



**UWI**  
ST. AUGUSTINE  
CAMPUS

**POST  
GRADUATE**

# **Medical Sciences**

**REGULATIONS & SYLLABUSES**

**2015  
2016**

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# ACADEMIC CALENDAR 2015-2016

ACTIVITY	SEMESTER 1 AUGUST - DECEMBER 2015	SEMESTER 2 JANUARY - MAY 2016	SUMMER MAY - JULY 2016
Semester <b>BEGINS</b>	August 23, 2015	January 17, 2016	May 15, 2016
Registration	August 17 – September 11, 2015	January 11 – February 05, 2016	May 09 – June 04, 2016
Teaching <b>BEGINS</b>	September 01, 2015	January 18, 2016	May 16, 2016
<b>Orientation and Ice Breaker (UWILIFE) August 28, 2015</b>			
Late registration / Late Payment Fee of TT\$200.00 <b>APPLIES</b>	September 07, 2015	February 01, 2016	May 31, 2016
Application to Carry forward Coursework <b>ENDS</b>	September 11, 2015	February 05, 2016	June 03, 2016
Change in Registration (ADD/DROP) <b>ENDS</b>	September 11, 2015	February 05, 2016	June 03, 2016
Application for Leave of Absence <b>ENDS</b>	September 11, 2015	February 05, 2016	June 03, 2016
Application for Exemptions <b>ENDS</b>	September 11, 2015	February 05, 2016	June 03, 2016
Teaching <b>ENDS</b>	November 28, 2014	April 17, 2015	July 11, 2015
<b>Semester II Break</b>	<b>April 19 – 26, 2015</b>		
Examinations <b>BEGIN</b>	December 02, 2015	April 25, 2016	July 12, 2016
Examinations <b>END</b>	December 18, 2015	May 13, 2016	July 22, 2016
Semester <b>ENDS</b>	December 18, 2015	May 13, 2016	July 22, 2016
<b>ELPT TEST:</b> Scheduled for the following dates	August 17, 2015 and October 15, 2015	February 18, 2016	-
SPECIALLY-ADMITTED 2015/2016	SEMESTER I	SEMESTER 2	ENTIRE ACADEMIC YEAR
Application for Specially Admitted OPENS	November 10, 2014	November 10, 2014	November 10, 2014
Application for Specially Admitted ENDS	June 30, 2015	December 18, 2015	June 30, 2015
<b>CEREMONIES</b>			
Matriculation Ceremony	September 17, 2015		
Graduation Dates	October 10, 2015 (Open Campus) October 22 - 24, 2015 (St. Augustine)		

# MESSAGE FROM THE DEAN

Every new academic year it is the pleasure of the Office of the Dean to welcome new and returning postgraduate students to another exciting year of learning.

Postgraduate education within the Faculty of Medical Sciences can be done through any of our schools: the Dental School, Medical School, Nursing School, Pharmacy School and The School of Veterinary Medicine.

We want you to be successful in all of your endeavours and the academic staff and administrative staff of our Faculty are geared to help you to achieve your goals.

However, as you go through your postgraduate training with us please take time to achieve something that is truly meaningful to you.

We want to acquire a good quality degree but we also want to help you to become a better person.

***Professor Terrence Seemungal***  
**DEAN**



## **MISSION STATEMENT**

To train health professionals to meet the needs and improve the care of those whom they serve. To strive for professional excellence while contributing to the social, economic, and cultural development of the Caribbean and inculcating in graduates an attitude of lifelong learning, ethical conduct, and excellence in service and research.

# STAFF LISTING

## OFFICE OF THE DEAN

### DEAN

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#### **SCHOOL OF VETERINARY MEDICINE**

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## **CENTRE FOR MEDICAL SCIENCES EDUCATION (CMSE)**

The Centre for Medical Sciences Education (CMSE) is a physical and conceptual centre for harnessing and maximising the efficient and effective use of teaching, learning, technology, and educational research resources in the Faculty of Medical Sciences. The mission of the Centre is to provide academic, professional and technical resources towards promoting continuous improvement in curriculum planning, and the delivery of medical education programmes involving staff and students in the Faculty of Medical Sciences.

CMSE provides the five Schools of the Faculty with the following services: print and copy, videotaping, photography, medical illustration, graphic design and desktop publishing, technical assistance, website design, curriculum design, review and development, staff development workshops, assessments and evaluation, communication skills teaching, co-ordination of the Problem-Based Learning (PBL) and internal audit, monitoring and review.

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## **MEDICAL SCIENCES LIBRARY**

Founded in 1989, the Medical Sciences Library comprises, six professional and thirty-one support staff. The Library provides services such as reference, circulation print, electronic and multimedia items, internet access; inter-library loans; photocopying, print and scanning, in addition to information literacy instruction (on demand). The Library offers a collection of over 48,000 items, ranging from books and periodical volumes to multimedia items and newspaper subscriptions. Apart from hard copy items, the library also provides access to 49 health research databases. A few examples include, Medline, UpToDate MICROMEDEX® Healthcare Series, and a wide range of health science e-journals and e-books. Special facilities include four seminar rooms, a multimedia-equipped Group Viewing room and a Computer Lab.

