment consists of 3 unit submissions (3 x 10%); final assignment 60%; attendance and participation 10%.

PED4004S BIostatISTICS

12 NQF credits at NQF level 8

Convener: A-R Sayed

Course outline:

The course aims to introduce students to the basic statistical concepts that will enable them to understand and interpret the most commonly used descriptive and inferential statistical procedures and to apply this to published research. Using practical examples and case studies, students are introduced to: types of data; descriptive measures; exploratory data analysis; probability distributions (normal and binomial distributions); sampling distribution and confidence intervals; hypothesis testing; nonparametric methods; sample size estimation; correlation and logistic regression analysis. They are required to perform elementary analyses using STATA statistical software.

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 course mark will include a learning activity at the face-to-face session (30%); online assignments (60%) and participation in and timeous submission of learning activities and assignments (10%).

PED4005S CHILD HEALTH POLICIES AND PROGRAMMES

15 NQF credits at NQF level 8; 13 Lectures (total 14 hours), 3 on-line chatrooms each lasting up to 90 minutes.

Convener: Dr J Shea, Dr SM Kroon and Dr L Jacobs

Objective: Describe & analyse the burden and pattern of childhood ill health and mortality globally & in South Africa, & appreciate their determinants both immediate & upstream, & their evolution

over time. Describe & critically interrogate the various global & local child health policies & programs that have been developed in response to the above at different times, & describe the different contexts, technical factors, organisations & funding mechanisms. Examine & critically comment on current South African health policies & programmes (NHI, PHC reengineering, IYCF, HIV, MNCH, PMTCT, EPI, etc) & their implications for child health & child health services. Appreciate the new policy emphasis on child wellness including the First Thousand Days Campaign & Early Childhood Development, their potential for improving survival, health & wellness over the life-course and the challenges in implementing these policies

Course outline:

The 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.

Lecture times: From 08h30 to 16h30 during the Face-to-face contact week.

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 assessment consists of 3 unit submissions (3 x 10%); final assignment 60%; attendance and participation 10%.

PED4006F OPTIMISING CARE FOR LONG-TERM CONDITIONS

10 NQF credits at NQF level 8

Convener: Dr S Naidoo and Dr L Jacobs

Objective: To have insight into and be able to respond to the potential effects of a long-term disabling condition (LTDC) on a child and the family. To critique and employ the definitional aspects associated with LTDCs in childhood. To apply knowledge of the implications of these definitional aspects on epidemiological methodologies aimed at describing populations of children with LTDCs. To develop a deeper knowledge of the epidemiology of LTDCs among children in southern Africa and to be able to apply this knowledge geographically. To apply knowledge and understanding of the personal and family implications of LTDCs in childhood, epidemiology and health systems to the design of services for children with LTDCs.

Course outline:

The course explores approaches to the definitions and classification of long-term and disabling health conditions as well as paradigms for continuing care of children and their families over time. It is envisaged that students will develop a critical understanding of essential concepts and practical tools for long-term care and their implementation, while learning how to configure health services optimally for long-term and disabling conditions such as asthma, disabilities, and HIV/AIDS at the community, 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: There are three assignments related to the units of the course, contributing 3 x 30% of the final mark; with 10% allocated for online activities.

PED4008F ADVOCACY AND CHILDREN'S RIGHTS

10 NQF credits at NQF level 8

Convener: L Lake and L Jamieson

Objective: Raise awareness of the relationship between children's rights and child health, well-being and development. Deepen your understanding of child rights principles and provisions as outlined in the UN Convention on the Rights of the Child, the African Charter on the Rights and Welfare of the Child, South African Constitution and Children's Act. Introduce the primary laws, policies and programmes that give effect to children's rights. Enable you to give effect to children's rights in your professional practice. Enable you to advocate for changes within the healthcare system. Enable you to advocate for child health beyond the health care system. Enable you develop and evaluate an advocacy plan.

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. Students are provided with opportunities to critically reflect on and enhance their professional practice drawing on local and international examples of how children's rights have been used to drive quality improvement. Students are then introduced to the advocacy process and the main principles of an effective advocacy strategy before applying these to advocacy project of their choice. The course also aims to provide students with the knowledge and understanding of ethical principles and legislation guiding the provision of child healthcare.

Lecture times: This is a blended course comprising two face-to-face sessions and weekly readings, online discussion fora and learning activities.

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 summative assessment comprises three portfolio tasks (3 x 10%) and a final advocacy project which is weighted 60% of the final mark. Participation in face-to-face sessions, online discussion for a and learning activities in this module contributes 10% of the final mark.

PED4009S HEALTH INFORMATION SYSTEMS

10 NQF credits at NQF level 8

Convener: Dr D le Roux

Objective: To be able to use health information to answer service-related questions in healthcare. To understand all the types & roles of various health information systems used in health services. To understand methods of collecting and collating health information and the purposes to which it can be put.

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 assessment consists of three assignments (one per unit) weighted 30%, 30% and 30% of the final mark respectively, with 10% allocated to online work.

PED4010F COMMUNICATION, EDUCATION & TRAINING

10 NQF credits at NQF level 8

Convener: Dr L Jacobs

Objective: Understand the different theories of communication and the importance of intercultural communication. Describe children's participation rights and the implications for health care practice. Identify strategies to help health professionals communicate better and ensure children and caregivers understand them. Evaluate the design of patient education materials using the Clear Communication Index. Apply the principles of adult (active) learning to facilitate effective teaching. Describe best practice in assessment and feedback.

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 course assessment consists of 2 portfolio reports (10% + 10%); final assignments 70%; attendance and participation 10%.

PED4017F HEALTH & DEVELOPMENT

12 NQF credits at NQF level 8

Convener: J Shea**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 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).

PED4018F EPIDEMIOLOGY

14 NQF credits at NQF level 8

Convener: J Shea**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.

PED4020S FOUNDATIONS OF MATERNAL & CHILD HEALTH

12 NQF credits at NQF level 8

Convener: J Shea**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 NQF level 8

Convener: J Shea

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 NQF level 8

Convener: J Shea

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.

PED4025W INTRODUCTION TO MATERNAL & CHILD HEALTH

12 NQF credits at NQF level 8

Convener: J Shea

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.

PED4026W MATERNAL MENTAL HEALTH

12 NQF credits at NQF level 8

Convener: J Shea

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.

PED4028S INTEGRATED ASSESSMENT

0 NQF credits at NQF 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.

PED4029F/S ORGANISATIONAL & ACADEMIC COMMUNICATION

12 NQF credits at NQF level 8

Convener: J Shea

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.

PED4030F/S ORGANISATION & MANAGEMENT OF HEALTH SERVICES

14 NQF credits at NQF 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.

PED4031W CLINICAL MANAGEMENT IN PAEDIATRIC HAEMATOLOGY & ONCOLOGY

90 NQF credits at NQF level 8

Convener: Associate Professor A Davidson

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 haemaglobinopathies, 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, they 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.

PED4032W ESSAY: TRANSITION & TRANSLATION OF KNOWLEDGE

30 NQF credits at NQF level 8

Convener: Professor K Donald

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 convener.

PED4033W CLINICAL MANAGEMENT IN NEONATOLOGY

90 NQF credits at NQF level 8; Three students slot into existing lecture structure at each site visit.

Convener: Associate Professor MC Harrison and Dr NR Rhoda

Objective: 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.

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 understand 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.

Lecture times: Varies according to site.

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. 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 3 formal clinical assessments undertaken at 4-monthly intervals. These assessments may be of a practical and/or oral nature and accrue 50%. The summative assessment comprises of a final written examination (50%).

PED4034W CLINICAL MANAGEMENT IN PAEDIATRIC CARDIOLOGY

40 NQF credits at NQF level 8

Convener: Associate Professor 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.

PED4035W PAEDIATRIC ECHOCARDIOGRAPHY

50 NQF credits at NQF level 8

Convener: Dr G Comitis

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%.

PED4036W CLINICAL MANAGEMENT OF PAEDIATRIC DIABETES

90 NQF credits at NQF level 8

Convener: Dr M Carrhill

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.

PED4037W CLINICAL MANAGEMENT OF PAEDIATRIC EPILEPSY

90 NQF credits at NQF level 8

Convener: Professor J Wilmshurst**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 recognized 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 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: In-course and formative assessment accrue 50%. End-of-training assessment will be a written paper (based on illustrative EEG cases n=20) requiring interpretation of the EEG and the clinical relevance of the findings, and clinical exam. (50%)

PED4038W CLINICAL MANAGEMENT IN PAEDIATRIC GASTROENTEROLOGY

90 NQF credits at NQF level 8

Convener: Professor E Goddard and Dr R de Lacy**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, haematemesis 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 their 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).

PED4039W CLINICAL MANAGEMENT IN DEVELOPMENT PAEDIATRICS

90 NQF credits at NQF level 8

Convener: Professor K Donald

Course outline:

The purpose of this course is to allow practicing doctors to develop foundation skills in developmental disorders and neutralizability to ensure safe practice. The trainees require skills in the assessment and multidisciplinary management of children with developmental disorders and neutralizability. 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 neutralizability 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 neutralizability. 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: In-course and formative assessment (50%) and a final examination (50%). The final examination will consist of a written paper (15%), a clinical examination in an ambulatory setting (10%) and a portfolio-based oral examination (25%). A student failing to obtain 50% for each of these 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 reassessment was done, the maximum pass mark shall be 50%.

PED4040W CLINICAL MANAGEMENT IN PAEDIATRIC EMERGENCY CARE

90 NQF credits at NQF level 8

Convener: Professor HA Buys

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.

PED4041W CLINICAL MANAGEMENT IN PAEDIATRIC CRITICAL CARE

90 NQF credits at NQF level 8

Convener: Professor S Salie**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.

PED4042W CLINICAL MANAGEMENT OF PAEDIATRIC RHEUMATOLOGY

90 NQF credits at NQF level 8

Convener: Associate Professor C Scott**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.

PED4043W CLINICAL MANAGEMENT IN PAEDIATRIC PULMONOLOGY

90 NQF credits at NQF level 8

Convener: Dr M Zampoli**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)

362 DEPARTMENTS IN THE FACULTY

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.

PED4044W CLINICAL MANAGEMENT IN PAEDIATRIC NEPHROLOGY

90 NQF credits at NQF level 8

Convener: Professor M McCulloch

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%).

PED4045S PAEDIATRIC PALLIATIVE CARE

60 NQF credits at NQF level 8

Convener: Dr MA Meiring

Course outline:

The aim of the course is to equip health care professionals caring for children with the knowledge and skills for the practical management of children with life-limiting illnesses within their scope of practice. Key competencies include the management of pain and other distressing symptoms, the provision of psycho-social and spiritual care to the child and family as well as the management of the terminal and bereavement phases. 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 of > 80% contact workshops, and successful completion of assignments.

Assessment: Formative assessment contributes 50% of the final mark with Summative assessment contributing 50%. A pass mark of 50% is required in each component of the assessment (Assignments, written and oral exams as well as portfolio).

PED4046F PRINCIPLES OF PAEDIATRIC PALLIATIVE MEDICINE

60 NQF credits at NQF level 8

Convener: Dr MA Meiring

Course outline:

The aim of this course is to engender in the multidisciplinary health care professional a holistic palliative care approach to the care of children with life threatening and life limiting illnesses that also includes the support of the child's family. This course covers the key principles of palliative care as outlined by the World Health Organisation and lays the foundation for the key competencies needed to practice palliative care in the students place of work. The course includes an overview of the history of paediatric palliative medicine and key models of practice. The theoretical basis for communication (including with children), pain and symptom control, ethics, advance care planning, end of life care and bereavement is covered in this introductory course and then practical competencies are further developed in the second semester.

DP requirements: Attendance of > 80% contact workshops, and successful completion of assignments.

Assessment: Formative assessment contributes 50% of the final mark with Summative assessment contributing 50%. A pass mark of 50% is required in each component of the assessment (Assignments, written and oral exams as well as portfolio).

PED409F/S BASIC EPIDEMIOLOGY & RESEARCH APPRAISAL

15 NQF credits at NQF level 8

Convener: Dr D le Roux and Dr A Masu

Objective: To understand some of the basic principles of epidemiology:-How we think about & measure health & disease-How we attribute causation in epidemiology-How we approach diagnostic testing-To understand some of the terminology, and start thinking about using words correctly (e.g. ratio vs rate, causation vs association)To understand some of the statistical methods used in medical literature:-Types of data, measures of spread and central tendency-Hypothesis testing, p values and confidence intervals-Statistical testing To gain confidence in evaluating and assessing these methods and understanding the results.

Course outline:

There will be integration of the key statistical and epidemiological concepts. Epidemiology learning will focus on disease causation and measurement, types of epidemiological studies and sources of error, and clinical epidemiology. Students will be required to understand and interpret the basic biostatistical concepts and apply these when interpreting published research. The biostatistical aspects covered will include descriptive statistics, data presentation, concepts of statistical inference, interpretation of systematic reviews and principles relating to evidence-based paediatric practice.

DP requirements: Students must attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

Assessment: The course assessment consists of 5 unit submissions: (5 x 10%); the final assignment is weighted as 40%; attendance and participation 10%.

PED4051F EXPERIENTIAL LEARNING PART 1

10 NQF credits at NQF level 8

Convener: Dr S Chippendale

Objective: Reflect constructively and meaningfully on work experiences. Communicate such reflections. Link such reflections to broader theories and concepts in health and health care. Transform such reflections into practical plans and actions in the workplace. Reflectively review the implementation of such plans and actions.

Course outline:

This first semester course focuses on the practical application of the theoretical learning gained from the context of the student. It evaluates their current child health context through primary research, which includes small projects which students need to undertake in their work environment. Students are expected to engage in reflection on their own professional context.

DP requirements: Students must attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

Assessment: The course assessment consists of 3 portfolio reports (30% each); attendance and participation 10%.

PED4052S EXPERIENTIAL LEARNING PART 2

15 NQF credits at NQF level 8

Convener: Dr L Jacobs

Objective: Reflect constructively and meaningfully on work experiences. Communicate such reflections. Link such reflections to broader theories and concepts in health and health care. Transform such reflections into practical plans and actions in the workplace. Reflectively review the implementation of such plans and actions.

Course outline:

This second semester course focuses on the practical application of the theoretical learning gained from the context of the student. It evaluates current child health practices through primary research, which includes small quality improvement projects which students need to undertake in their work environment. 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 attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

Assessment: The course assessment consists of three assignments related to the units of the course, contributing 30%, 30% and 30%; attendance and participation 10%.

PED4062F ADOLESCENT HEALTH CARE

10 NQF credits at NQF level 8

Convener: Dr Z Sablay, Dr M Carrihill and Dr L Jacobs

Objective: The course aims to sensitise student to health care issues that are unique to adolescents. It also aims to provide them with skills to engage meaningfully with adolescent patients, provide adolescent-friendly services and deal with common conditions and situations encountered in this period.

Course outline:

The course content is designed to help students understand the Adolescent patient, and gain knowledge of common challenges and priorities during adolescence. Students will develop insight into what constitutes adolescent-friendly healthcare and some practical skills in adolescent clinical care.

DP requirements: Students must attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

Assessment: The course assessment consists of 3 assignments (30% each) and in-course assessment (10%).

PED4063F MENTAL HEALTH IN CHILDREN AND ADOLESCENTS

10 NQF credits at NQF level 8

Convener: Dr L Jacobs

Objective: The course aims to sensitise students to child and adolescent mental health care issues, and understanding a rights-based approach to child mental health.

Course outline:

The course content is designed to help students understand the epidemiology and local prevalence of child and adolescent mental wellness, and to understand how child and adolescent mental illness manifests at different ages. Students will develop skills in crafting an interdisciplinary management plan, including mental health, rehabilitation and education inputs.

DP requirements: Students must attend a minimum of 60% of all contact sessions. All assignments must be submitted by the due dates.

Assessment: The course assessment consists of 3 assignments (30% each) and in-course assessment (10%).

PED5005S RESEARCH METHODS FOR HEALTH PROFESSIONALS I

10 NQF credits at NQF level 9

Convener: Dr T Hawkrigde and J Shea

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%.

PED5011S MPHIL MATERNAL & CHILD HEALTH INTEGRATED FINAL ASSESSMENT

0 NQF credits at NQF level 8

Convener: J Shea

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.

PED5012W MATERNAL & CHILD HEALTH MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: J Shea

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.

PED5013F RESEARCH METHODS FOR HEALTH PROFESSIONALS II

10 NQF credits at NQF level 9

Convener: J Shea

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.

PED5015H BIostatISTICS

12 NQF credits at NQF level 9

Convener: Dr A Masu

Course outline:

This course will develop effective techniques for maternal and child health communication. The focus of the course is on developing competence in evaluating the best available evidence to facilitate in-depth engagement and communication with multiple audiences and stakeholders to advance health service delivery. This course covers the principles of specialised professional and academic communication that includes verbal and electronic communication, meeting facilitation, technical and academic writing, and how these are applied in maternal and child health.

DP requirements: None

Assessment: The final course mark will be made up as follows: two assignments (40%) final summative assessment 50% and class participation 10%. A pass mark of 50% is required overall, with a 45% subminimum for each of the assessment components.

PED5016S MATERNAL, CHILD AND ADOLESCENT HEALTH

14 NQF credits at NQF level 9

Convener: J Shea

Objective: Students should demonstrate an understanding of global maternal, child and adolescent health priorities and critically examine policy and programme responses relevant to their local context.

Course outline:

This course critically examines maternal, child, and adolescent health determinants and the role of health policies and programmes in promoting and sustaining health. Specific attention is given to the prerequisites for healthy growth, nutrition, and the developmental processes across the life cycle. Global and national policies, programmes, and health services in promoting the health and well-being of pregnant women, newborn infants, children and adolescents are examined in relation to health determinants.

DP requirements: Attendance and submission of all academic coursework commitments. Full participation in online learning activities is a pre-requisite 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 programme examination.

Assessment: Coursework assessment includes weekly discussion forum posts (20%) and synchronous on-line learning sessions (10%) and an online course assessment (10%). The final assessment consists of two end-of-course assignments that account for 60% of the grade. Course assignments require contextual information which prepares candidates for addressing local challenges. Candidates must obtain a minimum of 50% to pass the course.

PED5017H INFORMATION, EDUCATION AND ACADEMIC COMMUNICATION

10 NQF credits at NQF level 9

Convener: J Shea

Course outline:

This course will develop effective techniques for public health communication. The focus of the course is on developing competence in evaluating the best available evidence to facilitate in-depth engagement and communication with multiple audiences and stakeholders to advance public health service delivery. This course covers the principles of specialised professional and academic communication that includes verbal and electronic communication, meeting facilitation, technical and academic writing, and how these are applied in public health.

DP requirements: None

Assessment: Formative assessment will include a series of written and oral communication exercises starting with the first face-to-face session, the Introduction to Maternal and Child Health Course. The assessment is based on a written paper applied to the disciplines in the programme to assess specialist academic literacy (20%). Summative assessment will include an end of course assignment, an annotated bibliography (20%), and a PowerPoint presentation addressing a specialist research topic (20%), a literature review (40%). Academic competence is incorporated into individual coursework and contributes to 15-20% of individual course papers. This grade is not included in the PED4019 Course grade as it contributes to individual course grades.

PED5018F MATERNAL, CHILD AND ADOLESCENT HEALTH PRIORITIES

20 NQF credits at NQF level 9

Convener: J Shea**Course entry requirements:** PED4017F, PED4022S, PED4018F and PED4025W**Course outline:**

This course integrates the principles of the foundation courses of the maternal and child health specialisation of the MPhil (MCH) degree, into a comprehensive, evidence-based response for addressing priority maternal and child health issues linked to the current burden of disease. Curricular topics include perinatal priorities, perinatal mental health, sexual and reproductive rights and health, basic emergency obstetric and neonatal care, perinatal audits, developmental delay, child malnutrition, communicable diseases, childhood allergies, WASH diseases, oral health, palliative care, the needs of children in difficult circumstances, child and adolescent mental health, chronic diseases in the childhood and adolescent periods, and the effect of climate change on child health.

DP requirements: Attendance and submission of all academic coursework commitments. Full participation in online learning activities is a pre-requisite 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 programme examination.

Assessment: Coursework assessment includes weekly discussion forum posts (20%), synchronous on-line learning sessions (10%) and an online course assessment (10%). The final assessment consists of two end-of-course assignments that account for 60% of the grade. Course assignments require contextual information that prepares candidates for developing evidence-supported responses to local challenges. Candidates must obtain a minimum of 50% to pass the course.

PED5025F EPIDEMIOLOGY

14 NQF credits at NQF level 9

Convener: R Petersen and J Shea**Course outline:**

This course introduces fundamental epidemiological concepts relevant to maternal, child, and adolescent health. It includes the application of epidemiology to disease causation, prevention and treatment. It introduces students to key sources of epidemiological data, different types of epidemiological studies; sampling design and methods; data measurement and collection, and disease surveillance. The course aims to develop competence in epidemiological approaches for defining and measuring health-related states in populations. It provides a foundation in research methods that will enable students to critically evaluate and undertake health systems research.

DP requirements: Students are required to attend a minimum of 60% of all contact sessions, submit a minimum of 60% of unit submissions, and participate in 60% of synchronous Vula sessions. Discussion Forum posts and Assignments must be submitted by due dates.

Assessment: Coursework assessment includes weekly discussion forum posts (20%), synchronous on-line learning sessions (10%) and an online course assessment (20%). The final assessment consists of two end-of-course assignments that account for 50% of the grade. Course assignments require contextual information that prepares students for developing evidence-supported responses to local challenges. Students must obtain a minimum of 50% to pass the course.

PED5026S HEALTH INFORMATICS AND SURVEILLANCE

14 NQF credits at NQF level 9

Convener: J Shea and Associate Professor A Westwood**Course outline:**

This course offers grounding in methods and concepts of health informatics and health information technology application in maternal, child, adolescent, and population health. It explores the range of information systems currently used to support health surveillance, epidemiologic investigations, and disease prevention. Students explore key indicators, data sources, and systems used for monitoring, evaluation, and continuous quality improvement of health services.

The challenges and opportunities for improving confidentiality, integrity, and security while maximising the availability of maternal, child, and adolescent health information. are explored. Emphasis is placed on improving informatic practices at facility, programme, district, provincial, and national levels.

DP requirements: Students are required to attend a minimum of 60% of all contact sessions, submit a minimum of 60% of unit submissions, and participate in 60% of synchronous Vula sessions. Discussion Forum posts and Assignments must be submitted by due dates.

Assessment: Coursework assessment includes weekly discussion forum posts (20%), synchronous on-line learning sessions (10%) and an online course assessment (20%). The final assessment consists of two end-of-course assignments that account for 50% of the grade. Course assignments require contextual information that prepares students for developing evidence-supported responses to local challenges. Students must obtain a minimum of 50% to pass the course.

PED5027S ORGANISATION, MANAGEMENT, AND LEADERSHIP IN HEALTH

14 NQF credits at NQF level 9

Convener: J Shea

Course outline:

This course is designed to develop competence in the organisation, planning, management, and leadership of maternal, child, and adolescent health services and programmes. It facilitates a critical understanding of legislative issues like decentralisation of decision-making, resource mobilisation and allocation, and policy implementation. Leadership, influence, diversity, managing change, and cultural influences in the health context are explored. Specific focus is placed on leadership for effective health workforce planning and management, managing health teams, motivating teams and diverse stakeholder groups, community engagement, and performance management.

Assessment: Coursework assessment includes weekly discussion forum posts (20%), synchronous on-line learning sessions (10%) and an online course assessment (20%). The final assessment consists of two end-of-course assignments that account for 50% of the grade. Course assignments require contextual information that prepares students for developing evidence-supported responses to local challenges. Students must obtain a minimum of 50% to pass the course.

PED5028F PRIMARY HEALTH CARE, RIGHTS AND ADVOCACY IN GLOBAL HEALTH

12 NQF credits at NQF level 9

Convener: J Shea

Course outline:

This is a foundational course for the MPhil (MCH) programme and focuses on the developmental determinants of health as well as the systems and ideologies that promote and sustain maternal, child and adolescent health. It provides insight into the need for health approaches that address underlying social, economic, political, environmental, cultural and contextual health determinants. It foregrounds the need to strengthen primary health care as a strategic health system response, integrates strategies for health improvements, and emphasises the importance of collaboration within and across countries and continents. It provides insight into the relationship between human rights and health through an exploration of the theoretical and historical evolution of human rights, international rights instruments, and the influence and impact of international and national human rights law on maternal, child and adolescent health policies and programmes, with the goal of incorporating a human rights approach into the health response. The concept of empowerment and processes of change linked to it are discussed in relation to the broad implications for advocacy and change agent roles in maternal, child, and adolescent health. Students integrate the course content into a health promotion and advocacy response to contextually relevant health challenges.

DP requirements: Students are required to attend a minimum of 60% of all contact sessions, and submit a minimum of 60% of unit submissions and participate in 60% of synchronous Vula sessions. Discussion Forum posts and Assignments must be submitted by due dates.

Assessment: Coursework assessment includes weekly discussion forum posts (20%), synchronous on-line learning sessions (10%) and an online course assessment (10%).

The final assessment consists of two end-of-course assignments that account for 60% of the grade. Course assignments require contextual information that prepares students for developing evidence-supported responses to local challenges. Students must obtain a minimum of 50% to pass the course.

PED7000W PAEDIATRICS DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor B Morrow

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 relevant to paediatrics and child health. Students may require training in statistics, research methods, conducting literature reviews, and/or designing a research proposal, as appropriate. Having submitted their research proposals for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyses the results, and write up the dissertation. The dissertation is externally examined.

PED7001W PAEDIATRICS THESIS

360 NQF credits at NQF level 10

Convener: Professor B Morrow

Course outline:

This is a degree by doctoral thesis of up to 80,000 words in length, on any subject relevant to paediatrics and child health. 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. The degree is completed under supervision with an expectation of independent applicant scholarship.

PED7002W MD IN PAEDIATRICS

360 NQF credits at NQF level 10

Convener: Professor R Muloiwa

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.

PED7004W MMED IN PAEDIATRICS PART 1

60 NQF credits at NQF level 9

Convener: Dr A Ndondo

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

370 DEPARTMENTS IN THE FACULTY

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.

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.

PED7006W MMED IN PAEDIATRICS PART 2

60 NQF credits at NQF level 9

Convener: Dr A Ndondo

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.

Assessment: Candidates write the final examination of the College of Paediatricians. The examination comprises two written papers, a written OSCE, and a clinical examination.

PED7007W PAEDIATRICS MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr A Ndondo

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.

Assessment: External examination of the minor dissertation.

PED7009W MPHIL IN PAEDIATRIC NEPHROLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor M McCulloch and Dr P Nourse**Course entry requirements:** Qualification as specialist paediatrician in South Africa or approved other country.**Course outline:**

This training program forms part of the certification process of specialist pediatricians to become subspecialists in pediatric nephrology. Students follow the relevant curriculum of the College of Pediatricians 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 pediatric 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 pediatric renal problems, ranging from pediatric 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 specialties e.g. pediatric cardiology, endocrinology and oncology; kidney disorders of adolescents; pediatric 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 pediatric 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 Pediatricians at www.collegemedsa.ac.za.

DP requirements: At least 18 months (or as prescribed by CMSA) as a subspeciality trainee in an accredited subspeciality unit in a teaching hospital; a written report from the head of the institution/program; a satisfactorily completed logbook; departmental presentation of a research proposal, approval of a research results, or approval of a research proposal by departmental research committee.

Assessment: Candidates write the relevant examination of the College of Pediatricians of South Africa. The examination comprises two written papers followed by an OSCE and an oral component. An overall pass mark of 50% is required to pass the exam.

PED7010W MPHIL IN NEONATOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Associate Professor MC Harrison**Course entry requirements:** Qualification as specialist paediatrician in South Africa or approved other country.(see FMD1; MPhil programmes in subspecialty disciplines)**Course outline:**

This training program forms part of the credentialing process of specialist pediatricians to become subspecialists in neonatology. Students follow the relevant curriculum of the College of Pediatricians of South Africa (CMSA) 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 procedure skills, the application of knowledge and skills in daily practice, organizational aspects of neonatology, quality assurance and a perinatal audit, 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 and pharmacology, microbiology, virology, and immunology, as well as genetics and nutrition. Candidates are taught to recognize, assess, and treat a range of problems, including those that are cardiovascular, neural, renal, gastro-intestinal, hematological, and respiratory. In addition, clinical problems in endocrinology and dermatology and a range of acute and chronic infections of the fetus 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. Candidates are exposed to research method study design and biostatistical analysis during participation in clinical research and preparation of a research proposal for PED7020W.

372 DEPARTMENTS IN THE FACULTY

The detailed curriculum is available in the relevant regulations of the College of Paediatricians at www.collegemedsa.ac.za.

DP requirements: At least 18 months training (or as prescribed by CMSA) as a subspecialty trainee in an accredited subspecialty unit in a numbered trainee post; a written report from the head of the institution/program indicating adequate clinical progress and competency evidenced by a completed logbook showing competency in clinical procedures and assessment; departmental presentation of a research proposal, research results, or approval of a research proposal by departmental research committee.

Assessment: Candidates undergo the relevant subspecialist Certificate in Neonatology 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 sub-minimum pass mark of 50% is expected for each of the two components of the examination.

PED7011W MPhil IN PAEDIATRIC ONCOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor 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 credentialing 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.

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.

PED7012W MPhil IN PAEDIATRIC CARDIOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Dr G Comitès

Course entry requirements: Qualification as specialist paediatrician in South Africa or approved other country.(see FMD1; MPhil programmes in subspecialty disciplines)

Course outline:

This training program forms part of the credentialing process of specialist pediatricians to become subspecialists in pediatric 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 Pediatricians 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; hemostasis; 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 catheterization; percutaneous interventions; echocardiography; cardiac imaging; ECG evaluation; exercise testing; electrophysiology; related knowledge of pacemakers; and the principles of post-operative management including hemodynamic monitoring and the use of inotropes and vasodilators. For the detailed curriculum, see the regulations of relevant College of Pediatricians at www.collegemedsa.ac.za.

DP requirements: At least 24 months' training (or as prescribed by CMSA) as a subspeciality trainee in an accredited subspeciality unit; a written report from the head of the institution/program; a satisfactorily completed portfolio; departmental presentation of a research proposal, proposal submission to ethics or approval of a research proposal by departmental research committee; 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 Pediatricians 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.

PED7019W PAEDIATRIC NEPHROLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor M McCulloch and Dr P Nourse

Course entry requirements: Registered for or completed PED7009W

Course outline:

The minor dissertation, prepared under supervision, is a requirement for senior registrars to graduate with the MPhil degree. The dissertation may be submitted in "publication-ready/already published format" according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 words in length, and must be on a topic in pediatric 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. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. 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.

Assessment: Examination of the minor dissertation is by two examiners (one of whom must be external).

PED7020W NEONATOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor MC Harrison

Course entry requirements: Registered for or completed PED7010W

Course outline:

The dissertation may be submitted in “publication-ready/already published format” according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 words in length, and must be on a topic in neonatology. It must also be based on a study for which the work was completed while the candidate was registered in PED7010W or PED7020W. The findings of the dissertation should contribute to the scientific understanding of the topic. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. Students receive guidance in statistics, 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.

Assessment: Examination of the dissertation by two examiners (one of whom must be external).

PED7021W PAEDIATRIC ONCOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor 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. The dissertation may be submitted in “publication-ready format” including a publication-ready manuscript of between 2000 - 5000 word or it may be submitted as a standard monograph, usually between 6 000 and 16 000 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. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. 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.

Assessment: Examination of the minor dissertation by two examiners (one of whom must be external).

PED7022W PAEDIATRIC CARDIOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr G Comitis

Course entry requirements: Registered for, or completed PED7012W

Course outline:

The minor dissertation, prepared under supervision, is a requirement for senior registrars to graduate with the MPhil degree. The dissertation may be submitted in “publication-ready/already published format” according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 words in length, and must be on a topic in pediatric 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. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. 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 the dissertation. The candidate may also be required to present the work at a congress and submit the research for publication.

Assessment: Examination of the minor dissertation is by two examiners (one of whom must be external).

PED7023W MPHIL IN PAEDIATRIC ENDOCRINOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Dr M Carrihill**Course entry requirements:** Qualification as specialist paediatrician in South Africa or other approved country.**Course outline:**

This training program forms part of the credentialing process of specialist pediatricians to become subspecialists in pediatric endocrinology. Students follow the relevant curriculum of the College of Pediatricians of South Africa and, on successful completion of the Certificate in Endocrinology, Metabolism and Diabetes (Paeds) examination of the Colleges of Medicines of South Africa, are granted credit towards PED7023W. The curriculum covers a range of related emergencies (such as hypoglycemic and diabetes-related comas); the diagnosis and management of Diabetes Mellitus, hypoglycemia, a range of other endocrine pancreatic disorders; lipid disorders; thyroid disorders; pituitary disorders; adrenal disorders; parathyroid disorders; metabolic bone disease; endocrine hypertension; growth and pubertal disorders; disorders of sex development; 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 Pediatricians at www.collegemedsa.ac.za.

DP requirements: At least 24 months (or as prescribed by CMSA) as a subspeciality trainee in an accredited subspeciality unit in a numbered trainee post; a written report from the head of the institution/program; a completed logbook; departmental presentation of a research proposal, research results, or approval of a research proposal by departmental research committee and an ethics submission; 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 Pediatricians of South Africa. The examination comprises a written and an oral component. Each of the two components contributes 50% to the overall mark. The pass mark for the overall examination is 50%.

PED7024W PAEDIATRIC ENDOCRINOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr M Carrihill**Course entry requirements:** Registered for, or completed PED7023W**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 may be submitted in "publication-ready/already published format" according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 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.

Assessment: Examination by two examiners, one must be external.

PED7025W MPHIL IN PAEDIATRIC NEUROLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor J Wilmshurst**Course entry requirements:** Qualification as specialist paediatrician (see FMD1; MPhil programmes in subspeciality disciplines).

Course outline:

This training program forms part of the accreditation process of specialist pediatricians to become subspecialists in pediatric neurology. Students follow the relevant curriculum of the College of Pediatricians of South Africa and, on successful completion of the Certificate in Pediatric 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 tumors, 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 pediatric 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 Pediatricians at www.collegemedsa.ac.za.

DP requirements: Certification of having completed at least 18 months (or as prescribed by CMSA), 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/program in which they trained indicating satisfactory completion of all training requirements; submission of a satisfactorily completed portfolio; departmental presentation of a research proposal, or approval of a research proposal by departmental research committee; presentation; ethics submission. 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 coauthored manuscript in a peer-reviewed journal.

Assessment: Candidates write the relevant examination of the College of Pediatricians 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.

PED7026W PAEDIATRIC NEUROLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor J Wilmshurst

Course entry requirements: Registered for, or completed PED7025W

Course outline:

The minor dissertation, prepared under supervision, is a requirement for senior registrars to graduate with the MPhil degree. The dissertation may be submitted in "publication-ready format", including a publication-ready manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 words in length, and must be on a topic in pediatric 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. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. 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.

Assessment: Examination (external but may also include one internal examiner) of the minor dissertation.

PED7027W MPhil IN PAEDIATRIC CRITICAL CARE PART 1

120 NQF credits at NQF level 9

Convener: Professor S Salie**Course entry requirements:** Qualification as specialist Paediatrician, Anaesthetist, Paediatric Surgeon in South Africa or approved other country (see FMD1; MPhil programmes in subspecialty disciplines).**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.

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 they 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.

PED7028W PAEDIATRIC CRITICAL CARE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor S Salie**Course entry requirements:** Registered for, or completed PED7027W**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 may be submitted in "publication-ready/already published format" according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 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. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. 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.

Assessment: Examination of the minor dissertation via the UCT postgraduate office, by two examiners (one of whom must be external).

PED7029W MPHIL IN DEVELOPMENTAL PAEDIATRICS PART 1

120 NQF credits at NQF level 9

Convener: Professor K Donald**Course entry requirements:** Qualification as specialist paediatrician in South Africa or approved other country. (see FMD1; MPhil programmes in subspecialty disciplines)**Course outline:**

This training program forms part of the credentialing process of specialist pediatricians as subspecialists in developmental pediatrics. Students follow the relevant curriculum of the College of Pediatricians 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 behavior 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 behavioral disorders, cognitive developmental disabilities, educational issues, and rehabilitation and the management of social problems such as child abuse. The pediatric heritage therefore must 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 behavior problems, and manage a wide variety of clinical problems and conditions commonly encountered in developmental pediatrics

DP requirements: Completion of at least 18 months (or as prescribed by CMSA) as a subspecialty trainee in an accredited subspecialty unit; written report from the head of the institution indicating satisfactory completion of all training requirements; submission of a portfolio; departmental presentation of a research proposal, or approval of a research proposal by departmental research committee; must have submitted an ethics proposal. Also 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 Pediatricians at www.collegemedsa.ac.za.

Assessment: Candidates write the relevant final examination of the College of Pediatricians 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 NQF credits at NQF level 9

Convener: Professor K Donald**Course entry requirements:** Registered for, or completed PED7029W**Course outline:**

The minor dissertation, prepared under supervision, is a requirement for those senior registrars to graduate with the MPhil degree. The dissertation may be submitted in "publication-ready/already published format" according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 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. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. 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.

Assessment: Examination of the minor dissertation by two examiners (one of whom must be external).

PED7031W MPHIL IN MATERNAL AND CHILD HEALTH BY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor B Morrow

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 an area relevant to the discipline of 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 for approval and having obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results, and write up the dissertation.

Assessment: The dissertation is externally examined.

PED7032W MATERNAL & CHILD HEALTH THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor M Coetzee

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.

PED7033W MPHIL IN PAEDIATRIC INFECTIOUS DISEASES PART 1

120 NQF credits at NQF level 9

Convener: Professor BS Eley

Course entry requirements: Qualification as specialist paediatrician in South Africa or other approved country.

Course outline:

This training program forms part of the credentialling process of specialist pediatricians to become subspecialists in pediatric infectious diseases. Students follow the relevant curriculum of the College of Pediatricians 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 Pediatricians at www.collegemedsa.ac.za.

DP requirements: At least 18 months training (or as prescribed by CMSA), as a subspecialty trainee in an accredited subspecialty unit in a numbered trainee post; a written report from the head of the institution/program; a completed logbook; departmental presentation of a research proposal, approval of a research proposal by departmental research committee; ethics submission; 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 two-hour OSCE, and an oral examination. The final examination includes assessment of the candidate's ability to perform research or at least to scrutinize and appropriately evaluate research data and scientific articles.

PED7034W PAEDIATRIC INFECTIOUS DISEASES MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor BS Eley

Course entry requirements: Registered for, or completed PED7033W

Course outline:

The minor dissertation, prepared under supervision, is a requirement for senior registrars to graduate with the MPhil degree. The dissertation may submit in "publication-ready/already published format" according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 words in length, and must be on a topic in pediatric 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 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 is strongly encouraged to submit the research for publication in a peer-review journal.

DP requirements: Registered for, or completed PED7033W

Assessment: Examination by two examiners, one must be external.

PED7035W MPhil IN PAEDIATRIC PULMONOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor HJ Zar

Course entry requirements: Qualification as specialist paediatrician in South Africa or approved other country.(see FMD1; MPhil programmes in subspecialty disciplines)

Course outline:

This training programme forms part of the credentialing 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 in appropriate laboratory diagnostic studies. For the detailed curriculum, see the regulations of the relevant College of Paediatricians at www.collegemedsa.ac.za.

DP requirements: At least 18 months (or as prescribed by CMSA) as a subspeciality trainee in an accredited pulmonology unit; a written report from the head of the institution/programmed; a completed logbook; departmental presentation of a research proposal, research results, or approval of a research proposal by departmental research committee; 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 NQF credits at NQF level 9

Convener: Professor HJ Zar

Course entry requirements: Registered for or completed PED7035W

Course outline:

The minor dissertation, prepared under supervision, is a requirement for those senior registrars. The dissertation may be submitted in “publication-ready/already published format” according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 words in length, and must be on a topic in pediatric pulmonology. It may be based on a study.