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## **ACADEMIC STAFF**

### **ANATOMY UNIT**

#### **Odekunle, Abayomi (M)**

MB BS (Benin), PhD (Sheff)  
Senior Lecturer & Unit Coordinator  
Research Interest: Neurogastroenterology; Organization of vagal brainstem nuclei of the Agouti; Morphology of the skull and brain of the Agouti

#### **McRae, Amanda (F)**

BSc (Alabama), PhD (U of Claude Bernard)  
Professor Research interest: Basic and Clinical Neurobiology (Parkinson and Alzheimer's diseases, influences of diet on the brain)

#### **Ovchinnikov, Nikolai A. (M)**

MD, PhD (Perm Med Inst), USSR  
Senior Lecturer  
Research interest: Anatomical malformations in adults and children

#### **Vincent Rodrigues (M)**

MSc, PhD (Manipal)  
Senior Lecturer  
Research interest: Stress and its effects on central nervous system, Anatomical malformations

#### **Dr. Suresh R. Rao (M)**

MSc, PhD (Manipal)  
Senior Lecturer  
**Research Interest:** Anatomical malformations in adults and children

## **BIOCHEMISTRY UNIT**

### **Carrington, Christine (F)**

BSc, PhD (Lond)  
Professor & Unit Coordinator  
**Research interest:** Molecular Genetics and Virology (virus evolution, phylogenetics, emerging infectious disease (esp. mosquito-borne viruses, rabies virus and other RNA viruses))

### **Alleyne, Trevor (M)**

BSc, MSc, PhD (Essex)  
Senior Lecturer  
Research interest: Enzymology, Protein modelling, evaluation of antihypertensive and anticancer properties of plant extracts

### **Foster, Jerome (M)**

BSc, PhD (U.W.I.)  
Lecturer  
**Research interests:** Virus microevolution, phylogenetics, emerging infectious diseases and chronic non-communicable diseases.

### **Melford, John (M)**

BSc, PhD (London)  
Senior Lecturer  
Chairman Faculty of Medical Sciences ICT Committee  
Chairman Faculty of Medical Sciences Website Committee  
**Research interest:** Bioinformatics; changes in the mutation profiles of cancer clones as they develop and respond to treatment.

### **Nayak, Shivananda (M)**

MSc, PhD, FAGE, (Manipal), NRCC-CC, FACB (USA), FABM, FISBT (India)  
Professor & Chairman, Ethics Committee,  
**Research interest:** Type 2 diabetes (Association of Inflammatory markers, Adiponectin and lipid profile and risk of diabetes and cardiovascular diseases).  
Wound healing (Evaluation of wound healing activity of medicinal plant extract)

#### PHYSIOLOGY UNIT

**Addae, Jonas I. (M)**

MB ChB Legon, PhD Lond  
Professor

**Research interest:** Intrinsic neuroprotective mechanisms in the brain. Caribbean natural products with neuro-active properties.

**Davis, E. Monica (F)**

MB BS UWI, MPhil (Physiology),  
Dip (Fertility Management & Reproductive Health) John Hopkins, Dip (Primary Health Care) GPATT  
Lecturer

**Research interests:** Respiratory Physiology - Effect of Pollutants on respiratory function; Wellness and Health Promotion; Medical Education

**Kurhade, Geeta A. (F)**

BSc, MBBS, MD, Diploma in Gynaecology and Obstetrics  
Senior Lecturer

**Research Interest:** Immunological status in Exercise

**Mohan, Junette (F)**

BSc (Tor); MPhil (UWI); PhD (UWI)  
Lecturer

**Research interest:** vascular endothelial dysfunction in diabetes, sickle cell disease, and eye disease. Role of inflammation in vascular endothelial dysfunction; Medical Education

**Youssef, Farid (M)**

MB BS, PhD UWI  
Lecturer

**Research interest:** Endocannabinoids and novel neuroprotective mechanisms; Neural Mechanisms involved in Decision Making; Knowledge, Attitudes and Perceptions Mental Illness; Ethics & Professionalism

#### DEPARTMENT OF PARACLINICAL SCIENCES

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MB BCh, DTM&H, MPH, FFPH (UK), CCST Public Health Medicine), UK

Unit Coordinator & Lecturer

**Research Interests:** Communicable diseases, emergency preparedness, health systems, quality in health care.

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Lecturer

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**Haqq, Edison (M)**

MB BS (UWI), MPH  
Lecturer

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BSc, MB BS, MHSc, DM, FCCFP

Senior Lecturer, Family Medicine

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Lecturer, Family Medicine

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MB BS, CIH, MPH FRIPH Eng, MBA

Senior Lecturer

**Ortega-Benito, José M (M)**

MD MSc FFPHM (UK)

Professor

**Roach, Allana (F)**

BSc (Hons), PhD (Howard Univ)  
Temporary Lecturer

**Research Interests:** Ethical, psychosocial and societal implications of genetics and genomics research; Psychosocial issues in patient care; Wellness and health.