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. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. Students gain training in statistics, research methods, conducting literature reviews, and designing a research proposal. Having obtained formal ethics approval, where necessary, they analyze 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: Examination of the minor dissertation by two examiners (one of whom must be external).

PED7037W HEALTH COMMUNICATION THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor M Coetzee

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 the discipline’s body of knowledge as this relates to maternal and child health with expertise and current specialist knowledge in an area 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 specialization; and an ability to apply knowledge, theory and research methods creatively to complex practical, theoretical and epistemological problems in the field of Health Communication. 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.

PED7039W MPhil IN PAEDIATRIC GASTROENTEROLOGY PART 1

120 NQF credits at NQF level 9

Convener: Dr R de Lacy**Course entry requirements:** Qualification as specialist paediatrician in South Africa or approved other country.**Course outline:**

This training program forms part of the credentialling process of specialist pediatricians to become subspecialists in pediatric gastroenterology. Students follow the relevant curriculum of the College of Pediatricians 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 pediatric 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 pediatric gastroenterology, hepatology and nutrition. For the detailed curriculum, see the regulations of the relevant College of Pediatricians at www.collegemedsa.ac.za.

DP requirements: At least 18 months (or as prescribed by CMSA) as a subspeciality trainee in an accredited subspeciality unit; a written report from the head of the institution/program; a completed logbook; departmental presentation of a research proposal, and approval of a research proposal by departmental research committee and ethics submission; 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 Pediatricians 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.

PED7040W PAEDIATRIC GASTROENTEROLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr R de Lacy**Course entry requirements:** Registered for or completed PED7039W**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: 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: Examination by two examiners, at least one examiner must be external.

PED7041W MPHIL IN PAEDIATRIC RHEUMATOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Dr K Webb

Course entry requirements: Qualification as specialist paediatrician in South Africa or approved other country.(see FMD1; MPhil Programmes in subspecialty disciplines)

Course outline:

This training program forms part of the credentialling process of specialist pediatricians to become subspecialists in pediatric rheumatology. Students follow the relevant curriculum of the College of Pediatricians of South Africa and, on successful completion of the Certificate in Pediatric 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, an etiology, 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; vasculitis's; metabolic bone disorders; regional bone disorders; and infections, arthritis, and other miscellaneous disorders such as rheumatic syndromes associated with endocrine and hematological 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 Pediatricians of South Africa at www.collegemedsa.ac.za.

DP requirements: At least 18 months (or as prescribed by CMSA) as a subspecialty trainee in an accredited subspecialty unit; a written report from the head of the institution/program indicating adequate clinical progress and competency; a completed logbook; departmental presentation of a research proposal, or approval of a research proposal by departmental research committee and an ethics submission. 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 Pediatricians 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.

PED7042W PAEDIATRIC RHEUMATOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr K Webb

Course entry requirements: Registered for, or completed PED7041W

Course outline:

The minor dissertation, prepared under supervision, is a requirement for senior registrars to graduate with the MPhil degree. The dissertation may be submitted in "publication-ready format" including a publication-ready manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 words in length, and must be on a topic in pediatric 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.

Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. 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: None.

Assessment: Examination of the minor dissertation by two examiners (one of whom must be external).

PED7043W MPHIL IN ALLERGOLOGY (PAEDIATRIC) PART 1

120 NQF credits at NQF level 9

Convener: Associate Professor ME Levin

Course entry requirements: Qualification as specialist paediatrician in South Africa or approved other country.

Course outline:

This training programme forms part of the credentialing process for specialist pediatricians 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 daily (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.

DP requirements: In addition to being registered paediatricians, candidates must have completed at least 18 months (or as prescribed by CMSA) 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 they trained indicating satisfactory completion of all training requirements. Must submit a satisfactorily completed logbook; departmental presentation of a research proposal, research results, or approval of a research proposal by departmental research committee; 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.

PED7044W PAEDIATRIC ALLERGOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor ME Levin

Course entry requirements: Registered for or completed PED7043W

Course outline:

The minor dissertation, prepared under supervision, is a requirement for senior registrars to graduate with the MPhil degree. The dissertation may submit in "publication-ready/already published format" according to university guidelines, including a manuscript of between 2000 - 5000 words or it may be submitted as a standard monograph, usually between 6 000 and 16 000 words in length, and must be

on a topic in allergology. It should be of a standard publishable in a peer-reviewed medical or allergy journal. Approval of the research on which the dissertation is based, is required from the head of the relevant department(s), departmental research committee(s), the supervisor(s), and the relevant research ethics committee if the study involves human or animal subjects. 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 analyze the results, present the work at a congress, and submit the research for publication.

DP requirements: None

Assessment: Examination by two examiners, at least one examiner must be external.

PATHOLOGY

Professor and Head (UCT/NHLS joint staff):

K Pillay, MBChB, FCPATH (SA), FRCPath(UK), MMed Anat Path (UCT). Paediatric Pathology

Anatomical Pathology

Level 4, Falmouth Building North/D7, Groote Schuur Hospital/1st Floor ICH Building, Red Cross Children's Hospital

Professor Full-time:

K Pillay, MBChB *UKZN MMed Cape Town FCPATH SA FRCPath UK*

Associate Professor Full-time:

R Naidoo, BScHons *UDW MMedSc PhD UKZN*

Emeritus Professor:

D Govender, MBChB MMed PhD *UKZN FCPATH (Anat Path) SA FCPATH ECSA FRCPath London IFCAP FAMM*

Emeritus Associate Professor:

HC Wainwright, MBChB *Cape Town FCPATH (Anat Path) SA*

Honorary Senior Lecturer:

J Yeats, FCPATH (SA) *Virology Cape Town*

Honorary Lecturer:

A Aldera, MBChB MMed *UCT FCPATH (Anat Path) SA DipRCPATH UK*

M Duffield, MBChB *Rhod LRCP&S Edin & Glas MMED (Anat Path) Cape Town MRCPATH*

Senior Lecturers Full-time:

R Roberts, MBChB MMed *Cape Town FCPATH (Anat Path) SA*

D Chetty, MBBCh *Witwatersrand MMed Cape Town FCPATH (Anat Path) SA*

Lecturers Full-time:

J Chokoe, MBChB *SMU MSc (Anat Path) Stell*

L Govender, MBChB *Pret*

N Ikumi, BSc Hon *Kenya, MSc UK, PhD Kenya*

W Mudini, MBChB *UZ MMed WITS FCPATH (Anat Path) SA*

B Price, MBBCh *Witwatersrand MMed Cape Town FCPATH (Anat Path) SA PhD UKZN*

A Ramburan, BScHons MMedSc *SA PhD Stell*

S Singh, MBChB MMed *UKZN FCPATH (Anat Path) SA*

J de Stadler, MBChB, MMed *Cape Town*

Medical Officer Full time:

S Likumbo, MBChB *Botswana, MMed Cape Town*

Assistant Lecturers / Registrars:

R Chimatira, MBChB *Zimbabwe*

NM da Costa, MBChB *UFS*

M du Toit, MBChB *Pretoria*

C Dittrich, MBChB *Cape Town*

J Enslin, MBChB *Cape Town*

G Fakier, MBChB *Cape Town*

A Gyan, MBChB *Stell*
 J Lunn, MBChB *Cape Town*
 K Ragnuth, MBChB *Mauritius*
 WD Rocher, MBChB *Pretoria*
 T Solomon, MBChB *Cape Town*
 A Soni, MBChB *Cape Town* W-J Tsai, MBBCh *Witwatersrand*
 RJ Wessels, MBChB *Stell*

Chief Scientific Officer/Research Laboratory Manager:

R Kriel, NDip (Medical Technology) *CPUT* Dip (Prof Photography) PGDip (Business Management) *UKZN*

Senior Technical Officer:

M Adonis, *MSc Phys Sci Stell, Bsc Hon Med Bio UWC*

Laboratory Managers (NHLS):

S Davids, (Cytopathology-Groote Schuur Hospital) NDip (Medical Technology) *CPUT*
 E Dollie, (Histopathology-Red Cross Hospital) NDip (Medical Technology) BTech (Biomedical Technology) *CPUT*
 J Fortuin, (Histopathology-Groote Schuur Hospital) NDip (Medical Technology) *CPUT*

Chemical Pathology

Level 6, Entrance 4, Falmouth Building
C17 New Main Building, Groote Schuur Hospital;
Red Cross War Memorial Children's Hospital

Head:

TBC

Associate Professor:

GF Van der Watt, MBChB *Pret MMed Cape Town FCPATH SA*

Emeritus Professor:

AD Marais, MBChB *Cape Town FCP SA*

Honorary Professors:

DB Sacks, MBChB NIH *Bethesda MD USA*
 TS Pillay, MBChB *UKZN PhD Cambridge MRCPATH UK*

Senior Lecturers:

H Vreede, (Principal Specialist) MBChB *MMed Cape Town*

Senior Scholar:

DM Blackhurst, PhD *Cape Town*

Lecturers Full-time:

JA Rusch, BSc Physio *MBBCh Witwatersrand MMed Cape Town FCPATH SA*
 S Meldau, BSc Genetics *Free State BSc Hons Med MSc Med Cape Town*
 J Pillay, BSc Biochem/Micro BSc Hons Biochem *KZN MSc Forensic London*
 B Southon BSc Biochem/Hum Phys *JHB BHSc Hons Forensic MSc Forensic/Path Witwatersrand*

Honorary Lecturers:

PH Fortgens, *MBBCh Witwatersrand MMed Cape Town FCPATH SA PhD UKZN*
 C Hudson, MBChB *Cape Town MMed Stellenbosch FC Path SA*

388 DEPARTMENTS IN THE FACULTY

JC Stanfliet, MBChB *Cape Town* FCPATH SA
F Omar, MBChB *Stell* MMed *Cape Town* FCPATH SA

Registrars:

CA Francis, MBChB *Free State*
TA Gcingca, MBChB *Cape Town*
KTR Magolego, MBChB *Pretoria*
M Mahomed, MBChB *Cape Town*
R Singh-Gansan, MBChB *KwaZulu-Natal*

Forensic Medicine

Level 1, Entrance 3, Falmouth Building

Professor and Head:

LJ Martin, MBBCh *Witwatersrand* MMed *Cape Town* Dip (Forensic Medicine) FCForPath SA

Senior Lecturers Full-time:

I H Alli, MBBS (*Mysore*) FC For Path (*CMSA*), Dip For. Path. /Clin. Path (*CMSA*) Cert. (Medical Law)(*Unisa*) PG. Dip. For. Odon. *UWC*
LJ Heathfield, BSc *UCT* BSc(Med)Hons *UCT* MSc *Strathclyde* PgDip *UCT* PhD *UCT*
GM Kirk, MBBCh *Witwatersrand* Dip (Forensic Medicine) FCForPath SA
Y van der Heyde, BSc MBChB MMed *Cape Town* Dip (Forensic Medicine) SA BA (Hons.) Islamic Studies (*IPSA*)

Lecturers Full-time:

S Abrahams, BSc *UCT* BSc(Med)Hons *UCT* PhD *UCT*
A. Awath-Behari, MBChB *Natal* PGDipBusMgt *Natal* PGDipPracDERM
CARDIFF MScPracDERM *CARDIFF* Dip for Med SA PATHTL V Bachan, MBChB *UCT* Dip for Med SA Path FC for Path SA MMed Path (Foren)
L Clegg, MBChB Dip for Med SA Path
Cook MBChB *UCT* Dip For Med SA Path
C De Vaal, MBChB *Stell* Dip (Forensic Medicine Pathology) MPhil SA
B Davies, PGDip (Med Tox) *Stell* BScHons *Cape Town* MSc *George Washington*
CG Mole, BSc *UCT* BSc Hons *Stell* MPhil *UCT*
IJ Molefe, MBChB *Cape Town* Dip (Forensic Medicine Pathology) FCForPath SA
AM Reeve, MBChB *Stell* Dip for Med (Path)
L Taylor, MBChB *UCT* DipForMed SA Path MMed Path (Foren) FCForPath SA

Medical Technologists:

Y Davies, NDip (Medical Technology) *CPUT*
M Perrins, NHDip (Medical Technology) *CPUT*

Scientific Officers:

Y Vandayar, BSc *UKZN* BSc Hons *UKZN* MPhil *UCT*

Haematology

Chris Barnard Building

Associate Professor and Head:

J Opie, MBChB *Cape Town* MRCP UK FRCPA (Haematology) *AUS*

Associate Professor:

S Mowla, PhD *Cape Town*

K Shires, PhD *Cape Town*

Lecturers (Full Time) and Haematology Pathologists:

J Bailly, MBChB *UFS FCPATH SA*

M Kriel, MBChB *Stell MCLinEpi Stell FCPATH SA MMed Cape Town*

L Lemkus MBBCh (Wits) FCPATH Haem (SA)

R Lohlun, MBBCh (Wits), FC Path Haem (SA), MMed (Stell)

Honorary Lecturer:

T Gerdener, MBChB *UP FCPATH SA Cert in Clin Haem Cape Town*

Honorary Associate Professor:

G Davison, PhD *Cape Town*

Assistant Lecturers / Registrars:

K De John, MBChB *Cape Town*

M du Toit, MBChB *Walter Sisulu*

A Kema, MBChB *Cape Town*

V Parker, MBChB *Cape Town*

D Richardson, MBChB Hons *Cape Town*

R Shein, MBChB *Wits*

Human Genetics

Room 3.14, Level 3, Wernher and Beit North, IDM

Professor and Head:

RS Ramesar, BScHons MSc *UKZN PhD MBA Cape Town*

Professor/Senior Specialist:

A Wonkam, MBChB *Cameroon MD Dip (Medical Genetics) Switzerland PhD Cape Town*

Professor:

C Dandara, BScHons PhD *Zimbabwe*

Emeritus Professors:

PH Beighton, MD *London PhD Witwatersrand FRCP UK FRCPC FRS SA*

LJHL Greenberg, BSc *Stell PhD Cape Town*

Honorary Professors:

W James, BAHons *UWC MSc PhD Madison Wisconsin*

MJA Wood, MBChB *Cape Town MA DPhil Oxon*

Senior Specialist/Associate Professor:

K Fiegggen, MBChB *Cape Town FCPaeds Cert (Med Genet) SA*

C Spencer, MBCHB *Stell DCH FCMG MMed Cape Town*

Senior Lecturers:

S Dalvie, BSc(Med)Hons MSc(Med) PhD *Cape Town*

T Wessels, MSc PhD *Witwatersrand*

Lecturer

K Mnika BSc Honours *UFS PhD Cape Town*

390 DEPARTMENTS IN THE FACULTY

Research Officer

LJ Roberts, BScHons MSc PhD Cape Town

Sessional Specialist and Honorary Senior Lecturer:

S Zieff, MBChB MMed *Cape Town FCP SA*

Immunology

Level 3, Entrance 2, Falmouth Building, and Wernher and Beit Building South, IDM

Professor and Head of Division:

E Mayne, BA SA MBBCH Wits MMed Wits FCPATH haem

Professors:

F Brombacher, PhD *Freiburg*

M Jacobs, PhD *Cape Town*

M Hatherill, MBChB MMed MD *Cape Town*

T Scriba, PhD *Cape Town*

Honorary Professor:

GD Brown, PhD *Cape Town*

Associate Professors:

R Guler, PhD *Switzerland*

Visiting Professor:

G Ferrari, MD *Genoa*

Senior Lecturer:

S Hadebe, PhD *Aberdeen*

Honorary Research Associate:

F Kirstein, PhD *Cape Town*

H Jaspán, BSc USA MD PhD *Tulane FAAP PaedsID Washington*

MJ Marakalala, PhD *Cape Town*

Research Scientists:

J Hoving, PhD *Cape Town*

N-J Hsu, PhD *Cape Town*

E Nemes, PhD *Italy/France*

NC Tsikiwa, PhD *Cape Town*

NHLS Staff:

J Banks, Dip (Medical Technology)

L Johnson, Dip (Medical Technology)

K Jonas, Dip (Medical Technology)

S Maart, (Lab Manager) Dip (Medical Technology)

B Pillay, Dip (Medical Technology)

N Semela, Dip (Medical Technology)

G Sheba, Dip (Medical Technology)

Z Vallie-Moosa, Medical Scientist

M Watkins, MSc (Medicine) PhD *Cape Town*

Manager FACS Facility:

R Dreyer

Falmouth Laboratory Manager:

B Allinde

Medical Microbiology*Level 5, Entrance 2/3, Falmouth Building, Faculty of Health Sciences Campus***Professor and Head:**AJ Brink, MBChB MMed *University of Pretoria***Professor and Director (MRC/NHLS/UCT Molecular Mycobacteriology Research Unit):**V Mizrahi, BScHons PhD *Cape Town OMS MASSAf FRSSAf FAAM***Professors:**H Cox, BSc MPH PhD *UM Australia*DF Warner, BCom BScHons PhD *Witwatersrand*S Parihar, PhD *Cape Town***Senior Lecturers Full-time:**W Dowling, MBChB, DTM&H *Witwatersrand FCPATH (Microbiology) MMed SA*A Khumalo, MBChB *FCPATH (Microbiology) SA*E Prentice, BA MBBCh *Witwatersrand DTM&H FCPATH (Microbiology) SA*N Samodien, MBBCh *Witwatersrand FCPATH (Microbiology) SA*H Tootla, MBChB *Cape Town FCPATH (Microbiology) SA***Lecturers:**C Moodley, PhD *Cape Town*L Paul, PhD *Cape Town*S Parihar, PhD *Cape Town***Research Scientists:**M Chengalroyen, PhD *Witwatersrand*M Mason, PhD *Cape Town***Honorary Lecturers:**C Bamford, MBChB *Cape Town MMedPath (Microbiology) Cape Town FCPATH (Microbiology) SA MPH MCH Cape Town DipCH*S Budree, MBChB *Cape Town FCPaeds & Cert Paeds Gastro SA*R Chen, MD *Virginia Commonwealth MSPH (Epidemiology) Alabama CJ Opperman, MBChB Stellenbosch MMedPath Cape Town FCPATH (Microbiology) SA*A Coussens, BSc (Hons) PhD *Queensland*JSN Govender, MBBCh *FCPATH (Microbiology) MMedPath Witwatersrand*DA Lewis, FRCP *UK PhD Dip (GUM) DTM&H*O Majdi, MBBS *DTM&H London MPH UK*G Marais, MBChB *Pretoria MMed (Viro) Cape Town FCPATH (Viro) SA Dip in Anaesthetics*Diploma in HIV Management *CMSA*E Mohr-Holland, BA *NY MPH MA*R Muller, PharmD PhD *Bonn Hab TU*MP Nicol, MBChB MMed *Witwatersrand DTM&H FCPATH (Microbiology) SA PhD Cape Town*P Naicker, MBBCh *UKZN DTM&H Witwatersrand FCPATH (Microbiology) SA*DH Onywera, PhD *Cape Town*RPH Peters, MD MSc PhD *LSTM Dip HIV Man SA*AM von Gottberg, MBBCh *DTM&H Witwatersrand FCPATH (Microbiology) SA PhD Witwatersrand*

392 DEPARTMENTS IN THE FACULTY

J Wojno, MBBCh *Witwatersrand* MMedPath (Microbiology) *Cape Town* FCPATH (Microbiology) SA

Registrars:

CY Chu, MBChB *Cape Town*

AJ Overmeyer, MBChB *Cape Town*

J Horak, MBChB *Stell* DTM & H RCP Dip in HIV management SA

G Marais, MBChB *Pretoria* MMed (Viro) *Cape Town* FCPATH (Viro) SA Dip in Anaesthetics
Diploma in HIV Management *CMSA*

M van der Westhuyzen, MBChB *Stell*

Medical Virology

Werner and Beit Building South (IDM), Faculty of Health Sciences Campus

Professor and Head (UCT/NHLS joint staff):

C Williamson, PhD *Cape Town*

Professor and SARCHI Chair in Vaccinology (UCT):

AL Williamson, PhD *Witwatersrand*

Associate Professors (UCT):

W Burgers, PhD *Cantab*

Associate Professors (NHLS/UCT joint staff):

D Hardie, MBChB MMed *Cape Town*

M Hsiao, MBChB DTM&H *Witwatersrand* MMed *Cape Town* FCPATH (Virology) SA

JS Passmore, PhD *Cape Town*

Senior Lecturers/Clinical Virologists (NHLS/UCT joint staff):

S Korsman, MBChB *Pret* MMed *Stell* FCPATH (Virology) SA

Senior Lecturer/Scientist (UCT/NHLS joint staff):

Mr Abrahams, PhD *Cape Town*

Ziyaad Valley-Omar PhD *Cape Town*

Lecturers:

MR Abrahams, PhD *Cape Town*

Registrars:

M Maseko MBChB *Cape Town*

M Kwon, MBChB *Pret* –

M Naidoo, MCBhB *UKZN*

K Sematle, MBChB *SMU*

T Smith MBChB *Cape Town*

Honorary Professor:

DA Lewis, PhD *FRCPUK*, *FACHSHM*

Honorary Associate Professor: -

AD Redd, PhD *Harvard*

Honorary Research Associates: -

N Chigorimbo-Tsikiwa PhD *Cape Town*

G Chege, PhD *Cape Town*

N Douglass PhD Cape Town

Honorary Senior Lecturers:

E Andersen-Nissen, PhD *USA*

A Bere, PhD *Cape Town*

A Enoch, MBChB *Pret DA(SA)DipHIVMan MMedUCT,FCPath (Virology) SA*

L Masson, PhD *Cape Town*

Senior Research Officers:

R Chapman, PhD *Cape Town*

R Keeton, PhD *Cape Town*

C Riou, PhD *Lyon*

Research Officer:

F Khumalo, PhD *Cape Town*

A Yssel, PhD *KU Leuven*

Junior Research Fellow:

R Bunjun, PhD *Cape Town*

TF Ramla, PhD *Cape Town*

MZ Zulu, PhD *Cape Town*

Senior Scientific Officers:

C Adams, MSc *Cape Town*

N Ndabambi, MSc *UWC*

Shirley Smith MSc *Tshwane University of Technology* – ADD everything in Yellow

R Thebus, NDip (Medical Technology) *CPUT*

L Tyers, MSc *Cape Town*

T York, MSc *UKZN*

Scientific Officers:

A Gwashu-Nyangiwe, MSc *Stellenbosch*

B Kullin, PhD *Cape Town*

L Tyers, MSc *Cape Town*

Project Managers/Administrators:

A Besethi, BTech (Biomedical Technology) *CPUT*

S Cingo MSc *UCT*

P Cohen, MSc *Wits*

L Curry, MSc *UCT*

B Galvao, PhD *Cape Town*

R Harryparsad, MSc Med *Cape Town*

S Magugu, MSc Med *Cape Town*

A Ngomti, MSc Med *Cape Town*

A Nkayi, MSc *UKZN*

A Walters, MSc Med *Cape Town*

Bioinformatician

D Zimire, MSc *Stellenbosch* –

Project Managers/Administrators: B Galvao, PhD *Cape Town* **Senior Secretary** Z Hartley

Paediatric Pathology

Red Cross War Memorial Children's Hospital

Senior Lecturer Full-time and Acting Head:

MHG Shuttleworth, BScHons MBChB MMed *Cape Town*

Senior Lecturers Full-time:

K Pillay, MBChB FC Path (Anat Path) SA FRC Path UK MMed *Cape Town*

G van der Watt, MBChB FCPATH (Chem Path) DA SA

Medical Technologists (Chemical Pathology):

B Bergstedt, NDip (Clinical Pathology) (Chemical Pathology) BTech

R Brown, BSc NDip (Chemical Pathology)

P Joseph, NDip (Clinical Pathology)

I Kamaar, NDip (Clinical Pathology)

S Kear, NDip (Clinical Pathology)

P Mangala, NDip (Clinical Pathology)

R Manuel, NDip (Clinical Pathology)

C Seaton, NDip (Clinical Pathology) (Haematology) NHDip

L Ungerer, NDip (Chemical Pathology)

J van Helden, NDip (Chemical Pathology)

V West, NDip (Chemical Pathology)

Medical Technologists (Haematology):

Z Abrahams, NDip (Clinical Pathology) BTech *Cape Tech*

K Benjamin, NDip (Haematology) BTech *Cape Tech*

A Bertscher, NDip (Blood Transfusion) (Haematology) *Jhb Tech*

C Booysen, NDip (Clinical Pathology) (Haematology) *Cape Tech*

S Brink, NDip (Clinical Pathology) BTech *Cape Tech*

L de Wet, NDip (Clinical Pathology) *CPUT*

H Hendricks, NDip (Clinical Pathology) *Pen Tech*

M Pickard, NDip (Haematology) *Cape Tech*

M Prins, NDip (Clinical Pathology) BTech *Cape Tech*

G Tappan, NDip (Blood Transfusion) NDip (Haematology) *Cape Tech*

E van der Heyde, BSc NDip (Haematology) (Clinical Pathology) *Cape Tech*

T Zbodulja, NDip (Haematology) *Cape Tech*

Medical Technologists (Histopathology):

E Dollie, NDip (Histopath Techniques) BTech

S Ford, NDip (Histopath Techniques)

C Jackson, NDip (Microbiology) (Histopath Techniques) NHDip

PTY4003W HUMAN GENETICS COURSEWORK

78 NQF credits at NQF level 8

Convener: Dr K Mnika

Course outline:

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

PTY4004W HUMAN GENETICS RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr K Mnika

Course outline:

The research project begins in April and ends in September / October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

PTY4005W INFECTIOUS DISEASES & IMMUNOLOGY COURSEWORK

78 NQF credits at NQF level 8

Convener: TBC

Course outline:

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

PTY4006W INFECTIOUS DISEASES & IMMUNOLOGY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: TBC

Course outline:

The research project begins in April and ends in September/October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

PTY4007W FORENSIC GENETICS COURSEWORK

78 NQF credits at NQF level 8

Convener: TBC

Course outline:

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the coursework and in the examinations. To pass the coursework component, students must obtain an overall average of at least 50% with sub-minima of 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%); and final comprehension examination (5%).

PTY4009W FORENSIC GENETICS RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: TBC

Course outline:

The research project begins in April and ends in September/October. Students become integrated into research groups and participate in weekly research discussions and seminars. Finally, they write a research project and give an oral presentation of the research project.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Evaluation is based on performance in the research project. To pass the research component students must obtain a sub-minimum of 50% for the research project. The final mark is made up as follows: research project (35%); oral presentation of research project (5%).

PTY4012F/S KNOWLEDGE-BASED INTERACTION NETWORKS

15 NQF credits at NQF level 8

Convener: Professor N Mulder

Course outline:

The health outcomes of a complex disease, response to treatment, or responses to drugs, are often a result of a biological events involving genetics, epigenetics, human microbiomes or clinical and environmental profiles. Since many or all these factors may be involved, there is a to integrate information derived from these different omics data and environmental studies, as well as other heterogeneous datasets to enhance the predictive power of health care. This integrative analysis may enable further functional characterization of the biological phenomena being studied with increased confidence and correlate different factors by combining association signals from available knowledge sources, including functional, environmental, epidemiological, and clinical information. The integrative approaches have been shown to increase the likelihood of effectively identifying associated factors. Leveraging post-omics data sets can also increase functional prediction of disease risk. The exposure that current trainees and biomedical postgraduate students receive in leveraging post-Omics summary statistics to perform functional analysis remains informal and not yet incorporated as formal course at the University of Cape Town, particularly for biomedical students at health sciences. Therefore this course is proposed to enable biomedical students to (1) integrate omics datasets from heterogeneous sources to build biological networks to understand the interplay between components of a biological system; (2) leverage networks to do post-omics data analysis for biological interpretation and to conduct meta-analyses.

DP requirements: Students are required: to attend at least 90% of lectures, tutorials and practicals; and to pass all formative assessments of the coursework component in order to gain entrance to the final coursework examination.

Assessment: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%).

A student who fails the exam with 45% – 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY4013F/S DATA SCIENCE FOR EPIDEMIOLOGY HEALTH INFORMATICS

15 NQF credits at NQF level 9

Convener: Associate Professor N Tiffin

Course outline:

This course provides training in study design and data analysis for health data, and how to research health conditions and the risk factors (genetic and epidemiological) that underly them. Students will learn about health data sources constraints, and how these data are synthesised and integrated to derive meaningful clinical information. As clinical data provides a valuable source of phenotype data for public health genomics and genetic epidemiology research, biomedical students will learn how to use these data appropriately and effectively to generate meaningful phenotypes to integrated with genomic data. This course will also improve the students' ability to critically evaluate current biomedical research, and to better understand the underlying frameworks on which research using clinical data is conducted. The course addresses a critical gap in the quantitative research and hands-on data analysis capabilities in life science postgraduate students. Students will learn about health informatics and working with routine clinical data. Some methods that students will apply using R include: data coding and standardisation, calculations for odds ratios, risk ratios, prevalence, incidence, correlation, regression (linear and logistic), sensitivity/specificity calculations, ROC curves. The course will also cover key elements of data governance for routine health data.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45% – 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY4014F/S OMICS MEDICINE

15 NQF credits at NQF level 8

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

Omics is a rapidly evolving, multi-disciplinary, and emerging field that encompasses genomics, epigenomics, transcriptomics, proteomics, and metabolomics. Each of these fields offers the possibility to understand and view biology from a global perspective in a way that was previously unthinkable. Exploiting the potential of omics for clinical diagnosis, prognosis, and therapeutic purposes has currently been receiving a lot of attention. High-throughput methodologies can rapidly provide a global picture of the processes within cells at multiple levels, allowing for accelerated discoveries in health and disease. This course will introduce a solid foundation of molecular biology, it will involve a review of Mendelian and non-Mendelian inheritance, pedigrees as tools to understand family relationships & inheritance of disorders, sex-linked inheritance (e.g. the Y-chromosome), and disorders arising from chromosomal abnormalities, the role of genetics in sexuality and principal of genetic epidemiology. In addition, this course will introduce students to theoretical concepts and principles of various Omics technologies and their application in medicine. The course will be in the form of lectures and the discussion of papers. The course will be taught by faculty members with wide expertise consisting of both scientists and physicians, taking the student through aspects of what is observed in the clinic or hospital to how it is resolved in the laboratory. Teaching will cover technologies include, but are not limited to cancer, genomics, proteomics, epigenomics, metabolomics, transcriptomics, microbiomics, pharmacogenomics, globinopathies and genetic testing.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45% – 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY4015F/S OMICS DATA GENERATION, TECHNOLOGIES/PLATFORMS

15 NQF credits at NQF level 8

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

The rise of technologies that simultaneously measure thousands of data points represents the heart of systems biology. These technologies have had a huge impact on the discovery of next-generation diagnostics, biomarkers, and drugs in the precision medicine era. Driven by high-throughput omics technologies and the computational surge, it enables multi-scale and insightful overviews of cells, organisms, and populations. Exploiting the potential of Omics for clinical diagnosis, prognosis, and therapeutic purposes has currently been receiving a lot of attention. High-throughput methodologies can rapidly provide a global picture of the processes within genes, protein, cells at multiple levels, allowing for accelerated discoveries in health and disease. This course will introduce students to laboratory techniques, High-throughput methodologies and systematic comprehension of each Omics (genomics, proteomics, epigenomics, metabolomics, transcriptomics, microbiomics, pharmacogenomics) data standard, their choice for appropriate clinical application. Topics to cover in this course not limit to introduction to High-throughput platform methodologies of each Omics (genomics, proteomics, epigenomics, metabolomics, transcriptomics, microbiomics, pharmacogenomics), introduction to each Omics laboratory techniques (from DNA extraction, PCR to next Generation sequencing techniques), understanding each Omics (genomics, proteomics, epigenomics, metabolomics, transcriptomics, microbiomics, pharmacogenomics) data standard and clinical application.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45% – 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY4016F/S HIGH-PERFORMANCE COMPUTING

15 NQF credits at NQF level 8

Course outline:

Omics is an advanced analytical research field aiming for holistic characterization of any biological system or organism of interest involving serious computational cost tasks. In addition, the accumulation of new high throughput experimental data in biology results in high volumes of biomedical data which are difficult to manage, to store and to analyze. This course serves as an applied module for understanding High-Performance Computing techniques related to process, store, manage and transfer big biomedical data sets in enabling students to apply such skills in their respective projects. The course will empower biomedical students with solid foundations for developing, analyzing, and implementing parallel and locality-efficient for computationally cost tasks in big Omics data science using high-Performance Computing techniques via Linux command. Below are topics that will involve in this course: Introduce Linux programming and High-Performance Computing.

Able to understand the concepts of partitioning a problem for parallel computing in Omics context. Able to appreciate latest and emerging technologies in accessing the clusters and git. Introduce to NUMA and thread affinity. Introduce to parallel Omics data analysis: Netflix.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45% – 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY4017F/S OMICS-BASED SCIENTIFIC PROGRAMMING WITH PYTHON

15 NQF credits at NQF level 8

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

Computing has revolutionized the biological and biomedical sciences over the past several decades, such that virtually all contemporary research in molecular biology, biochemistry, and other biosciences utilizes computer programs. Python is a programming language that is increasingly popular in scientific era, particularly in the field of biomedical within various large-scale “Omics” to process and manipulate. This course will empower biomedical students with the ability and the solid foundation in using Python as computer language for solving computational, statistical problems pertinent to biomedical data science and for analysing big Omics data and their manipulation. In addition, this course will empower students with the ability for developing numerical/scientific computing and problem-solving biomedical skills through writing computers scripts with respect to various Omics approaches. Topics to be covered will include and not limited to understand types of control structures for big biomedical data science, as building blocks for all computer scripts, manipulate data structures and advanced programming objects to handle large-scale big data, understand the concepts/management of variable assignment, different data types, the memory allocation model, functions and function calls, with the mechanics of argument passing, appreciate the importance of writing programs with I/O capabilities, introduction to object-oriented programming and effectively write computer programs, retrieve process and manipulate arrays for big Omics data types.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45% – 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY4018F/S BIOMEDICAL DATA ANALYSIS WITH R

15 NQF credits at NQF level 8

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

The importance of biomedical data analysis, the analysis of variability that draws on our ability to quantify uncertainty and to draw logical inferences from observations, experiment in biomedical data science have been increasing at an unprecedented pace with the advancements of high-throughput biological data. Foundation in explaining and programming statistical concepts, will thereby bridge the gap in appropriately mining Omics data sciences and their interpretation. In that regard, this course seeks to empower biomedical students with the ability of analyzing and interpreting Omics data through various statistical and inference approaches omics data sciences using R programming language.

400 DEPARTMENTS IN THE FACULTY

This course will empower students with best practices of being biomedical data science analyst with special emphasis on various Omics data science. Topics to be covered in this course are R programming, Biomedical data visualization with R, Biomedical data manipulation with R, Understanding distributions in statistics and Population/sample, statistical inference and tests, Foundation in machine learnings for biomedical data analysis.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45% – 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY4021F/S OMICS RESEARCH AND BIO-INDUSTRY METHODOLOGY

15 NQF credits at NQF level 8

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

The Biotechnology and Biomedical industries are highly volatile and unpredictable sector due to the scientifically intensive operations of companies that reside here. Markets served include medical, agricultural, environmental, and industrial. Biotechnology/Biomedical firms are among the most research-intensive organizations in the world. This course will (1) provide training to biomedical students in industry approaches and practices (2) empower biomedical students with detailed understanding of entrepreneurial skills and concepts; and with necessary competencies to run, involve or establish their own entrepreneurial venture in a business context and (3) facilitate interaction between biomedical students with various bio-industries. Topics to be covered are Biomedical research and bio-industries principles/concepts, processes and all their facets in the work/research environment. Scientific research, ethical principles and behaviour in research, and the nature, methods and process of conducting quantitative and qualitative biomedical research. Standards and practice in a bio-industry sectors related to biomedical research or career ambitions. Entrepreneurial skills and concepts; and competencies to run, involve or establish entrepreneurial venture in a business context in biomedical sectors.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45% – 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY4022W FORENSIC ENTOMOLOGY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr L Heathfield

Course outline:

The student will be required to carry out a research project under supervision. The research project will pertain to the use of insects and related arthropods that inhabit and feed upon decomposing remains to aid medicolegal investigations, principally through estimation of post-mortem interval, location of remains, identification of victims, determination of antemortem drug usage (through entomotoxicology) and reconstruction of events. The course will develop the student's laboratory techniques and research skills.

DP requirements: Obtain $\geq 50\%$ in written research project.

Assessment: This course will be assessed as a written research project. It will also comprise an integrated assessment (typically an oral exam) which counts 5% towards the mark for this course.

PTY4023W FORENSIC ENTOMOLOGY COURSEWORK

78 NQF credits at NQF level 8

Convener: Dr L Heathfield

Course outline:

The course aims to provide students with knowledge and skills pertaining to the use of insects and related arthropods that inhabit and feed upon decomposing remains to aid medicolegal investigations, principally through estimation of post-mortem interval, location of remains, identification of victims, determination of antemortem drug usage (through entomotoxicology) and reconstruction of events. It also provides an introduction to death investigation, the criminal justice system and associated legislation. It provides an elementary understanding of criminal trials and the use of scientific evidence in the courtroom. Lastly, the course will introduce students to laboratory and research techniques and writing skills.

DP requirements: Complete all assessments, obtain $\geq 50\%$ in techniques and two compulsory modules for the stream and obtain $\geq 50\%$ for coursework overall.

Assessment: Each module of the course has its own formative and summative assessments which include practical, written and oral tests and assignments. Summative assessments will count 95% towards the coursework mark. The coursework exam comprises an integrated assessment (typically a comprehension exam) and counts 5% towards the total coursework mark.

PTY4024W FORENSIC TOXICOLOGY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: B Davies

Course outline:

The student will be required to carry out a research project under supervision. The research project will pertain to The course aims to equip students with knowledge and skills of core concepts and principles in forensic toxicology, including the analysis, interpretation and reporting of forensic toxicological evidence. The course will develop the student's laboratory techniques and research skills.

DP requirements: Obtain $\geq 50\%$ in written research project.

Assessment: This course will be assessed as a written research project. It will also comprise an integrated assessment (typically an oral exam) which counts 5% towards the mark for this course.

PTY4025W FORENSIC TOXICOLOGY COURSEWORK

78 NQF credits at NQF level 8

Convener: B Davies

Course outline:

The course aims to equip students with knowledge and skills of core concepts and principles in forensic toxicology, including the analysis, interpretation and reporting of forensic toxicological evidence. It also provides an introduction to death investigation, the criminal justice system and associated legislation. It provides an elementary understanding of criminal trials and the use of scientific evidence in the courtroom. Lastly, the course will introduce students to laboratory and research techniques and writing skills.

DP requirements: Complete all assessments, obtain $\geq 50\%$ in techniques and two compulsory modules for the stream and obtain $\geq 50\%$ for coursework overall.

Assessment: Each module of the course has its own formative and summative assessments which include practical, written and oral tests and assignments. Summative assessments will count 95% towards the coursework mark. The coursework exam comprises an integrated assessment (typically a comprehension exam) and counts 5% towards the total coursework mark.

PTY4026W BIOMEDICAL FORENSIC SCIENCE RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr L Heathfield

402 DEPARTMENTS IN THE FACULTY

Course outline:

The student will be required to carry out a research project under supervision. The research project will pertain to the interdisciplinary field of biomedical forensic science and may include components relating to natural and unnatural deaths, ancillary investigations for cause of death determination and identification of the deceased. The course will develop the student's laboratory techniques and research skills.

DP requirements: Obtain $\geq 50\%$ in written research project.

Assessment: This course will be assessed as a written research project. It will also comprise an integrated assessment (typically an oral exam) which counts 5% towards the mark for this course.