**PATHOLOGY AND MICROBIOLOGY UNIT**

**Davis, Gershwin (M)**

BSc (Hons), MB BS, (UWI), PhD, DABCC, SC (ASCP), MRO (AAMRO), FACB, FCACB  
Senior Lecturer (Chemical Pathology) & Unit Coordinator

**Research Interests:** Alzheimer's disease, biomarker risk factors, epidemiology

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**MICROBIOLOGY**

**Akpaka, Patrick (M)**

MB BS (UNN), DM (UWI)  
Professor (Microbiology)

**Research Interests:** Molecular characterization, diagnostics and epidemiology of multi-drug resistant pathogens; Antimicrobial resistance and nosocomial Infections; and Control of infections of Public health Importance.

**Orrett, Fitzroy (M)**

BSc, MSc, MBBS, Dip. Bac.  
Senior Lecturer (Microbiology)

**Manjunath, Madhura (F)**

MBBS, MD  
Part-time Lecture (Microbiology)

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Part-time Senior Lecturer (Microbiology)

**PATHOLOGY**

**Chalapathi Rao, A.V. (M)**

DCP (Mysore), MD (Manipal)  
Senior Lecturer (Anatomical Pathology)

**Research Interests:** breast cancer, renal disease, wound healing and STI

**Mohammed, Wayne (M)**

MB BS (UWI), MRCPath  
Lecturer (Anatomical Pathology)  
Research Interests: Prostate, cervical, colonic and breast cancer.

**Srikanth, Umakanthan (M)**

MB BS, MD (Manipal University)  
Lecturer (Anatomical Pathology)

**Research Interests:** Renal, Lung and Central Nervous System tumors

**Charles, Kenneth (M)**

MB.BS (UWI), FRCP, FRCPath. CCST (Haem.) (UK)  
Senior Lecturer (Haematology)

**Davis, Gershwin (M)**

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Senior Lecturer (Chemical Pathology)

**Research Interests:** Alzheimer's disease, biomarker risk factors, epidemiology

**Ezenwaka, Chidum (M)**

BSc, MSc, MPhil, PhD (Ibadan)  
Professor (Chemical Pathology)

Research Interests: diabetes and metabolism and biochemical risk factors for diabetic complications.

**Vuma, Sehlule (F)**

Lecturer (Haematology)

**Research Interests:** Haematologic malignancies in Trinidad and Tobago and Antiphospholipid syndrome.

**Labastide, Wayne (M)**

PhD  
Lecturer (Immunology)

**Research Interests:** Immunophenotyping and cell cycle analysis by Flow Cytometry.

**Vaillant, Angel (M)**

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**Research Interests:** Development of Vaccines, Applied Microbiology, Avian immunoglobulins, Immunodeficiency and autoimmune disorders

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Senior Lecturer & Unit Coordinator

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**STAFF**

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MB BS (UWI), FRCP (UK), PhD (UK), CCST (UK)  
Professor

**Research interests:** (i) Education (ii) Obstructive lung disease

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**Research interest:** Metabolic Disease

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Professor

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(iv) Neurodevelopmental studies (v) Morbidities in the Neonatal period

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Lecturer

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Professor

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**PSYCHIATRY UNIT**

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Research Interests: Suicide, Psychosis, ADHD

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Senior Lecturer  
Research interests: Alzheimer's & other Dementias,  
Medical Education, Cognitive Impairment in Diabetes,

**Bissessar, Chandan (M)**

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Research interests: Services for child and adolescent mental health

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(iv) Biliary Kinetics

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MB BS, DM

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OBSTETRICS & GYNAECOLOGY UNIT

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patterns in Trinidad and the Wider Caribbean from an  
epidemiologic perspective, in-vivo/in-vitro release of  
antifungal agents from biodegradable bone cements in  
animal model, and evaluative research on pharmacist  
managed chronic disease states.

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**AVIAN/EXOTICS UNIT**

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**Onuoha, Philip (M)**

Lecturer  
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Research Interests: Oncology Nursing, Implementation of Evidence Based Practice in the Health Care Systems of Trinidad and Tobago.

**Singh, Rabindranath (M)**

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Research Interests: Knowledge, attitudes and beliefs about Cardio Vascular Disease in Trinidad and Tobago

**King, Michelle (F)**

Contract Officer II  
Research Interests: Oncology Nursing, Implementation of Evidence Based Practice in the Health Care Systems of Trinidad and Tobago.

# FACULTY REGULATIONS

To be read in conjunction with Regulations for Postgraduate Degrees, The Manual of Procedures for Graduate Diplomas and Degrees, the Graduate Studies Guide for Students and Supervisors and the Thesis Guide. (Please see for further information: <http://sta.uwi.edu/postgrad/downloads.asp>).

## **Additional Requirements for Admission QUALIFYING EXAMINATIONS**

When an applicant's undergraduate qualifications are weak the Board may require the candidate to pursue qualifying courses and write Qualifying Examinations.

Heads of Departments should set out the qualifying courses recommended on the application form, which must be approved by the Campus Committee.

Qualifying courses must be extensive enough to remedy weaknesses in an applicant's academic record and to prepare the applicant for research work in the discipline.

The qualifying courses and the assessment procedure must be provided to the Campus Registrar. The Campus Registrar will supply this information to the applicant in the letter of admission.

A candidate for a Qualifying Examination will be registered as a qualifying student and for the individual courses. Such candidates may not register for a degree until such examinations have been passed.

The administration of the examination is the responsibility of the Campus Registrar.

Heads of Departments must ensure that the signed mark sheets are sent to the Chairman of the Campus Committee.

The results of all Qualifying Examinations shall be communicated to the candidate in writing.

## **Requirements for Completion of Degrees DEPARTMENTAL EXAMINATIONS**

Candidates deemed acceptable for admission to graduate diploma and degree programmes but deficient in the knowledge of some aspects of the field to be pursued or in statistics and research methodology, may be required to pursue courses from the undergraduate or graduate programmes or to follow a reading programme. MPhil and PhD candidates in the Departments of

Preclinical Sciences and Paraclinical Sciences, and the School for Veterinary Medicine are also required to take a course in Scientific Presentation and Critique which is also recommended for all research degree candidates. Candidates must pass the appropriate examinations before being allowed to write examinations for the degree or to submit any thesis, research paper, short dissertation or project report.

The procedures for the Departmental Examinations shall be the same as for Qualifying Examinations.

## **MPhil / PhD**

Candidates shall register for the MPhil degree in the first instance, but a candidate may have his/her registration upgraded to a PhD degree, if in the opinion of the supervisor/s and of the Faculty Sub-Committee for Higher Degrees his/her MPhil thesis research work qualifies the candidate for a PhD registration.

In addition to completing departmental examination prescribed, MPhil candidates are expected to give two seminars, one in the middle of the course and the other at the end of the course before final submission of his thesis to the University. PhD candidates are expected to give three such seminars. These seminars will be judged by a panel of at least two examiners drawn from the same Faculty.

Candidates are advised that acceptance into MPhil and PhD programmes is dependent on the availability of suitable supervisors, research projects and available facilities at the time of application considerations.

## **Doctor Of Medicine (MD) QUALIFICATION FOR ADMISSION**

The following candidates are eligible to apply for registration for the MD degree.

Graduates in Medicine of this University or of a University or Medical School approved by the University of the West Indies of at least five (5) years standing, and who are fully registered as medical practitioners in the territory or territories in which the research project will be carried out.

A candidate who is not a graduate of the University of the West Indies must hold or have held an Academic post in the Faculty of Medical Sciences of the University of the West Indies, or must have engaged in:

- i) scientific work directly relevant to his profession or
- ii) in the practice of Medicine in Institutions or Teaching Hospitals approved by The University of the West Indies

### **COURSE OF STUDY**

The MD degree shall be awarded on the basis of examination by thesis.

The candidate will be required to discuss the scope of his research project with the senior member of the Faculty appointed as his Supervisor. It is expected that this should occur at an early stage and preferably before embarking on the project.

The thesis must embody a critical account of the results of personal observation or original research in any branch of knowledge related to the curriculum for the degrees of Bachelor of Medicine and Bachelor of Surgery, and should normally be submitted within five (5) years but not less than three (3) years of approval of the research proposal.

The thesis may include work previously published by the candidate but such work must be clearly identified in the thesis in accordance with the Regulations of the University of the West Indies.

Submission of the thesis to the University must be as prescribed by the Regulations of the University of the West Indies for Doctoral Theses and must be accompanied by a declaration that the work has been carried out solely, or in the cases where the candidate has been a member of a research group, predominately by the candidate. In the latter instance, work which has not been carried out by the candidate must be identified in the thesis.

### **EXAMINATIONS**

The examinations by thesis shall be as prescribed by the appropriate Regulations of the University of the West Indies for Doctoral Theses.

The thesis will be examined by at least three examiners, at least one of whom is an External Examiner appointed for this purpose, by the Board for Graduate Studies acting on behalf of Senate.

The candidate will be required to present himself/herself for Oral examination on the subject matter of the thesis at such place as the University may direct, upon such day or days as shall be notified to him/her by the Registrar in writing.