PTY4027W BIOMEDICAL FORENSIC SCIENCE COURSEWORK

78 NQF credits at NQF level 8

Convener: Dr L Heathfield

Course outline:

The course aims to provide students with skills and understanding in various disciplines relating to biomedical forensic science. This will include an understanding of natural and unnatural deaths, ancillary investigations for cause of death determination and identification of the deceased. It also provides an introduction to death investigation, the criminal justice system and associated legislation. It provides an elementary understanding of criminal trials and the use of scientific evidence in the courtroom. Lastly, the course will introduce students to laboratory and research techniques and writing skills.

DP requirements: Complete all assessments, obtain $\geq 50\%$ in techniques and two compulsory modules for the stream and obtain $\geq 50\%$ for coursework overall.

Assessment: Each module of the course has its own formative and summative assessments which include practical, written and oral tests and assignments. Summative assessments will count 95% towards the coursework mark. The coursework exam comprises an integrated assessment (typically a comprehension exam) and counts 5% towards the total coursework mark.

PTY5001W GENETIC COUNSELLING MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: 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 a qualitative approach, 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 20 000 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 their research proposal for approval and obtained formal ethics approval where necessary, the student proceeds with their research, analyses of the results and writes up the dissertation.

DP requirements: The analysis of two journal articles and a seminar presentation.

Assessment: External examination of the minor dissertation (100%).

PTY5002W GENETIC COUNSELLING PRACTICE

80 NQF credits at NQF 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 average of 50% for clinical block evaluations; and (4) achieve a minimum average of 50% for continuous clinical counselling assessments.

Assessment: Assessment is by continuous clinical counselling assessments, clinical block evaluations and clinical case reports. Students have continuous clinical counselling assessments and clinical counselling examinations at the end of each semester. Clinical counselling assessments 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. Clinical block evaluations include assessment of the student’s performance during the clinical rotations by clinical supervisors and reflective practice is assessed by means of clinical case reports. The clinical block evaluations (40%), continuous clinical counselling assessments (40%) and clinical case reports (20%) account for the remaining 50%. The final examinations of each semester contribute 50% of the course marks.

PTY5003F PRINCIPLES OF GENETIC COUNSELLING (COURSEWORK)

10 NQF credits at NQF level 9

Convener: Dr T Wessels

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: Completion of all course requirements. The student must obtain at least 45% for continuous assessments.

Assessment: Tests and assignments: 50%; written examination: 50%. To pass the course students must obtain at least 50% for the final examination and an overall mark of at least 50%.

PTY5004S PRINCIPLES OF GENETIC COUNSELLING (APPLIED LEARNING)

10 NQF credits at NQF level 9

Convener: Dr T Wessels

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: Completion of all course requirements. The student must obtain at least 45% for continuous assessments.

Assessment: Tests and assignments: 50%; written examination: 50%. To pass the course students must obtain at least 50% for the final examination and an overall mark of at least 50%.

PTY5005F MEDICAL GENETICS I

12 NQF credits at NQF level 9

Convener: Dr T Wessels

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: Completion of all course requirements. The student must obtain at least 45% for continuous assessments.

Assessment: Tests and assignments: 50%; written examination: 50%. To pass the course students must obtain at least 50% for the final examination and an overall mark of at least 50%.

PTY5006S MEDICAL GENETICS II

12 NQF credits at NQF level 9

Convener: Dr T Wessels

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: Completion of all course requirements. The student must obtain at least 45% for continuous assessments.

Assessment: Tests and assignments: 50%; written examination: 50%. To pass the course students must obtain at least 50% for the final examination and an overall mark of at least 50%.

PTY5007W GENETIC COUNSELLING DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr T Wessels

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.

Assessment: The dissertation is externally examined.

PTY5008W GENETIC COUNSELLING PRACTICE II

40 NQF credits at NQF level 9

Convener: Dr T Wessels

Course entry requirements: Genetic Counselling Practice I

Course outline:

This course addresses the theory and practical application of genetic counselling to genetic conditions. Students spend a portion of each week in various clinics, counselling patients and their families initially under direct and indirect supervision and participating in clinical management discussions. Counselling practice starts from the beginning of year one, initially simulated sessions and later in clinics. It involves attending clinics at Groote Schuur Hospital, Red Cross Hospital, school and outreach visits.

Students will attend all clinics. Rotations are in blocks and will involve an initial period of observation only before progressing to taking a medical history and drawing a pedigree, counselling under guidance and finally counselling independently. Goal 1, 2 and 3 provide guidance as to the focus of the experiential training. The most frequently presented medical conditions are listed under the specific clinic in the rotation timetable. Students should prepare for cases prior to attending the clinics in order to ensure that patients and their families receive optimum counselling, minimise the stress of the clinical environment and maximise the learning experience. Each student will receive regular clinical facilitation/supervision.

DP requirements: In order to qualify for the admission to the end of year clinical counselling and written examination the student must: (1) attend 80% of all classroom and clinic activities (2) obtain an average of 50% for the continuous assessments and the midyear clinical counselling examination.

Assessment: Assessment is by continuous clinical counselling assessments, clinical block evaluations, clinical case reports and written exam. Clinical counselling assessments and examinations is an assessment of the student's ability to conduct a genetic counselling session. Clinical block evaluations is an assessment of the student's overall performance in the clinical and academic setting. A clinical case report is a written reflective piece on a genetic counselling session. Mark breakdown: Continuous assessments - 50% (Continues clinical counselling assessments 40%, Clinical block evaluations 40%, Case reports 20%); Clinical counselling examinations - 50% (midyear clinical exam 33%, end of year clinical exam 33%, end of year written examination 33%). The student will be required to obtain 50% for all examinations in order to pass.

PTY5009W GENETIC COUNSELLING PRACTICE I

40 NQF credits at NQF level 9

Convener: Dr T Wessels

Co-requisites: Medical Genetics 1, Medical Genetics 2, Principles of Genetic Counselling: Coursework, Principles of Genetic Counselling: Applied Learning

Course outline:

This course addresses the theory and practical application of genetic counselling to genetic conditions. Students spend a portion of each week in various clinics, counselling patients and their families initially under direct and indirect supervision and participating in clinical management discussions. Counselling practice starts from the beginning of year one, initially simulated sessions and later in clinics. It involves attending clinics at Groote Schuur Hospital, Red Cross Hospital, school and outreach visits. Students will attend all clinics. Rotations are in blocks and will involve an initial period of observation only before progressing to taking a medical history and drawing a pedigree, counselling under guidance and finally counselling independently. Goal 1, 2 and 3 provide guidance as to the focus of the experiential training. The most frequently presented medical conditions are listed under the specific clinic in the rotation timetable. Students should prepare for cases prior to attending the clinics in order to ensure that patients and their families receive optimum counselling, minimise the stress of the clinical environment and maximise the learning experience. Each student will receive regular clinical facilitation/supervision.

DP requirements: In order to qualify for the admission to the end of year clinical counselling and written examination the student must: (1) attend 80% of all classroom and clinic activities (2) obtain an average of 50% for the continuous assessments and the midyear clinical counselling examination.

Assessment: Assessment is by continuous clinical counselling assessments, clinical block evaluations, clinical case reports and written exam. Clinical counselling assessments and examinations is an assessment of the student's ability to conduct a genetic counselling session. Clinical block evaluations are assessments of the student's overall performance in the clinical and academic setting. A clinical case report is a written reflective piece on a genetic counselling session. Mark breakdown: Continuous assessments - 50% (Continues clinical counselling assessments 40%, Clinical block evaluations 40%, Case reports 20%). Clinical counselling examinations - 50% (midyear clinical exam 33%, end of year clinical exam 33%, end of year written examination 33%). The student will be required to obtain 50% for all examinations in order to pass.

PTY6000W HUMAN GENETICS THESIS

360 NQF credits at NQF level 10

Convener: Professor A Wonkam**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: The thesis is externally examined.

PTY6001W BASIC AND APPLIED RESEARCH IMMUNOLOGY

15 NQF credits at NQF level 9

Convener: Dr M Marakalala and 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 defence 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.

PTY6002W BIOMEDICAL FORENSIC SCIENCE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr L Heathfield**Course entry requirements:** HUB6014F/S, PTY6004F/S, PTY6005F/S, PTY6006F/S, PTY6007F/S, PTY6010F/S and 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.

PTY6003F/S FORENSIC ANTHROPOLOGY AND ANATOMY

18 NQF credits at NQF level 9

Convener: Dr VE Gibbon

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.

PTY6004F/S FORENSIC PATHOLOGY

20 NQF credits at NQF level 9

Convener: Dr L Taylor

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.

PTY6005F/S FORENSIC TOXICOLOGY

20 NQF credits at NQF level 9

Convener: B Davies**Course entry requirements:** Suitable courses in undergraduate chemistry.**Course outline:**

Forensic toxicology encompasses the detection and measurement of alcohol, drugs and toxic substances within biological specimens, and the interpretation and reporting of the results in a medico-legal context. Course content, as it relates to forensic toxicology, includes theory and methodology of analytical instrumentation, analytical techniques, specimen handling and types, interpretation of analytical results, and report writing and oral presentation thereof. The course is taught through lectures (online and/or in contact sessions), practical experiments and demonstrations, tutorials, workshops/discussions and a variety of other formative assessment techniques. The course culminates in the final competency exercise, which includes a theory examination and a case report oral presentation. At the end of the course students will have a strong understanding of the principles and concepts of forensic toxicology, apply theoretical and analytical techniques, and skilfully interpret and present/defend analytical findings.

Lecture times: Variable**DP requirements:** Students are expected to attend and participate in all lectures, practical sessions, workshops and tutorials. Students are required to submit all coursework as required in their course manuals. A mark of at least 50% for coursework is required to write the final exam.**Assessment:** Assessment consists of a combination of assignments, tests and a final examination. Course mark contributes 50% and comprises of tutorial tasks; presentations, practicals and term test. The examination contributes 50% and comprises a written theory examination. There are no supplementary exams. A pass mark of 50% is required for the coursework component *and* the exam component. 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 NQF level 9

Convener: L Heathfield**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.

PTY6007F/S APPLIED FORENSIC SCIENCE

18 NQF credits at NQF level 9

Convener: Dr L Heathfield**Course entry requirements:** HUB6014F/S, PTY6004F/S, PTY6005F/S and PTY6006F/S

Course outline:

The course is based on the contents of the Forensic Pathology, Forensic Toxicology, Molecular Forensics and Forensic Anthropology and Anatomy 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.

PTY6007W APPLIED FORENSIC SCIENCE

18 NQF credits at NQF level 9

Convener: TBC

Course outline:

The course is based on the contents of the Forensic Pathology, Forensic Toxicology, Molecular Forensics and Forensic Anthropology and Anatomy 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.

PTY6008W FORENSIC MEDICINE DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor LJ Martin

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.

Assessment: The dissertation is externally examined.

PTY6009W GENETIC COUNSELLING THESIS

360 NQF credits at NQF level 10

Convener: Dr T Wessels

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

410 DEPARTMENTS IN THE FACULTY

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: The thesis is examined externally.

PTY6010F/S FORENSIC STATISTICS

12 NQF credits at NQF level 9

Convener: C Mole

Course outline:

This course is delivered online and introduces 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 NQF level 9

Convener: C Mole

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.

PTY6019W FORENSIC TOXICOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor LJ Martin

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.

Assessment: The dissertation is externally examined.

PTY6020W FORENSIC GENETICS DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr L Heathfield

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.

Assessment: The dissertation is externally examined.

PTY6021W FORENSIC MEDICAL MICROBIOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor LJ Martin

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.

PTY6022W MOLECULAR FORENSICS DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr L Heathfield

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.

Assessment: The dissertation is externally examined.

PTY6023W FORENSIC ENTOMOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor L Martin

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: Progress will be monitored through annual progress reports and supervisor meetings.

Assessment: The dissertation is externally examined.

PTY6024F/S BIO-COMPUTING

20 NQF credits at NQF level 9

Convener: Dr H Bendou

Course outline:

Omics is an advanced analytical research field aiming for holistic characterization of any biological system or organism of interest involving serious data storage, management and computational cost tasks. In addition, the accumulation of new high throughput experimental data in biology results in high volumes of biomedical data which are difficult to manage, to store and to analyse. This course serves as an advance applied module for mastering High-Performance Computing techniques related to process, store, manage, and transfer big Omics data sets, enabling students to apply such skills in their respective projects. The course seeks to empower students with solid, practical and advanced foundations in developing and designing specialized biomedical databases; designing and implementing parallel and computationally cost-effective tasks to in storing, transferring and managing big Omics data using high-Performance Computing techniques and advanced programming in Linux operating system. Below are topics that will involve in this course: Linux and parallel programming and advance High-Performance Computing, Biomedical databases design and management, Computational Biomedical algorithms and their practical important in clinical and research settings.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%– 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6025F/S BIOINFORMATICS PROGRAMMING WITH PYTHON

20 NQF credits at NQF level 9

Convener: Dr H Bendou

Course outline:

In the fast growing high-throughput-next generation sequencing technologies, the main challenge is to cope with the analysis of vast production of sequencing database through advanced bioinformatics tools. Bioinformatics programming with python skills are becoming a necessity across many facets of biology and medicine, owed in part to the continuing explosion of biological data aggregation and the complexity and scale of questions now being addressed through modern bioinformatics. This course will provide support to students in developing real time and advance python-based applications using advance concepts in biomedical science. Furthermore, the course is introduced to empower biomedical students with advanced computer programme and biomedical problem-solving skills using python and approaches through writing computers scripts to mine and modelling Omics data. Topics covering in this course are advance python feature for biomedical problem-solving, design and development python computer programme and tool to mine and model big biomedical data and the underlying computational and statistical Omics approaches.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%– 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6026F/S MACHINE LEARNING AND BIOMEDICAL DATA SCIENCE

20 NQF credits at NQF level 9

Convener: Dr H Bendou, Dr Te Mutsvangwa and Dr M Sinkala

Course outline:

The importance of biomedical data analysis and their interpretation, the analysis of variability that draws on our ability to quantify uncertainty and to draw logical inferences from observations, experiment in biomedical data science have been increasing at an unprecedented pace with the advancements of high-throughput biological data. Foundation in explaining and programming biostatistical concepts, will thereby bridge the gap in appropriately mining biomedical data, their interpretation. In that regard, this course seeks to empower biomedical students with the ability to turn biomedical data into information relevant for clinical and healthcare practice using advance R programming; and use cutting-edge techniques and best practises to report, interpret, store, manage and analyse biomedical data.

This course will equip biomedical students with the most rigorous training at the interplay between computational biostatistics, machine learning, biomedical data interpretation and their application to data visualization, clinical application, and public health research.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%– 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6027F/S PROTEOMICS AND GENE EXPRESSION DATA MINING

15 NQF credits at NQF level 9

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

Current technological advances have led to the development of several biological platforms generating heterogeneous datasets, including proteomics, epigenomics, gene expression levels and genomics datasets. It is important that learners from biomedical science to be aware of these different data types and be able to manipulate them. Furthermore, large-scale biology projects such as gene expression surveys using RNA-seq, microarrays and other technologies have created a wealth of data for biologists. Biomedical students are expected to overcome the challenge facing scientists in analyzing and even accessing these data to extract useful information pertaining to the system being studied. Thus, this course is essential as it provides hands-on training in the basics of mass spectrometry (MS), gene expression and epigenomics bioinformatics, search engines and post-processing software, quantitative approaches, MS data repositories, the use of public databases for protein analysis, annotation of subsequent protein lists and incorporation of information from molecular interaction and pathway databases. The course will empower students with new insights of bioinformatics for epigenomics, gene expression and proteomics data analysis.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%– 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6028F/S BIOINFORMATICS FOR NEXT GENERATION SEQUENCING TECHNOLOGIES

15 NQF credits at NQF level 9

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

Next generation sequencing has undergone major renovations and is rapidly impacting medical care across specialities. Huge advancements were made toward storing, handling, mining, comparing, extracting and analysis as well as visualization of big macromolecular data using novel computational approaches. Though High-Performance Computing (HPC), Next Generation Sequencing technologies have allowed scientists to tackle bigger and broader questions related to population trends, genetic variation impacts phenotype, biomarker discovery, protein targets, predicting and prioritizing in silico mutations leading to clinical diagnostics and personalized medical treatment of patients on a much broader scale than ever before possible with older methods. This course will introduce current state-of-the art bioinformatics techniques related to the processing, quality control, analysis and interpretation of high-throughput next generation sequencing data; enable students understanding of the new trends in sequence, alignment, variant and copy number variation calling, protein and gene expression analysis and; introduce analysis of in silico mutation prioritization and prediction of pathogenicity and enrichment analysis.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%– 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6029F/S COMPUTATIONAL POPULATION OMICS STRUCTURE

15 NQF credits at NQF level 9

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

Evolutionary forces, including mutations and selection, and other historical human events, such as migration, have highly contributed to shaping existing populations through genetic drift, gene flow and had impacted human health. This course offers an opportunity to learners to model these forces and predict their effects in population through study of population Omics. Understanding how these forces influence changes at different biological layers over time and contribute to population traits. Moreover, survival is important and may answer various essential questions from how medical genetics identifies the genes involved in disease to how small populations are preserved from extinction. In addition, this course will enable learners to acquire skills required to understand population Omics, genetics landscape, genetics history and predict potential effects of different evolutionary forces on a given population.

DP requirements: Students are required to: to attend at least 90% of lectures, tutorials and practicals; and to pass all formative assessments of the coursework component in order to gain entrance to the final coursework examination

Assessment: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%– 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6030F/S OMICS-WIDE ASSOCIATION STUDIES

15 NQF credits at NQF level 9

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

Omics epidemiology holds great potential for personalized medicine and improved biological knowledge of disease pathophysiology. More recently, Omics-wide association studies (OWAS) has become the method of choice for studying disease etiology and has been made possible by the generation of human genetic variation maps, the large-scale availability of clinically-phenotyped

samples and the development of statistical methods to identify significantly associated genetic variants without bias. This course describes the concept/data analysis in Omics association studies in general, the study design, power calculation, data quality control approach, clinical applications, limitations, and its future trends. Introduce the OWAS study design, power calculation, data quality control, analysis and interpretation of Omics studies of disease, with a focus on state-of-the-art analysis of various Omics-wide association scans. Over and above the fundamental assumptions, showcase recent successes and discuss limitations of each OWAS approaches in the field of complex diseases. Provide a stage for shaping the next generation of OWAS by exposing students to new disease-mapping, OWAS microbiomics/transcriptomics techniques to overcome current limitations.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%– 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6031F/S PHARMACOMICROBIOMICS

15 NQF credits at NQF level 9

Convener: Prof. Raj Ramesar, Dr Shareefa Dalvie, Dr Victoria Nembaware

Course outline:

Pharmacomicrobiomics is an emerging field that investigates the interplay of microbiome variation and drugs response and disposition (absorption, distribution, metabolism and excretion). This course will equip students with an integrated view and bioinformatics approach of Pharmacogenomics, microbiomics and Pharmacomicrobiomics technologies relevant to human health. The course will provide a foundation on the principles of microbiomes in integrative methods for pharmacomicrobiomics data of which will initiate academia-industry links that inform future research directions in biomedical research. Topics to cover in this course are: Key gene classes, drugs for which genetics is critical and resources for pharmacogenomics. Pharmacogenomics and Pharmacomicrobiomics databases. Different pharmacogenomic approaches to understand drug responses and treatments variability. Microbes and the human microbiome and cover topics such as the influence of the gut microbiota on our nutrition, health and behaviour. Studying the microbiome: Statistical data analysis of microbial communities and Microbiome Genome-wide Association Studies. Explore integrative approaches used in pharmacomicrobiomics.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%– 49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6032F/S COMPUTATIONAL FORENSIC OMICS

15 NQF credits at NQF level 9

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

The field of omics has undergone major renovations and is rapidly impacting medical care and of course forensic sciences across world-wide specialties, particularly in using machine intelligence to accurately identify patterns (sex identification, age, stature reconstruction, facial and imaging). Recent developments in the field of genomics, transcriptomics, and proteomics have made the forensic sciences increasingly sensitive and reliable.

This course will introduce different techniques used for DNA profiling, interpreting DNA profiles, Mitochondrial DNA analysis, Y chromosome markers. Introduce machine intelligence approaches to identify and establish paternity, relationship testing, prediction of age and externally visible characteristics using SNPs, STRs, and mitochondria, Next Generation Sequencing technologies. Introduce forensic statistics methods to leverage Omics data in evaluating forensic evidence. Introduce computer forensics through the development of a multiagent system and case-based reasoning.

DP requirements: Students are required: to attend at least 90% of lectures, tutorials and practicals; and to pass all formative assessments of the coursework component in order to gain entrance to the final coursework examination.

Assessment: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%–49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6033F/S COMPUTATIONAL PHYLOGENETICS

15 NQF credits at NQF level 9

Convener: Associate Professor D Martin

Course outline:

Phylogenetic inference is essential for defining species boundaries, species identifications, recognition of cryptic species, testing systematic hypotheses such as infection transmission, identifying evolutionary history within a group of organisms based on the inheritance of ancestral characteristics and biogeographic patterns and understanding the evolution of traits. This course will introduce students to phylogeny, particularly to (1) the general mathematics behind the trees and evolutionary models such as distance and parsimony methods, coalescence theory, maximum likelihood methods, Bayesian methods, phylodynamics, branch supports, bootstrapping; (2) will able students to the potential of selecting the best method and evolutionary model and Working with public sequence repositories (BLAST, uploading data). Expose student to tree dating, reconstructing, and using character evolution, molecular epidemiology and interpretation of tree topology and nodal support.

DP requirements: 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: The evaluation of this proposed course is based on performance in coursework and the final exam. To pass the course, students must obtain a final mark of at least 50%. The final mark is made up as follows: in course mark (assessments) (40%) and final course exam mark (60%). A student who fails the exam with 45%–49% may be granted a re-evaluation. A student who gets less than 45% will not qualify for a re-evaluation.

PTY6034W INTELLIGENT SYSTEMS FOR BIOMEDICAL SCIENCES (ISBS) DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor R Ramesar, Dr S Dalvi and Dr V Nembaware

Course outline:

The minor dissertation of a maximum of 20 000 words is prepared under multi-disciplinary supervision and Co/supervision and must be on a topic in the Intelligent Systems for Biomedical Sciences (ISBS) discipline of the coursework master's programme for which the candidate is registered. The candidate shall conduct literature reviews and design 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 dissertation must demonstrate rigorous application of the relevant Omics research methodology but does not have to be original research.

The minor dissertation should deal with a topic that is contextually relevant to Machine Intelligence Omics Data analytics and may draw on or develop Omics Data analytic theories and philosophies. The dissertation must comply with all scientific, ethical and legal requirements.

DP requirements: Students are required:(a) Students are required to complete and obtain a minimum pass mark of 50% for all courses.(b) Students are required to obtain approval for their research study from the Departmental Research Committee and Human Research Ethics Committee within seven months of the date of first registration.

Assessment: External examination of minor dissertation. To pass the research component, students must obtain a sub-minimum of 50% for the dissertation. The final mark is made up as follows: dissertation (80%); oral presentation of research project (20%).

PTY7000W MMED CLINICAL PATHOLOGY PART 1A (CHEMICAL PATHOLOGY)

18 NQF credits at NQF level 9

Convener: Associate Professor GF van der Watt

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.

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.

PTY7001W MMED CLINICAL PATHOLOGY PART 1B (HAEMATOLOGY)

18 NQF credits at NQF level 9

Convener: Dr F Omar and Associate Professor J Opie

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.

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.

418 DEPARTMENTS IN THE FACULTY

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.

PTY7002W MMED CLINICAL PATHOLOGY PART 1C (MEDICAL MICROBIOLOGY)

18 NQF credits at NQF level 9

Convener: Associate Professor J Opie

Course entry requirements: PTY7000W

Course outline:

This training programme forms part of the process to train medical practitioners for registration 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.

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.

PTY7003W MMED CLINICAL PATHOLOGY PART 1D (VIROLOGY)

6 NQF credits at NQF level 9

Convener: Associate Professor J Opie

Course entry requirements: PTY7000W

Course outline:

This training programme forms part of the process to train medical practitioners to register 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.

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.

PTY7004W MEDICAL VIROLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor C Williamson

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.

Assessment: The dissertation is externally examined.

PTY7005W ANATOMICAL PATHOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor K Pillay

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: The thesis is externally examined.

PTY7006W MMED ANATOMICAL PATHOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Professor K Pillay

Course entry requirements: 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 process to train 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 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 six 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 NQF level 9

Convener: Professor K Pillay

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%.

PTY7008W MMED IN CLINICAL PATHOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Associate Professor J Opie

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.

DP requirements: The candidate must have completed 54 months of approved training in pathology, which must include 16 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.

PTY7009W ANATOMICAL PATHOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor K Pillay

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.

Assessment: The dissertation is externally examined.

PTY7010W MMED ANATOMICAL PATHOLOGY PART 1A

60 NQF credits at NQF level 9

Convener: Professor K Pillay

Course outline:

This training programme forms part of the credentialing 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%).

PTY7011W MPHIL PAEDIATRIC PATHOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor K Pillay

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%.

PTY7012W PAEDIATRIC PATHOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor K Pillay

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.

422 DEPARTMENTS IN THE FACULTY

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 (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 communicate their conclusions clearly to specialist and non-specialist audiences.

DP requirements: None

Assessment: External examination of the minor dissertation. Pass mark 50%.

PTY7013W CHEMICAL PATHOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor GF van der Watt

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.

Assessment: The dissertation is externally examined.

PTY7014W CHEMICAL PATHOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor AD Marais

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: The thesis is externally examined.

PTY7015W MMED CHEMICAL PATHOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Associate Professor GF van der Watt

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.

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. For uniformity nationally the examination is done by the College of Pathology.

PTY7016W MMED CHEMICAL PATHOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Associate Professor GF van der Watt

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.

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.

PTY7017W CHEMICAL PATHOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor GF van der Watt

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.

PTY7018W MMED IN FORENSIC PATHOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Professor LJ 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

424 DEPARTMENTS IN THE FACULTY

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.

PTY7019W FORENSIC PATHOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor LJ Martin

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.

PTY7020W HAEMATOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor RS Ramesar

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: The thesis is externally examined.

PTY7021W MMED IN HAEMATOLOGICAL PATHOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Associate Professor J Opie**Course entry requirements:** 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, haemolytics 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.

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.

PTY7022W HAEMATOLOGICAL PATHOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor J Opie**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.

Assessment: External examination of the minor dissertation.

PTY7023W HAEMATOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor RS Ramesar**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.

Assessment: The dissertation is externally examined.

PTY7024W MMED HAEMATOLOGICAL PATHOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Associate Professor J Opie

Course outline:

This training programme forms part of the credentialing 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.

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.

PTY7025W CLIN SCIENCE & IMMUNOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor CM Gray

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.

Assessment: The dissertation is externally examined.

PTY7026W CLINICAL SCIENCE & IMMUNOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor CM Gray

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: The thesis is externally examined.

PTY7027W MEDICAL MICROBIOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr L Paul

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.

Assessment: The dissertation is externally examined.

PTY7028W MEDICAL MICROBIOLOGY THESIS

360 NQF credits at NQF level 10

Convener: TBC

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: The thesis is externally examined.

PTY7029W MMED MEDICAL MICROBIOLOGY PART 1D

60 NQF credits at NQF level 9

Convener: Dr E Prentice

Course outline:

This training programme forms part of the credentialing 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.

DP requirements: This course must be completed within 18 months of commencing formal training in medical microbiology.

Assessment: Written, practical and oral examinations.

PTY7030W MMED MEDICAL MICROBIOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Dr E Prentice

Course entry requirements: 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.

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.

PTY7031W MEDICAL MICROBIOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr E Prentice

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.

Assessment: External examination of the minor dissertation.

PTY7032W MMED VIROLOGICAL PATHOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Associate Professor N Hsiao

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.

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 may be 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.

PTY7033W VIROLOGICAL PATHOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor N Hsiao

Course outline:

The minor dissertation is prepared under supervision. The dissertation must be between 15 000 and 20 000 words in length, or in a publication ready manuscript format 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.

Assessment: External examination of the minor dissertation.

PTY7034W MMED VIROLOGICAL PATHOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Associate Professor N Hsiao

Course outline:

This training programme forms part of the credentialing process of general practitioners as specialist clinical virologists. 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 write the part 1 examination of the College of Pathologists to complete this part of the training programme.

Assessment: College of Pathologist Medical Virology part 1 exam.

PTY7036W MEDICAL VIROLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor C Williamson

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: The thesis is externally examined.

PTY7037W FORENSIC PATHOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor LJ Martin

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: The thesis is externally examined.

PTY7038W FORENSIC TOXICOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor LJ Martin

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: The thesis is externally examined.

PTY7039W FORENSIC MEDICINE THESIS

360 NQF credits at NQF level 10

Convener: Professor LJ Martin

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: The thesis is externally examined.

PTY7040W MPHIL IN PAEDIATRIC FORENSIC PATHOLOGY PART 1

120 NQF credits at NQF level 9

Convener: Emeritus Associate Professor ROC Kaschula and Professor LJ Martin

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.

PTY7041W PAEDIATRIC FORENSIC PATHOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Emeritus Associate Professor ROC Kaschula and Professor LJ Martin

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.

Assessment: External examination of the minor dissertation.

PTY7042W BIOMEDICAL FORENSIC SCIENCE THESIS

360 NQF credits at NQF level 10

Convener: Professor LJ Martin

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: The thesis is externally examined.

PTY7043W MMED IN FORENSIC PATHOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Professor LJ Martin

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. 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.

PTY7044W CLINICAL PATHOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor J Opie

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.

Assessment: External examination of the minor dissertation.

PTY7045W FORENSIC GENETICS THESIS

360 NQF credits at NQF level 10

Convener: Dr L Heathfield

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: The thesis is externally examined.

PTY7046W FORENSIC ENTOMOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor L Martin

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: Progress will be monitored through annual progress reports and supervisor meetings.

Assessment: The thesis is externally examined.

PSYCHIATRY AND MENTAL HEALTH

Neuroscience Institute, E-Floor, Groote Schuur Hospital

Professor and Head:

DJ Stein, BSc (Medicine) MBChB *Cape Town* FRCPC PhD DPhil *Stell*

Sue Struengmann Professor of Child & Adolescent Psychiatry:

PJ de Vries, MBChB *Stell* FRCPsych *London* PhD *Cantab*

Vera Grover Professor of Intellectual Disability:

S Kleintjes, MA MPhil PhD *Cape Town*

Professors:

J Hoare, MBChB MPhil *Cape Town* MRCPsych FCPsych *SA*

J Joska, MBChB MMed PhD *Cape Town* FCPsych *Cert Neuropsychiatry SA*

K Sorsdahl, PhD *Cape Town*

J van Honk, PhD *Utrecht*

Associate Professors:

S Honikman, MBChB MPhil *Cape Town*

A Marais, MA *Stell* PhD *Cape Town*

G Sibeko, MBChB *UKZN* PhD *Cape Town*

Professors Emeritus /Associate Professors:

CM Adnams, BSc *UKZN* BScHons (Medicine) MBChB *Cape Town* FCPaed *SA*

A Berg, MBChB *Pret* MPhil *Cape Town* FCPsych *SA*

CD Molteno, MBChB MMed MD *Cape Town* BAHons PhD *Unisa* DCH RCP *UK*

BA Robertson, MD *Cape Town* Dip (Psych) *McGill* FCPsych *SA*

T Zabow, MBChB DPM *Cape Town* FCPsych *SA* MRCPsych *UK*

Lecturers/Senior Lecturers:

M Abbas, BA *Unisa* MPsych *UWC*

T Abrahams, MA

I Akpabio, MBChB *UP*, DMH *SA* & FC Psych *CMSA* MMed Psych *Cape Town*

N Alie, BSocSci *UKZN* BScHons *Unisa* MA *Rhodes*

S Allie, BA (Hons) Psychology *UWC*

F Ashburner, MA *UJ*

A Benjamin, MA (Clin Psych) *Cape Town* PhD *Stell*E Benjamin, MA *Cape Town*

J Bouwer, MBChB *UP* MMed Psych *Wits* FCPsych *SA*

N Cader-Mokoa, MA *Stell*

O Coetzee, MA *PU for CHE*

Q Cossie MBChB FCPsych *MPhil Cape Town*, MSc HEPM *LSE*

L Dannatt, MBBCh *Witwatersrand* DMH *SA* DCH *SA* MMed *Stell* FCPsych *SA*

JJ Dawson-Squibb, MA PhD *Cape Town*

C de Clercq, MBChB *Pret* FCPsych *SA*

S de Vaal, MBChB *SU*, MMed(Family Medicine) *SU* MMed(Psychiatry) *Cape Town* FCPsych *SA*

C Dean, MPsych *UWC* MBA *Milpark/Oxford Brookes*

N Dyakalashie, MBChB *WSU* FCPsych *SA* Cert Forensic Psych *SA*

A Fakroodien, MBChB *UKZN*, FCPsych *SA*, *MMED Cape Town*

EC Garman, BSc *Reading* MSc *Durham*

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N Groenewold, PhD *Groningen*

T Henderson, MBChB *Cape Town* FCPsych Cert (Child & AdolPsych) MPhil *Cape Town*

I Hoosen, MBChB *Cape Town* MRCPsych *UK* Dip (Occupational Health) *UK* Dip (Cognitive Behavioural Therapy) *Birmingham*
 J Ipsier, MSc (Epidemiology) *Columbia* PhD *Cape Town* F Ismail, MPsych *UWC*
 H Julius, BAHons *UWC* MA *Cape Town*
 K Kamaloodien, BSocSc *Cape Town* MPsych *UWC*
 M Karjiker, MBChB *Witwatersrand* FCPsych *SA*
 A Kibi,
 M Knight, PhD *NMU*
 N Koen, MBChB PhD *Cape Town*
 N Lagerstrom, MD *Zagreb* MMed (Forensics) *Witwatersrand* MMed (Psychiatry) *Cape Town* FC for Path *SA* FCPsych *SA*
 N Lalkhen, MA *Stell*
 I Lewis, BSc MBChB MMed *Cape Town* FCPsych *SA*
 D Liedeman-Prosch, MPsych *UWC* PGDip (Addictions Care) *Cape Town*
 K Moloto
 J Moolman, MBChB *Stell* FCPsych *SA*
 B Mpinda, BSc *SLU* MBChB *Cape Town* MMed *Stell* FCPsych *SA* Cert. Child and Adol *SA*
 C Mtati. MPsych *UWC*
 P Naude, MSc *UPE* PhD *Groningen*
 R Ori, MBChB *Natal* DMH FCPsych Cert Neuropsychiatry *SA* MMed (Psych) *Cape Town*
 Z Parker, MA *Cape Town* MPsych *UWC*
 D Pieterse, MBChB *Stell* DCH DMH FCPsych *SA* MMed *Cape Town*
 E Reid, MBChB/UFCPsych *SA*
 B Robson, MA *Rhodes*
 B Romburgh, MBChB MMed *Cape Town* FCPsych DMH *SA*
 T Roos, MBChB *Cape Town* DMH *SA* MMed *Stell* FCPsych *SA* RCPsych *London*
 M Roffey, MBChB *Cape Town* FCPsych *SA*
 L Schlebusch BSc *Stell* PhD *Pretoria*
 NG Sibeko, MBChB *UKZN* PhD *Cape Town*
 P Smith, MBChB *Cape Town* FCPsych *SA*
 T Swart, BSc *Cape Town* MSc *UKZN* PhD *Cape Town*
 I Tayob
 H Temmingh, MBChB MMed *Stell* FCPsych *SA* MPH PhD *Cape Town*
 H Thornton, MA *Rhodes* PhD *Stell*
 T Timmermans, MBChB *Cape Town* FCPsych *SA*
 C van der Westhuizen MBChB *Stell*, PhD *Cape Town*
 Y Vava, MBChB *WSU* DMH *SA* MMED *Stell* FCPSYCH *SA*
 PF Williams-Ashman, MBChB *Witwatersrand* FCPsych *SA*
 J Yako, MA *Cape Town*

Honorary Professors/Associate Professors:

C Allgulander, MD PhD *Karolinska Institutet*
 BL Atwoli, MBChB *Moi univ* PhD *Cape Town*
 D Baldwin, DM *Southampton* FRCPsych MRCPsych MB BS *London*
 D Castle, MBChB MD *Cape Town* MRCPsych FRCPSYCH MSc *London* DLSHTM
 EL Davids, PhD *UWC* MPH *Cape Town*
 AW Carrico, PhD *Cape Town*
 L Cluver, DPhil *Oxon*
 D Edwards, Psych (Hon) *Oxon* MA PhD *Rhodes*
 L Franz, MBChB *Stell* MPH *Duke*
 H Gouse, PhD *Cape Town*
 SL Halligan, BA (Hons) *Cambridge* DPhil *Oxford*
 A Hamilton, PhD *California univ* MPH *UCLA*
 SW Jacobson, MA *Brandeis* MA PhD *Harvard*

436 DEPARTMENTS IN THE FACULTY

JL Jacobson, MA PhD *Harvard*
C Kuo, BA *Virginia DPhil Oxon*
J Leff, MBBS *London MRCP UK MD London FRCPsych UK*
C Lund, BA *UKZN BAHons MSocSci Rhodes MA PhD Cape Town I Marks, MBChB MD Cape Town DPM MRCPsych FRCPsych London*
C Mathews, BA *Natal MSc PhD Cape Town*
N Milburn, Ph.D *Michigan*
B Myers, MSocSc *Natal PhD Cape Town*
CR Newton, MBChB *Cape Town MRCP London MD Cape Town FRCPCH London M Robertson, MBChB MD DSc Cape Town DPM FRCPsych FRCP FRCPCH MRCPsych London*
O Shisana, BA *UNIN MA Loyola PhD South Florida ScD Johns Hopkins*
SJ Shoptaw, PhD *Los Angeles*
L Simbayi, BSc *Zambia MSc Utah DPhil Sussex*
K Sikkema, PhD *Cape Town*
G Thornicroft, MA *Cambridge MBBS London MRC Psych FRC Psych Royal College of Psychiatrists PhD London*
M Tomlinson, BA *Rhodes BAHons Witwatersrand MA Cape Town PhD Reading*
J van Honk, PhD *Utrecht D Williams, BThHons Southern Caribbean MDiv Andrews PhD Michigan*
G Wyatt, PhD *UCLA*
C Zlotnik, MA *Witwatersrand PhD Rhode Island*

Honorary Lecturers/Senior Lecturers:

SE Baumann, MBChB BA *Cape Town FCPsych SA MRCPsych UK*
J Campion MBBS *FRCPsych*
T Carney PhD *Cape Town*
S Dalvie, PhD *Cape Town*
I Daniels, PhD *Cape Town R De Jager, MBChB Cape Town DMH SA*
B Dickman, PhD *Cape Town*
A Gevers, BA *Grinnell College MA Missouri St. Louis PhD Cape Town*
NR Horn, MBChB *Cape Town PGDip (CogTher) Manchester MRCPsych UK*
R Kader, MPsych *UWC PhDCape Town*
A Mason-Jones, BAHons MA (Public Health) PhD *Nottingham*
I McCallum, BA BSocSc MBChB *Cape Town FCPsych SA*
U Meys, MBChB MPhil *Cape Town FCPsych SAA Muller, BCur NMMU MCur (Psychology) UJ*
SD Pickstone-Taylor, MBChB *Cape Town*
M Retief, MBChB *SU FCPsych SA MMed SU*
A Robins, MBChB *Cape Town MD Witwatersrand DRM England MRC Psych London*
D Rosenstein, MPsych cum laude *Witwatersrand PhDSU*
D Terburg, PhD cum laude *Utrecht*
J Torline, MBBCH *Witwatersrand MMed Cape Town*

Research Officers/Senior Research Officers:

NJ Chambers BAHons MA *Witwatersrand PhD Florida*
SD Cooper, BAHons MPH *Cape Town*
BL Evans, MA *Unisa*
R Jacobs, MA Research Psychology, *UWC*
S. Nightingale, MBChB MRC Neurol *UK PhD Liverpool*
S Rabie, PhD *Stell*
A Roos, PhD *Stell*
N Seris BA HdipEd BEd *Witwatersrand BA(Hons) Johannesburg MA Witwatersrand*
N Shabalala PhD *UWC*
M Viljoen BOcc *Stell MSc (Med) Neurosci Cape Town*

Research Fellows:

J-P Fouche, MSc *Stell Phd Cape Town*
 N A Groenewold, PhD *Groningen*
 A Hartford, PhD
 S Heany, PhD *Cape Town*
 S Koopowitz, PhD *Cape Town*
 L Majara PhD *Cape Town*
 A C Palk
 T Williams

Addiction Psychiatry:

G Sibeko, MBChB *UKZN Phd Cape Town*
 H Temmingh, MBChB MMed *Stell FCPsych SA MPH Cape Town*

Child and Adolescent Psychiatry:

P Gasela, MBChB *Cape Town FCPsych Cert (Child & Adol Psych) SA*

Consultation-Liaison Psychiatry:

E Benjamin, MA *Cape Town*
 J Hoare, MBChB MPhil *Cape Town MRCPsych FCPsych SA*

Forensic Psychiatry:

N Dyakalashé, MBChB *WSU FCPsych SA Cert Forensic Psych SA*

General Adult Psychiatry:

Q Cossie, MBChB FCPsych MPhil *Cape Town, MSc HEPM LSE*

Intellectual Disability Psychiatry:

S Kleintjes, MA MPhil Phd *Cape Town*

Neuropsychiatry:

J Joska, MBChB MMed Phd *Cape Town FCPsych SA Cert Neuropsychiatry SA*

Psychopharmacology and Biological Psychiatry:

N Koen, MBChB Phd *Cape Town*

Psychotherapy:

W Hawa

Public Mental Health:

K Sorsdahl, Phd *Cape Town*

PRY4003W MENTAL HEALTH EPIDEMIOLOGY

30 NQF credits at NQF level 8

Convener: S Allie

Course outline:

This course aims to provide the student with an in-depth understanding of mental health epidemiology, including the global mental health burden. On completion of this course, students will be able to demonstrate a good understanding of: (i) basic epidemiological concepts (ii) study designs used in mental health epidemiology and will be able to identify the strengths & limitations of these designs, and appropriate study designs for epidemiological research questions (iii) the need for cultural adaptation of measures and the adaptation process.

DP requirements: Students are required to attend a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account.

Assessment: The weighting of the final results consists of participation and engagement (20%) and course assignments (80%). Participation & engagement (20%) consists of: Attendance (5%): Students are required to attend a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account. Activity engagement (15%): Students need to complete at least 50% of the activities. The quality of online, asynchronous engagement will be assessed on the following criteria: participation in an activity, engagement with the activity content and engagement with peers. Course assignments (80%). Assignments should be completed with a sub-minimum of 50%.

PRY4004W RESEARCH METHODOLOGY FOR PUBLIC MENTAL HEALTH

30 NQF credits at NQF level 8

Convener: S Allie

Course outline:

The purpose of this course is to provide instruction in research methodology that is specific to the discipline of public mental health. Content includes the following: introduction to quantitative research methods, introduction to statistics, introduction to qualitative research methods, and mixed methods research.

DP requirements: Students are required to attend a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account.

Assessment: The weighting of the final results consists of participation and engagement (20%) and course assignments (80%). Participation & engagement (20%) consists of: Attendance (5%): Students are required to attend a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account. Activity engagement (15%): Students need to complete at least 50% of the activities. The quality of online, asynchronous engagement will be assessed on the following criteria: participation in an activity, engagement with the activity content and engagement with peers. Course assignments (80%). Assignments should be completed with a sub-minimum of 50%.

PRY4005W INTRODUCTION TO PUBLIC MENTAL HEALTH

30 NQF credits at NQF level 8

Convener: S Allie

Course outline:

This course aims to provide students with an in-depth understanding of the public mental health approach, the interplay between culture and mental health and mental health policy and systems, including development, implementation and monitoring and evaluation. Additionally, the course aims to equip students with leadership and management skills. On completion of this course, students will be able to demonstrate a good understanding of public mental health as a discipline, and the different ideological approaches and associated debates, policy development & analysis, social determinants, health systems research, financing & service models the interplay between culture & mental health (with regard to language, ways of understanding wellbeing & illness, and treatment). Additionally, students will acquire academic communication, self-management, teamwork and advocacy skills.

DP requirements: Students are required to attend a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account.

Assessment: The weighting of the final results consists of participation and engagement (20%) and course assignments (80%). Participation & engagement (20%) consists of: Attendance (5%): Students are required to attend a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account. Activity engagement (15%): Students need to complete at least 50% of the activities. The quality of online, asynchronous engagement will be assessed on the following criteria: participation in an activity, engagement with the activity content and engagement with peers. Course assignments (80%). Assignments should be completed with a sub-minimum of 50%.

PRY4006W MENTAL HEALTH INTERVENTIONS

30 NQF credits at NQF level 8

Convener: S Allie

Course entry requirements: PRY4005W

Course outline:

This module aims to provide students with an in-depth understanding of mental health interventions, and knowledge and skills to develop, implement and evaluate mental health interventions. Specifically, the module aims to equip graduates to: Locate their interventions in a broad context (environmental scanning). Facilitate the development of proposals for intervention. Raise funds for intervention. Facilitate the implementation of interventions. Evaluate interventions.

DP requirements: Students are required to attend a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account.

Assessment: The weighting of the final results consists of participation and engagement (20%) and course assignments (80%). Participation & engagement (20%) consists of: Attendance (5%): Students are required to attend a minimum of 70% of mandatory sessions. Relevant reasons for non-attendance will be taken into account. Activity engagement (15%): Students need to complete at least 50% of the activities. The quality of online, asynchronous engagement will be assessed on the following criteria: participation in an activity, engagement with the activity content and engagement with peers. Course assignments (80%). Assignments should be completed with a sub-minimum of 50%.

PRY4008W EVIDENCE-BASED TREATMENT APPROACHES

15 NQF credits at NQF 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%.

PRY4009F SCREENING AND ASSESSMENT OF ADDICTIVE DISORDERS

15 NQF credits at NQF 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.

440 DEPARTMENTS IN THE FACULTY

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%.

PRY4010S CASE MANAGEMENT AND SERVICE MONITORING

15 NQF credits at NQF 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%.

PRY4011F MANAGING CO-OCCURRING MENTAL DISORDERS

15 NQF credits at NQF 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%.

PRY4012S ETHICS & PROFESSIONAL DEVELOPMENT

15 NQF credits at NQF 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%.

PRY4013F UNDERSTANDING ADDICTIVE DISORDERS

15 NQF credits at NQF level 8

Convener: G Hendricks

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%.

PRY4015F MANAGING CHILDREN & ADOLESCENTS WITH ADDICTIVE DISORDERS

15 NQF credits at NQF level 8

Convener: 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%.

PRY4016S WORKING WITH THE FAMILY AND SOCIAL NETWORKS

15 NQF credits at NQF level 8

Convener: 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%.

PRY4018F/S INTRODUCTION TO PSYCHODYNAMIC CONCEPTS IN PSYCHOTHERAPY

25 NQF credits at NQF level 8

Convener: E Benjamin and L Frenkel

Course outline:

This course gives a basic introduction to core principles of the psychodynamic model and how to recognise them in the process of counselling. Topics covered include the unconscious, transference and countertransference, the therapeutic alliance, and resistance. Candidates are taught how to understand and how to manage these dynamics and, importantly, when it is appropriate to refer to a psychologist. 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.

PRY4019F/S BASIC THERAPEUTIC COMPETENCIES

30 NQF credits at NQF level 8

Convener: L Abrahams and G Hendricks

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.

PRY4020F/S INTRODUCTION TO COGNITIVE BEHAVIOURAL THERAPY

25 NQF credits at NQF level 8

Convener: N Parker

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 NQF level 8

Convener: G Hendricks

Course outline:

This course engages students with the range of ethical dilemmas that arise in the practice of psychotherapy. Students are presented with a framework for ranking ethical issues which guides ethical decision-making. Case examples from the students' own experience are used and worked through, in order to familiarise them with legal, ethical and clinical principles underlying professional conduct. Topics include informed consent and confidentiality and their limits; treatment of minors and other vulnerable clients; clinical competence; boundaries and multiple relationships; and management of social media and other forms of communication in an ethical and professional manner. The course is designed to promote reflective 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 NQF level 8

Convener: Professor S Kleintjes and E Benjamin

Objective: Student will critically examine the issue of 'evidence' in counselling and psychotherapy and understand the terms and methodology of evidence-based practice and evidence-based treatments as it applies to counselling and psychotherapy.

Course outline:

Students will explore the applicability of evidence to clinical work and the limitations and advantages of evidence-based treatment 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.

PRY4023F/S INTEGRATED ASSESSMENT

0 NQF credits at NQF level 8

Convener: G Hendricks

Course entry requirements: Successful completion of all other courses.

Course outline:

This course exists for the sole purpose of recording an integrated, overall mark.

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.

PRY7001W PSYCHIATRY THESIS

360 NQF credits at NQF level 10

Convener: Professor DJ Stein

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: The thesis is externally examined.

PRY7006W MPHIL IN CHILD AND ADOLESCENT PSYCHIATRY PART 1

120 NQF credits at NQF level 9

Convener: Professor PJ de Vries

Course outline:

Assessment, formulation and treatment in child & adolescent psychiatry; neurodevelopment and child health; social and applied psychology relevant to child & adolescent psychiatry.

DP requirements: In order to be eligible to present themselves for the College of Medicine Certificate in Child and Adolescent Psychiatry examination, 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 experiencing the full range of child and adolescent mental health disorders under appropriate sub-specialist supervision. At least 12 months of this period must have involved full-time clinical training in approved clinical units.

Assessment: Six-monthly in-course assessment and College Certificate Examination.

PRY7007W MMED IN PSYCHIATRY PART 1

60 NQF credits at NQF level 9

Convener: Dr N Dyakalashé

Course outline:

This training programme forms part of the credentialing 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.

PRY7008W MMED IN PSYCHIATRY PART 2

60 NQF credits at NQF level 9

Convener: Dr N Dyakalashé

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.

DP requirements: Candidates must have been qualified for at least five years; must have spent at least three years in a clinical appointment where they 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.

PRY7009W PSYCHIATRY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr N Dyakalashé

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.

Assessment: External examination of the minor dissertation.

PRY7010W CHILD AND ADOLESCENT PSYCHIATRY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor PJ de Vries

Course entry requirements: PRY7006W

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).

Assessment: External examination of the minor dissertation.

PRY7011W MSC(MED) IN PSYCHIATRY

180 NQF credits at NQF level 9

Convener: Professor DJ Stein

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.

PRY7012W PSYCHIATRY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor DJ Stein

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.

Assessment: The dissertation is externally examined.

PRY7013W MPHIL IN FORENSIC MENTAL HEALTH PART 1

120 NQF credits at NQF level 9

Convener: Dr N Dyakalashé

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: 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 and A three-hour written Part 1 examination.

PRY7014W FORENSIC MENTAL HEALTH MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr N Dyakalashé

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.

PRY7016W MPHIL IN ADDICTIONS MENTAL HEALTH PART 1

120 NQF credits at NQF level 9

Convener: Dr H Temmingh

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.

PRY7017W ADDICTIONS MENTAL HEALTH MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr H Temmingh

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.

Assessment: External examination of the minor dissertation.

PRY7018W MPHIL IN NEUROPSYCHIATRY PART 1

120 NQF credits at NQF level 9

Convener: Professor JA 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, psycho-pharmacology 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).

PRY7019W NEUROPSYCHIATRY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor JA 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.

PRY7020W MPHIL IN LIAISON MENTAL HEALTH PART 1

120 NQF credits at NQF level 9

Convener: Associate Professor J Hoare

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.

PRY7021W LIAISON MENTAL HEALTH MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor J Hoare

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.

Assessment: External examination of the minor dissertation.

PRY7022W NEUROSCIENCE (PSYCHIATRY) DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor DJ Stein

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.

Assessment: The dissertation is externally examined.

PRY7023W MPHIL IN INTELLECTUAL DISABILITY PART 1

90 NQF credits at NQF level 9

Convener: Professor S Kleintjes

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.

450 DEPARTMENTS IN THE FACULTY

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.

PRY7024W INTELLECTUAL DISABILITY MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: Professor S Kleintjes

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.

PRY7025W NEUROPSYCHIATRY THESIS

360 NQF credits at NQF level 10

Convener: Professor J Joska

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: The thesis is externally examined.

PRY7026W NEUROSCIENCE (PSYCHIATRY) THESIS

360 NQF credits at NQF level 10

Convener: Professor DJ Stein

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.

PRY7027W COUNSELLING & PSYCHOTHERAPY SERVICES DISSERTATION

180 NQF credits at NQF level 9

Convener: L Abrahams**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%.

PRY7028W MPhil BEHAVIOURAL MEDICINE DISSERTATION

180 NQF credits at NQF level 9

Convener: Dr S Rabie and Professor J Joska

Course entry requirements: Successful applicants of the programme should be in possession of a minimum Honours degree, or an equivalent four-year degree (NQF 8). UCT offers several admitting qualifications that will facilitate access to the programme. Rigorous attempts will be made to offer the programme to students from previously disadvantaged backgrounds. Moreover, for candidates not in possession of a NQF Level 8 qualification, the programme will make use of recognition of prior learning (RPL) to facilitate access for 10% of applicants. RPL assessments will be conducted by means of a written research outline and individual interview to determine prospective candidates' suitability. The programme will not make use diagnostic testing for placement. Finally, applicants will be required to have demonstrable experience in conducting research, with participation in one or more research project.

Co-requisites: None**Course outline:**

The proposed Master of Philosophy in Behavioural Medicine was established in response to the growing recognition of the burden of mental disorders in people living with chronic conditions in South Africa. The purpose of the programme is to provide advanced development and training in research at the intersection of psychiatric disorders, chronic conditions, and health. The programme enables candidates to evaluate interventions and interpret research findings with a critical framework, and more importantly, builds professional capacity in how to develop, assess, and apply behavioural interventions to promote mental and physical health, and prevent, manage, and treat multimorbid health challenges faced by people in South Africa and beyond. The programme will generate advanced contextual knowledge related to the role of psychosocial factors in health promotion, disease prevention and management. Crucially, the programme will develop research and intervention implementation skills informed by a biopsychosocial, patient-centred, evidence-based approach to the prevention and management of mental disorders and chronic conditions.

DP requirements: None**Assessment:** Dissertation

PRY6001W PUBLIC MENTAL HEALTH DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor C van der Westhuizen**Course outline:**

The MPhil in Public Mental Health is a part-time research degree that aims to develop advanced research skills, enabling participants to undertake their own research projects (such as evaluating services, policies and interventions) as well as interpret research findings for mental health policy and

practice. The programme is designed to be accessible to practitioners who work full-time, and who are from a range of backgrounds including social work, psychology, psychiatry, medicine, occupational therapy, nursing, health economics, public mental health, public health, health service management, policy making and non-governmental organisations (NGOs). The training aims to build the professional capacity of the participants in their work, while contributing to knowledge generation in Africa. The degree requires the preparation of a high quality dissertation of a minimum of 20 000 words and not exceeding 50 000 words. More information may be found at <https://cpmh.org.za/teaching/>.

DP requirements: None.

Assessment: The dissertation is externally examined.

PUBLIC HEALTH AND FAMILY MEDICINE

Level 3, Falmouth Building South

Professor, Director and Head of Department:

S Cleary, BA *Rhodes* BAHons MA PhD *Cape Town*

Environmental Health

Level 4, Falmouth Building South

Professor and Head:

HA Rother, BA MA PhD *Michigan State*

Professors:

A Dalvie, BSc BScHons (Physiology) MSc (Public Health) PhD (Public Health) *Cape Town*

L London, MBChB MMed MD *Cape Town* BScHons (Medicine) *Stell DOH Witwatersrand*

Senior Lecturer:

J Irlam, BSc (Med)(Hons) MPhil (Epidemiology) MSc (Climate Change and Development) *Cape Town*

Lecturer:

M Jagarnath, BScHons MSc PhD *UKZN*

Assistant Lecturer:

R Mlelwa, BSc MSc (Environmental and Occupational Health) *Tanzania* PhD (Public Health)

Candidate *Cape Town*

Visiting Professors:

T Arcury, BA *Duquesne* MA PhD *Kentucky*

S Quandt, BA *Lawrence* MA PhD *Michigan*

Honorary Professor:

K Ahmed, BSc MSc *Karachi* BSpHd *Minnesota*

Honorary Senior Lecturers:

E. Euripidou, B.Tech(Hons) MSc *LSHTM London* | MSc *UoN Nottingham*

AA Halpaap, BA MA PhD *Yale University New Haven*

G Manuweera, BSc MPhil *Peradeniya* PhD *Missouri*

M Miller, BSc BSc (Nursing) *Ohio* MSc (Nursing) *Seattle*

WR Utembe, BSc (Hons) *Malawi* master's in environmental sciences *Malaysia* PhD (Public Health)

JHB

S Willis, BScHons *Newcastle* DPhil *Oxford*

Epidemiology and Biostatistics

Level 5, Falmouth Building South

Professor and Head:

L Myer, BA *Brown* MA MBChB *Cape Town* MPhil PhD *Columbia*

Professor and AXA Chair in Non-Communicable Disease Epidemiology:

L Dugas, BSc PhD *Cape Town* MPH *Loyola*

454 DEPARTMENTS IN THE FACULTY

Associate Professor:

M Lesosky, BSc MSc PhD *Guelph* PGDip (Health Professional Education) *Cape Town*

Senior Lecturers:

T Phillips, BSc *UJ* MPH PhD *Cape Town*

H Madlala, BSc PhD *UKZN* MPH *Cape Town*

A de Voux, BSc MSc *Cape Town* PhD *Emory*

Clinical Research Officer:

J Odayar, MBChB MPH *Cape Town*

Lecturers/Research Officers:

F Honwana, BSc MSc *UKZN*

T Malaba, BSc *Zimbabwe* MPH *Cape Town*

E Mukonda, BSc *Zimbabwe* MPhil *Cape Town*

Honorary Professors:

D Bradshaw, BSc *UKZN* MSc *Cape Town* PhD *Oxon*

S Delaney-Moretlwe, MBChB *Witwatersrand* MSc PhD *LSHTM*

J McIntyre, MBChB *Zimbabwe* FRCOG

C Wiysonge, MD *Cameroon* MPhil *Cambridge* PhD *Cape Town*

Honorary Associate Professors:

L Dodd, BSc *Utah* MSc PhD *Washington*

M Rangaka, MBChB *Cape Town* MSc MPhil PhD *London*

S Reynolds, BSc *Toronto* MD *McGill* MPH *Johns Hopkins*

Adjunct Associate Professor:

T Tucker, MBChB PhD *Cape Town*

Honorary Senior Lecturers:

A Cois, BSc MSc *Caligiari* MPH PhD *Cape Town*

DJ Davey, BA *Colorado* MPH *Columbia* PhD *UCLA*

N Ford, BSc *Warwick* MPH *Cape Town* PhD *Simon Fraser*

K Kelly, BA MA *UKZN* PhD *Rhodes*

M Wallace, BA *Cape Town* MSc *UCL* PhD *West England*

Honorary Research Associate:

J Ncaiyana, BSc *UKZN* MSc *Witwatersrand* PhD *North Carolina*

Project Co-ordinators:

S Dadan BSc *UKZN*

N Mashele BSc PhD *Northwest*

P Mogoba, BSc *Venda* MPH *UCT*

R Mvududu BSc *MPH UCT*

P Zwane BSc MPH *UCT*

Laboratory Managers:

N Hu, BSc MSc MPH *UCT*

S Matyeseni, BSc MSc *Stellenbosch*

Data Analysts:

N Gawler BSc MSc *Pretoria*

H Geffin BSc MSc *Cape Town*

D Nyemba BSc Zimbabwe MPH *Cape Town*

Health Economics

Falmouth Annex

Professor and Head:

E Sinanovic, BSc *Zagreb* PG Dip (Financial Management) *Maastricht* MCom *Cape Town* PGDip
PhD *London*

Professor:

S Cleary, BA *Rhodes* BAHons MA PhD *Cape Town*

Senior Lecturers:

OA Alaba, BScHons MSc PhD *Ibadan*

L Cunnama, BSc (Physiotherapy) MPH PhD *Cape Town*

Honorary Associate Professor:

V Govender, BCom *UKZN* MCom *Cape Town* MPH *Boston* PhD *Cape Town*

Research Officers:

A Obse, BA MSc *Addis Ababa* PhD *Dublin*

Health Policy and Systems

Level 1, Falmouth Building South

Professor and Head:

L Gilson, BAHons *Oxon* MA *East Anglia* PhD *London*

Associate Professors:

J Olivier, BA MPhil PhD *Cape Town*

M Shung King, MBChB *UKZN* DPhil *Oxon*

Honorary Professors:

I Aygepong, MBChB *Ghana* MCommH *Liverpool* DRPH *North Carolina*

U Lehmann, PhD *Hanover*

H Schneider, MBChB *Cape Town* DCH DTMH MMed *Witwatersrand*

Adjunct Associate Professor:

EH Engelbrecht, MBChB MFamMed DCH DHA *Free State*

Honorary Senior Lecturers:

M Moodley, MBChB *UKZN* MBA *Cape Town*

Honorary Research Associate:

B Cakorous, DrPH *California* MPH *Pittsburgh*

Occupational Medicine

Level 4, Falmouth Building South

Professor and Head:

MF Jeebhay, MBChB *Natal* DOH MPhil (Epidemiology) *Cape Town* MPH (Occupational
Medicine) PhD *Michigan* FCPHM (Occupational Medicine) *SA*

456 DEPARTMENTS IN THE FACULTY

Associate Professor:

S Adams, MBChB DOH MMed PhD *Cape Town* MFamMed *Stell* FCPHM (Occupational Medicine) *SA*

Senior Lecturer:

I Ntamatama MBChB *Cape Town* Dip Public Health *UNISA* MMed *Cape Town* MSc Occupational Health *Birmingham* Dip HIV Man FCPHM (Occupational Medicine) *SA* AHMP -*FPD/Yale*

Research Co-ordinator:

R Baatjies, BTech MTech *CPUT* MPH *Witwatersrand* PhD *Cape Town*

Emeritus Professor and Senior Scholar:

R Ehrlich, BBusSc MBChB PhD *Cape Town* DOH *Witwatersrand* FFCH FCPHM (Occupational Medicine) *SA*

Emeritus Professor:

G Todd, BSc *UKZN* MBChB PhD *Cape Town* FCDerm *SA*

Adjunct Professor:

S Kisting-Cairncross, MBChB DOH *Cape Town* MFamMed *Witwatersrand* MCFP *SA*

Honorary Senior Lecturers:

B Andrews, MBChB *Cape Town*, DOH MMed *Stell* FCPHM (Occupational Medicine) *SA*

AH Burdzik, MBChB MMed *Cape Town* Dip Occupational Medicine *UK* FCPHM (Occupational Medicine) *SA*

G Kew, MBChB *DA SA* DOH *Cape Town*

S Manjra, MBChB *Natal* MMedSc *Birmingham* BScHons (Medicine) DOH *Cape Town*

M Morkel, MBChB DOH *Cape Town*

A Raynal, MBChB *Cape Town* MSc *LSHTM* MPH MFOU *UK*

J te Water Naude, MBChB MPhil *Cape Town* FCPHM *SA*

Honorary Lecturers:

B Cloete, MBChB DOH MMed *Cape Town* FCPHM (Occupational Medicine) *SA*

H de Wet, MBChB MMed *NUS*

S Fakie, MBChB DOH *Cape Town*

D Knight, MBChB MMed *Cape Town*

M Mothemela, MBChB *Medunsa*, MMed *Cape Town*, FCPHM (Occupational Medicine) *SA*

H Mwanga, MD *Tanzania*, MMed PhD *Cape Town*, FCPHM (Occupational Medicine) *SA*

D Ngajilo, MD *Tanzania*, MMed *Cape Town*, FCPHM (Occupational Medicine) *SA*

H Williams, MBChB DOH MMed *Cape Town* FCPHM (Occupational Medicine) *SA*

Registrars:

PM Hlangwane

P Mfuno

Z Soday

Y Williams-Mohamed

Public Health Medicine

Levels 2 and 4, Falmouth Building South

Professor and Head:

L London, MBChB MMed MD *Cape Town* BScHons (Medicine) *Stell* DOH *Witwatersrand*

Professors:

A Boulle, MBChB PhD *Cape Town* MSc *London* FCPHM *SA*
 M Davies, MBChB MMed PhD *Cape Town* FCPHM *SA*

Associate Professor:

V Zweigenthal, BSc DTM&H DPH *Witwatersrand* BSocScHons MBChB PhD *Cape Town* FCPHM *SA*

Associate Professor Part-time:

T Naledi, MBChB *Cape Town*, FCPHM (Deputy Dean: Joint Faculty- Department appointment)

Senior Lecturers Full-time:

J Irlam, BScHons (Medicine) MPhil *Cape Town* (Joint School-Directorate of Primary Healthcare appointment)
 N Jacob, MBChB MMed *Cape Town* FCPHM *SA*
 NO Mapukata, ND BTech (Medical Technology) *CPUT/DUT* MSc (Health Management) *UK*
 MSc Medicine (Bioethics and Law) *Witwatersrand* Cert (HIV/AIDS Care & Counselling) *Unisa* Cert (Introduction to Theory of Change) PhD *Witwatersrand*

Senior Lecturers Part-time:

K Begg, MBChB *Cape Town* DCH DipObs FCPHM (Deputy Dean: Joint Faculty-Department appointment)

Lecturers Full-time:

F Amien, BChD MChD *Cape Town*
 I Datay, MBChB *Cape Town* DPhil *Oxon* (Joint School-Directorate of Primary Healthcare appointment)
 S Toto, BSc MSc (Occupational Therapy) *Cape Town*

Senior Research Officer:

E Kalk, MBBCh *Witwatersrand* PhD *Birmingham* MRCP *London* Dip (HIV Management) *SA* MPH *Cape Town*
 H Haricharan, MA *Cape Town* MJournalism *Canada* PhD *Cape Town*
 U Mehta, BPharm *Witwatersrand* PharmD *Albany* DrPH *James Cook*

Medical Natural Scientist:

N Zinyakatira, BScHons *Zimbabwe* MPhil Cer(Project Management) *Cape Town*

Honorary Professors:

N Morojele, PhD *Kent*
 R Matzopoulos, BBusSci MPhil PhD *Cape Town*

Honorary Associate Professors:

N Harker-Burnhams, PhD *Cape Town* BAHons MPhil *UPE*
 S Moyo, MBChB MPH Dip MSHS PhD
 T Oni, BSc *London* MBBS *UCL* MPH MMed *Cape Town* MD *Imperial* MRCP DFPH *UK* FCPHM *SA*

Adjunct Associate Professor:

R Foster, PhD *Cape Town*

Honorary Senior Lecturers:

E Goemare, MSc MD DTMH *Belgium* DSc *Cape Town*
 D Pienaar, MBChB MMed *Cape Town*

458 DEPARTMENTS IN THE FACULTY

Honorary Lecturers:

G Denicker, MSc *Oxford BChD UWC*
E Morden, BSc MPH *Cape Town*
Z Mgugudo-Sello MBChB *Cape Town FCPHM SA*
S Peters, MBChB *Cape Town FCPHM SA*
V Shaw, PhD *Norway*

Honorary Research Associates:

T Boulle, BSc (OT) *UCT, MPH UWC*
A Cassidy, MPH *Cape Town*
F Hassan, LLM *Duke*
J McLoughlin, MBChB MPH *Cape Town*
M Prinsloo, MPH *UWC, PhD UCT*
M Richter, LLM *Wits, PhD Ghent*
CJ Seebregts, BSc BScHons (Medicine) PhD *Cape Town BScHons Unisa*

Visiting Professors:

S Whittaker, MBChB MMed PhD *Cape Town FFCH SA*
T Rehle, MD *Munich MPH LSHTM PhD Antwerp*

Facilitators:

B Adebisi, MSocSc PhD *UWC*
I Amanquarnor, MSc (*Occupational Therapy*) *Cape Town*
F Bennin, BSc (*Honors*) *Occupational Therapy + MPH Cape Town*
A Cariem, BSc (*Honors*) *Occupational Therapy UWC*
M Chidavaeni, BSocSc *Cape Town*
N Chikte, BScHons (Biokinetics) *Cape Town*
G Cook, BScHons UK Dip (Careers Guidance) *Kent*
K Fataar, BSocScHons *Cape Town*
M Isiaga MSc (Medicine) *Cape Town*
N Jaffer M Nutrition and Dietetics *US*
A Lehloa, BSc Audiology (*Honors*) *Cape Town*
A Lukwa, Bcomm Econ (Hon) (MSU) M.P.H (Health Economics) (UCT) Ph.D. Candidate (Public Health)-(UCT)
S Makumire, PhD *Biochemistry Cape Town*
S Mguzulwa, MSocSc *Cape Town*
N Mini, BA Cur Nursing PGDip Pall Care *Cape Town*
P Mosala, PhD *Clinical Sciences & Immunology Cape Town*
L Mpoyisa, MScSc *Cape Town*
C Ncube, BA SocSc *Cape Town*
E Nwosu PhD (Med) *Cape Town*
T Nyamndaya MSocSc *UNISA*
M Sekhesa BSc Audiology *Cape Town*
A Timol, BSc Audiology (*Honors*) *Cape Town*
E Tsetse, MSc (Medical Biochem) *Cape Town*

Registrars:

N Berkowitz
M Hunter
H Hussey
J Gammon
M Jose
S Lubega
H Moolla

V Mudalay
 L Mureithi
 G Ngubane
 C Pillay
 Y Tembo
 M Tlali
 A von Delft

Social and Behavioural Sciences

Level 3, Falmouth Building South

Associate Professor and Head:

L Knight, *BSc Cape Town MPS UKZN PhD LSHTM*

Lecturer:

J Githaiga, *Bed (Arts) Kenya MA (Communication) MA (Counselling Psychology) Kenya PhD Cape Town*

Assistant Lecturer:

N Kannemeyer, *BA (Psychology) New Zealand MPH Cape Town*

Research Co-ordinator:

M Majola

Honorary Professors:

N Abrahams, *MPH PhD Cape Town*

D Cooper, *BSocSc BAHons PhD Cape Town*

C Morroni, *BA Harvard MSc Columbia MPH MBChB Cape Town PhD Columbia*

Honorary Associate Professors:

A Harrison, *BA Penn MA MPH Johns Hopkins PhD LSHTM*

M Lurie, *BA Boston MA Florida PhD Johns Hopkins*

C Mathews, *BAHons UKZN BSocScHons MSc (Medicine) PhD Cape Town*

Adjunct Associate Professor:

C Colvin, *BA VirginiaTech MA PhD Virginia MPH Cape Town*

Adjunct Senior Lecturers:

D Constant, *BSc (Physiotherapy) BSocHons MSc (Medicine) MPH PhD Cape Town*

M Endler, *MD PhD Karolinska*

A Swartz, *BSocScHons MPH PhD Cape Town*

Honorary Senior Lecturer:

E Stern, *MPH PhD Cape Town*

Honorary Research Associates:

S Cooper, *MPH Cape Town PhD LSHTM*

Z Duby, *MPH PhD Cape Town*

J Harries, *BA MPhil MPH PhD Cape Town*

E Venables, *PhD Edinburgh*

PPH4019F THE ECONOMICS OF HEALTH SYSTEMS

12 NQF credits at NQF level 8

Convener: Dr A Obse

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.

PPH4020S PRIORITY SETTING AND HEALTH TECHNOLOGY ASSESSMENT

12 NQF credits at NQF level 8

Convener: Professor S Cleary

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.

PPH4021S KEY FEATURES OF ECONOMIC EVALUATION

12 NQF credits at NQF level 8

Convener: Dr L Cunnamo

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.

PPH4022F ECONOMIC EVALUATION FOR HEALTHCARE DECISION-MAKING

12 NQF credits at NQF level 8

Convener: Associate Professor E Sinanovic

Course entry requirements: PPH4020S and 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.

PPH4023F STRATEGIC PURCHASING 1

12 NQF credits at NQF level 8

Convener: Dr A Obse

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.

PPH4024S STRATEGIC PURCHASING 2 – INFLUENCING PROVIDERS

12 NQF credits at NQF level 8

Convener: Dr A Obse

Course entry requirements: PPH4019F and 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.

PPH4025S STRENGTHENING PROGRESS TO UNIVERSAL HEALTH COVERAGE

12 NQF credits at NQF level 8

Convener: O Alaba

Course entry requirements: PPH4019F, PPH4023F and 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.

PPH4033F PESTICIDE RISK MANAGEMENT

20 NQF credits at NQF level 8

Convener: Dr M Jagarnath

Objective: By the end of this course students should be able to: Describe and apply the elements of the International Code of Conduct on Pesticide Management for the sound management of pesticides. Explain and apply the pesticide life-cycle in relation to best practices for reducing pesticide health risks. Identify social and individual vulnerability in relation to pesticide exposures and identify how to regulate for these access and use various global data bases for effective pesticide regulation

Course outline:

Five modules (two weeks each) introduce students to the International Code of Conduct on Pesticide Management, 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, compliance with international commitments and standards, registration issues, pesticide governance, implementation of pesticide legislation, incorporating 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 analyze pesticide policies and the registration process to promote effective regulatory implementation in varying pesticide use contexts (e.g., different climates, populations, legal structures).

DP requirements: Attendance at two-week teaching blocks at the beginning of the programme is mandatory, successful completion of web-based forums, and submission of all assignments by the due date (late penalties apply as described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH4034S PESTICIDE TOXICOLOGY

20 NQF credits at NQF level 8

Convener: Dr M Jagarnath

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 as described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH4035S PESTICIDE ECOTOXICOLOGY

20 NQF credits at NQF level 8

Convener: Dr M Jagarnath**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 described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH4040S CONTAINERS & CONTAMINATED SITE MANAGEMENT

20 NQF credits at NQF level 8

Convener: Dr M Jagarnath

Objective: At the end of this course, students should be able to: Describe Container Management Schemes, the main elements that make up such schemes and container management regulation, Demonstrate an understanding of how to design of a contaminated land investigation including site ranking, site investigation techniques, risk assessment and environmental assessment, Demonstrate an understanding of the role of the conceptual site model in risk management, Demonstrate understanding of remediation techniques.

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 as described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH4041S INTERNATIONAL CHEMICAL MANAGEMENT AGREEMENTS

20 NQF credits at NQF level 8

Convener: Dr M Jagarnath

Objective: By the end of this course students should be able to:

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 chemical risks, particularly in low- and middle-income countries (LMICs). These include the International Code Conduct on Pesticide Management, the Stockholm Convention, the Rotterdam Convention, Basel Convention, Minamata Convention, and the Strategic Approach to International Chemicals Management (SAICM) and the Beyond 2020 Instrument. The five modules cover an introduction to global cooperation on chemical management, legally binding instruments for chemicals management, and the different implementation elements of the conventions and agreements (e.g., legislation, capacity building, financing, and monitoring and evaluation).

DP requirements: Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH4042S PESTICIDES AND INTEGRATED VECTOR MANAGEMENT

20 NQF credits at NQF level 8

Convener: Dr M Jagarnath

Objective: At the end of this course, students should be able to: Demonstrate understanding about vector biology, behaviour and ecology, and their significance for the transmission of disease pathogens, as a basis for selecting vector control interventions, Identify the motives, guiding principles

and key elements of IVM and their significance in a local context, Describe the process of planning, implementation, monitoring and evaluation of IVM, Describe the contribution of vector control and transmission reduction in the effective control, elimination, and prevention-of-reintroduction of vector-borne disease, Describe and identify the major types of urban pests and strategies for their control, Understand the factors that influence insecticide management for vector control. Understand to integrate public health pesticides legislation, develop reporting systems, and assure efficacy and compliance with international conventions.

Course outline:

This course is comprised of eight modules and 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 a 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 will have knowledge of a holistic approach to public health vectors and disease management; basic vector ecology, biology and control for major diseases; how to develop a framework for IVM; how to plan for and implement IVM; identify IVM strategies for malaria control; how to control vectors and pests in the urban environment; and how to integrate public health pesticides into legislation, how to develop a reporting system, managing insecticides in vector control 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 as described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH4051F/S ALTERNATIVES & RISK REDUCTION STRATEGIES

20 NQF credits at NQF level 8

Convener: Professor HA Rother

Course outline:

The course provides students with the complex and diverse background knowledge required to prevent pesticide exposures (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 through a Hierarchy of Control approach. 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 approaches 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.

PPH4057S CRITICAL HEALTH MANAGEMENT PRACTICES

25 NQF credits at NQF level 8

Convener: Associate Professor M Shung King**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%. Pass requirements are as follows: An average of 50% across all the course assessments with a subminimum of 50% for the primary written assignment. Students with a mark of between 45-49% are eligible for resubmission. Only one resubmission is allowed, subject to the proviso (see rule FPU5.1) that no more than two resubmission across all four courses shall be allowed.

PPH4058Z LEADING HEALTH SYSTEM IMPROVEMENT

25 NQF credits at NQF level 8

Convener: Associate Professor M Shung King**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%. The pass requirements are as follows: An average of 50% across all the course assessments with a subminimum of 50% for the primary written assignment. Students with a mark of between 45-49% are eligible for one resubmission, subject to the proviso (see rule FPU5.2) that no more than two resubmissions across all four courses shall be allowed.

PPH4059Z HEALTH SYSTEM INTERVENTION PROJECT (B)

40 NQF credits at NQF level 8

Convener: Associate Professor M Shung King

Course entry requirements: Attendance and completion of all tasks for PPH4062X (Health Systems Intervention Project (A)).

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%. Pass requirements are as follows: 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. Students with a mark of between 40% and 49% for the written assignment are eligible for resubmission only once, subject to rule FPU5.2.

PPH4060F WORKING IN COMPLEX HEALTH SYSTEMS

25 NQF credits at NQF level 8

Convener: Associate Professor M Shung King

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%. The pass requirements are as follows: An average of 50% across all the course assessments with a subminimum of 45% for the primary written assignment. Students with a mark of between 40- 44% for the written assignment are eligible for one resubmission, subject to the provision that no more than two resubmissions across all four courses area allowed (see rule FPU2).

PPH4069W PRACTISING INTEGRATED OCCUPATIONAL HEALTH IN CONTEXT

60 NQF credits at NQF level 8

Convener: Dr IMT Ntamatlala

Objective: The aim of this course is to equip students with the values, knowledge and skills to practice occupational health in an integrated, effective and ethical manner in a variety of clinical and workplace/industry contexts, as regulated by South African occupational health and safety legislation.

Course outline:

This course covers all the key principles and the application of key concepts in order to demonstrate an integrated approach to occupational health in a variety of preceding courses to different industry/workplace settings. The course introduces students to progressive and critical thinking in relation to a broad and extensive range of issues relevant to occupational health and is an important final component that enables the student to demonstrate competencies across different workplace/industry contexts.

DP requirements: Satisfactory attendance of the course block contact week (at least 80% attendance); and At least a 50% grade point average for the semester assignments and quizzes (in-course assessment). Satisfactory attendance of the course block contact week (at least 80% attendance)

Assessment: Consists of a combination of an integrated portfolio assignment specific to this course (practicing integrated occupational health in context), quizzes and a final end-of-course examination which covers all work covered over the two year diploma period. 66.7% final examination (summative assessment); 33.3% assignments and quizzes (in-course assessment) A student failing to obtain 50% in the in-course assessment, will have one opportunity to repeat this component (portfolio and/or quizzes). A student failing to obtain 50% in the final examination will only have one opportunity to repeat the examination.