The candidate may also be required to present himself/herself for Clinical examination.

### **Doctor of Medicine (DM) Specialist Degree**

Applicants to the Doctor of Medicine (DM) programmes are required to hold a medical degree with eligibility for registration in the country of study. The University's Regulations for Graduate Diplomas and Degrees apply to DM students, but there are also specific regulations governing the DM programme in each Speciality, e.g. All applicants must have a posting at a recognised hospital in the country of study.

### **Taught Graduate Courses for MPhil and PhD Students**

According to University regulations, candidates who are accepted into the MPhil programme will be required to register for taught graduate courses amounting to a minimum of 6 credits. Candidates gaining direct entry into the PhD programme are required to register for a minimum of 9 credits. Such candidates must pass all taught graduate courses before proceeding to their research project. In the Faculty of Medical Sciences these courses will normally include Biostatistics and Data Analysis for Health Sciences (MEDC 6925), Research Methods for Health Sciences (MEDC 6924) and Scientific Presentation and Critique (MEDC 7041 for MPhil candidates and MEDC 8041 for candidates pursuing a PhD Degree).

Students, who enter either the MPhil or PhD degree, holding a taught Masters degree or Postgraduate Diploma, may be granted exemption from the course requirements of the research degree. However, such students may be asked, by the Department in which they are registering and with the approval of the Campus Committee, to take additional course credits, if such courses provide a specific knowledge-base or skill required for the proposed research degree. Students who upgrade from the MPhil to the PhD, will be allowed to have their course credits added to the course requirements of the PhD.

### **Supervision SUPERVISOR**

On the acceptance of an MPhil, PhD or MD candidate, the Department will nominate a supervisor and where necessary joint or co-supervisors for appointment by the Campus Committee.

The Chief Supervisor must hold a graduate degree of the same or higher level as the degree being supervised.

The designation 'Joint Supervisor' should be used in cases where University staff members are considered equally responsible to the Board for the supervision of the candidate, while the designation 'Co-Supervisor'



should be applied to persons from outside the University who are assisting in the supervision of the candidate.

A topic which crosses the boundaries of Departments or Faculties will require the appointment of more than one Supervisor and consultation with those competent to jointly supervise such a topic should take place before the topic and the names of Supervisors are sent to the Board.

In the event of a candidate wishing to do a research degree which is not readily identifiable with a particular Faculty or Department, the application of that candidate will be referred by the Campus Office for Graduate Studies & Research to the Dean of the School for Graduate Studies & Research, who, in consultation with the Campus Coordinator, will seek to ascertain whether it is feasible to empanel a Committee of Supervisors and whether there are adequate facilities available to support the proposed research, in order to determine whether the application should be approved. If it is determined that the application should be approved, the Dean will then return the application to the Campus Office for Graduate Studies & Research.

**Advisory Committee and Responsibilities of the Advisory Committee**

By the end of the first semester of registration an Advisory Committee will be assigned to each student reading for an MPhil, PhD or MD degrees. The committee will be composed of three persons including the Supervisor. The Committee may include no more than one person from outside the University.

### **General Examination Regulations**

All examinations, whether by thesis or by written papers, are conducted on behalf of the Campus Registrar, who is responsible for setting and publishing the dates for each examination in consultation with Departments concerned, and for informing candidates of such dates.

Examination timetables should be published at least one month before the series of examinations begin. Notification of oral defence of a thesis should be provided at least two weeks before the examinations.

Candidates must submit theses, research papers and project reports for examination to the Campus Office for Graduate Studies and Research.

The transmission of theses and other examination papers to and from examiners is the responsibility of the Campus Registrar.

It is essential that graduate research students and their Supervisors have a shared set of expectations about all aspects of supervision, time frame for project execution,

important milestones and the overall manner in which the research will be executed. The ground rules must be set early and the mutually agreed expectations made explicit. Graduate students must seek clarity from their Supervisors early on with respect to: -

- Supervisor availability, both for routine and non-routine contact
- The provision of feedback and advice
- The timelines for such advice

Similarly, Supervisors must be explicit with their students about: -

- The need for regular meetings
- The benefits of graduate level courses
- The need for mastery of methodological, writing and speaking skills
- The benefits of seminar and conference presentations
- The importance of publication
- The necessity for completion within the time limits

Supervisors, the Advisory Committee and research students must be very clear about: -

- The objectives and scope of the research project
- The financial, physical, human and intellectual resources available for executing the research project

The above are frequently the most difficult areas for the Supervisor and student to agree upon, but must be achieved through dialogue and reason early in the student's registration period in the University.