PPH4070F OCCUPATIONAL HEALTH SERVICES MANAGEMENT, ETHICS AND LEGISLATION

20 NQF credits at NQF level 8

Convener: Dr IMT Ntamatlala

Objective: The aim of this course is to provide students with the knowledge and skills to establish and comprehensively manage an occupational health service, have sufficient knowledge of relevant occupational health and safety legislation, and have the appropriate knowledge and skills to deal with ethical issues that occur in occupational health and safety practice.

Course outline:

The course introduces students to progressive and critical thinking in relation to a broad range of issues relevant to occupational health services management, occupational health and safety legislation and ethical issues encountered in the workplace/practice of occupational health. This course will provide students with the knowledge and skills to establish and comprehensively manage an occupational health service, have sufficient knowledge of relevant occupational health and safety legislation, and have the appropriate knowledge and skills to deal with ethical issues that occur in occupational health and safety practice.

DP requirements: Satisfactory attendance of the course block contact week (at least 80% attendance); and at least a 50% grade point average for the semester assignments and quizzes (in-course assessment).

Assessment: Consists of a combination of a work-based practical portfolio assignment specific to this course (occupational health services management), quizzes and a final end-of-course examination. 40% final examination (summative assessment); 50% for portfolio assignments and 10% for quizzes (in-course assessment). A student failing to obtain 50% will have one opportunity to repeat the portfolio assignment or course only once. The examination cannot be repeated and there is no supplementary examination.

PPH4071S OCCUPATIONAL MEDICINE AND WORK ABILITY

20 NQF credits at NQF level 8

Convener: Dr IMT Ntatamala

Objective: The aim of this course is to provide students with the knowledge and skills to evaluate patients with work-related health problems (occupational injury/disease), develop a workplace medical surveillance programme, and the ability to assess health problems and disease in relation to fitness for work and work ability.

Course outline:

This course covers all the key principles and the application of key concepts in order to diagnose and manage occupational diseases, injuries and work ability. The course introduces students to progressive and critical thinking in relation to a broad and extensive range of issues relevant to occupational medicine and work ability practice including impairment and disability assessment of various health problems encountered in the workplace.

DP requirements: Satisfactory attendance of the course block week (at least 80% attendance); and at least a 50% grade point average for the semester assignments and quizzes (in-course assessment).

Assessment: Consists of a combination of a work-based practical portfolio assignment specific to this course (occupational medicine and work ability), quizzes and a final end-of-course examination. 40% final examination (summative assessment); 50% for portfolio assignments and 10% for quizzes (in-course assessment). A student failing to obtain 50% will have one opportunity to repeat the portfolio assignment or course only once. The examination cannot be repeated and there is no supplementary examination.

PPH4072F OCCUPATIONAL HEALTH RISK ASSESSMENT AND MANAGEMENT

20 NQF credits at NQF level 8

Convener: Dr IMT Ntatamala

Objective: The aim of this course is to provide students with the knowledge and skills to conduct a comprehensive health risk assessment in a workplace, to prioritise risks and identify appropriate control measures to mitigate risks for the protection of working populations, in accordance with laws/regulations responsible for the prevention of occupational injury and disease.

Course outline:

This course covers all the key principles and the application of key concepts in order to assess and manage occupational health risks. This course lays the foundation for introducing students to progressive and critical thinking in relation to a broad and extensive range of issues relevant to occupational health risk assessment and management in different occupational settings. Students will develop the knowledge and skills to conduct a comprehensive health risk assessment in a workplace, to prioritise risks and identify appropriate control measures to mitigate risks for the protection of working populations, in accordance with laws/regulations responsible for the prevention of occupational injury and disease.

DP requirements: Satisfactory attendance of the course block week (at least 80% attendance); and at least a 50% grade point average for the semester assignments and quizzes (in-course assessment).

Assessment: Consists of a combination of a work-based practical portfolio assignment specific to this course (occupational health risk assessment and management), online quizzes and a final end-of-course examination. 40% final examination (summative assessment); 50% for portfolio assignments and 10% for quizzes (in-course assessment) A student failing to obtain 50% will have one opportunity to repeat the portfolio assignment or course only once. The examination cannot be repeated and there is no supplementary examination.

PPH6004W PUBLIC HEALTH DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor L Myer

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.

Assessment: The dissertation is externally examined.

PPH6030W MPHIL IN PALLIATIVE MEDICINE BY DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor E Gwyther

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.

Assessment: The dissertation is externally examined.

PPH6032R RESEARCH LITERACIES

12 NQF credits at NQF level 9

Convener: Professor HA Rother and R Mlelwa

Objective: The aim of this course is to equip students with: Critical and analytical research and writing skills, the ability to translate research findings for academic and non-academic audiences; and skills in writing proposals, sourcing funding and project management of research projects. On completion of this course, students will be able to: Demonstrate skills in academic writing for different audiences and publications. Evaluate and synthesis evidence from varying sources. Knowledge in conducting a review of the literature and relevant data bases. Critically evaluate research articles, documents and data for research and regulatory decision-making. Demonstrate skills in conducting a situation analysis, gap analysis, needs assessment and health and environment impact assessment. Design and write a project proposal. •Develop a fundraising strategy for research proposals. Describe the funding landscape for research and projects. •Apply project management and budgeting skills.

Course outline:

This course is comprised of three modules. In the first module, students will be introduced to academic writing principles, conducting literature reviews, mechanics of referencing, and drafting literature reviews. In the second module, students will also be introduced to different methodological approaches such as situational analysis, needs assessment, and health and environmental impact assessment, and relevant tools for supporting methodological assessments. In the third module, students will be taught fundraising strategies and how to write strong funding proposals.

DP requirements: Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply as described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH6033Q RISK COMMUNICATION AND POLICY BRIEF DEVELOPMENT

12 NQF credits at NQF level 9

Convener: Professor HA Rother and R Mlelwa**Objective:** Upon completion of this course, students should be able to demonstrate: Advanced knowledge in chemical risk communication concepts and methods as part of risk management. Advanced skills in developing risk communication strategies for the appropriate context and target audience. Advanced skills in conducting research for a policy brief. Advanced critical skills and literacies in developing a policy brief. Ability to identify the different stakeholders in chemicals management nationally and internationally and to describe methods to engage with these. Ability to pilot policy briefs with target audiences. Ability to describe the role, impact and complexity of research translation.**Course outline:**

The aim of this course is to provide students with skills needed for research translation through implementing chemical risk prevention and risk reduction interventions. Students will learn different intervention models, particularly risk communication strategies, and promoting policy changes through policy briefs. They will learn the purpose and functions of policy briefs, developing and disseminating policy briefs. The course also covers other elements and issues linked to risk communication in chemicals management, various tools and developing chemicals risk communication strategies.

DP requirements: Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply as described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

PPH6034Q SITUATIONAL ANALYSIS RESEARCH TASK

30 NQF credits at NQF level 9

Convener: Professor HA Rother and R Mlelwa**Course entry requirements:** Research Literacies course PPH6032R**Objective:** The aim of this data collection and data analysis course is for students to apply the skills obtained in the Research Literacies course (PPH6032R) to a real-life problem linked to chemical management within their country or the country they are working in. Upon completion of this course, students will demonstrate: Ability to conduct, for example, a situation analysis, needs assessment, gap analysis or health impact assessment within a specific country context for a chemical health and environmental risk or issue of concern. Ability to appraise national strategies to identify gaps and opportunities for chemical risk prevention and risk reduction interventions. Ability to evaluate current interventions for risk prevention and reduction related to the chemical of concern identified.**Course outline:**

This is a self-driven course. Students will be provided with instructions, marking rubric and milestones. They will be expected to submit a task proposal for approval by the course convenors, and the final report at the end of the course. The final report will comprise of an introduction, literature review, methods, results, findings, recommendations and conclusion.

DP requirements: Successful completion of the research work (proposal, data collection, draft report with data analysis) and submission of the final report by the due date (late penalties apply as described in the course outline).**Assessment:** The situational analysis research task will have one final mark. A pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the situational analysis research task for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted task will receive a maximum of 50%.

PPH6035Q/R CORE COURSE IN CHEMICAL RISK MANAGEMENT

12 NQF credits at NQF level 9

Convener: Professor HA Rother and R Mielwa

Objective: Upon completion of this course, students should be able to demonstrate: Knowledge of principles of chemicals risk management covering health, environment, human rights, environmental justice and gender mainstreaming. Insights to the environmental and social determinants of chemical exposures by vulnerable populations and in diverse contexts including climate change. Advanced knowledge of chemicals and their associated hazards and risks for health and the environment, particularly in LMIC. Insights into decision-making mechanisms for chemicals management and specifically risk reduction in LMIC. Critically appraise the various policies to identify gaps and opportunities with various systems and structures. Advanced knowledge of global governance of the sound management of chemicals particularly in relation to international harmonization, hazard and risk management and labelling. Apply human rights, ethics, and environmental principles to managing health risks. Ability to describe governance and policy analysis theories as applied to chemical risk management. Ability to identify the key stakeholders and roles each play in the life cycle management of chemical risks. Advanced knowledge of policies and drivers in chemical risk management through understanding relevant frameworks for managing chemical risks.

Course outline:

The aim of this course is to provide students with extensive knowledge on the complex aspects of managing chemical health and environmental risks along the life cycle of the chemical to protect vulnerable populations in low- and middle-income countries. Students will learn advanced knowledge in frameworks for sound management of chemicals, policy, drivers and principles of chemicals management, and strategies for developing chemicals management. They will also gain advanced knowledge to promote decision-making and critical thinking involved in chemicals management and specifically health and environmental risk reduction.

DP requirements: Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply as described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH6036R CHEMICAL RISK ASSESSMENT FOR MANAGERS

12 NQF credits at NQF level 9

Convener: Professor HA Rother and R Mielwa

Objective: On completion of this course students will demonstrate: Advanced knowledge of the health and environmental impacts and risks linked to chemical use and exposures for a cross-spectrum of chemicals. Advanced knowledge of methods for chemical hazard, risk and exposure assessment. Advanced knowledge of basic principles of hazard and risk assessment of chemicals. Advanced skills in accessing health and environmental surveillance data within a country or for a country through using mutually accepted data from other countries. Ability to identify and design strategies for addressing complex environmental health issues in relation to chemicals use and management. Specialised knowledge of risk assessment modelling and monitoring. Advanced knowledge of ethical risk assessment that incorporates human rights into chemicals risk management. Ability to critique and design chemical risk communication strategies. Ability to critique and identify gaps in hazard and risk assessments relevant for LMIC regulation of chemicals. Advanced skills in managing highly hazardous chemicals in LMIC.

Course outline:

The aim of this course is to provide students with the knowledge to implement risk assessment for sound management of chemicals at a management level. It covers the background to risk assessment for managers, hazard and risk assessment, risk reduction and assessment issues for managers. Students will learn on using risk assessment data for making regulatory decisions, conducting substitution and alternative assessments, and three safety nets in managing chemicals. The course also covers risk assessment in managing public health incidents and alternative approaches to risk assessment.

DP requirements: Successful completion of web-based forums and submission of all assignments by the due date (late penalties apply as described in the course outline). Students must obtain a sub-minimum of 45% GPA for the semester continuous assessments (discussion exercises, pesticide discussion forum, chemical network discussion participation, online quizzes, and assignments) to be allowed to write the final assignment.

Assessment: Continuous 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 pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the final assignment for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted final assignment will receive a maximum of 50%.

PPH6037Q/R MASTER'S PROJECT

42 NQF credits at NQF level 9

Convener: Professor HA Rother and R Mlelwa

Course entry requirements: PPH6033Q: Risk Communication and Policy Brief Development course PPH6034Q: Situational Analysis Research Task course

Objective: Upon completion of this course, students will demonstrate: Ability to develop an intervention based on research findings and data collected. Ability to evaluate the current country interventions for chemical risk prevention and risk reduction. Skills in intervention monitoring and evaluation. Skills in designing and implementing a risk prevention and risk reduction intervention. Ability to write a well-structured and clearly written report.

Course outline:

This is a self-directed intervention project where the student makes use of the research findings and data collected in the Situational Analysis Research Task course (PPH6034Q), as well as applies the research translation skills learned in the Risk Communication and Policy Brief Development course (PPH6033Q). Students will develop, implement, and evaluate an intervention to address the real-life problems linked to chemicals within their country or the country they are working in. The problems to be addressed and implementation recommendations will be informed by the findings and data the student collected in the Situational Analysis Research Task course (PPH 6034Q).

DP requirements: Successful completion of the project work and submission of the final report by the due date (late penalties apply as described in the course outline).

Assessment: The mark is comprised of the intervention design and implementation proposal, the pre- and post-intervention evaluations, and the final report. A pass mark of 50% is required overall. Students who obtain 45% – 49% for their course mark will be given an opportunity to revise and resubmit the master's project for reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. The resubmitted master's project will receive a maximum of 50%.

PPH7015W MASTER OF PUBLIC HEALTH MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor L Myer

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

474 DEPARTMENTS IN THE FACULTY

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.

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.

PPH7016F PUBLIC HEALTH AND SOCIETY

12 NQF credits at NQF level 9

Convener: Associate Professor L Knight

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.

PPH7018F INTRODUCTION TO EPIDEMIOLOGY

12 NQF credits at NQF level 9

Convener: Dr A Grimmsrud

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.

PPH7021F BIOSTATISTICS I

12 NQF credits at NQF level 9

Convener: J Ramjith

Course outline:

This course introduces 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.

PPH7022S EVIDENCE-BASED HEALTH CARE

12 NQF credits at NQF level 9

Convener: TBC

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.

PPH7029F ADVANCED EPIDEMIOLOGY

12 NQF credits at NQF level 9

Convener: Professor 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.

PPH7033W MMED IN PUBLIC HEALTH PART 1

60 NQF credits at NQF level 9

Convener: Professor L London

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, and undergo training in an HPCSA-accredited training unit linked to the UCT Faculty of Health Sciences. The Part I 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 interventions to promote health.

DP requirements: At least two 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 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.

PPH7034W MMED IN PUBLIC HEALTH PART 2

60 NQF credits at NQF level 9

Convener: Professor L London

Course entry requirements: PPH7033W and PPH7035W

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, 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 36 months 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, which include: (iv) Completed their dissertation for the MMed degree (PPH7035W); (v) submitted a short report on a public health topic that fulfils the requirements of the College of Public Health Medicine; and (vi) 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 their 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 four written papers, a short report and an Objective Structured Practical Examination (OSPE). A minimum of 50% must be obtained as an average for all the written papers and a minimum of 50% must be obtained for the aggregate mark.

PPH7035W PUBLIC HEALTH MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor L London

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.

Assessment: External examination of the minor dissertation.

PPH7039F THEORY AND APPLICATION OF ECONOMIC EVALUATION IN HEALTHCARE

12 NQF credits at NQF level 9

Convener: Professor E Sinanovic

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.

PPH7041S HEALTH POLICY AND PLANNING

12 NQF credits at NQF level 9

Convener: Dr E Whyte

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.

PPH7048W PALLIATIVE MEDICINE MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: Associate Professor E Gwyther

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.

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.

PPH7050F EQUITY AND EFFICIENCY FOR UNIVERSAL HEALTH COVERAGE

12 NQF credits at NQF level 9

Convener: Dr L Cunnama

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.

PPH7051W FAMILY MEDICINE THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor D Hellenberg

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: The thesis is externally examined.

PPH7053F PUBLIC HEALTH & HUMAN RIGHTS

12 NQF credits at NQF level 9

Convener: Professor L London

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.

PPH7054S GENDER AND SEXUAL & REPRODUCTIVE HEALTH

12 NQF credits at NQF level 9

Convener: Associate Professor L Knight

Course outline:

The course aims to provide an introduction and overview to sexual and reproductive health as well as the impacts of gender and sex on health, health care and health systems. It seeks to do this by exploring; gender and sex as key social determinants of health and disease and making reference to global and local patterns and examples. It will also explore gender theory and conceptual frameworks relating to sexual and reproductive health as well as explore related health care policies and practice. Specific topics are used to examine sexual and reproductive health.

DP requirements: At least 45% subminimum average mark and submission of all semester assignments.

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.

PPH7055W PUBLIC HEALTH THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor S Cleary

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: The thesis is externally examined.

PPH7056W MMED IN OCCUPATIONAL MEDICINE PART 1

60 NQF credits at NQF level 9

Convener: Associate Professor S Adams

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, 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.

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.

PPH7057W MMed IN OCCUPATIONAL MEDICINE PART 2

60 NQF credits at NQF level 9

Convener: Associate Professor S Adams

Course entry requirements: PPH7056W & PPH7058W

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 process to prepare medical practitioners to register 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, 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 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. 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). and (iv) Confirmation that the candidate has successfully completed and submitted the dissertation for the MMed degree, and the dissertation has been passed with proof of confirmation of passing the dissertation provided. Candidates are also required to submit: (i) a short report on an occupational health topic that fulfils the requirements of the College of Public Health Medicine; and (ii) submit an electronic portfolio that conforms to the CMSA format, which also 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, an assessment of the short report and a clinical skills examination, which comprises an objectively structured clinical exam (OSCE) and a structured oral exam. For a pass in this examination, candidates must obtain 50% or higher across all components.

PPH7058W OCCUPATIONAL MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor S Adams

Course entry requirements: PPH7056W

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. Candidates are also required to submit the mark obtained for the MMed dissertation upon registration for the Occupational Medicine Fellowship examination held under the auspices of the College of Public Health Medicine.

Assessment: External examination of the minor dissertation.

PPH7059W MPHIL IN OCCUPATIONAL HEALTH PART 1

120 NQF credits at NQF level 9

Convener: Professor MF Jeebhay

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 of more of the course components.

PPH7060W OCCUPATIONAL HEALTH MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor MF 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

482 DEPARTMENTS IN THE FACULTY

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.

PPH7061W MSC(MED) IN PUBLIC HEALTH

180 NQF credits at NQF level 9

Convener: Professor L Myer

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.

Assessment: The dissertation is externally examined.

PPH7063S EPIDEMIOLOGY OF INFECTIOUS DISEASES

12 NQF credits at NQF level 9

Convener: Professor 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.

PPH7064F QUANTITATIVE METHODS FOR HEALTH ECONOMISTS

12 NQF credits at NQF level 9

Convener: Dr OA Alaba

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; polytomous 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.

PPH7065S EPIDEMIOLOGY OF NON-COMMUNICABLE DISEASES

12 NQF credits at NQF level 9

Convener: Dr V Zweigenthal and Associate Professor 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.

PPH7070S QUANTITATIVE RESEARCH METHODS

12 NQF credits at NQF level 9

Convener: Dr A Grimsrud

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.

PPH7071F QUALITATIVE RESEARCH METHODS

12 NQF credits at NQF level 9

Convener: Associate Professor L Knight**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.

PPH7077S THE ECONOMICS OF HEALTH SYSTEMS

12 NQF credits at NQF level 9

Convener: Dr A Obse

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 county'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 (e.g. 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.

PPH7080H RESEARCH METHODS

90 NQF credits at NQF level 9

Convener: Associate Professor E Gwyther**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. In addition aspects of advanced clinical care are covered to include recent developments in the field of palliative care. 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.

PPH7087W HEALTH ECONOMICS MINOR DISSERTATION

90 NQF credits at NQF level 9

Convener: Dr OA Alaba

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.

Assessment: External examination of the dissertation.

PPH7089F/S PUBLIC HEALTH PRACTICUM

12 NQF credits at NQF level 9

Convener: Professor 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. These learning outcomes are finalized in discussion between the practicum host, the course convener and the student and written into a Memorandum of Understanding (MOU), signed by all parties, before the student registers.

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%).

PPH7090S SEMINARS IN EPIDEMIOLOGY AND BIOSTATISTICS

12 NQF credits at NQF level 9

Convener: Professor L Myer

Course entry requirements: Introduction to Epidemiology (PPH7018F), Advanced Epidemiology (PPH7029F), Biostatistics I (PPH7021F), Biostatistics II (PPH7092S), and Biostatistics III (STA5056F). 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.

PPH7091S QUALITATIVE DATA ANALYSIS

12 NQF credits at NQF level 9

Convener: Associate Professor L Knight

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 NQF level 9; 15 lectures.

Convener: 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.

PPH7093F INTRODUCTION TO HEALTH SYSTEMS

12 NQF credits at NQF level 9

Convener: Dr T Assegai and Associate Professor J Olivier

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.

PPH7094S HEALTH SYSTEMS RESEARCH & EVALUATION

12 NQF credits at NQF level 9

Convener: Associate Professor J Olivier and Professor L Gilson

Course entry requirements: PPH7093F

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.

PPH7095F BIOSTATISTICS III

12 NQF credits at NQF level 9

Convener: Associate Professor M Lesosky

Course entry requirements: PPH7021F and PPH7092S

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.

PPH7096F CANCER PREVENTION AND CONTROL

12 NQF credits at NQF level 9; Sixteen contact sessions (seminars), each lasting two hours.

Convener: Professor J Moodley

Objective: By the end of the course participants should be able to: Identify and describe key concepts related to cancer prevention and control; discuss prevention and early diagnosis strategies for common cancers; discuss key cancer risk factors; evaluate cancer prevention and early detection interventions, including screening programmes and behavioural and lifestyle interventions; understand the role of molecular biomarkers and cancer genetics in assessing cancer risk and outcome; discuss the role the

role of cancer registries and surveillance systems; understand the interaction between infections and cancer; and understand key elements of cancer survivor care.

Course outline:

This course aims to introduce the principles of cancer prevention and control. It covers a broad range of topics relevant to the South African 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 course has an interdisciplinary approach and teaching staff include clinical, public health and basic scientists.

DP requirements: At least 45% for the semester assignments taken as a whole.

Assessment: Class participation (10%) 2 take-home assignments (each weighted at 20%) and a summative end-of-course exam (weighted at 50%).

PPH7097S CLIMATE CHANGE, POLLUTION AND HEALTH

12 NQF credits at NQF level 9

Convener: Professor HA Rother

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.

PPH7098F ENVIRONMENTAL HEALTH POLICY

12 NQF credits at NQF level 9

Convener: Professor L London and Dr M Jagarnath

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 are 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 covers 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 covers 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 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; 50% individual assignments. A pass mark of 50% is required overall, with a 45% subminimum for each of the semester and examination components.

PPH7099F/S CHILDREN'S ENVIRONMENTAL HEALTH

12 NQF credits at NQF level 9

Convener: Professor HA Rother

Course outline:

The aim of this course is to equip students with: (1) a comprehensive understanding of children's environmental health issues and their unique vulnerabilities, and (2) the ability to address these issues through analysing policy options and identifying relevant health interventions and risk management / risk reduction approaches. Specifically, the course provides students with a broad understanding of children's environmental health issues from a disease, rights, regulatory, preventative and community action perspective. This is through an understanding and critical evaluation of environmental risk factors; exposure risks to chemicals and pollutants; health risks, including epigenetics; child labour; children's rights; relevant sustainable development goals; climate change; housing; mental health; and indicators. Prevention skills include critical appraisal of the hierarchy of control; risk communication mechanisms; risk assessment; risk mapping; policy briefs; theory of change; and health behaviour/promotion theories and methods.

PPH9080W MINI-DISSERTATION FOR MSC IN EPIDEMIOLOGY AND BIOSTATISTICS

90 NQF credits at NQF level 9

Course outline:

The minor dissertation, prepared under supervision, is comprised of 4 components (a detailed literature review, a research protocol, a journal-ready article based on the work conducted and policy brief) and must be on an approved topic in epidemiology and/or biostatistics. 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 minor dissertation. Master's degree candidates must be able to reflect critically on the theory and application of epidemiological and/or biostatistical methods to salient concerns in public health and/or clinical medicine. 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. Assessment is via external examination.

RADIATION MEDICINE

Professor and Head:

Rotating Head Currently:

J Parkes, MBBCh *Witwatersrand* FCRad Onc SA

Medical Physics

L-Block, Groote Schuur Hospital

Head:

N Joubert, BMedScHons PGDip MMedSc *UFS*

Lecturers:

H Mac Gregor, BScHons *Stell*

J Mbewe, BScHons *UNAM*

B Smith, BMedScHons *UCT*

Nuclear Medicine

C4/C3, New Groote Schuur Hospital

Head of Division and Senior Lecturer Full-time:

S More (Acting)

Consultants:

S More, MBBCh *Wits* FCNP SA MMed *Cape Town*

Red Cross Hospital:

Consultant at lecturer level:

K Hlongwa MBChB *Pretoria* FCNP SA MMed Nuclear Medicine *Pretoria*

Paediatric Radiology

Red Cross Children's Hospital

Lecturer Full-time:

E Banderker, MBChB *Cape Town* FCRadDiag SA

A Rajkumar, MBChB *Cape Town* FCRadDiag SA

Radiation Oncology

L-Block, Groote Schuur Hospital

Professor and Head of division:

J Parkes, MBBCh *Witwatersrand*, DA(SA), FCRad Onc (SA)

Emeritus Professor

R. Abratt, MBChB(UP), FFRad Onc(SA)

Associate professor full-time

AJ Hunter, BScHons (Medicine) PhD *Cape Town* (Radiobiology)

Senior Lecturers Full-time:

Z Mohamed, MBChB *Stell* MMed *US*

Lecturers Full-time:

S Dalvie, MBChB *Cape Town* FCRadOnc SA
 N Fakie, MBChB *Cape Town* FCRadOnc SA
 B. Nagar, MBChB(UCT), FC Rad Onc(SA), MMed Rad Onc(Cape Town)
 T Naiker, MBBCh *Witwatersrand* FCRadOnc SA
 B Robertson, MBChB *Cape Town* FCRadOnc SA
 J Wetter, MBChB *Cape Town* FCRadOnc SA MMedRadOnc UFS
 L Punt, MBChB *Stell* MMed(Rad Onc) *Cape Town*
 S. Viranna, MBChB (UKZN), FC Rad Onc (SA), MMed Rad Onc(Cape Town)

Radiology

C16, New Grootte Schuur Hospital

Associate Professor and Head:

SEI Moosa, MBChB MPhil *Cape Town* BScHons *Stell* FFRadDiag SA

Emeritus Professor:

SJ Beningfield, MBChB FFRad(D) SA

Emeritus Associate Professor:

SJ Beningfield, MBChB FFRad(D) SA
 SE Candy, BSc HED MBChB FCRadDiag SA

Senior Lecturers Full-time:

N Ahmed, MBChB *Cape Town* FCRadDiag SA
 R Gamieldien, MBChB *Cape Town* FCRadDiag SA
 QM Said-Hartley, MBChB *Cape Town* FCRadDiag SA

Senior Lecturers Part-time:

AT Scher, MBChB *UCT DMRD (RCP&S)(London)* FCRad(D) SA

Lecturers Full-time:

D.K.Creamer MBChB UKZN, FC Rad(SA) Diag, MMed US
 GP Human MBChB *Free State*, FC Rad (SA) Diag, MMed *UCT*
 FM Oompie, *UCT* FC RadDiag SA MMed *UCT* PG Dip Diagnostic RadDiag, *CPUT* MBChB
 MEDUN SA
 RM Wessels, MBChB *Stellenbosch SA*, FC Rad (SA) Diag, MMed (Rad D) *Wits*
 C. van Zyl MBChB US, FC Rad(SA) Diag, MMed *UCT*

RAY4006W POSTGRADUATE DIPLOMA IN PAEDIATRIC RADIOLOGY

200 NQF credits at NQF level 8

Convener: Dr T Kilborn

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.

492 DEPARTMENTS IN THE FACULTY

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.

DP requirements: Completion of all clinical and academic commitments

Assessment: *Continuous coursework assessment:* A Due Performance Certificate reflecting clinical service delivery, with targets clearly defined (40% of total year mark) before admission to the final assessment. Weekly clinical (oral) case presentations and assessments at the end of each of the six modules (12% of total year mark). Written clinical case reports (12% of total year mark). *Final summative assessment:* 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%, they may be granted an opportunity to repeat the module test. 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%, they may be granted one opportunity to repeat the examination once.

RAY4010S QUANTUM MECHANICS

9 NQF credits at NQF level 8

Course outline:

Postulates of QM, mathematics of QM: infinitely dimensional vector spaces; functions as vectors; Hermitian vs. self-adjoint operators; spectral decomposition; Lie algebra; generators of transformations; (some) representation theory. [Heisenberg picture, Schroedinger picture. Path integrals; Trotter formula; propagator for a free particle, simple harmonic oscillator, uniform gravity; functional analysis. Perturbation theory: time independent, non-degenerate and degenerate; time dependent, time order exponential, Dyson series; interaction picture. Scattering Theory; Lippman-Schwinger equation; Fermis Golden rule; Born cross section; Optical theorem. Quantum Statistics: Bosons vs. fermions; density matrices. Bells inequality; Einstein-Podolsky-Rosen paradox. Time permitting: WKB approximation, method of steepest descent.

RAY4014W PHYSICS OF RADIOLOGY

9 NQF credits at NQF level 8

Convener: A Groenewald

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.

DP requirements: A minimum year mark of 45% for continuous coursework assessment, for each course. The year mark is calculated from a 30% contribution from tutorials / practical assignments and 70% from the test.

Assessment: Continuous coursework and a final summative assessment of each of the courses take place throughout and at the conclusion of each course. The coursework assessment includes tests, assessment of tutorial participation, group-work, and practical assignments. The final summative assessment involves an integrated examination for each of the courses, moderated by an external examiner. The weighting of the final result is 50% coursework (year mark) and 50% examination. A minimum of 50% in the final mark is required for each of these courses, with a minimum of 45% in the examination. In the case where a student's year mark is between 40% and 45%, the student may gain access to a reassessment opportunity, to achieve a 45% year mark (DP), and thereby gain access to the examination in the course. Students who achieve at least 45% in the examination but who fail a course (final mark of less than 50%) may gain access to a reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. Students with a final mark of 50% or higher, but with an exam mark of between 40% and 45%, will need to complete a reassessment if access is gained.

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, or whose final marks are less than 50%, will fail the course. Reassessments will only be granted at the discretion of the HOD, and limited to one (1) reassessment per student per course, i.e. either for DP or examination.

RAY4015W PHYSICS OF NUCLEAR MEDICINE

9 NQF credits at NQF level 8

Convener: N Joubert

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.

DP requirements: A minimum year mark of 45% for continuous coursework assessment, for each course. The year mark is calculated from a 30% contribution from tutorials / practical assignments and 70% from the test.

Assessment: Continuous coursework and a final summative assessment of each of the courses take place throughout and at the conclusion of each course. The coursework assessment includes tests, assessment of tutorial participation, group-work, and practical assignments. The final summative assessment involves an integrated examination for each of the courses, moderated by an external examiner. The weighting of the final result is 50% coursework (year mark) and 50% examination. A minimum of 50% in the final mark is required for each of these courses, with a minimum of 45% in the examination. In the case where a student's year mark is between 40% and 45%, the student may gain access to a reassessment opportunity, to achieve a 45% year mark (DP), and thereby gain access to the examination in the course. Students who achieve at least 45% in the examination but who fail a course (final mark of less than 50%) may gain access to a reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. Students with a final mark of 50% or higher, but with an exam mark of between 40% and 45%, will need to complete a reassessment if access is gained. 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, or whose final marks are less than 50%, will fail the course. Reassessments will only be granted at the discretion of the HOD, and limited to one (1) reassessment per student per course, i.e. either for DP or examination.

RAY4016W RADIOTHERAPY

9 NQF credits at NQF level 8

Convener: H McGregor

Course outline:

The aim of the course is to introduce the student to the basic principles of the physics of Radiotherapy, which includes linear accelerator design, dose measurements and dose calculations for teletherapy and brachytherapy, beam shaping, shielding and treatment planning. Content includes quality assurance, radiation characteristics, photon therapy, electron therapy, brachytherapy and advanced radiotherapy techniques.

DP requirements: A minimum year mark of 45% for continuous coursework assessment, for each course. The year mark is calculated from a 30% contribution from tutorials/practical assignments and 70% from the test.

Assessment: Continuous coursework and a final summative assessment of each of the courses take place throughout and at the conclusion of each course. The coursework assessment includes tests, assessment of tutorial participation, group-work, and practical assignments. The final summative assessment involves an integrated examination for each of the courses, moderated by an external examiner. The weighting of the final result is 50% coursework (year mark) and 50% examination.

A minimum of 50% in the final mark is required for each of these courses, with a minimum of 45% in the examination. In the case where a student's year mark is between 40% and 45%, the student may gain access to a reassessment opportunity, to achieve a 45% year mark (DP), and thereby gain access to the examination in the course. Students who achieve at least 45% in the examination but who fail a course (final mark of less than 50%) may gain access to a reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. Students with a final mark of 50% or higher, but with an exam mark of between 40% and 45%, will need to complete a reassessment if access is gained. 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, or whose final marks are less than 50%, will fail the course. Reassessments will only be granted at the discretion of the HOD, and limited to one (1) reassessment per student per course, i.e. either for DP or examination.

RAY4017W RADIATION PROTECTION AND DOSIMETRY

9 NQF credits at NQF level 8

Convener: N Joubert

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.

DP requirements: A minimum year mark of 45% for continuous coursework assessment, for each course. The year mark is calculated from a 30% contribution from tutorials/practical assignments and 70% from the test.

Assessment: Continuous coursework and a final summative assessment of each of the courses take place throughout and at the conclusion of each course. The coursework assessment includes tests, assessment of tutorial participation, group-work, and practical assignments. The final summative assessment involves an integrated examination for each of the courses, moderated by an external examiner. The weighting of the final result is 50% coursework (year mark) and 50% examination. A minimum of 50% in the final mark is required for each of these courses, with a minimum of 45% in the examination. In the case where a student's year mark is between 40% and 45%, the student may gain access to a reassessment opportunity, to achieve a 45% year mark (DP), and thereby gain access to the examination in the course. Students who achieve at least 45% in the examination but who fail a course (final mark of less than 50%) may gain access to a reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. Students with a final mark of 50% or higher, but with an exam mark of between 40% and 45%, will need to complete a reassessment if access is gained. 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, or whose final marks are less than 50%, will fail the course. Reassessments will only be granted at the discretion of the HOD, and limited to one (1) reassessment per student per course, i.e. either for DP or examination.

RAY4018W RADIOTHERAPY TREATMENT PLANNING

9 NQF credits at NQF level 8

Convener: B Smith

Course outline:

The aim of the course is to present the student with a sound foundation in the theory and practice 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.

DP requirements: A minimum year mark of 45% for continuous coursework assessment, for each course. The year mark is calculated from a 30% contribution from tutorials / practical assignments and 70% from the test.

Assessment: Continuous coursework and a final summative assessment of each of the courses take place throughout and at the conclusion of each course. The coursework assessment includes tests, assessment of tutorial participation, group-work, and practical assignments. The final summative assessment involves an integrated examination for each of the courses, moderated by an external examiner. The weighting of the final result is 50% coursework (year mark) and 50% examination. A minimum of 50% in the final mark is required for each of these courses, with a minimum of 45% in the examination. In the case where a student's year mark is between 40% and 45%, the student may gain access to a reassessment opportunity, to achieve a 45% year mark (DP), and thereby gain access to the examination in the course. Students who achieve at least 45% in the examination but who fail a course (final mark of less than 50%) may gain access to a reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. Students with a final mark of 50% or higher, but with an examination mark of between 40% and 45%, will need to complete a reassessment if access is gained. 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, or whose final marks are less than 50%, will fail the course. Reassessments will only be granted at the discretion of the HOD, and limited to 1 reassessment per student per course, i.e. either for DP or examination. A minimum of 50% average is required for the course, with both practical and theoretical components within the course receiving a mark of at least 40%.

RAY4019W RADIOBIOLOGY

9 NQF credits at NQF level 8

Convener: Dr AJ Hunter

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.

DP requirements: A minimum year mark of 45% for continuous coursework assessment, for each course. The year mark is calculated from a 30% contribution from tutorials/practical assignments and 70% from the test.

Assessment: Continuous coursework and a final summative assessment of each of the courses take place throughout and at the conclusion of each course. The coursework assessment includes tests, assessment of tutorial participation, group-work, and practical assignments. The final summative assessment involves an integrated examination for each of the courses, moderated by an external examiner. The weighting of the final result is 50% coursework (year mark) and 50% examination. A minimum of 50% in the final mark is required for each of these courses, with a minimum of 45% in the examination. In the case where a student's year mark is between 40% and 45%, the student may gain access to a reassessment opportunity, to achieve a 45% year mark (DP), and thereby gain access to the examination in the course. Students who achieve at least 45% in the examination but who fail a course (final mark of less than 50%) may gain access to a reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. Students with a final mark of 50% or higher, but with an exam mark of between 40% and 45%, will need to complete a reassessment if access is gained. 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, or whose final marks are less than 50%, will fail the course. Reassessments will only be granted at the discretion of the HOD, and limited to one (1) reassessment per student per course, i.e. either for DP or examination.

RAY4020W MEDICAL PHYSICS RESEARCH PROJECT

30 NQF credits at NQF level 8

Convener: N Joubert

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.

DP requirements: A class record average of all Research Project components completed prior to final presentation of the project shall be at least 40%

Assessment: 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.

RAY4021W RADIOBIOLOGY COURSEWORK

78 NQF credits at NQF level 8

Convener: Dr AJ Hunter

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. Modules include: 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; and Clinical End-points in Oncology.

DP requirements: Completion and attendance 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%). The research project makes up the other 25% of this total mark.

RAY4022W RADIOBIOLOGY RESEARCH PROJECT

42 NQF credits at NQF level 8

Convener: Dr AJ Hunter

Course outline:

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.

DP requirements: Completion and attendance of all academic commitments.

Assessment: Assessment of the research project (25% of total honours mark).

RAY4025W MODERN PHYSICS FOR MEDICAL PHYSICISTS

18 NQF credits at NQF level 8

Convener: A Groenewald

Course outline:

This course teaches the basic principles of modern physics required by the medical physicist. It comprises of two components, Quantum Mechanics for Medical Physics and Nuclear Physics. The Quantum Mechanics section focusses on the wave-particle duality, planck's constant, uncertainty principle and particle-wave equations (which form the basis of all x-rays). It explores wave functions and wave mechanics, Schrodinger's equation, and the behaviour of a particle in a magnetic field (with applications in magnetic resonance imaging and linear accelerator design). For dosimeters/detectors the course component explores perturbation, scattering and time dependent theories. Angular momentum, atoms and the hydrogen atom (forming the basis of medical imaging) looks at magnetic moments, classical mechanics, variation principle, electron states and energy levels and the effects of electric fields. The Nuclear Physics component covers nuclear properties including Segre plot, binding energies, nuclear shapes and sizes, magnetic moments. Radioactive decay: alpha, beta and gamma decay, fission.

Semi-empirical mass formula, the liquid drop model. Cross-sections, nuclear reactions. Acceleration methods, interactions with matter, detectors, counting statistics. Deuteron. Nucleon-nucleon potential. Nuclear structure: Fermi gas, nuclear shell model, collective motion, non-spherical nuclei. Gamma spectroscopy. Nucleosynthesis. Applications: radioactive dating, fission, fusion, biomedical applications. Dosimetry. 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, lasers and microwaves as sources of radiation.

DP requirements: A class average of at least 40% obtained for each module.

Assessment: Quantum Mechanics (1): In first semester; examination to take place in June/July, counting 50% towards course mark. Radiation Physics and Interaction with matter: second semester; examination to take place in November, counting 50% towards course mark. A minimum of 50% average is required for the course, with no individual module within the course receiving a mark below 40%. No supplementary exams shall be granted.

RAY4026W CLINICAL AND ADVANCED TECHNIQUES

9 NQF credits at NQF level 8

Convener: Dr A Groenewald

Co-requisites: RAY4014W, RAY4015W, RAY4016W, RAY4017W, RAY4018W, RAY4019W, RAY4020W, RAY4025W, HUB4045F

Course outline:

The aim of the course is to indicate useful, purposeful, safe and innovative application of radiation in modern clinical radiotherapy. It is a core course for advanced courses in medical physics. Identifying the risk factors, biology, epidemiology and etiology of different cancers. Knowledge of treatment options and regimes for different cancers. Cancer staging and prognosis. Physics of advanced treatment techniques in Radiotherapy, i.e. VMAT, IMRT, IGRT, proton therapy, stereotax, SBRT, modern HDR and LDR brachytherapy, heavy ions, neutrons.

DP requirements: A minimum year mark of 45% for continuous coursework assessment, for each course. The year mark is calculated from a 30% contribution from tutorials / practical assignments and 70% from the test.

Assessment: Continuous coursework and a final summative assessment of each of the courses take place throughout and at the conclusion of each course. The coursework assessment includes tests, assessment of tutorial participation, group-work, and practical assignments. The final summative assessment involves an integrated examination for each of the courses, moderated by an external examiner. The weighting of the final result is 50% coursework (year mark) and 50% examination. A minimum of 50% in the final mark is required for each of these courses, with a minimum of 45% in the examination. In the case where a student's year mark is between 40% and 45%, the student may gain access to a reassessment opportunity, to achieve a 45% year mark (DP), and thereby gain access to the examination in the course. Students who achieve at least 45% in the examination but who fail a course (final mark of less than 50%) may gain access to a reassessment before the final mark is submitted to the Faculty Examinations Committee for approval. Students with a final mark of 50% or higher, but with an exam mark of between 40% and 45%, will need to complete a reassessment if access is gained. 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, or whose final marks are less than 50%, will fail the course. Reassessments will only be granted at the discretion of the HOD, and limited to one (1) reassessment per student per course, i.e. either for DP or examination.

RAY5000W RADIOTHERAPY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor J Parkes

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.

498 DEPARTMENTS IN THE FACULTY

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.

Assessment: The dissertation is externally examined.

RAY5001W MEDICAL PHYSICS MASTERS DISSERTATION

A limited number of student places are available, and selection is highly competitive.

180 NQF credits at NQF level 9

Convener: N Joubert

Course entry requirements: Applicants are required to have a Honours degree in Medical Physics, or equivalent. Applicants must submit a research concept, full academic transcripts and proof of obtained degrees for consideration by the Head of Division.

Objective: This degree teaches students the ability to conduct research independently, scientific writing skills, audience presentation skills, problem solving and critical thinking skills.

Course outline:

The research Master's by full dissertation is conducted under supervision on a relevant Medical Physics topic. Submission and approval of a research protocol whilst under supervision by the relevant departmental research committee/s and ethical approval (as applicable) is a requirement.

The final dissertation (maximum 50 000 words) must demonstrate acquaintance with research methodology, scientific writing and ethical standards of research, and may include a submission ready- manuscript. Publication of part or the whole of the work, done by the student whilst under supervision and registered for the degree, prior to dissertation submission is permissible, if approved by the supervisor.

Lecture times: This degree extends over a minimum of 1 year.

Assessment: The dissertation is examined externally, by two examiners. The examiners will be identified by the supervisor and Head of Division.

RAY6000W MEDICAL PHYSICS PHD THESIS

A limited number of student places are available, and selection is highly competitive.

360 NQF credits at NQF level 10

Convener: Dr A Groenewald

Course entry requirements: Applicants are required to have a Master's degree in Medical Physics. Applicants must submit a research concept, full academic transcripts and proof of obtained degrees for consideration by the Head of Division.

Objective: This degree teaches a candidate in-depth knowledge and advanced research skills, including innovative thinking, problem solving abilities, data collection, processing and interpretation skills, scientific writing and presentation skills.

Course outline:

The degree of Doctor of Philosophy is a research degree undertaken under the guidance of a supervisor for the minimum period of two years. Candidates shall undertake research in Medical Physics, and such advanced study as may be required, under the guidance of a supervisor or supervisors appointed by Senate for the minimum period of two years. At the conclusion of their supervised research candidates shall submit a thesis for examination, of between 40 000 to 80 000 words. 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.

Lecture times: This degree extends over a minimum of 2 years and a maximum of 5 years.

Assessment: The thesis is examined by three external examiners, two international and one South African, unless specifically motivated for. The examiners will be identified by the supervisor and Head of Division.

RAY7000W RADIOBIOLOGY DISSERTATION (MSC MED)

180 NQF credits at NQF level 9

Convener: Professor S Beningfield

Course entry requirements: Relevant BSc honours or equivalent

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.

Assessment: The dissertation is externally examined.

RAY7001W PHD IN RADIOTHERAPY THESIS

360 NQF credits at NQF level 10

Convener: Professor J Parkes

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: The thesis is externally examined.

RAY7009W MMED IN RADIATION ONCOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Professor J Parkes

Course entry requirements: Full-time Registrar post in Radiation Oncology at Groote Schuur Hospital

Objective: The purpose of this course is to provide a sound foundation of basic sciences for the subsequent training in clinical oncology. Training for Part 1 covers relevant areas of disciplines such as anatomy, radiobiology and cancer biology and medical physics as applied to the practise of radiotherapy; including the physical basis of treatment with radioactive isotopes; and radiation hazards and protection.

Course outline:

After a minimum period of 6 months of training, in a registered training post, candidates write the Part 1 Radiation Oncology examination of the College of Radiation Oncology and receive full credits towards RAY7009W.

For the full curriculum and examination details, see the regulations of the College of Radiation Oncologists, at www.cmsa.co.za.

DP requirements: Candidates may register to write Part 1 examinations after a minimum period of 6 months in a registered Radiation Oncology training post. In addition, End-of block formative assessments of performance will take place at the end of each four-month clinical attachment. An annual formative assessment will be done by course convener or designate. Performance in the clinical blocks, ward attachments, planning and technical radiotherapy, chemotherapy management and research is reviewed as well as completion of the logbook and portfolio as outlined in the College of radiation Oncology curriculum.

500 DEPARTMENTS IN THE FACULTY

Assessment: Candidates write the Part 1 examination of the College of Radiation Oncology of the Colleges of Medicine of South Africa (CMSA). The examination consists of three written papers: Anatomy, Radiobiology and Cell Biology, and Medical Physics.

RAY7010W MMed IN RADIATION ONCOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Professor J Parkes

Course entry requirements: RAY7009W

Course outline:

This training programme forms part of the credentialing process 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 as a registrar in an HPCSA-accredited training unit in a teaching hospital linked to the UCT Faculty of Health Sciences. The part 2 curriculum includes applied physics, applied radiobiology, applied molecular medicine and pharmacology, applied tumour pathology, applied physiology, palliative care, psycho-social oncology, end of life ethics and evidence-based medicine as applied to the practice of oncology, as well as system-based principles and practice of oncology including radiotherapy, chemotherapy, palliative care and medical statistics. After a minimum period of 36 months in a registered training post, candidates may apply to write the Part 2 examination of the College of Radiation Oncology of the CMSA provided all College requirements are met and the RAY7011W minor dissertation has been handed in for marking. Success in this examination allows credit towards RAY7010W. For the full curriculum and examination details, see the regulations of the College of Radiation Oncologists, at www.cmsa.co.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 may apply to write the Part 2 examination of the College of Radiation Oncologists of the Colleges of Medicine of South Africa (CMSA) provided all end of block assessments and annual assessments are adequate. The examination consists of three written papers (general oncology and tumour pathology, radiation and medical oncology x2 papers), an OSPE examination and 3 viva voce examinations. The viva voce examination includes a portfolio assessment.

RAY7011W RADIATION ONCOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor J Parkes

Course entry requirements: Must be in a registrar post at Groote Schuur Hospital and have successfully completed RAY7009W

Course outline:

The minor dissertation is prepared under supervision and according to the rules for MMed Part III in Faculty of Health Sciences. The candidate must identify a research topic for MMed Part III (RAY7011W) and sign an MOU with their supervisor within 24 months of entering the radiation Oncology registrar rotation. The research protocol must be submitted and approved by the UCT Human Research Ethics Committee (HREC) within 36 months of entering the radiation Oncology registrar rotation. The finalised mini-dissertation must be submitted for marking prior to registering for the Part 2 examination. (RAY7010W)

DP requirements: None

Assessment: Examination of the dissertation by two examiners, of which at least one will be external to UCT.

RAY7012W MMED IN NUCLEAR MEDICINE PART 1

60 NQF credits at NQF level 9

Convener: Dr S More**Course entry requirements:** A joint staff appointment as a registrar in Nuclear Medicine**Course outline:**

This training programme forms part of the process to train and register general practitioners as nuclear medicine specialists. Candidates complete the training program 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.cmsa.co.za

DP requirements: Appointment as a registrar in nuclear medicine: one year as medical officer in internal medicine at a secondary or tertiary hospital. The candidate must have completed Part 1 of the College of Nuclear Physicians within the first 18 months of their rotation. Two attempts at the examination will be allowed. If the candidate does not succeed within the first 24 months, they will be deemed not eligible to continue the degree. The MMED proposal must be finalized and ethics approval obtained within the first 24 months of the rotation.

Assessment: Candidates write the Part 1 examination of the College of Nuclear Physicians. The examination comprises two written papers.

RAY7013W MMED IN NUCLEAR MEDICINE PART 2

60 NQF credits at NQF level 9

Convener: Dr S More**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.

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. Entry into this examination is only permitted after MMed mini-thesis(RAY7014W) has been submitted for marking.

RAY7014W MMED IN NUCLEAR MEDICINE MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr S More**Course entry requirements:** RAY7012W and a joint staff appointment as a registrar in Nuclear Medicine

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: Examination of the dissertation by two examiners, of which at least one will be external to UCT.

RAY7015W PHD IN NUCLEAR MEDICINE THESIS

360 NQF credits at NQF level 10

Convener: Dr S More

Course entry requirements: Must have a registered degree in Nuclear Medicine or allied discipline.

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: The thesis is externally examined.

RAY7017W MMED IN DIAGNOSTIC RADIOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Professor S Beningfield

Course entry requirements: This course must be completed to be considered for a registrar training position .

Course outline:

This training programme forms part of the process of training general practitioners to register 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. After undertaking the College examinations and on passing, candidates 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 specialty 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. More detail is available in the curriculum regulations of the College at www.cmsa.co.za

Assessment: A written paper for Medical Physics and a slide test for Imaging Anatomy as conducted by the College.

RAY7019W PHD IN RADIOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor SEI Moosa

Course entry requirements: Registered specialty in Radiology

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: The thesis is externally examined.

RAY7020W MMED IN DIAGNOSTIC RADIOLOGY PART 2

60 NQF credits at NQF level 9

Convener: Professor S Beningfield

Course entry requirements: RAY7017W. A registered clinical registrar training post. NOTE: Submission of MMed mini-thesis (RAY7021W) for marking is required prior to registering for Part 2 college examination

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, as well as clinical medical practice and pathology as applied to diagnostic and interventional radiology.

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. Details for examination on college web-site www.cmsa.co.za.

RAY7021W DIAGNOSTIC RADIOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor S Moosa

Course entry requirements: Registered clinical registrar training post

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 an imaging or intervention 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.

504 DEPARTMENTS IN THE FACULTY

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.

Assessment: Examination of the dissertation by two examiners, of which at least one will be external to UCT.

RAY4027W GENERAL PAEDIATRIC RADIOLOGY

56 NQF credits at NQF level 8

Course entry requirements: Registered specialty in Radiology

Course outline:

This course is aimed at consolidation of knowledge, skills and techniques in all modalities acquired in Course 1. It facilitates in-depth clinical and radiological exposure necessary for accurate reporting of paediatric pathology. It will also allow the fellow to work independently and allow opportunity for independent decision-making regarding patient management within the scope of correct imaging choices. It also allows for a limited supervisory role. Workload to be accomplished consists of reporting: 1500 digital radiographs, 200 CT and 80 MRI cases, and performing and reporting 250 ultrasound and 40 Fluoroscopy cases.

SURGERY

J Floor, Old Main Building, Groote Schuur Hospital

Professor and Head:

AG Fieggan, BSc (Medicine) MBChB *Cape Town* MSc *London* MD *Cape Town* FCS *SA*

Emeritus Professors:

PC Bornman, MMedSurg FRCS *Edinburgh* FCS *SA* FRCS *Glasgow*

DM Dent, MBChB ChM *Cape Town* FCS *SA* FRCS *UK* FRCPS *Glasgow* (Hon)

JEJ Krige, MBChB MSc (Medicine) *Cape Town* FRCS *Edinburgh* FCS *SA*

D Kahn, MBChB CRM FCS *SA*

A Murray, MBChB *Witwatersrand* FRCS *Edinburgh* FRCOphth

AB van As, MBChB *Netherlands* FCS *SA* PhD *Cape Town* MBA *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)

Emeritus Associate Professor:

JG Brink, MBChB *Cape Town* FC Cardio *SA*

J Hewitson, MBChB *Cape Town* FC Cardio *SA*

DA Hudson, MBChB MMed *Cape Town* FCS *SA* FRCS *Edinburgh* FACS

Cardiothoracic Surgery (Chris Barnard Division of Cardiothoracic Surgery)

Groote Schuur Hospital; Red Cross Children's Hospital; Cape Heart Centre, Health Sciences Campus

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 to being the only academic unit that provides heart and lung transplantation in South Africa. The Chris Barnard Division targets innovative solutions for cardiovascular health care. The Cardiovascular Research Unit housed within the division focuses on the development of a myocardial regeneration, restenosis and angiogenesis in tissue engineering.

Chris Barnard Chair of Cardiothoracic Surgery and Head:

T Pennel, MBChB *Stell* MMed *Cape Town* FC Cardio *SA* PhD *Cape Town*

Professor:

D Bezuidenhout, PhD *Cape Town*

Emeritus Professor:

P Zilla, MD *Zurich* PD *Vienna* PhD *Cape Town*

Associate Professors Full-time:

N Davies, PhD *Cape Town*

P Human, PhD *Cape Town*

J Scherman, MBChB *Pret Dip* (Occupational Medicine) *Stell* FC Cardio *SA* MMed *Cape Town*

Associate Professors Part-time:

JG Brink, MBChB *Cape Town* FC Cardio *SA*

A Linegar, MBChB *Cape Town* PhD *UFS* FC Cardio *SA*

506 DEPARTMENTS IN THE FACULTY

Senior Lecturers Full-time:

A Brooks, MBChB *Stell* FCS SA
N Da Silva, MBChB Pret FC Cardio SA
R Manganyi, MBChB *Cape Town* FC Cardio
C Ofoegbu, MBBS(Ibadan) FWACS FC Cardio SA MMed *Cape Town* SA

Senior Lecturers Part-time:

L Moodley, MBBS *India* FC Cardio SA
J Rossouw, MBChB PhD *Stell* MMed Thorax *Stell* SA

Senior Scientific Officer:

H Ilsley, NDip *CPUT*
A Oosthuysen, MSc *Stell*

General Surgery

J-Floor, Old Main Building, Groote Schuur Hospital

The Division of General Surgery services Groote Schuur Hospital, Victoria Hospital, New Somerset Hospital, Mitchells Plain District Hospital and Red Cross War Memorial Childrens Hospital. The Division offers Undergraduate teaching, Post Graduate teaching and has a reputation for innovative surgical methods and a strong research infrastructure. The Division is made up of 8 sub specialist Units and Firms and is the largest division within the Department of Surgery.

Professor and Head:

To be appointed in 2021

Professors:

P Navsaria, MBChB MMed *Cape Town* FCS SA
AJ Nicol, (Head: Trauma Unit) MBChB *Cape Town* FCS SA
E Jonas, MBChB MMed FCS SA PhD

Emeritus Professors:

PC Bornman, MMedSurg FRCS Ed FCS SA FRCS *Glasgow*
DM Dent, MBChB ChM *Cape Town* FCS SA FRCS UK FRCPS *Glasgow* (Hon)
D Kahn, MBChB CRM FCS SA
JEJ Krige, MBChB MSc *Cape Town* FRCS *Edinburgh* FCS SA
J Terblanche, MBChB ChM *Cape Town* FCS SA FRCS UK FRCPS *Glasgow* FAC (Hon) FACP (Hon) FRCS UK (Hon) FRCSC (Hon) FRCS *Edinburgh* FMC SA FRCSI (Hon)

Associate Professors:

L Cairncross, MBChB *Cape Town* FCS SA
JC Kloppers, MBChB *Stell* Dip (Primary Emergency Care) FCS SA MRCS FRCS GenSurg *Edinburgh*
E Panieri, (Head: Oncology, Endocrinology) MBChB MMed *Cape Town* FCS SA

Adjunct Professor:

RJ Baigrie, BSc MD *Cape Town* FRCS UK

Honorary Full Professors:

E Muller, MBChB Pret MMed *Cape Town* MRCS FCS
V N. Nfonsam, MD MS FACS FASCRS

Senior Lecturers Full-time:

M Bernon, MBBCh *Witwatersrand* FCS SA Cert (Gastro)

ABT Boutall, MBChB *Stell* FCS SA Cert (Gastro)
 H Bougard, MBChB FCS SA
 S Burmeister, MBChB *Cape Town* FCS SA Cert (Gastro)
 G Chinnery, MBChB *Witwatersrand* MMed FCS SA Cert (Gastro)
 JM du Toit, MBChB *Stell* MMed *Cape Town* FCS SA FEBS
 S Edu, Dip (Medicine) *Romania* FCS SA
 F Gool, MBChB DA SA FCS SA CertGastro
 F Malherbe, MBChB FCS SA
 M Mihalik, MBChB MMed FCS SA
 F Noor, MBBCH *Witwatersrand* FCS SA NG
 NG Naidoo, (Head: Vascular Unit) MBChB *UKZN* FCS SA
 DA Thomson, MBChB *UKZN* FCS SA MMed *Cape Town*
 C Warden, MBChB *Cape Town* MMed FCS SA
 J Plaskett, MBChB MMed FCS SA

Senior Lecturers Part-time:

ME Dalwai, MBChB FCS SA Cert (Surgical Gastroenterology)
 M Forlee, MBChB FCS SA Cert (Vascular Surgery)
 M Madden, MBChB FCS SA FRCS *England Edinburg*
 H Molabe, MBChB MMed FCS SA
 B Natha, MBChB FCS SA Cert (Vascular Surgery)
 JA Tunncliffe, MBChB *Cape Town* FCS SA
 A Sander, MBChB FCS SA Cert (Vascular Surgery)

Honorary Senior Lecturer:

S Rayamajhi, MBChB MMed *Cape Town*

Neurosurgery

F Floor Neuroscience Institute , Grootte Schuur Hospital

The Division of Neurosurgery is responsible for the neurosurgical management of patients at the two internationally-renowned teaching hospitals affiliated with the University of Cape Town (UCT), treating patients from across the Western Cape as well as elsewhere in South Africa and abroad. Our clinical platform enables us to teach students, train specialists and pursue cutting-edge research into conditions relevant to our clinical practice. We treat various diseases of the brain and spinal cord including traumatic brain injury, brain tumours, vascular diseases of the brain and various types of strokes, spinal disorders, congenital abnormalities, hydrocephalus, and functional disorders such as epilepsy.

Helen & Morris Mauerberger Professor and Head:

AG Fieggen, BSc (Medicine) MBChB *Cape Town* MSc *London* MD *Cape Town* FCS SA

DST/NRF Research Chair in Clinical Neuroscience Research:

AA Figaji, MBChB MMed PhD *Cape Town* FCNeurosurg SA

Professors:

PL Semple, MBChB MMed PhD *Cape Town* FCS SA

Honorary Professors:

MJA Wood, MBChB *Cape Town* DPhil *Oxon*
 WJ Peacock, BSc *Stell*, MBChB *Cape Town* FRCS *Edin*

Associate Professors:

DEJ Le Feuvre, MBChB MMed *Cape Town* MSc *Paris/Mahidol* FCS SA

508 DEPARTMENTS IN THE FACULTY

AG Taylor, MBBCh *Witwatersrand* MMed *Cape Town* MSc *Paris/Mahidol* FCS *SA*

Senior Lecturers:

JMN Enslin, BPhysT *Pret* MBChB *Pret* MMed *Cape Town* FCNeurosurg *SA*

NG Langerak, BSc (Physiotherapy) *Utrecht* MSc *Nijmegen* PhD *Cape Town*

AC Mathole, MBChB *Cape Town* MMed *Cape Town* FCNeurosurg *SA*

UK Rohlwink, BA *Bosphorus* MSc (Medicine) PhD *Cape Town*

SJ Röthemeyer, MBBCh *Witwatersrand* FCNeuroSurg *SA*

NS Thango, MBChB *UKZN* MMed *Cape Town* FCNeurosurg *SA*

Senior Lecturers Part-time:

ND Fisher-Jeffes, MBChB *Stell* FCS *SA*

CF Kieck, MBChB *Stell* MD *Cape Town* FCS *SA*

A Mbatha, MBChB *UKZN* MMed *UKZN* FCNeurosurg *SA*

RL Melvill, MBChB *Cape Town* FCS *SA*

SA Parker, MBChB *Cape Town* FCS *SA*

C Thompson, MBChB MMed *Cape Town* FCNeuroSurg *SADG* Welsh MBChB *Cape Town* FRCS *London* FCS *SA*

DG Welsh, MBChB *Cape Town* FRCS *London* FCS *SA*

GA White, MBChB *Cape Town* FCS *SA*

Research Enterprise Manager:

JC Bracher, BSc(Med) Hons PhD *Cape Town*

Chief Scientific Officer:

J Combrinck, BSc(Med) Hons PhD *Cape Town*

Laboratory Manager:

L Ungerer, ND Med Tech (Chem Path) Med Technician: Clin Path

Honorary Research Associate:

R Balchin, BSocScHons MA PhD *Cape Town*

Ophthalmology

H52, Old Main Building, Groote Schuur Hospital

The Division of Ophthalmology (Dept of Surgery) provides eye care services at Groote Schuur Hospital, Red Cross Children's and across the metropole at Victoria, Somerset, and Mitchell's Plain hospitals, with cataract surgery lists also taking place at False Bay and Eerste River Hospitals.

Teaching and training of undergraduates, postgraduates and subspecialty fellows is offered, with skill development and transfer taking place both locally and regionally in sub-Saharan Africa. We are involved in research activities, which includes the South African Ophthalmology Journal being edited from within our division. We also run a UCT Community Eye Health unit in collaboration with the Kilimanjaro Centre for Community Ophthalmology; a Simulated Surgery unit; and we have almost completed the setting up of a Clinical Research unit as well.

Morris Mauerberger Professor of Ophthalmology and Head:

N Du Toit, MBChB MMed PhD *Cape Town* Dip (Ophthalmology) *SA* FRCS *Edinburgh* FCOphth *SA*

Emeritus Professor:

A Murray, MBChB *Witwatersrand* FRCS *Edinburgh* FRCOphth

Senior Lecturers Full-time:

N Freeman, MBChB *Stell* FCOphth SA MMed
 S Mustak, MBChB MMed *Cape Town* Dip (Ophthalmology) SA FCOphth SA
 J Rice, MBChB *Witwatersrand* FCOphth SA MPH
 J Steffen, MBChB *Stell* FCOphth SA MMed

Senior Lecturers 5/8:

J de Villiers, MBChB *Witwatersrand* FCOphth SA
 T van der Lecq, MBChB MMed *Pret* FCOphth SA

Director Community Eye Health Programme:

D Minnies, NHDMT (Haematology) SA MPH *Cape Town*

Senior Lecturers Part-time:

E Albrecht, MBChB *Stell* FCOphth SA
 R Grötte, MB BS *Newcastle* FRCS *Edinburgh* DO RCP *London* RCS UK
 L Heydenrych, MBChB FCOphth SA MMed
 M Lenake, MBChB *Witwatersrand* FCOphth SA MMed
 D McClunan, MBChB *Stell* Dip (Ophthalmology) SA FCOphth SA MMed
 K Suttle, MBChB *Cape Town* FCS (Ophthalmology) SA
 D Steven, MBChB *Franzco*
 C Tinley, MBChB *Cape Town* FRCOphth
 J van der Merwe, MBChB *Stell* MMed Dip (Ophthalmology) SA FCOphth SA
 H van Velden, MBChB *Stell* FCOphth SA

Orthopaedic Surgery

H49 Old Main Building, Groote Schuur Hospital

The Orthopaedic surgical division offers a clinical service across the western metropole platform at all three level two hospitals (VHW, NSH and MPH), Red Cross Children's and Groote Schuur Hospital with outreach to surrounding areas. This facilitates teaching of both under-and postgraduate students and research for the local environment resulting in locally appropriate skill development and transfer. We continue to run post-specialist qualification sub-discipline fellowships and collaborate internationally in research and academic activities.

Pieter Moll & Nuffield Professor of Orthopaedic Surgery and Head:

R Dunn, MBChB MMed *Cape Town* FCSOrth SA

Full Professors:

M Held, Med Cert *Heidelberg* MD *Munich* MMed PhD *Cape Town* FC Orth SA
 S Maqungo, MBChB *Natal* FCSOrth SA
 S Roche, MBChB *Cape Town* LMCC *Canada* FCSOrth SA

Associate Professors:

M Laubscher, MBChB Dip (Primary Emergency Care) FCOphth SA MMed *Cape Town*
 G McCollum, MBChB MMed *Cape Town* Dip (Primary Emergency Care) FCSOrth SA
 M Solomons, MBChB *Cape Town* FCSOrth SA

Honorary Associate Professor:

BC Vrettos, MBChB *Zimbabwe* FRCS *England* MMed *Cape Town* FCSOrth SA

Adjunct Associate Professors:

B Bernstein, MBChB *Witwatersrand* FCSOrth SA
 G Grobler, MBChB MMed *Cape Town* FRCS *Edinburgh* FCS (Orth) SA

510 DEPARTMENTS IN THE FACULTY

K.Hosking *MBChB Cape Town FCSOrth SA*

WM van der Merwe, *MBChB UFS Social Studies Oxon BMedScHons Cape Town FCSOrth SA*

Senior Lecturers Full-time:

S Dix-Peek, *MBBCh Witwatersrand FCSOrth SA MMed Cape Town*

T Hilton, *MBChB MMed Cape Town FCSOrth SA*

A Horn, *MBChB Pret MMed Cape Town FCOrth SA*

J Kauta, *MBChB MMed Cape Town*

N Kruger, *MBChB Cape Town FCSOrth SA*

F Louw, *MBChB Stell MMed Cape Town FCS (Orth) SA*

T Munting, *MBChB Cape Town MMed FCSOrth SA*

M Nortje, *MBChB MMed Cape Town FCOrth SA Dip (Primary Emergency Care) SA*

P Rowe, *MBBCh Witwatersrand FCSOrth SA*

S Swanepoel, *MBChB MMed Cape Town FC Ortho SA*

J.McCaul *MBChB Cape Town FCOrth SA*

Senior Lecturers Part-time:

JP Du Plessis, *MBChB Cape Town MMed Cape Town FCSOrtho SA*

I Koller, *MBChB Pret FC Orth SA MMed Cape Town*

Y Hassan, *MBChB MPhil Cape Town FCOrth SA*

P Hardcastle, *MBChB Stell MMed FCOrth SA*

M Maree, *MBChB MMed Cape Town FCSOrth SA*

D McGuire, *MBChB Witwatersrand MMed Cape Town FCOrth SA*

Honorary Senior Lecturers:

D Engela, *MBChB Pret FCSOrth SA*

Otorhinolaryngology

H53, Old Main Building, and Ward F8, Groote Schuur Hospital, Red Cross War Memorial Children's Hospital and New Somerset Hospital

The Division of Otorhinolaryngology (ENT) provides a world class comprehensive clinical service to the Western Cape community, as well as for complex cases referred from other provinces. It also runs the only clinical fellowships in Africa in head and neck surgery, rhinology and anterior skull base surgery, paediatric otolaryngology, and otology.

Leon Goldman Professor of Otorhinolaryngology and Head:

JJ Fagan, *MBChB MMed Cape Town FCS SA*

Senior Lecturers Full-time:

T Harris, *MBChB Cape Town, MMed, FCS Otol SA*

DE Lubbe, *MBChB Stell MMed FCS Otol SA*

J McGuire, *MBChB MMed FCS Otol SA*

V Pretorius, *MBChB Stell FCS Otol SA*

S Peer, *MBChB MMed, FC SOtol SA*

M White, *MBChB MMed FCS Otol SA*

Lecturers Part-time:

MD Broodryk, *MBBCh Stell FCSOtol SA*

N Goncalves, *MBChB Witwatersrand FCSOtol SA*

CJ Hofmeyr, *MBChB UCT, FCSOtol SA*

M Molyneaux, *MBChB Univ of Free State, FCSOtol SA*

A van Lierop, *MBChB Stell FCSOtol SA*

Paediatric Surgery

Institute of Child Health, Red Cross War Memorial Children's Hospital, Rondebosch

Division of Paediatric Surgery in the Department of Surgery (UCT) is a nationally recognised resource and based at the Red Cross War Memorial Children's Hospital. In addition to the regional drainage area, it receives patients from other provinces for certain tertiary care conditions. Fields such as Oncological Surgery, Trauma, Burns, Colorectal, Hepatobiliary and Upper GIT are offered to the patients. There is a well-designed undergraduate training program and highly successful postgraduate program training colleagues in Paediatric Surgery. Research output predominantly derives from conditions that are relevant to our setting and has been an important factor in us providing best care possible to our patients. Surgical Skills Training Centre is also situated in the Division, which is a national resource and has been functioning for over 10 years. Outreach is an important component of our mission and regular high-quality sessions are offered using online teaching methods since 2010.

Charles F M Saint Professor of Paediatric Surgery and Head:

S Cox, MBChB Cape Town FCS SA Cert (Paediatric Surgery) SA
A Numanoglu, MBChB Turkey FCS SA

Emeritus Professors Part-Time:

AJW Millar, MBChB Cape Town FRCS UK FRCS Edinburgh FRACS DCH (RCP&Seng) FCS SA
H Rode, MBChB Pret MMed Surg FRCS Edinburgh FCS SA
AB van As, MBChB Netherlands FCS SA PhD Cape Town MBA SA

Adjunct Professor Part-time:

RA Brown, MBChB Cape Town MPhil Stell DCH SA FRCS Edinburgh FCSSurg SA

Senior Lecturers:

M Arnold, MBChB Pret DCH SA FC Paed Surg SA MMed Stell
D von Delft, MBChB UFS MRCS Edinburgh FC Paed Surg
G Dos Passos, MBChB Witwatersrand FC Plast Surg SA MMed Cape Town
Y Gamiet, MBChB Stell, MMed Witswatersrand FC Paed Surg SA

Child Accident Prevention Foundation of Southern Africa (Childsafe):

P Nyakaza, BA UWC

Senior Medical Technologist:

J Raad, D (Medical Technology) UJ

Surgical Skills Training Centre:

C van Geems

Plastic, Reconstructive and Maxillo-facial Surgery

F26, New Grootte Schuur Hospital

The Division of Plastic and Reconstructive Surgery is based at Grootte Schuur and Red Cross War Memorial Children's hospitals. We offer the whole range of surgery, in many cases via a combined approach. The combined Breast, Skin and the Head and Neck service at GSH, and the Cleft, Craniofacial and Burn service at RXH deserve special mention. We also offer surgical management of pressure wounds at Eerste River hospital via Cape Rehab and have specialised access to Advanced Wound Care. At RXH we have the only laser scar resurfacing service on the continent since 2016. We offer undergraduate and post graduate teaching catering for both local and foreign elective students. The division trains supernumerary registrars from the African

512 DEPARTMENTS IN THE FACULTY

continent and is currently involved in strategic research partnerships in the UK (Bristol) and the Netherlands (AMC). The division has a long history of publishing in the most prestigious plastic surgery journals. We are also involved in community outreach both locally since partnering with the Smile Foundation of South Africa in 2009, and abroad since our collaboration with Operation Smile in 2008 and the Smile Train in 2015.

Associate Professor and Head:

S Adams, MBChB *Cape Town FC Plast (Plastic & Reconstructive Surgery) SA*

Senior Lecturers Full-time:

KG Adams, MBChB *Cape Town FC Plast (Plastic & Reconstructive Surgery) SA*
B Lelala, MBChB *Cape Town FC Plast (Plastic & Reconstructive Surgery) SA*

Senior Lecturers Part-time:

G Dos Passos, MBChB *Witwatersrand FC Plast Surg SA MMed Cape Town*
DB Fernandes, MBChB *FRCS Edinburgh*
S Geldenhuys, MBChB *FCS SA*
A Landau, MBChB *Cape Town FCS SA*
C Pienaar, MBChB *UOFS FCS SA*
JE 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:

GJ Hein, BSc, BChD *MChD UWC*

Dentists:

J Thompson

Maxillo-facial Part-time consultants:

S Aniruth, BChD *UWC*
S Singh, BChD *UWC BSc UKZN*

Full Professors Part Time:

DA Hudson, MBChB *MMed Cape Town FCS SA FRCS Edinburgh FACS*
R Hendricks, PhD

Surgical Gastroenterology

E23, New Main Building, Grootte Schuur Hospital

Professor and Head:

E Jonas, MBChB *MMed FCS SA PhD*

Head Colorectal Clinic:

ABT Boutall, MBBCh *Stell FCS SA Cert (Gastroenterology)*

Senior Lecturers:

M Bernon, MBBCh *Witwatersrand FCS SA Cert (Gastroenterology)*
S Burmeister, MBChB *Cape Town FCS SA Cert (Gastroenterology)*
G Chinnery, MBChB *Witwatersrand MMed FCS SA Cert (Gastroenterology)*
C Warden, MBChB *Cape Town MMed FCS SA*

Urology

E26, New Groote Schuur Hospital

Professor and Head:

JM Lazarus, MBChB *Cape Town FCSUrol SA*

Emeritus Associate Professor:

RD Barnes, MBChB *Cape Town FCSUrol SA*

Senior Lecturers Full-time:

J Howlett, FC Urol *SA MMed Urol UKZN MBChB Cape Town*

L Kaestner, MBChB *Stell FCSUrol SA MMed Cape Town*

AS Salukazana, MBChB *WSU FCSUrol SA MMed Cape Town*

Senior Lecturers Part-time:

TM Borchers, MBChB *Cape Town FCSUrol SA*

MJ Dewar, MBChB *Cape Town FCSUrol SA MMed Cape Town*

JH Wicht, MBChB *Stell FCSUrol SA MMed Cape Town*

CE De Wet, MBChB *UFS FCSUrol SA MMed Cape Town*

SG de Jager, MBChB *UP FCSUrol SA MMed Cape Town*

CHM4000F COMMUNITY EYE HEALTH

20 NQF credits at NQF 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: Dr D Minnies

Course outline:

This course is delivered in blended format, comprising of a one-week contact period plus an on-line component over a 6-week period. An additional 12 weeks are allocated for tutorials and the completion of group exercises and assignments. The on-line course entitled "Planning and managing eye care services" serves as foundation for self-study and exploration. 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 global strategies to eliminate avoidable blindness. Students are introduced to the principles of community eye health planning and are required to conduct a situational analysis of the needs and resources for their own eye care programme. Using this knowledge, 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 an eye care programme plan for their particular service units.

DP requirements: Completion of on-line course during initial six-week period, including scoring of at least 75% for all in-course quizzes.

Assessment: During the second six-week period, the students complete two assignments, each making up 50% of the course mark. Students must obtain a minimum of 40% to pass an assignment, but must obtain an aggregate of 50% to pass the course. Students who fail to achieve the pass mark must repeat it. No examination is written for this course.

CHM4001F HEALTH PROMOTION AND HUMAN RESOURCE DEVELOPMENT

10 NQF credits at NQF level 8

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".

514 DEPARTMENTS IN THE FACULTY

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.

CHM4002F MANAGEMENT FOR EYE CARE

20 NQF credits at NQF level 8; The course comprises a total of 15 contact sessions per week, including didactic lessons, individual and group exercises, and field visits.

Convener: Dr D Minnies

Course entry requirements: CHM4000F and CHM4001F

Course outline:

This course is delivered in blended format, comprising of a four-week contact period during which the following sub-modules are covered: "Leadership and management," "Project management essentials," "Developing action plans," and "Programme administration and management." A fifth sub-module entitled "Programme implementation and development" is covered through online sessions. This is followed by 13 weeks of online exercises, tutorials and mini-assignments to consolidate application of the learning. The overall paradigm of the course is that better eye care service delivery outcomes can be achieved through strengthened 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 eye care programmes.

DP requirements: Attendance of all coursework commitments and submission of coursework requirements by the due dates.

Assessment: Assessment: At the end of each sub-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 student has to repeat the course. No examination is written for this course.

CHM4003W IMPLEMENTATION OF EYE CARE

70 NQF credits at NQF level 8; The course is delivered in distance mode and comprises the preparation and submission of a portfolio of assignments.

Convener: Dr D Minnies

Course entry requirements: Successful completion of the following three courses: CHM4000F, CHM4001F and CHM4002F

Course outline:

This course is delivered in distant mode: a period of practical assignment preparation and submission followed by a two-week period of online debriefing and feedback, facilitated through supervision by the course conveners. The assignment phase of the course requires students to complete and submit up to eight compulsory assignments, through which they apply the knowledge gained and techniques learned during the coursework and exercises of the other three courses: CHM4000F, CHM4002F and CHM4028Q.

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, financial planning and management, developing monitoring systems and strategies for managing human resources. Each assignment is supervised by a faculty member who provides the student with further reading materials, coaching and support through email and 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 specific health service units.

DP requirements: Attendance of all academic commitments and submission of all assessments by the due dates.

Assessment: Assessment comprises assignments (80%) and a final examination (20%). The examination, a three-hour paper, covers the study areas of the three preceding courses CHM4000F, CHM4001F and CHM4002F and is written online. 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 is at the discretion of the assignment supervisor or responsible faculty. A final course mark is calculated by adding 80% of the total assignment mark to 20% of the examination mark. A final course mark of 50% and greater constitutes a pass, while a mark of less than 40% constitutes a fail. Students scoring 40% and more but less than 50% are eligible for a supplementary examination for which a minimum of 50% constitutes a pass.

CHM4028Q EYE CARE AND HEALTH SYSTEMS

20 NQF credits at NQF level 8

Convener: Dr D Minnies

Course outline:

This course is delivered partly distant and partly contact over a six-week period. During the first contact period, students participate in lectures and exercises to obtain knowledge and understanding of “Health Promotion for Eye Care,” “Eye and health systems,” “Human Resource Development for Eye Care” and “Health Professional Education for Eye Care”, relevant to development of eye care services in district health programmes. During the second contact week, "Advocacy for eye care," a key competency required for developing eye services is offered, in work-shop format. The contact period is used to enhance knowledge sharing, provide and receive feedback. This is followed by four weeks of distant teaching and learning activities, including individual and group exercises and mini assignments. The study material is largely based on current understandings of health system principles and applications. Using 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.

DP requirements: DP requirements: Attendance of all coursework commitments and submission of coursework requirements by the due dates.

Assessment: 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.

CHM5001W MSC(MED) IN SURGERY

180 NQF credits at NQF level 9

Convener: Professor L Cairncross

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.

Assessment: The dissertation is externally examined.

CHM5002W UROLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor L Cairncross

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.

Assessment: The dissertation is externally examined.

CHM6003W MPHIL IN SURGICAL GASTROENTEROLOGY PART 1

120 NQF credits at NQF level 9

Convener: Professor E Jonas

Course outline:

This training programme forms part of the process to prepare specialist surgeons to become subspecialists in adult surgical gastroenterology. Candidates declare their area of clinical focus and follow the relevant curriculum of the College of Surgeons of South Africa. On successful completion of the relevant examination of the College of Surgeons they are granted credit towards CHM6003W. There is emphasis on acquiring updated knowledge on relevant basic sciences; congenital and acquired non-neoplastic and neoplastic diseases; and surgical and interventional management of the conditions relevant to the declared special interest. During placement in the specialised gastrointestinal surgical units candidates undergo formal training in diagnostic and therapeutic endoscopy as well as in surgical techniques for basic and complex gastrointestinal conditions. Candidates become proficient in performing procedures designated as "mandatory" unsupervised, and are exposed to and assist at procedures designated as "advanced". All trainees are required to participate in basic or clinical research during their training during which research skills (clinical research methods, biostatistics, epidemiology and ethics) are acquired. Participation in research should lead to the submission of at least one manuscript to a peer-reviewed journal and one presentation at a national or international meeting or conference in the relevant field. For the detailed curriculum, see the regulations of the relevant College of Surgeons of South Africa at www.cmsa.co.za.