Graduate research students must be aware that there is no substitute to consistent, carefully planned, intelligent work in the pursuit of research excellence. Graduate students must show a commitment to the agreed objectives being pursued and must be supported at every step by their Supervisor. Graduate students must also be encouraged by their Supervisors to show independence of thought and action and to develop into first-rate professionals themselves. They should be familiar with the rules and regulations of the University, work within deadlines and communicate regularly with their Supervisor and Advisory Committee members.

The main responsibilities of the Graduate Research Student are to:

1. Keep the schedule of meetings agreed to with the Supervisor(s) and/or Advisory Committee.
2. Take the initiative in raising with the Supervisor, problems or difficulties, however, elementary they may seem.
3. Seek guidance and comment on the research programme.

4. Accept and act on advice given by the Supervisor, unless the student, after careful consideration and discussion with the Supervisor, and for good reasons, decides otherwise.
5. Maintain good progress in one's research in accordance with the schedule agreed to with the Supervisor.
6. Assist the Supervisor and the Advisory Committee in the completion of the semester's progress report.
7. Pass creditably and at the first attempt any Departmental or Qualifying courses which may have been prescribed.
8. Give, and participate in, Graduate Research Seminars and other scholarly activities.
9. Make representation to the Head of Department if an effective working relationship is not established with the Supervisor or any member of the Advisory Committee or if, for reasons beyond the student's control, the work is not proceeding satisfactory. If the Supervisor is also the Head of Department, making such representation to the Dean of the Faculty and then to the Chairman of the Campus Committee, or with any member of the Campus Committee for Graduate Studies and Research.
10. Present written material as required by the Supervisor in sufficient time to allow for comments and discussion before proceeding to the next stage; for example, in the preparation of a thesis or project report.
11. Take responsibility for the final presentation of the thesis or project report in terms of writing, style, grammar, spelling, references, end/footnotes, and bibliography.
12. Submit a thesis, project report or dissertation within the time limits set by the University.
13. Familiarise himself/herself with the rules and regulations of the University, particularly the 'General Regulations for Postgraduate Degrees' and its 'Policy on Research Ethics' for example.

# POSTGRADUATE PROGRAMMES

\*DM in: Anaesthetics (Parts I, II, III)  
Psychiatry  
Obstetrics & Gynaecology (Parts I, II)  
Radiology  
Orthopaedics  
Internal Medicine  
Paediatrics  
Surgery (Part I, II)  
Urology  
Emergency Medicine  
Family Medicine  
Ophthalmology (Part I, II, III)  
Otorhinolaryngology (ORL)

\*\*MD in: Medicine (all clinical disciplines)

MSc in: Clinical Psychology  
Family Medicine  
Advanced Nursing (MSN)  
Public Health (MPH)  
Palliative Care  
Medical Microbiology

MPhil/PhD in: Biochemistry  
Human Anatomy  
Human Nutrition (currently not on offer)  
Human Physiology  
Molecular Genetics  
Neuroscience  
Pathology (Chemical Pathology, Anatomical Pathology, Haematology, Immunology,)  
Medical Microbiology  
Pharmacology  
Community Health (MPhil only)  
Veterinary Anatomy  
Veterinary Clinical Medicine  
Veterinary Microbiology  
Veterinary Parasitology  
Veterinary Pathology  
Veterinary Physiology  
Veterinary Public Health  
Veterinary Virology

Postgraduate Diploma in:  
Family Medicine  
Emergency Medicine  
Management of HIV Infections

\*DM Doctorate in Medicine  
A specialist qualification pursued part-time over 4 years

\*\*MD Doctorate in Medicine  
A research degree requiring the completion of a thesis.

# SCHOOL OF MEDICINE

## DEPARTMENT OF PRE-CLINICAL SCIENCES

The Department offers M.Phil. and Ph.D. degrees in Biochemistry, Human Anatomy, Human Nutrition, Human Physiology, Molecular Genetics and Neuroscience. Current areas of research include:

### MPhil/PhD Biochemistry

The postgraduate programme offers students the opportunity to do research in specific areas such as:

- Mechanistic and conformational studies of cytochrome c-oxidase
- Cytochrome c oxidase in neurological disorders of humans and animals.
- Biochemical and nutritional risk markers for coronary heart disease, diabetes and other chronic diseases.
- Calcium handling proteins in the diabetic heart.
- Adiponectin, inflammatory markers and risk type II diabetes.
- Anticancer and other medicinal properties of Caribbean plant extracts.

### MPhil/PhD Human Anatomy

The postgraduate programme currently offers research in modern morphological and functional investigations of the brain in the normal and pathological conditions, for example, Alzheimer's disease and other mental disorders. Other specific areas include:

- Vagal involvement in peripheral neuropathy associated with chronic diabetic states.
- Effect of vagotomy on enteroendocrine cells in the gastrointestinal tract.
- Anatomical studies of the Agouti (*Dasyprocta Leporina*) including (i) vagal innervation of the gastrointestinal, respiratory and cardiovascular organs, (ii) skull morphology and morphometry and (iii) the brain in stereotaxic coordinates.