DP requirements: At least eighteen months as a subspeciality trainee in an accredited specialist Surgical Gastroenterology department/division/unit; submission of the prescribed logbook; and written reports from the heads of the institutions in which the student has been 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 that includes applied anatomy, physiology, pathology and radiology relevant to gastroenterology in general and the declared area of clinical focus declared by the candidate and reflected in the logbook.

CHM6004W SURGICAL GASTROENTEROLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor E Jonas**Course outline:**

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic in Surgical Gastroenterology. The minor dissertation should generally be on a clinical topic and should be based on a study for which the work was commenced while the candidate was registered as a postgraduate student. Candidates are trained in research skills such as clinical research methods, biostatistics, epidemiology and ethics and in research proposal design. The research should lead to the submission of at least one manuscript to a peer-reviewed journal and one presentation at a national or international meeting or conference in the relevant field.

DP requirements: None**Assessment:** External examination of the minor dissertation.

CHM6022F COMMUNITY EYE HEALTH I

12 NQF credits at NQF level 9

Convener: Dr D Minnies**Course outline:**

The aim of this course is to provide an overview of the principles of the control of blindness in general and an overview of the control of avoidable blindness due to cataract and childhood blindness and visual impairment due to refractive error and low vision. The coursework is covered through an initial, contact block during which part 1 of the Community eye-health course manual is studied, a six-week, on-line course called "Planning and managing eye care services" is completed along with and reading of selected journal article, reports and strategy documents are completed. A set of individual and group assignments are completed with the aim of consolidating the knowledge assimilated during the online study phases.

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 final course mark of 50% and greater constitutes a pass, while a mark of less than 40% constitutes a fail. Students obtaining marks between 40% and 49% are eligible for a supplementary examination for which a minimum of 50% constitutes a pass.

CHM6023F COMMUNITY EYE HEALTH II

12 NQF credits at NQF level 9

Convener: Dr D Minnies**Course outline:**

The aim of this course is to provide an overview of the principles of the control of blindness due to other blinding conditions such as glaucoma, diabetic retinopathy and childhood blindness. Specific emphasis is laid on information and research strategies in eye health, for example Rapid Assessment of Avoidable Blindness and Trachoma survey. The coursework is covered through an initial, contact block during which part 2 of the Community eye-health course manual is studied, a six-week, on-line course called "Global blindness: ophthalmic epidemiology" is completed along with and reading of selected journal article, reports and strategy documents. A set of individual and group assignments are completed with the aim of consolidating the knowledge assimilated during the online study phases.

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 final course mark of 50% and greater constitutes a pass, while a mark of less than 40% constitutes a fail. Students obtaining marks between 40% and 49% are eligible for a supplementary examination for which a minimum of 50% constitutes a pass.

CHM6024W CARDIOVASCULAR BIOMECHANICS DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor AG Fiegggen

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.

Assessment: The dissertation is externally examined.

CHM6036W BASIC ANATOMY & PHYSIOLOGY IN PAEDIATRIC NEUROSURGERY

50 NQF credits at NQF level 9

Convener: Dr L Padayachy

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.

CHM6037W MANAGEMENT OF CLINICAL CONDITIONS IN PAEDIATRIC NEUROSURGERY

45 NQF credits at NQF level 9

Convener: Dr L Padayachy

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.

CHM6038W SURGICAL AND CRITICAL CARE MANAGEMENT IN PAEDIATRIC NEUROSURGERY

40 NQF credits at NQF level 9

Convener: Dr L Padayachy

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.

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.

CHM6039W FINAL INTEGRATED CLINICAL EXAMINATION

0 NQF credits at NQF 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 student's knowledge as well as their ability to integrate and apply this knowledge adequately in a clinical situation.

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.

CHM6040W RESEARCH REPORT

45 NQF credits at NQF level 9

Convener: Dr L Padayachy

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.

Assessment: The Report is externally examined. The Report should be a well-constructed manuscript that is publishable in a peer-reviewed journal.

CHM6041W SURGERY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor AG Fieggen

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.

Assessment: The dissertation is externally examined.

CHM6045F FUNDAMENTALS OF GLOBAL SURGERY

12 NQF credits at NQF level 9

Convener: Associate Professor S Maswime

Course outline:

This course examines the role of public and global health systems in surgery and explores strategies to improve surgical healthcare in the African context. The course aims to build surgical leadership in Africa by equipping students with the foundational knowledge, critical analysis, reasoning skills, and tools needed to contribute to global surgery through research, advocacy, and implementation of surgical healthcare programs for large-scale impact. Students will apply theoretical concepts and empirical trends in surgical systems to develop pragmatic solutions to improve surgical healthcare.

DP requirements: To be eligible to write the final examination, students are required to have: (a) complete all course related activities (b) attended 80% of block week activities. Absence is permitted only with approval of the course convener.

Assessment: Examination 20%; Project proposal 40%; Class participation 20%; Class presentation 20%

CHM7001W SURGERY THESIS

360 NQF credits at NQF level 10

Convener: Professor AG Fieggen

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: The thesis is external examined.

CHM7002W MD IN SURGERY

360 NQF credits at NQF level 10

Convener: Professor AG Fieggen

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: The thesis is externally examined.

CHM7004W MMED IN SURGICAL DISCIPLINES PART 1

60 NQF credits at NQF level 9

Convener: Varies per surgical discipline

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.cmsa.co.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.

CHM7005W PLASTIC & RECONSTRUCTIVE SURGERY THESIS

360 NQF credits at NQF level 10

Convener: Professor AG Fieggen

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: The thesis is externally examined.

CHM7008W MMED IN GENERAL SURGERY PART 2B

30 NQF credits at NQF level 9

Convener: Professor L Cairncross

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.

522 DEPARTMENTS IN THE FACULTY

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, gastro-intestinal surgery, head and neck surgery, surgical oncology, trauma surgery, 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.cmsa.co.za

DP requirements: Candidates may be admitted to the final examination if they fulfil the criteria specified by the College and HPCSA, as well as the internal DP criteria of the Division which are a requirement for receiving the HOD approval letter. They need to have passed the primary and the intermediate CMSA examinations and completed a period of not less than four years of general surgery training at UCT. During this time, they need to have shown a commitment to attending academic activities, with >70% attendance at weekly academic tutorials, morbidity and mortality meetings and MMed presentation meetings (absence is permitted only with valid excuse submitted and approved by the course convenor). As per the College of Surgeons guidelines, candidates need to have submitted a first draft of their minor dissertation for evaluation to the course convenor. Candidates are required to keep a logbook of procedures which must be uploaded at the time of application for the final examination. Finally, candidates are required to have completed the prescribed minimum number of workplace-based assessments/observations per rotation, to enable the postgraduate education committee to assess their competence in the workplace.

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 surgery, including operative surgery, surgical anatomy, physiology and pathology.

CHM7009W GENERAL SURGERY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor L Cairncross

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, The minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to general surgery. The minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The minor dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Through attending a research methods course students may receive 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. Candidates may also be required to present the work at a congress and submit there search for publication.

DP requirements: None

Assessment: External examination of the minor dissertation.

CHM7010W MMed IN SURGICAL DISCIPLINES PART 2A

30 NQF credits at NQF level 9

Convener: Varies per surgical discipline

Course entry requirements: CHM7004W

Course outline:

This training programme forms part of the credentialing process of general practitioners as specialists. The Health Professions Council of South Africa stipulates the training requirements, and candidates complete the curriculum of the relevant College. 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.cmsa.co.za.

DP requirements: The candidate may be admitted to the intermediate examination having passed the primary; 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. 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 two multiple choice written papers and such oral examinations as determined by the College.

CHM7012W MMED IN PLASTIC & RECONSTRUCTIVE SURGERY PART 2B

30 NQF credits at NQF level 9

Convener: Professor S Adams

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.cmsa.co.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.

CHM7013W PLASTIC & RECONSTRUCTIVE SURGERY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor S Adams

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to plastic surgery. The minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The minor dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Through attending a research methods course students may receive 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 minor dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

Assessment: External examination of the minor dissertation.

CHM7016W CARDIOTHORACIC SURGERY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor T Pennel

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.

Assessment: The dissertation is externally examined.

CHM7017W CARDIOTHORACIC SURGERY THESIS

360 NQF credits at NQF level 10

Convener: Professor T Pennel

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: The thesis is externally examined.

CHM7019W MMED IN CARDIOTHORACIC SURGERY PART 2B

30 NQF credits at NQF level 9

Convener: Professor T Pennel

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.cmsa.co.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 examination. For full details see www.cmsa.co.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.

CHM7020W CARDIOTHORACIC SURGERY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor T Pennel

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to cardiothoracic surgery. The minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a post graduate student. The dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Through attending a research methods course students may receive 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 minor dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

Assessment: External examination of the minor dissertation.

CHM7024W NEUROSURGERY THESIS

360 NQF credits at NQF level 10

Convener: Professor AG Fiegggen

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: The thesis is externally examined.

CHM7025W MD IN NEUROSURGERY

360 NQF credits at NQF level 10

Convener: Professor AG Fiegggen

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

526 DEPARTMENTS IN THE FACULTY

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: The thesis is externally examined.

CHM7026W MMED IN NEUROSURGERY PART 2B

30 NQF credits at NQF level 9

Convener: Professor AG Fieggen

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.

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.

CHM7027W NEUROSURGERY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor AG Fieggen

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to neurosurgery. The minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The minor dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Through attending a research methods course students may receive 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 minor 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.

CHM7030W MMED IN OPHTHALMOLOGY PART 2

30 NQF credits at NQF level 9

Convener: Associate Professor C Tinley

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.cmsa.co.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.

CHM7031W OPTHALMOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor N du Toit

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to ophthalmic surgery. The minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a post graduate student. The minor dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Through attending a research methods course students may receive 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 minor 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.

CHM7032W MMED IN OPTHALMOLOGY (PAPERS 1&2)

60 NQF credits at NQF level 9

Convener: Associate Professor C Tinely

Course outline:

This training programme forms part of the credentialing 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.cmsa.co.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.

CHM7033W ORTHOPAEDIC SURGERY THESIS

360 NQF credits at NQF level 10

Convener: Professor R Dunn

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: The thesis is externally examined.

CHM7035W MMED IN ORTHOPAEDIC SURGERY PART 2B

30 NQF credits at NQF level 9

Convener: Professor R Dunn

Course entry requirements: CHM7004W and CHM7010W

Course outline:

This training programme forms part of the credentialing 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.cmsa.co.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.

CHM7036W ORTHOPAEDIC SURGERY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor R Dunn

Course outline:

The minor dissertation is prepared under supervision. The minor dissertation must be between according to the CMSA requirement in length, and must be on a topic in orthopaedic surgery. The minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a postgraduate student. The minor 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 minor 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.

CHM7037W OTORHINOLARYNGOLOGY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor JJ Fagan**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.

Assessment: The dissertation is externally examined.

CHM7038W OTORHINOLARYNGOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor JJ Fagan**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: The thesis is externally examined.

CHM7040W MMED IN OTORHINOLARYNGOLOGY PART 2

30 NQF credits at NQF level 9

Convener: Professor JJ 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.cmsa.co.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

530 DEPARTMENTS IN THE FACULTY

sciences and audiology, in the theory and practice of otorhinolaryngology, and in the theory and practice of head and neck surgery, including operative surgery.

CHM7041W OTORHINOLARYNGOLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor JJ Fagan

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to otorhinolaryngology. The minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a post graduate student. The minor dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Through attending a research methods course students may receive 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 minor 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.

CHM7042W UROLOGY THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor JM Lazarus

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: The thesis is externally examined.

CHM7044W MMED IN UROLOGY PART 2B

60 NQF credits at NQF level 9

Convener: Associate Professor JM Lazarus

Course entry requirements: CHM7010W

Course outline:

This training programme forms part of the credentialing 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.cmsa.co.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.

CHM7045W UROLOGY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor JM Lazarus

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to urological surgery, the minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a post graduate student. the minor dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Through attending a research methods course students may receive 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. 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.

CHM7050W OPHTHALMOLOGY THESIS

360 NQF credits at NQF level 10

Convener: Professor N du Toit

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: The thesis is externally examined.

CHM7052W MPHIL IN VASCULAR SURGERY PART 1

120 NQF credits at NQF level 9

Convener: Dr NG Naidoo

Course outline:

This training programme forms part of the credentialing 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 subspeciality, 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.cmsa.co.za.

DP requirements: At least eighteen months as a subspeciality 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 subspeciality. 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 DISSERTATION

60 NQF credits at NQF level 9

Convener: Dr NG Naidoo

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 minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to 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 minor 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 minor 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 subspeciality 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.

CHM7059W MMED IN PAEDIATRIC SURGERY PART 1

60 NQF credits at NQF level 9

Convener: Professor S Cox

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.

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.

CHM7060W MMED IN PAEDIATRIC SURGERY PART 2

60 NQF credits at NQF level 9

Convener: Professor S Cox

Course entry requirements: CHM7059W and 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.

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.

CHM7061W PAEDIATRIC SURGERY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor S Cox

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirement, and must be on a topic related to paediatric surgery. The minor dissertation must be based on a study the work for which was commenced while the candidate was registered as a post graduate student. The minor dissertation should generally be on a clinical topic and of a standard publishable in a peer-reviewed medical journal. Through attending a research methods course students may receive 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 minor 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.

CHM7062W NEUROSCIENCE (SURGERY) DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor AG Fiegen

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.

Assessment: The dissertation is externally examined.

CHM7063W NEUROSCIENCE (SURGERY) THESIS

360 NQF credits at NQF level 10

Convener: Professor AG Fieggen

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: The thesis externally examined.

CHM7064W EMERGENCY MEDICINE THESIS

360 NQF credits at NQF level 10

Convener: Associate Professor S Bruijns

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: The thesis is externally examined.

CHM7065W BIOMATERIALS THESIS

360 NQF credits at NQF level 10

Convener: Professor T Pennel

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: The thesis is externally examined.

CHM7066W CARDIOVASCULAR BIOMECHANICS THESIS

360 NQF credits at NQF level 10

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: The thesis is externally examined.

CHM7067W MPHIL IN CLINICAL PAEDIATRIC SURGERY PART 1

120 NQF credits at NQF level 9

Convener: TBA

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.

Assessment: One final examination of all coursework, including a written, oral and clinical component.

CHM7068W CLINICAL PAEDIATRIC SURGERY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Professor S Cox

Course outline:

The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph format according to the CMSA requirements, and must be on a topic related to paediatric surgery. The minor 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. Through attending a research methods course students may receive 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 minor dissertation. Candidates may also be required to present the work at a congress and submit the research for publication.

Assessment: External examination of the minor dissertation.

CHM7069W MMED IN OPHTHALMOLOGY PART 2A

30 NQF credits at NQF level 9

Convener: Associate Professor C Tinely

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.

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 NQF level 9

Convener: Associate Professor AJ Nicol

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.cmsa.co.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.

CHM7071W TRAUMA SURGERY MINOR DISSERTATION

60 NQF credits at NQF level 9

Convener: Associate Professor AJ Nicol

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 minor dissertation may register with the HPCSA as subspecialists after completion of the relevant College of Medicine Part I examination. The minor dissertation is prepared under supervision. As per the faculty minor dissertation guidelines, the minor dissertation can be submitted in publication or publication-ready format (standard journal article length) or monograph according to the CMSA requirements, and must be on a topic related to trauma surgery.

It must be based, moreover, on a study the work for which was commenced while the candidate was registered as a post graduate student. The minor 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 minor dissertation. In some disciplines they are also required to present the work at a congress and submit the research for publication.

Assessment: External examination of the minor dissertation.

CHM7072W MMED IN OTORHINOLARYNGOLOGY PART 1

60 NQF credits at NQF level 9

Convener: Professor JJ Fagan

Course outline:

This course covers the following: Anatomy (including head, neck and upper thorax; neuro-anatomy; applied anatomy relevant to diseases and spread of infection in head and neck; and relevant anatomy of the thorax); physiology (including general principles of physiology; discipline-orientated physiology; and basic principles of audiology and vestibular testing); and general principles of pathology.

Assessment: Students write the examinations of the Colleges of Medicine of South Africa.

CHM7073W MUSCULOSKELETAL SCIENCES DISSERTATION

180 NQF credits at NQF level 9

Convener: Associate Professor 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.

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.

Assessment: Dissertation 100%. The dissertation is externally examined.

CHM7074W TRAUMA SCIENCE DISSERTATION

180 NQF credits at NQF level 9

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. 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.

CHM7075W INFECTION MANAGEMENT DISSERTATION

180 NQF credits at NQF level 9

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.

CHM7076W SPORTS INJURIES DISSERTATION

180 NQF credits at NQF level 9

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.

CHM7077W GLOBAL SURGERY DISSERTATION

180 NQF credits at NQF level 9

Convener: Professor S Maswime

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 global 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 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: Examination of the dissertation by two examiners of international standing external to UCT.

CHM7078W GLOBAL SURGERY THESIS (SURGERY)

360 NQF credits at NQF level 10

Convener: Professor S Maswime

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

RESEARCH STRUCTURES

Alan J Flisher Centre for Public Mental Health

Department of Psychiatry and Mental Health, University of Cape Town, and Department of Psychology, Stellenbosch University

The Alan J Flisher Centre for Public Mental Health (CPMH, www.cpmh.org.za), based in the Department of Psychiatry and Mental Health 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, has been appointed as a World Health Organization Collaborating Centre and now conducts research in 13 countries in sub-Saharan Africa, South America, south Asia, and southeast 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 low- and middle-income country, and employs a multi-disciplinary team dedicated to undertaking high quality research and teaching in the areas of public mental health, and mental health policy and services. The Centre is currently involved in three major mental health research and capacity building consortia: the Wellcome Trust-funded “Improving Adolescent mental health by reducing the Impact of poVErty (ALIVE), the Wellcome Trust-funded African Mental health Research Initiative (AMARI, www.amari-africa.org) capacity building programme and the Fogarty International-funded African mental health Researchers InSpired and Equipped (ARISE) capacity building programme. CPMH is also home to the Sue Struengmann Initiative (SSI), funded by the Andreas and Sue Struengmann Foundation, and the Perinatal Mental Health Project (www.pmh.org.za). Additionally, the Centre attracts students from across Africa and beyond to the CPMH postgraduate programmes, including the blended learning Postgraduate Diploma (PGDip) in Public Mental Health, a distance learning MPhil in Public Mental Health as well as the PhD programme.

K Sorsdahl, PhD *Cape Town*

Biomedical Engineering Research Centre

Room 514, Anatomy Building

The Biomedical Engineering Research Centre has the goal of conducting research that supports and leads to technological innovation for improved health and wellbeing, particularly in developing contexts. At the same time, it aims to generate scholarship that has global value. The Centre is underpinned by postgraduate programmes in Biomedical Engineering, Health Innovation, and Healthcare Technology Management, and integrates UCT’s strengths in these areas into a synergistic whole. The broad research mandate of the Centre spans a range of disciplines, including engineering, computing and physical sciences, health and life sciences, and social sciences. The Centre incorporates the Medical Imaging Research Unit.

Professor and Director:

T Douglas, BScEng MBA *Cape Town* MS *Vanderbilt* MPhil *Stell* PhD *Strathclyde*

Brain and Behaviour Unit (BBU)

Dept of Psychiatry, 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 signatures.

DJ Stein, BSc (Medicine) MBChB Cape Town FRCPC PhD DPhil Stell

Cancer Research Initiative

Room 3.45 Falmouth Building, FHS, UCT and J52-12, Old Main Building, Groote Schuur Hospital

The Cancer Research Initiative (CRI) brings together basic science, clinical and public health researchers to address the complex burden of cancer. Established in 2013, the CRI is housed in the Faculty of Health Sciences at UCT. The CRI aims to: Support collaborative, interdisciplinary cancer research relevant to the African context, Develop cancer research capacity, Support cancer research infrastructure development, Influence policy and practise by translating scientific discoveries into public benefit.

Professor and Director:

J Moodley, MBChB MMed PhD Cape Town

Cape Heart Institute

Levels 4, 5 and 6, Christiaan Barnard Building, Faculty of Health Sciences

The Cape Heart Institute (CHI) is a multidisciplinary and interprofessional centre of excellence that concentrates on research activities and expertise relating to cardiovascular risk factors and diseases common to sub-Saharan Africa. Its focus is to consolidate and expand major existing efforts to combat the most serious cardiovascular threats to health and to improve overall prosperity within the region. The Institute's strategic intent is the focused application of its extensive array of scientific and research skills and capacities, within a multi-disciplinary environment, extending from the most basic enabling technologies to clinical studies and public health approach. This includes leadership in global studies. Through its bridge position between laboratory-based research and clinical research, the CHI sees itself as an institution fostering translation. The CHI creates a modern, consolidated and vibrant environment between a number of shared laboratories, facilities and expertise, in which scientific excellence is pursued within a number of laboratory groups. Each group is headed by a scientist of international stature and is facilitated by efficient and effective infrastructure and centralized facilities, with minimum bureaucracy, thereby enabling local research capacity to prosper in Africa.

Professors and Co-Directors:

K Sliwa, MD Berlin PhD Johannesburg FESC FACC

Professor and Deputy-Director:

S Lecour, PharmD *Dijon* PhD *Dijon* FESC

Full Members:

Prof. D Blom, MD *Cape Town* PhD *Cape Town*

Prof. M Engel, PhD *Cape Town*

Prof. N Ntusi, MD *Cape Town*, DPhil *Oxford*

Assoc. Prof. G Shaboodien, PhD, *Cape Town*

Prof. Friedrich Thienemann, MD *Berlin* PhD *Cape Town*

Prof. Liesl Zühlke MD *Cape Town* PhD *Cape Town*

Cardiovascular Research Unit

Second, Third and Fifth Floor, Cape Heart Institute, Chris Barnard Building, Faculty of Health Sciences

The CRU is a transdisciplinary research unit that investigates biomaterials in the context of regenerative medicine. It provides postgraduate training in the disciplines of Cardiovascular Biomaterials and Cardiothoracic Surgery Research. Both MSc (Medicine) and PhD degrees by dissertation are offered in these disciplines.

Laboratory-based research is carried out in the fields of biomaterials research, bioprosthetic and polymeric heart valves, myocardial regeneration, regenerative vascular grafts and tissue engineering.

Professor and Director:

N. Davies PhD *Cape Town*

Deputy Director:

Assoc. Prof. P Human, PhD *Cape Town*

Associate Members:

Prof. T Pennel, MBChB PhD *Cape Town* FCS (Cardio)

Assoc. Prof. J Scherman, MBChB FCS (Cardio)

Prof P. Zilla MD PD *Vienna* DMed *Zurich* PhD *Cape Town* (Senior Research Scholar)

Financial Officer:

J Brooks

Centre for Environmental and Occupational Health Research (CEOHR)

Level 4, Falmouth Building South

The Centre, a WHO collaborating centre in occupational health between 2005 – 2014 and an MRC research entity between 2001-2005, was upgraded in 2009, following its initial establishment as a research unit in 1993. The SA Swiss Bilateral Research Chair in Global Environmental Health is based in the Centre. The core objectives of the Centre are:

To be a principal Centre of environmental and occupational health research, teaching and training, occupational medical clinical services, policy advisory, technical consultancy services, advocacy and a source of supportive outreach activities in South Africa, in the Southern and Eastern regions of Africa, Africa more generally, and internationally;

To conduct multidisciplinary research, teaching and service provision integrating laboratory, clinical, epidemiological and policy skills in relation to environmental and 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 solution;

To explore and develop means of maintaining the health of individuals and the environment, especially in relation to environmental health risks and 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, 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 inter-institutional research, teaching and service (including outreach) collaboration and capacity development; and

To translate and implement the results of research in teaching, training, policy, service provision and outreach.

Associate Professor and Director:

S Adams, MBChB DOH PhD *Cape Town* MFamMed *Stell* FCPHM (Occupational Medicine) *SA*

Professor and Deputy Director:

MA Dalvie, BSc BScHons (Medicine) MSc (Medicine) PhD *Cape Town*

Professors:

MF Jeebhay, MBChB *Natal* DOH MPhil *Cape Town* MPH PhD *Michigan* FCPHM (Occupational Medicine) *SA*

L London, MBChB MMed MD *Cape Town* BScMedHons *Stell* DOH *Witwatersrand*

HA Rother, BA MA PhD *Michigan* State

Emeritus Professors:

R Ehrlich, BBusSc MBChB PhD *Cape Town* DOH *Witwatersrand* FFCH FCPHM (Occupational Medicine) *SA*

JE Myers, BSc MBChB MD *Cape Town* DTM&H MFOM *UK*

ML Thompson, BScHons *Natal* PhD *Gottingen*

Research Co-ordinator:

R Baatjies, BTech MTech *CPUT* MPH *Witwatersrand* PhD *Cape Town*

Honorary Professor:

R Matzopoulos, BBusSc MPhil PhD *Cape Town*

Post-Doctoral Research Fellow:

B O Fagbayigbo, BSc MSc PhD

Research Associate:

T Olaniyan, BSc *Nigeria*, MSc *Northampton*, PhD *Cape Town*

Centre for Infectious Disease Epidemiology and Research (CIDER)

Level 5, Falmouth Building South, & Standard Bank Building, Mowbray

The Centre for Infectious Disease Epidemiology and Research is a World Health Organization (WHO) Collaborating Centre in HIV Epidemiology and Research) and 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, data scientists, social scientists and public health specialists.

Professor and Director:

M Davies, MBChB MMed PhD *Cape Town FCPHM SA*

Centre Manager:

C Sylvester, BA *Unisa AIM Cape Town*

Professors Full-time:

A Boulle, MBChB PhD *Cape Town MSc London FCPHM SA*

L Myer, AB *Brown MA MBChB Cape Town MPhil PhD Columbia*

Senior Clinical Research Officers Full-time:

E Kalk, MBChB *Witwatersrand PhD Birmingham MRCP London Dip (HIV Management) SA MPH Cape Town*

M Tlali, BA MBChB *Cape Town MSc DTMH LSHTM*

Senior Research Officers Full-time:

L Johnson, BBusSc PGDip (Actuarial Science) PhD *Cape Town*

R Kassanjee, PhD *Witwatersrand*

M Cornell, MPH PhD *Cape Town*

M Osler, BS *Colorado MPH Cape Town*

C Morrow, BSc(Hons); PhD *Cape Town*

Senior Research Officers Part-time:

U Mehta, BPharm *Witwatersrand DPharm Albany DrPH James Cook*

Clinical Research Officers Part-time:

R de Waal, MBChB MPH *Cape Town Dip (Pharm Medicine) UK*

Clinical Research Officers Full-time:

K Anderson, MBChB MPH *Cape Town Dip (HIV Management) SA*

Research Officers Full-time:

P Nyakato, BSc *Makarere MSc LSHTM*

G Patten, BSc *Cape Town MSc LSHTM*

J Euvrard, BA MA *Rhodes*

Research Officer Part-time:

K Hilderbrand, BSc *Sussex MSc London*

Project Managers:

N Tena-Coki, BScHons *UWC MSc PhD Cape Town*

W Wiemers, BCom *Unisa BSocScHons Cape Town*

Data Managers:

A Heekes, BSc *Cape Town*
 T Mutemaringa, BSc MSc *Zimbabwe MPhil Cape Town*
 M Smith, BSc *Stell MSc Erasmus*
 N Maxell, RN *UK*

Software Managers:

M Bosland, BSc *Stell*
 R Burley, BSc *Unisa*

Honorary Senior Lecturers:

D Pienaar, MBChB MMed *Cape Town*
 M Schomaker, Dip (Statistics) Dr.rer.nat. *Munich*

Honorary Research Associate:

G van Cutsem, BSc *FNDP Namur MD UCL Brussels DTM ITM Antwerp MPH Cape Town*
 L Wilkinson, LLB *Witwatersrand MSc London*

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.

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, MBChB MD FCP SA

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) 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. CCOAT Director, Prof Barnes participates actively in national, regional and global policy bodies. She is co-chair of the South African Malaria Elimination Committee.

CCOAT conducts translational research on the clinical pharmacology of antimalarials in vulnerable target populations (young children, pregnant women, those with prevalent co-morbidities such as HIV and malnutrition) and comprehensive evaluations of changes in malaria treatment policy, including from monotherapy to artemisinin-based combination therapy (ACT's) for treating uncomplicated malaria, from injectable quinine to injectable artesunate for the treatment of severe malaria and single low dose primaquine for malaria transmission blocking. We support the development of much-needed novel antimalarials through the conduct of clinical trials including the Phase 1 First-in-Human study on MMV048 and drug-drug interaction studies.

WWARN (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 (<https://www.cdisc.org/>).

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). Our staff contribute to and work with both local and global clinical research communities to use Global Health Network eLearning and other resources to enhance clinical research standards in low and middle income settings, while internal resources developed for our clinical research studies are shared with the broader Global Health Network community.

Professor and Director:

K Barnes, MBChB MMed *Cape Town*

Project Manager:

M Solomons

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:

LG Bekker, MBChB PhD *Cape Town* DCH DTM&H FCP SA

Associate Professor:

C Orrell, MBChB *Cape Town* MSc DCH SA

Senior Research Officers:

K Middelkoop, MBChB PhD *Cape Town*

B Mkhize, MBChB *Natal* ADOH UFS

Affiliate Member:

L Myer, BA *Brown* MA MBChB *Cape Town* MPhil PhD *Columbia*

Principal Scientific Officer:

C Morrow, PhD *Cape Town*

Research Officers:

S Arnolds, MBChB *Stell*

F Bango, MBChB *UFS*

N Chigorimbo-Tsikiwa, BSc *Rhodes* BScHons (Medicine) MSc PhD *Cape Town*

L Fleurs, MBChB *Cape Town*

D J Onwumeh, MBBS *Nigeria*

T Radzilani, MBCh *Witwatersrand*

S Sattar, MBChB *Cape Town*

GW Skinner, MBChB *Witwatersrand*

Academic Facilitator:

M May, BEd MEd *NMMU*

Gender, Health and Justice Research Unit

Room 1.01, Entrance 1, Level 1, Falmouth Building

e-mail: Lillian.Artz@uct.ac.za or Melissa.Meyer@uct.ac.za

The GHJRU is an interdisciplinary research unit that unites scholars, NGOs and practitioners to develop and implement innovative, interdisciplinary research and social interventions on social exclusion and violence in a range of social, political and institutional settings. We have a proven history of empirical, evaluation and monitoring projects, many of which are well cited in the literature and are foundational studies in the areas of gender-based violence, sexual and gender minority rights, and reproductive rights. We use our empirical research to develop well-informed, evidence-based advocacy positions to support legal and policy reform in South Africa and similarly situated countries. Our research is almost exclusively conducted in interdisciplinary teams, frequently including NGOs and government departments. The Unit also has a well-established history of providing technical assistance to a wide range of implementing partners including government and NGOs.

The mission of the Gender, Health and Justice Research Unit is to improve service provision to victims of crime, violence and human rights violations, to facilitate violence prevention, and to promote access to justice in Southern and Eastern Africa through interdisciplinary research, advocacy and education.

Director and Professor:

LM Artz, BAHons *SFU* MA *University of Cape Town* PhD *Queens University Belfast*

Legal Researchers:

Harsha Gihwala, LLB *University of Cape Town*

Nasreen Solomons, LLB *University of Cape Town*

Junior Research Fellow

Dr Leoba Nyathi, *PhD* Gender Studies, MPH *University of Venda*

Researcher

Millicent Ngubane, BSS *UKZN*, BSocSci Hons *Industrial Psychology UKZN*

Administration and Research Support:

Melissa Meyer

Research Affiliates:

Dr Helen Liebling, PhD Women and Gender, University of Warwick

Dr Mahlogonolo Thobane, Department of Criminology and Security Science at the University of South Africa (UNISA)

Associate Professor Alex Muller, Dr Med Georg August University Gottingen, Germany

T Meer, BAHons UKZN MA Dalhousie University, Halifax

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; Covid-19 and older persons

William P Slater Chair of Geriatric Medicine and Professor:

MI Combrinck, MBChB BSc(Med)(Hons) PhD *Cape Town FCP SA (Neuro) MRCP UK DTM&H FRCP London*

Professor:

JA Joska, MBChB MMed PhD *Cape Town FC Psych SA*

Associate Professor and Director Institute of Ageing in Africa

SZ Kalula, BSc MBChB *Zambia MRCP UK MMed MPhil PhD Cape Town FRCP London*

Professor:

KGF Thomas, BA *Harvard MA Southern California PhD Arizona*

Honorary Senior Lecturers:

CA de Jager, BSc Hons HDE *Natal PhD Cape Town*

L Geffen, MBChB *Cape Town MCFP SA*

F Parker, MBChB *Stell FCP SA Cert Geriatric Medicine (SA)*

K Ross, MBChB *Stell FCP SA Cert Geriatric Medicine (SA)*

Visiting Associate Professor:

JR Hoffman, BA Hons DPhil *Oxon*

Honorary Research Associate:

M Chait, BA *Cape Town MSc London DPhil Oxford*

Health Economics Unit

Health Economics Unit

The Health Economics Unit (HEU) works to improve the performance of health systems by 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 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 South Africa and Africa; and*
- *To provide technical support to facilitate the translation of health policies into practical programmes.*

Professor and Director:

E Sinanovic, BSc *Zagreb PGDip (Financial Management) Maastricht MCom Cape Town PhD London*

Associate Professors:

S Cleary, BA *Rhodes* BAHons MA PhD *Cape Town*

Senior Lecturer:

OA Alaba, BScHons MSc PhD *Ibadan*
L Cunnama, BSc (Physiotherapy) MPH PhD *Cape Town*

Research Officers:

A Obse, BA MSc *Addis Ababa* PhD *Dublin*

Honorary Research Associate:

G Solanki, BChD *Western Cape* MSc *London* BAHons *Western Cape* DrPH *Berkeley*
JE Ataguba, BScHons *Nigeria* MPH PhD *Cape Town*

Emeritus Professor:

D McIntyre, BCom BAHons MA PhD *Cape Town*

HIV Mental Health Unit

Neuroscience Institute, 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. Our work includes both adults and adolescents affected by HIV. 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. Further information may be found at www.hivmentalhealth.uct.ac.za

Director and Professor:

J Joska, MBChB MMed PhD *Cape Town* FCPsych SA, *Cert Neuropsychiatry (SA)*

Co-director and Professor:

J Hoare, MBChB MPhil *Cape Town* PhD *Cape Town* MRCPsych UK FCPsych SA

Psychologist and Associate Professor

A. Marais, PhD *Cape Town*

Senior Research Officers:

N Phillips, PhD
B Mtukushe, Mphil
S Rabie, PhD
S Nightingale, MBBS PhD

Research Officers

A Dreyer, MA
N. Steenkamp, MA

Sub-specialist Clinical Fellow

L. Mgweba-Bewana, MBChB, MMed (psych), FC Psych (SA)

Honorary Professors:

A. Carrico, PhD
L Cluver, PhD *Oxford*

H. Gouse, PhD *Cape Town*
 C Kuo, PhD *Brown*
 K Sikkema, *Columbia*
 L Simbayi, *HSRC*

Administrative Assistant:

K Poggenpoel, B Admin *UWC*

Institute of Infectious Disease and Molecular Medicine

Wolfson Pavilion 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 100m² 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://www.idm.uct.ac.za/>

Professor and Director:

V Mizrahi, BSc (Hons) PhD *Cape Town* OMS MASSAf FRSSAf FAAM (Fellow of UCT)

Full Members and Professors:

S Barth, BSc MSc *Bonn* PhD *Bonn* DMSc *Cologne*

LG Bekker, MBChB DCH DTM&H FCP PhD *SA*

J Blackburn, BA MA DPhil *Oxon*

F Brombacher, PhD *Freiburg* K Chibale BSc *Zambia* PhD *Cantab* FRSC FRSSAf

K Chibale, BSc.Ed *Zambia* PhD *Cantab* FRSC FRSSAf MASSAf FAAS (Fellow of UCT)

C Dandara, PhD *University of Zimbabwe*

J Hapgood, BSc (Hons) PhD *Cape Town*

M Hatherill, MBChB DCH MMed MRCP FCPaed MD *Cape Town*

G Hussey, MBChB MMed *Cape Town* MSc (Clinical Tropical Medicine) *London* DTM&H UK FFCH *SA*

M Jacobs, BSc (Hons)(Medicine) PhD *Cape Town*

AA Katz, PhD *Weizmann Institute*

G Meintjes, BSc (Hons) MBChB PhD *Cape Town* FRCP UK FCP Dip (HIV Management) *SA* MPH *Johns Hopkins*

R Millar, BSc (Hons) MSc *London* PhD *Liverpool* MRCP FRCP

N Mulder, BSc (Hons) PhD *Cape Town*

RS Ramesar, BSc (Hons) MSc *UKZN* PhD *Cape Town*

EP Rybicki, BSc (Hons) MSc PhD *Cape Town* MASSAf FRSSAf (Fellow of UCT)

T Scriba, BSc (Hons) MSc *Stell* DPhil *Oxon*

ED Sturrock, BSc (Hons) (Medicine) PhD *Cape Town* MASSAf FRSSAf (Fellow of UCT)

DF Warner, BCom BSc (Hons) PhD *Witwatersrand*

A Williamson, BSc (Hons) PhD *Witwatersrand* MASSAf FRSSAf (Fellow of *UCT*)

C Williamson, BSc (Hons) PhD *Cape Town* MASSAf FRSSAf (Fellow of *UCT*)

A Wonkam, MBChB *Cameroon* MD Dip (Medical Genetics) *Switzerland* PhD *UCT*

R Wood, BSc (Hons) BMBCh *Oxon* MMed DSc FCP *SA* (Fellow of *UCT*)

Full Members and Associate Professors:

W Burgers, BSc (Hons) MSc *Cape Town* PhD *Cantab*

H Cox, BSc (Hons) MPH PhD *UniMelb*

W Horsnell, BSc (Hons) *Leeds* PhD *London*

H Jaspán, BSc *USA* MD PhD *Tulane* FAAP PaedsID *Washington*

D Martin, BSc (Hons) MSc *UKZN* PhD *Cape Town*

E Nemes, PhD *Modena (Italy)*

C Orrell, MBChB MSc MMed PhD *Cape Town*

JA Passmore, BSc (Hons) *UKZN* PhD *Cape Town* BSc (Hons)

Full Member and Honorary Professor:

RJ Wilkinson, MA *Cantab* BM BCh *Oxon* PhD DTM&H FRCP FMed Sci Group Leader *Francis Crick Institute* London Wellcome Trust Senior Fellow in Clinical Science and Professor of Infectious Diseases *Imperial College London*

Affiliate Members and Professors:

K Barnes, MBChB MMed (Clinical Pharmacology) *Cape Town*

A Boule, MBChB PhD *Cape Town* MSc *London* FCPHM *SA*

K Dheda, MBBCh *Witwatersrand* FCP *SA* FCCP PhD FRCP *London*

T Egan, PhD *Cape Town*

BS Eley, MBChB FCP (Paediatrics) *SA* BSc (Hons) (Medicine) *Cape Town*

G Maartens, MBChB MMed FCP *SA* DTM&H

H McIlleron, MBChB PhD *Cape Town*

L Myer, BA *Brown* MBChB MA *Cape Town* MPhil PhD *Columbia*

K Naidoo, BSc (Hons) MSc *Cape Town* PhD *Michigan* FRSSAf

M Ntsekhe, MD PhD FCP *SA* FACC

MI Parker, BSc (Hons) PhD *Cape Town* MASSAf FIAS ftWAS

K Sliwa-Hahnle, MD PhD FESC FACC

DJ Stein, BSc (Medicine) MBChB *Cape Town* FRCPC PhD *Stell* DPhil

HJ Zar, MBBCh *Witwatersrand* BCPaed BCPaed Pulmonology *USA* PhD FCPaed *SA* FRCP *Edinburgh*

Affiliate Member and Associate Professor:

D Coetzee, BA *Cape Town* MBBCh DPH DTM&H DOH *Witwatersrand* FCPHM *SA* MS *Columbia*

L Zuhlke, MBChB DCH MPH PhD *Cape Town* FC Paeds FESC FACC

DJ Davey, BA *University of Colorado* MPH *Columbia University* PhD *University of California Los Angeles*

Associate Members and Associate Professors:

E Chimusa, BSc (Hons) BSc (Hons) PhD *Cape Town*

A Coussens, BSc (Hons) *Adelaide* PhD *Brisbane*

R Guler, BSc (Hons) MSc PhD *Geneva*

Associate Members and Researchers:

FS Dube, BSc (Hons) PhD *Cape Town*

J Hoving, BSc (Hons) BSc (Hons) MSc (Med) PhD *Cape Town*

L Masson, BSc (Hons) MSc (Med) PhD *Cape Town*

K Middelkoop, MBChB MPH PhD *Cape Town*

S Parihar, PhD *Cape Town*
 J Raimondo, MBChB *Cape Town* DPhil *Oxon*
 C Riou, PhD *Lyon*
 G Schafer, PhD *Humboldt*
 M Shey, BSc *Yaounde I (Cameroon)* BSc(Med)Hons PhD *Cape Town*
 S Wasserman, MBChB MMed *Cape Town* FCP SA CertID(Phys)SA

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 tenofovir on renal function, kidney biopsy finding in HIV+ve to HIV+ve kidney transplants, outcomes and genetics 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.