- Prevalence, ethnicity and polymorphism of anatomical variations and congenital malformations in Trinidad and Tobago.
- Effects of diabetes mellitus on the reproductive organs of Sprague Dawley rats.
- Effect of paw-paw seed extract on the histology and histochemistry of the testes in Sprague Dawley rats

### MPhil/PhD Human Physiology

Human Physiology is the study of the normal biological systems in the body. The subject covers both macro systems (for example, the heart and circulation) and Microsystems (for example, the function of cell membrane proteins in maintaining the electrical properties of the cell). The postgraduate programme offers research in:

- The biological principles underlying learning and memory.
- Intrinsic physiological mechanisms that protect the brain from certain neurological disorders such as stroke, epilepsy, migraine and dementia.
- Development of new diagnostic criteria for cardiovascular and autonomic nervous systems. Mechanisms underlying obstructive airway diseases.
- Physiological actions of abused substances on the brain.
- Effects of environmental pollutants on respiratory functions.
- Development of non-invasive diagnostic criteria for diseases of the cardiovascular and autonomic nervous system.

### MPhil and PhD Molecular Genetics

Students have the opportunity to do research in areas such as:

- Molecular epidemiology, evolution and phylodynamics of emerging and re-emerging pathogens (esp. dengue and other mosquito-borne viruses).
- Evolutionary and ecological factors involved in emergence, dispersal and maintenance of viral pathogens, and in particular zoonotic and vector-borne RNA viruses.
- Viral diversity in bats and bats as a source of emerging pathogens.
- Bioinformatics

## **MPhil and PhD Neuroscience**

The postgraduate programme offers students the opportunity to do research on neurodegenerative disorders:

- Evaluation of neuroprotective drugs using ischemia and other neurodegenerative models.
- Protective effects of calorie restriction on aging and inflammation in the brain.
- The roles of excessive calorie intake, metabolic disorder and diabetes on brain function.
- Drug delivery systems for the treatment of neurodegenerative disorders.
- The role of immune mechanisms of the central nervous system in the pathogenesis of neurodegenerative disorders.
- Central nervous system development
- Effects of ultrasound on brain development

In collaboration with the Psychiatric Unit Department of Medicine and the Department of Paraclinical Sciences:

- Prevalence of dementia in Trinidad and the region.
- Risk factors and Biomarkers associated with Alzheimer's disease and other dementias.
- Dermatoglyphics in patients with bronchial asthma, pulmonary tuberculosis, schizophrenia, dementia and psychiatric disorders.

## **DEPARTMENT OF PARA-CLINICAL SCIENCES**

### **Postgraduate Programmes**

The Department of Para-Clinical Sciences offers MPhil and PhD degrees in Pharmacology, Pathology (with specialisation in a specific sub-discipline), Microbiology and Community Health.

According to University regulations, candidates who are accepted into the MPhil programme will be required to register for taught graduate courses amounting to a minimum of 6 credits. Candidates gaining direct entry into the PhD programme are required to register for a minimum of 9 credits. Such candidates must pass all taught graduate courses before proceeding to their research project. In the Faculty of Medical Sciences these courses will normally include Biostatistics and Data Analysis for Health Sciences (MEDC 6925), Research Methods for Health Sciences (MEDC 6924) and Scientific Presentation and Critique (MEDC 7041 for MPhil candidates and MEDC 8041 for candidates pursuing a PhD Degree).

Candidates are required to present two (2) seminars before the completion of the MPhil degree programme, one in the first half of the course and the second at the end of the course based on their research. Attendance at postgraduate seminars is mandatory.

#### **QUALIFICATIONS FOR ENTRY**

The following are eligible for admission to the MPhil degree programme:

- Graduates of The University of the West Indies or of any other university, recognised for this purpose, holding first class or second class degrees (preferably second class upper degrees)

## MPhil and PhD Pharmacology

Pharmacology is the study of drugs and how they affect the body from drug-induced molecular and cellular reactions to the clinical evaluation of therapeutic efficacy. It focuses on drug use for the improvement of health and quality of life, for treatment and prevention of disease and also as research tools for the further exploration of body functions. MPhil / PhD training in the Pharmacology Unit aims to provide candidates with the requisite expertise in the concepts, approaches, and techniques of basic and clinical research and facilitates the development of independent investigators. The programme provides students with a solid foundation through coursework, research, and opportunities to develop communication and presentation skills.

Current research areas within the department include:

- Preclinical investigation of local medicinal plants.
- Modulation of drug-induced hepatotoxicity.
- Obstructive respiratory disease
- Clinical pharmacology of antimicrobial use and abuse
- Cytochrome P4502D6 allele and genotype frequency in patients with major depression
- Alcoholism risks and protective factors in Trinidad and Tobago
- Alcohol challenge in the two major ethnic groups of Trinidad and Tobago.