Head:

KCZ Ndlovu, MBChB *Cape Town* FCP SA Cert (Nephrol Phys) PhD *KwaZulu-Natal*

Honorary Professor:

P Heering, MD Fellow of the *American Society of Nephrology*

Associate Professor:

N Wearne, MBChB BMedSciHons *Sydney* FCP SA Cert (Nephrol Phys) SA PhD

Emeritus Professor:

BL Rayner, MBChB MMed *Cape Town* FCP SA PhD *Cape Town*

Emeritus Associate Professors:

CR Swanepoel, MBChB *Cape Town* MRCP FRCP *UK*

I Okpechi, MB BS FWACP Cert (Nephrol Phys) SA PhD *Cape Town*

Senior Lecturers:

Z Barday, MBChB FCP Cert (Nephrol Phys) SA
E Jones, MBBCh FCP Cert (Nephrol Phys) SA PhD Cape Town
B Davidson, MBBCh FCP Cert (Nephrol Phys) SA

Honorary Senior Lecturer:

M Pascoe, MBChB FCP SA

Surgeons (Transplants and Dialysis Access):

JM Du Toit, MBChB Stell FCS SA
D Kahn, MBChB Birmingham ChM Cape Town FCS SA
E Muller, MBChB Pret MMed Cape Town MRCS FCS SA
DA Thomson, MBChB UKZN FCS SA MMed Cape Town

Social Worker:

L Hlakudi

Transplant coordinators:

F McCurdie
L Steenkamp

Transplant Clinic/Unit Nursing Staff:

K Goliath
R Solomon
F Du Plessis

Administrative and Clerical Staff:

M Appolis
A Oosthuizen
A Daniels

MRC/UCT unit on Child & Adolescent Health

Red Cross War Memorial Children's Hospital, University of 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. Studies are conducted at several hospital or community based sites in the Western and Eastern Cape, with many local, African and global collaborations. A flagship study is a longitudinal birth cohort study, the Drakenstein Child Health study, to investigate the early life determinants of child and adolescent health and the intersection of infectious exposures with development of non-communicable diseases. This unique study integrates comprehensive measurements of maternal factors, environmental exposures and childhood exposures, with underlying mechanisms and measures of child and adolescent health in a low and middle-income country context.

Professor and Director:

HJ Zar, MBBCh FCPaed SA BC Pediatr BC Pediatr Pulm USA FRCP Edinburgh 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 executing drug discovery projects while also undertaking the following:

- *Becoming a principal integrated Drug Discovery and Development Research (DDD) Unit in South Africa, in Africa and internationally;*
- *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;*

Professor and Director:

K Chibale, BScEd *Zambia* PhD *Cantab* FRSSAf FRSC MASSAf FAAS

Senior Research Officer:

V Singh, PhD *Central Drug Research Institute Lucknow*

Research Officers:

J Woodland, PhD *Cape Town*

K Wicht, PhD *Cape Town*

Post-Doctoral Fellows:

J Hlozek, BSc MSc PhD *Cape Town*

D Redhi, BSc MSc PhD *Cape Town*

T Motlhalamme, PhD *Stellenbosch*

K Mogwera, PhD *Stellenbosch*

M Mmonwa, PhD *UNISA*

C Korkor, BSc *Ghana* PhD *Cape Town*

PhD Students:

N Shakela, BSc *Namibia*

C Hikaambo, BSc *Zambia*, MSc *Korea*

C Cloete, BSc *UWC* MSc *Cape Town*

F Ndubi, BSc *Nairobi* MSc *Cape Town*

F.-Z. Ishmail, BSc MSc *Cape Town*

MRC/UCT Immunology of Infectious Diseases Research Unit

Room SI.27, Wernher 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*

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:

AG Fieggen, MSc MD FCS

Suite 3.14 Werner and Beit Building North

The SAMRC/UCT Precision and Genomic Medicine Research Unit (PGMRU) is interested in using the exciting developments in the field of genomic sciences to investigate human biodiversity. This quest will contribute to a more proactive and preventive approach to health. Tied closely to this quest is the expansion of research to cover genome-wide investigations pertaining to the burden of disease in Southern Africa and to assess the impact of genomic variants on the health of the indigenous populations of Africa.

Key focus areas:

- To identify the ancestral groupings detectable in the current populations of Southern Africa, and to compare the genetic lineages/composition of populations of Southern Africa, with those already characterised in Africa, and elsewhere in the world.
- To identify low frequency, possibly functional genetic variants, in the populations of Southern Africa.
- To collate allele frequencies of sample data in order to identify sub-populations and to relate this to susceptibility and resistance to disease.
- To provide a genetic dimension towards understanding the heterogeneity of practically all disorders, and the biology underlying this heterogeneity, towards devising improved clinical management.
- To create an attractive research environment comprising well characterised disease resources.
- To establish a state of the art health ecosystem which has a knowledgeable subject/patient/client at its centre
- To enhance public understanding of genetics and genomics

Professor and Director:

RS Ramesar, BScHons MSc *UKZN* PhD *Cape Town* MBA

Research Centre for Adolescent and Child Health (REACH)

Red Cross Children's Hospital

REACH is a paediatric clinical research unit based at Red Cross War Memorial Children's Hospital (RCH) in the Department of Paediatrics & Child Health, Faculty of Health Sciences, University of Cape Town. It was opened in October 2013, following a decade of successful clinical research at RCH. From 2015, the South African Medical Research Council (SAMRC) Unit on Child & Adolescent Health has also been part of the unit. The Centre comprises 74 clinical and research support staff members (29 on-site) funded through grant support and is involved in the training of 46 postgraduate students (18 masters, 19 doctoral and 9 post-doctoral). Further, the Centre collaborates with many African and international healthcare professionals, building clinical and research capacity to improve child health across Africa. The research program addresses national and global priorities such as TB, HIV, RSV, childhood pneumonia and includes a flagship study, the Drakenstein Child Health study, a birth cohort to investigate the early life determinants of child and adolescent health. The unit's work involves numerous international, national, and local collaborations and has received substantial national and international funding. Directed by Prof Heather Zar, this Centre is a partnership between RCH, the Western Cape Health Department and the Department of Paediatrics and Child Health, UCT.

Professor and Director:

HJ Zar, MBBCh FCPaed BC Pediatr BC Pediatr Pulm USA PhD

SA Medical Research Council (MRC) Unit on Risk & Resilience in Mental Disorders

Department of Psychiatry & Mental Health, University of Cape Town, and Department of Psychiatry, University of Stellenbosch.

The Medical Research Council (MRC) Unit on Risk & Resilience in Mental Disorders was founded with the mandate to: 1) Strengthen and grow existing research and multi-disciplinary collaborations in mental disorders and mental health to improve health in South Africa and the region.; 2) Develop and expand new research programs specifically focused on translational research and new collaborations addressing major African mental disorders; 3) Provide a platform for the training and support of clinician-scientists working in the area of mental disorders and mental health, including women and African scientists; 4) Promote implementation of research findings from the fields of psychiatry and mental health into policy and practice.

Professor and Head:

DJ Stein, BSc (Medicine) MBChB Cape Town FRCPC PhD DPhil *Stell*

South African Tuberculosis Vaccine Initiative (SATVI)

Institute of Infectious Disease and Molecular Medicine

The South African Tuberculosis Vaccine Initiative (SATVI) is a tuberculosis research group housed within the Institute of Infectious Disease 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. Clinical immunology research is led by SATVI Deputy Director, Professor Tom Scriba; and clinical trials research is led by SATVI Director, 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, correlates of vaccine-induced protection against TB, and application of TB biomarker tests for prevention of TB.

The focus on this research agenda has underpinned SATVI's academic success, in terms of research funding secured, students graduated, and papers published.

*SATVI has conducted 32 Phase I-III trials of nine novel TB vaccine candidates, among more than 4,000 research participants. SATVI played a leading role in the first new infant tuberculosis vaccine efficacy trial in half a century; a pivotal Phase 3 efficacy trial of the M72/AS01E candidate vaccine that showed 50% efficacy in reducing incidence of lung tuberculosis in HIV-negative adults; and a ground-breaking trial of BCG revaccination that showed 45% protection against sustained IGRA conversion. SATVI recently started a large, multi-site Phase 3 trial of the live attenuated *M. tuberculosis* candidate vaccine MTBVAC in infants. Additionally, the group has enrolled more than 20,000 participants in epidemiological and immunological TB studies and clinical trials of BCG vaccine.*

The SATVI postgraduate program has produced several PhD and Masters graduates since 2006 and has published a number of highly cited papers in the fields of TB immunology, vaccinology, diagnostics and therapeutics.

Professor and Director:

M Hatherill, MD FCPaed

Professor and Deputy Director (Immunology):

T Scriba, PhD

Chief Operations Officer:

M Kaskar, MBChB MBA Cape Town

Worcester Field Site Manager:

M de Kock, MPhil

Associate Professors:

Elisa Nemes, PhD

Michele Tameris, MBChB

Chief Research Officer:

Angelique Kany Kany Luabeya, MBChB

Research Officers

Virginie Rozot, PhD

Justin Shenje, MBChB

Munyaradzi Musvosvi, PhD

Nicolette Tredoux, MBChB

Simon Mendelsohn, MBChB, PhD

Anele Gela, PhD

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 and PASS staff 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.

Members:

J Woodward, PhD Cape Town

BT Sewell, PhD London

ED Sturrock, PhD Cape Town

L Lubbe, PhD Cape Town

T Zininga, PhD Zululand

A Rabagliati, BA Eng Cantab

University of Cape Town 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 1999 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 four Clinical Research Units (CRU'S) that are part of the Lung Institute:

Allergy and Immunology Unit

University of Cape Town Lung Institute, George Street, Mowbray

The Allergy and Immunology Unit (AIU) of the UCT Lung Institute serves as a centre for the investigation, diagnosis and management of allergic diseases.

It has five 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, immune mediated diseases, vaccinology, 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*

Associate Professor and Head:

JG Peter, MBChB FCP SA MMED PhD UCT

Centre for TB Research Innovation

2nd 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 and new TB vaccine candidates.*

Associate Professor and Head:

R Dawson, MBChB FCP SA Cert (Pulmonology) UCT

Knowledge Translation Unit

4th 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. KTU has been responsible for Western Cape and National guidelines, training and implementation during the COVID-19 pandemic.

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 Management) MMED FCP SA Cert (Pulmonology) 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 *Witwatersrand* FCP SA FCCP PhD *London* FRCP *London*

Senior Lecturer and Pulmonologist:

R van Zyl-Smit, MBChB MMed PhD *Cape Town* MRCP *UK* FCP Dip (HIV Management) Cert (Pulm Phys) *SA*

Chief Research Officer Part-Time:

G Theron, BScHons MSc PhD *Cape Town*

Principal Scientific Officer:

M Tomasicchio, BSc BScHons MSc PhD *Rhodes*

Medical Officer and Clinical Trial Co-ordinator:

M Pascoe, MBChB *Cape Town*

Honorary Professor:

TG 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 *Germany*

R Hendricks, BChD MChD *Cape Town*

Laboratory Technologists:

R Meldau, BScHons (Medicine) *Cape Town*

V Woodburne

UCT Molecular Mycobacteriology Research Unit

The 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 relevant to tuberculosis (TB) drug discovery and drug resistance, mycobacterial persistence, and TB aerobiology. As past recipient of several major grants from the South African government through the South African Medical Research Council, the National Research Foundation and the Department of Science and Technology, the Unit uses research as the vehicle to develop the next generation of biomedical TB researchers. The Unit, which currently comprises senior scientists, post-doctoral fellows, PhD, MSc and Honours students, participates in the TB Drug Accelerator through grants from the Bill & Melinda Gates Foundation and in Myco3V, a TB Research Unit funded through the TBRU programme of the US National Institutes of Health. Members of the MMRU are also affiliated with the Wellcome Centre for Infectious Diseases Research in Africa (CIDRI-Africa).

Professor and Director:

V Mizrahi, BScHons PhD Cape Town AFTWAS MASSAf FRSSAfOMS FAAS

Professor:

DF Warner, BCom BScHons PhD Witwatersrand

Research Officers:

M Chengalroyen, BScHons PhD Witwatersrand

S Gessner, MSc Pretoria PhD Cape Town

C Jacobs, MSc Pretoria PhD University College London

M Mason, BScHons PhD Cape Town

A Moosa, MSc Witwatersrand PhD Cape Town

Honorary Lecturer:

A Koch, MSc Witwatersrand PhD Cape Town

Junior Research Fellow:

C Omollo, PhD Cape Town

Vaccines for Africa Initiative (VACFA)

Level 2, Wernher & Beit North Building, Anzio Road, Observatory

The Vaccines for Africa Initiative (VACFA) is a non-profit academic unit founded in 2009 by Professor Gregory Hussey, previous unit Director. VACFA is in the Department of Public Health and Family Medicine, within the Faculty of Health Sciences at the University of Cape Town. VACFA partners with concerned individuals and organisations with a goal of increasing awareness of and promoting uptake of vaccines on the African continent. VACFA provides a forum for the exchange of accurate, up-to-date, and fully researched information on vaccines and immunisation practices relevant to Africa for health professionals, policymakers, programme managers, parents, and the public. VACFA's mission is to increase awareness of the benefits of vaccines and to promote the uptake of established and newly available vaccines in Africa as well as make a significant contribution to capacity building, product development, and research on vaccines in Africa. Staff includes vaccinologists and infectious disease specialists

Senior Research Officer and Co-Director:

B Kagina, PhD UCT

Professor and Co-Director:

R Muloiswa, MBChB MSc PhD *UCT*

Professor:

G Hussey, MBChB MMed Msc FFCH DTM&H *UCT*

Honorary Professor and Associate Professor:

CS Wiysonge, PhD *UCT*

T Kreda, MBChB, MMed (Clin Pharm) *UCT*

Clinical Research Officer Part-time:

C Ritchie, MBChB *UCT*

Honorary Research Associates:

L Abdullahi, PhD *UCT*

K Munyai, PhD *CPUT*

Post-Doctoral Research Fellow:

E Amponsah-Dacosta, PhD *SMU*

Wellcome Centre for Infectious Diseases Research in Africa (CIDRI-Africa)

IDM, UCT Faculty of Health Sciences

The Wellcome Centre for Infectious Diseases Research in Africa (CIDRI-Africa) fosters investigator-led approaches via the overarching scientific objective of combatting infection, especially HIV and tuberculosis (TB), through clinical and laboratory research. CIDRI-Africa achieves these goals through the provision of core support to Centre investigators in the form of expertise, facilities, equipment and staff. CIDRI-Africa operates three shared platforms: Basic Science, Biomedical Data Integration, and Clinical Research. A major focus of our clinical research activities is in Khayelitsha township where people suffer high levels of unemployment and chronic ill-health.

Centre investigators work on a range of studies with strong underpinning immunology, inflammation and –omics science. This includes work on TB drug discovery; the physiology and metabolism of Mycobacterium tuberculosis; biomarkers and diagnostics for TB; and clinical and immunological studies of TB pericarditis, meningitis, and immune reconstitution inflammatory syndrome. HIV work includes trials of antiretroviral (ART) regimens, and investigation of HIV infection and vascular disease. There is significant international collaboration in vaccine development and testing for TB, HIV and COVID-19.

To develop future research leaders CIDRI-Africa supports postdoctoral fellows and PhD scholars. In addition, our staff and investigators go beyond the laboratory and clinic to engage the communities in which they work: we have an active relationship with civil society through our community engagement stakeholders' forum.

Honorary Professor and Director:

RJ Wilkinson, BMBCh FMedSci MA PhD DTM&H FRCP

IMPORTANT INFORMATION

FACULTY OF HEALTH SCIENCES 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.

566 IMPORTANT INFORMATION

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

(For 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 practise 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.

PROCESS TO INVESTIGATE REPORTED STUDENT 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) and the South African Nursing Council (SANC) are responsible for ensuring that practitioners are fit to practise. This means that neither the HPCSA nor the SANC will license an *impaired* person to practise.

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.

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 South African Nursing Council (SANC) defines impairment as “a condition which renders a practitioner incapable of practising nursing with reasonable skill and safety”.

The University understands this to mean that an undergraduate student may be reported as *impaired* where they:

- has become physically or mentally disabled to such an extent that the student is unable to perform the clinical duties of their 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 contrary to prescribed regulations; 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 South African Nursing Council (SANC) defines unprofessional conduct as "a conduct which, with regard to the profession of a practitioner, is improper, disgraceful, 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).

The **Student Development and Support Committee** is a Committee consisting of several academic staff members who identify, support and monitor the performance of students with academic and other difficulties.

In the event of a reported disability this Committee may seek advice from the Disability Unit or other expert body.

The **Dean’s nominee** will ordinarily be the Deputy Dean: Undergraduate Education.

IMPAIRMENT REVIEW PROCESS

- 1 An impairment, or any physical or emotional or behavioural problem that may be or become an impairment, must be reported by either the student, tutor, fellow student, course convener or clinician teaching the student to the Student Development and Support Committee (SDSC) or to the Dean’s nominee. If the matter is reported to the

Dean's nominee, the Dean's nominee may refer it to SDSC in the first instance. The role of the SDSC will be to assess whether the student needs support and, if so, to try to provide this support.

If the matter can be resolved with appropriate support and reasonable accommodation, the SDSC will arrange this and no further action needs to be taken. In such a case the Dean's nominee will arrange for the Faculty Manager to record the findings in a letter to the student, with such conditions for continued registration as the Dean, acting on behalf of the Faculty, may determine. SDSC shall continue to monitor the student.

2 If the SDSC deems it to be not a matter of supporting the student, it will refer the matter to the Dean's nominee.

3 The Dean's nominee will assess the report and, if they believes that there is reason to do this, they will ask the relevant year convener, or another appropriate staff member who teaches the student, to chair a Conveners' Committee, at which all conveners teaching/convening courses for which the student is registered in that year, report on whether they deem the student to be impaired, and/or unfit to undergo training and/or practise the relevant profession.

The Chair of the Conveners' Committee will record the findings of the Committee in a written report to the Dean's nominee.

4 The Dean's nominee, having received the report of the Conveners' Committee, will decide whether to drop the matter, or, if they believes there is reason to proceed, shall:

- (a) inform the student of the concerns and explain the process forward;
- (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 the student in the current year.

5 The Impairment Review Committee:

- (a) will provide the student with a copy of the report of the Conveners Committee and invite the student to submit a written response to it; assess the written report of the Conveners Committee 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.

6 The Impairment Review Committee may decide that:

- a. the student's registration will be cancelled with immediate effect in terms of the relevant Faculty rule/s; or
- b. there will be strict conditions for continued registration, with regular monitoring and with re-assessment by a due date, if necessary, after which a final decision about continued registration is taken; and/or

- c. the student's impairment will be reported to the Health Professions Council of South Africa or the South African Nursing Council, at the time or, if appropriate, upon graduation.
- 7 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 or the SANC.
 - 8 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 registration is cancelled. The student is 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.
- 2 The Deputy Dean shall, if they believes there is reason to do so,
 - (a) ask the Year Convener, or another appropriate academic staff member, to chair a Conveners Committee (made up of the conveners of the relevant academic year of study and members of the Student Development and Support Committee) to discuss the reported conduct and make a recommendation as to whether the reported conduct 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.
- 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 and HPCSA or the SANC 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 Conveners Committee, if the matter has been considered by a Conveners Committee, and shall invite the student to respond in writing to this/these report/s.
- 5 The PCRC shall assess the evidence and record its finding and the reasons for its finding. The Committee shall on the basis of its finding decide a course of action with reasons in writing, namely that:
 - a. the student's 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 re-assessment by a due date, if necessary, after which a final decision about continued registration is taken; and/or

570 IMPORTANT INFORMATION

- d. the student's impairment be reported to the Health Professions Council of South Africa or the South African Nursing Council, at the time or upon graduation.
- 6 The student will be advised that they may appeal to the Vice-Chancellor or nominee against the findings of the PCRC.

STANDARD OPERATING PROCEDURE (SOP) FOR DUAL/CONCURRENT REGISTRATION WITH INTERNAL (UG/PG, PG/PG DEGREE, FHS PG and Other Faculty PG) OR EXTERNAL INSTITUTION

SCENARIO 1: EXTERNAL INSTITUTION: UG or PG/PG

STEP 1: Request the student to provide to the Faculty PG manager:

1. A motivation from the student outlining why they want to undertake the two qualifications simultaneously and why they could not finish one and then continue with the second.
2. A letter of acceptance from the secondary institution.
3. A letter from the secondary institution confirming that they have no objection to the student being registered simultaneously with another tertiary institution.
4. A letter of support from the primary year convener to programme convener. This motivation should, furthermore, indicate whether the convener is of the opinion that the student has the capacity to undertake two programmes at the same time.
5. An interim progress report from the programme convener/supervisor
6. A workplan from the student outlining how they will handle the work (lectures, tutorials, assignments, tests, and exams) for two programmes at the same time.

STEP 2: Approval

1. On receipt of the above documentation the matter will be submitted by the PG manger to the Deputy Dean: PG Education, for consideration and support.
2. The Deputy Dean - PG indicates support for the application by sending through a signed letter of support to the PG Manager and Faculty Manager. The FM will submit the motivation to the senate secretariat to place on the next SEC agenda and send to the Task Team of SEC (this task team is chaired by the deputy registrar). FM send a copy of the recommended application pack to the Dean for his reference when presenting the requests at the respective SEC meeting.
3. The SEC task-team will then consider the application prior to the next SEC meeting and will make a recommendation to SEC for approval.
4. Once SEC has met and approved the submission, the Senate secretariat will inform the faculty manager. FM relays the approval information to the PG manager who will prepare the necessary approval documentation for submission to the secondary tertiary institution and communicate outcome to the student.

SCENARIO 2: INTERNAL FHS UG & PG QUAL

STEP 1: Request the student to provide to the UG Manager:

1. A motivation from the student outlining why they want to undertake the two qualifications simultaneously and why they could not finish one and then continue with the second.
2. A letter of acceptance/proof of current registration from the respective faculty at UCT.
3. A letter of support from the primary year convener to programme convener. This motivation should, furthermore, indicate whether the convener is of the opinion that the student has the capacity to undertake two programmes at the same time.
4. An interim progress report from the respective programme convener.
5. A workplan from the student outlining how they will handle the work (lectures, tutorials, assignments, tests, and exams) for two programmes at the same time.

STEP 2: Approval

1. On receipt of the above documentation the UG manager will submit the documents to the Deputy Dean: UG Education, for consideration and support.
2. Once this is obtained, UG manager passes this information to PG manager to submit to the Deputy Dean: PG to recommend for approval.
3. The Deputy Dean - PG indicates support for the application by sending through a signed letter of support to the PG Manager and Faculty Manager. The FM will submit the motivation to the senate secretariat to place on the next SEC agenda and send to the Task Team of SEC (this task team is chaired by the deputy registrar). FM send a copy of the recommended application pack to the Dean for his reference when presenting the requests at the respective SEC meeting.
4. A SEC task-team will then consider the application prior to the next SEC meeting and will make a recommendation to SEC for approval.
5. Once SEC has met and approved the submission, the Senate secretariat will inform the faculty manager. FM relays the approval information to the PG manager will communicate outcome to the respective departments and student and will facilitate registration.

SCENARIO 3: INTERNAL FHS PG/PG

STEP 1: Request the student to provide to the Faculty PG manager with:

1. A motivation from the student outlining why they want to undertake the two PG qualifications simultaneously and why they could not finish one and then continue with the second.
2. A letter of support from the primary programme convener/HODIV. This motivation should, furthermore, indicate whether the convener is of the opinion that the student has the capacity to undertake two PG programmes at the same time.
3. An interim progress report from the programme convener/ supervisor/ HODIV
4. A workplan from the student outlining how they will handle the work (lectures, tutorials, assignments, tests, and exams) for two programmes at the same time.

STEP 2: Approval

1. On receipt of the above documentation the matter will be submitted by the PG manger to the Deputy Dean: PG Education, for consideration and support.
2. The Deputy Dean - PG indicates support for the application by sending through a signed letter of support to the PG Manager and Faculty Manager. The FM will submit the motivation to the senate secretariat to place on the next SEC agenda and send to the Task Team of SEC (this task team is chaired by the deputy registrar). FM send a copy of the recommended application pack to the Dean for his reference when presenting the requests at the respective SEC meeting.
3. A SEC task-team will then consider the application prior to the next SEC meeting and will make a recommendation to SEC for approval.
4. Once SEC has met and approved the submission, the Senate secretariat will inform the faculty manager. FM relays the approval information to the PG manager will communicate outcome to the student and respective departments and will facilitate registration.

SCENARIO 4: INTERNAL FHS PG/Other UCT Faculty PG

STEP 1: Request the student to provide to the Faculty PG manager with:

1. A motivation from the student outlining why they want to undertake the two PG qualifications simultaneously and why they could not finish one and then continue with the second.
2. A letter of support from the primary programme convener/HODIV. This motivation should, furthermore, indicate whether the convener is of the opinion that the student has the capacity to undertake two PG programmes at the same time.
3. An interim progress report from the programme convener/ supervisor/ HODIV

572 IMPORTANT INFORMATION

4. A workplan from the student outlining how they will handle the work (lectures, tutorials, assignments, tests, and exams) for two programmes at the same time.

STEP 2: Approval

1. On receipt of the above documentation the matter will be submitted by the PG manger to the FHS Deputy Dean: PG Education, for consideration and support.
2. The Deputy Dean - PG indicates support for the application by sending through a signed letter of support to the PG Manager.
3. The PG manager sends the application pack to the Deputy Dean-PG of the second faculty. The Deputy Dean-PG of the second faculty indicates support by sending through a signed letter to the FHS PG manager and Faculty Manager. The FM will submit the motivation to the senate secretariat to place on the next SEC agenda and send to the Task Team of SEC (this task team is chaired by the deputy registrar). FM send a copy of the recommended application pack to the Dean of FHS for his reference when presenting the requests at the respective SEC meeting.
4. A SEC task-team will then consider the application prior to the next SEC meeting and will make a recommendation to SEC for approval.
5. Once SEC has met and approved the submission, the Senate secretariat will inform FHS faculty manager. FM relays the approval information to the PG manager in the home faculty and the PG manager/FM of the second faculty. The outcome will be communicated to the student and respective faculties will facilitate registration.

LEAVE OF ABSENCE (LOA) GUIDELINES: POSTGRADUATE (PG) STUDENTS

The University uses the term “leave of absence” (LoA) to indicate leave for longer periods; usually this is for a semester or up to a year.

Senate may grant leave of absence to students for a specified period. (Reasons for granting leave of absence are illness, compassion, maternity leave, and external study opportunity other than a formal exchange.) Senate may grant leave of absence to a postgraduate student registered for a part-time, coursework postgraduate (diploma or master’s degree) programme on the grounds of exceptional work commitments. Consideration for a concession may be granted on a case-by-case basis.

PROCESS:

If a student wishes to apply for or contacts a department in respect of a LoA as described above, refer the student to the FHS website for information on procedure or to the Faculty Manager (FM). A student obtains a leave of absence only if the necessary documentation in respect of reasons (see details below) have been submitted via PeopleSoft. These are automatically assigned to the FM, and the LoA is approved by the Dean, or the FM. Research (PG) students must consult with their supervisors to provide a letter of support.

1. LoA is usually granted on the following grounds:

Medical reasons

1.1 (a) The student must obtain the LoA application form from the UCT website (ACA 37 for UG and ACA38 for PG) or email the faculty manager (FM): Academic Admin who will email the document to the student, The student must upload the application and the supporting documents from treating health care practitioner/s via self- service on PeopleSoft. An application received without supporting documentation will not be processed or approved. (b) Once the medical leave of absence (MLOA) is approved, students will receive details about the return from LoA (ACA43) processes that involve the Fit for Study Panel (FSP) who assessment fitness to return (FTR). Please refer to General rule FGP5.2.

1.2 Compassionate reasons- supporting documents e.g., death certificate.

1.3 Maternity leave - letter from relevant medical practice specifying expected delivery date and delivery plan.

- 1.4 External study opportunity - letter from supervisor and organization.
- 1.5 Exceptional work-related commitments - letter from supervisor and organisation.
2. Save in exceptional circumstances
 - 2.1 Students in year courses (W or H courses) or full semester courses (F or S courses) intending to apply for LoA will be required to apply for LOA within the first 10 weeks of each semester. The permitted duration for a LoA request is either for a semester or a maximum of a full year depending on the programme registered for; no approvals will be granted for periods of lesser duration.
 - 2.2 A student may not ordinarily be granted leave of absence in retrospect or if the student has already attended roughly two-thirds of the course or in the last quarter of the year; this requires a motivation and respective supporting documents to be sent to the FM for consideration.
 - 2.3 An application for an extension for a LoA is not automatically granted.
3. The date on which the student uploads the LoA application form on the PeopleSoft self-service portal is the date on which the LoA becomes effective if the application is approved.
4. On approval of the LoA,
 - 4.1 the student is provided with the letter of approval and respective documents pertaining to the return from leave of absence process, and
 - 4.2 the academic convener or supervisor and the Student Development and Support Office are informed of the LoA period for their respective student.
5. Fee rebates may be granted if students apply for leave of absence within certain periods. Fee rebates of tuition fees in respect of LoA are in accordance with the Student Fee Policy (please consult the current Student Fee Handbook for the rebate dates and rates) - <https://www.uct.ac.za/students/study-uct-handbooks/handbooks#fees>.
6. Should LoA be granted before the due date for course withdrawals, the courses will be removed from the student's record. Should the LoA be granted after the due date for course withdrawals, the PeopleSoft system automatically enters an INC (incomplete) or AB (absent) on the student's academic record.
7. The Faculty Examinations Committee will decide a student's progression on the basis of their performance at the time they took leave of absence. If, for example, a student has transgressed readmission rules at the time they went on leave of absence, the Committee may at its next meeting recommend to Senate that the student not be permitted to renew their registration.
8. Where a student has been granted LoA, the student may not use any of the University facilities, stay in residence or receive academic supervision during the period of the LoA. Students do however retain access to their @myuct email account while on LoA.
9. Students who are found fit to return (FTR) will be communicated their outcomes by the Fit for Study Panel. Please note: Students pursuing PG programmes in the clinical field, will be required to do a secondary assessment as part of the faculty requirement. An independent health care practitioner will conduct a secondary assessment and provide feedback to the Fit for Study Panel. The final outcome will be communicated to the student with a copy to the FM and Student Development and Support office in the faculty.
10. Should the Fit for Study Panel decide that the student is not ready to return, the student will be required to apply for an extended LoA with the relevant documents in consultation with the FM: Academic Administration.

574 IMPORTANT INFORMATION

11. Note that an application for LoA is not allowed for two consecutive years unless advised by the Fit for study panel or in certain circumstances that may warrant this.

NOTE: Only the Faculty Manager may approve LoA in terms of UCT policy.

LOA GRANTED FOR MATERNITY AND COMPASSIONATE REASONS:

GRANTED FOR MATERNITY REASONS

To apply for LoA:

- The student must obtain the LoA application form from the UCT website or email the faculty manager (FM): Academic Administration who will email the document to the student,

GRANTED FOR COMPASSIONATE REASONS

To apply for LoA:

- The student must obtain the LoA application form from the UCT website or email the faculty manager (FM): Academic Administration who will email the document to the student.

LOA GRANTED FOR EXTERNAL STUDY OPPORTUNITY AND WORK-RELATED COMMITMENTS:

GRANTED FOR EXTERNAL STUDY OPPORTUNITY

To apply for LoA:

- The student must obtain the LoA application form from the UCT website (ACA38) or email the faculty manager (FM): Academic Administration who will email the document to the student,

GRANTED FOR WORK RELATED COMMITMENTS

To apply for LoA:

- The student must obtain the LoA application form from the UCT website (ACA38) or email the faculty manager (FM): Academic Administration who will email the document to the student.

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 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 their 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 to be included in your thesis

In the front of your thesis, a signed and dated declaration in the following format must be included:

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.

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 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

For the best registrar in Anaesthesia.

For the most meritorious article published by a postgraduate student in Anaesthesia.

TOM RUTTMANN INTENSIVE CARE PRIZE

For the best Anaesthesia registrar in intensive care medicine.

THEMI AUGOUSTIDES MEMORIAL PRIZE

For the best registrar in Cardiovascular Anaesthesia.

HEALTH & REHABILITATION SCIENCES

ADVANCED MIDWIFERY & NEONATAL
CARE AWARD
CHILD CRITICAL CARE AWARD

For the best student in the Postgraduate Diploma in Midwifery.

For the best student in the Postgraduate Diploma in Children's Critical Care Nursing

CHILD NURSING AWARD

For the best student in the Postgraduate Diploma in Children's Nursing

HENRIETTA STOCKDALE TROPHY

For the graduating student in the Postgraduate Diplomas in Nursing or the Postgraduate Diploma in Midwifery who has displayed the highest standard of academic work, clinical ability, professional behaviour, social responsibility, commitment and leadership skills.

NEPHROLOGY NURSING AWARD

Nursing Award for the best student in the Postgraduate Diploma in Nephrology Nursing.

PROFESSORIAL AWARD

For the graduating student who has received the highest aggregate mark across the Postgraduate Diplomas in Nursing or the Postgraduate Diploma in Midwifery

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 JACKSON AWARD

For the best young clinical investigator. 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
S J BEHRMAN AWARD

For contributions to Oncology. 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
J C COETZEE AWARD
Golden Speculum award

Registrar award for excellence. For best research (done or in progress). For the best registrar research presentation in Gynaecology.

Golden Foetus award
ROOS PRIZE

For the best Obstetric research registrar. 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 (*excludes undergraduates, postgraduates, interns, SHOs and registrars*).

PATHOLOGY

LAFRAS STEYN CLINICAL LABORATORY SCIENCES PRIZE

Awarded at the bi-annual research day for the best student oral presentation of the day.

Anatomical Pathology

PAULINE HALL BOOK PRIZE

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

For the student graduating with the highest marks in the Masters of Public Health, subject to a minimum of 70% overall.

ETHNE JACKE PRIZE

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).

GEOFF CAMPBELL BOOK PRIZE

Awarded for the best student in the Postgraduate Diploma in Occupational Health.

RADIATION MEDICINE

Radiology

PROTEA HOLDINGS PRIZE

For the best registrar in Radiology.

SURGERY

GEORGE SACKS PRIZE IN SURGERY

For outstanding postgraduate research in Surgery.

LENNOX GORDON PRIZE

For an original, distinguished publication by a registrar in Surgery

Emergency Medicine

Clinical Research Methods I Prize

Best overall candidate in CHM6005F

Clinical Research Methods II Prize

Clinical Research Methods I for the year

MPhil Emergency Medicine Award

Best overall candidate in CHM6006F

MMed Emergency Medicine Award

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)

Emergency Medicine Research Methodology Award

Outstanding achievement in research methodology in CHM6005F &

CHM6006F

Clinical Research Methods I and II (first class pass)

Clinical Emergency Medicine Award

Outstanding achievement (first class pass) in the clinical courses in the MPhil in

MMed Emergency Medicine Research Award	Emergency Medicine (CHM6007F, CHM6008S & CHM6010F) Outstanding achievement (first class pass) in the MMed Emergency Medicine dissertation and acceptance of article in an accredited journal
Emergency Medicine Master’s Dissertation Award	Outstanding achievement (first class pass) for a full dissertation in Emergency Medicine, and acceptance of an article in an accredited journal
Emergency Medicine Registrar Excellence Award Top Achievement MMed Emergency Medicine Award	Emergency Medicine Registrar Award for excellence Outstanding achievement (first class pass) in Parts 1, 2 and 3 of the MMed in Emergency Medicine
Top Achievement MPhil Emergency Medicine Award	Outstanding achievement (first class pass) in both coursework and dissertation for the MPhil in Emergency Medicine degree
Emergency Medicine Master’s Research Award	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.
Top Emergency Medicine Consultant Award	For the Emergency Medicine consultant teacher voted to have been the most supportive during the year
Neurosurgery JONATHAN PETER PRIZE	
SYNTHES PRIZES	For the postgraduate student who has produced the best journal publication. For the most outstanding registrar in Orthopaedic Surgery.
Orthopaedic Surgery REGISTRAR RESEARCH PRIZE	
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.	

DISTINGUISHED TEACHERS IN THE FACULTY

Students may nominate (to the Registrar's office) academic staff for UCT's Distinguished Teacher Awards. Faculty of Health Sciences staff who have received Distinguished Teacher Awards are:

- 2019 Professor A Argent (Paediatrics and Child Health)
- 2019 Associate Professor R Parker (Anaesthesia and Perioperative Medicine)
- 2017 Professor P Navsaria (Surgery)
- 2017 Professor R Dunn (Surgery)
- 2014 Professor D Kahn (Surgery)
- 2012 Associate Professor Z Woodman (Molecular and Cell Biology)
- 2010 Associate Professor R Eastman (Medicine)
- 2010 Professor Z van der Spuy (Obstetrics & Gynaecology)
- 2007 Dr I A Joubert (Anaesthesia)
- 2005 Dr M Blockman (Pharmacology)
- 2004 Associate Professor V Burch (Medicine)

(Also received the National Excellence in Teaching and Learning Award from the Council for Higher Education and the Higher Education Learning and Teaching Association of South Africa in 2009)

- 2003 Associate Professor G Louw (Human Biology)
- 2003 Dr P Berman (Chemical Pathology)
- 2002 Associate Professor J Krige (General Surgery)
- 2001 Dr C Slater (Human Biology)
- 2001 Emeritus Professor V Abratt (Molecular and Cellular Biology)
- 2000 Associate Professor A Mall (General Surgery)
- 2000 Professor D Knobel (Forensic Medicine)
- 1998 Professor MFM James (Anaesthesia)
- 1996 Emeritus Professor J Thomson (Molecular and Cellular Biology)
- 1993 Professor J de Villiers (Neurosurgery)
- 1989 Professor EJ Immelman (General Surgery)
- 1988 Associate Professor G R Keeton (Medicine)
- 1987 Dr C Warton (Anatomy & Cell Biology)
- 1985 Professor A Forder (Medical Microbiology)
- 1984 Dr AH Robins (Pharmacology)
- 1982 Professor W Gevers (Medical Biochemistry)
- 1981 Professor R Kirsch (Medicine)