In addition to completing the Faculty course requirements (see above), candidates other than those holding a BSc. Pharmacology or MB.BS are expected to complete a departmental course covering basic and systemic pharmacology, as well as basic sciences, including Biochemistry and Physiology, relevant to the understanding of pharmacological principles. As far as possible candidates will be provided with the opportunity to participate in at least two (2) laboratory rotations outside of their primary research; to include analytical techniques, animal experimentation, molecular biology or other relevant areas available within, but not restricted to, the Faculty of Medical Sciences. Candidates are encouraged to present or publish at least two (2) first-authored primary research papers in forums or peer-reviewed journals before submission of their thesis.

## MPhil and PhD Pathology

MPhil and PhD degrees in Pathology are available in the various sub-disciplines of Haematology, Chemical Pathology, Immunology and Anatomical Pathology.

1. Anatomical Pathology is concerned with the diagnosis of disease based on the gross, microscopic, and molecular examination of organs, tissues, and whole bodies. Current research resides in the areas of breast, colonic, prostate and cervical cancer, renal disease, wound healing and STI.
2. Chemical Pathology also known by the following names: Clinical Biochemistry and Clinical Chemistry is that branch of laboratory medicine in which chemical and biochemical methods are applied to the study of disease. The Chemical Pathology laboratory performs qualitative and quantitative analyses on body fluids such as blood, urine and spinal fluid among other materials. Chemical Pathology laboratory tests assist the physician in making a diagnosis. Current research areas include: research in diabetes, endocrinology and metabolism, risk factors and biomarkers in Alzheimer's disease, biomarkers in cardiovascular disease and drug abuse and the neonate.
3. Haematology is concerned with disordered physiology of haemopoetic systems and overlaps with oncology. Research is presently being conducted in the area of Haemoglobinopathies.
4. Immunology deals with the physiological functioning of the immune system in health and disease, in particular malfunctions of the immune system in immunological disorders.

## MSc, MPhil and PhD Medical Microbiology

Microbiology is a branch of laboratory medicine that has several specialties that includes bacteriology, virology, mycology and parasitology. It deals with nature, epidemiology, disease processes, clinical features, diagnosis, treatment and prevention of the infections caused by microorganisms.

The Master of Science degree (MSc) in Medical Microbiology program consists of 41 credits with a strong practical component and in depth knowledge of the subspecialties of the discipline.

Where a candidate does not have a strong basic microbiology qualification to undertake this MSc program, such a student will be required to pursue a qualifying program for this postgraduate studies. The qualifying course or program consists of 22 credits with foundational background and base in the subspecialties of Medical microbiology.

Whereas the MSc programme has written examinations and course work, the MPhil program is based on research and submission of a thesis. Graduates from the MSc and MPhil programmes will be equipped with the knowledge, analytical, and practical skills to pursue careers in medical microbiology in hospital, laboratories, industrial or research settings. Furthermore, these programs will prepare them for further higher degree training in Medical microbiology such as the PhD and DM degrees.

The PhD and DM programmes are geared towards producing clinical scientists or medical consultants who are capable of assisting physicians in the management of infections and who can assist and advise hospitals' infection control programme.

#### STRUCTURE OF THE MSC PROGRAMME

The qualifying course or program will provide a foundation in the subspecialties of Medical microbiology.

#### COURSES TO REGISTER FOR QUALIFYING FOR MSC PROGRAMME

CODES	DETAILS	CREDITS	SEMESTERS
MEDC 5400	Fundamentals of Medical Bacteriology	4.0	1
MEDC 5401	Fundamentals of Medical Mycology	3.0	1
MEDC 5402	Fundamentals of Medical Parasitology	3.0	1
MEDC 5403	Introduction to Laboratory Diagnosis of Microbial Infections	6.0	1 & 2
MEDC 5404	Fundamentals of Medical Virology	4.0	4
MEDC 5405	Fundamentals of Medical Immunology	2.0	2

The Master of Science degree (MSc) in Medical Microbiology program consists of 41 credits. There is a strong practical component and the courses listed below provide in depth knowledge of the subspecialties of the discipline.

#### COURSES TO REGISTER FOR MSC MEDICAL MICROBIOLOGY PROGRAMME

CODES	DETAILS	CREDITS	SEMESTERS
MEDC 6820	Medical Bacteriology	5.0	1
MEDC 6821	Medical Mycology	3.0	1
MEDC 6822	Molecular Biology Applied to Infectious Diseases	3.0	1
MEDC 6823	Medical Virology	5.0	1 & 2
MEDC 6824	Applied Medical Immunology	3.0	2
MEDC 6825	Medical Parasitology	2.0	2
MEDC 6826	Diagnostic Medical Microbiology	6.0	1 & 2
MEDC 6830	Research Project	6.0	1 & 2
MEDC 6924	Research Methods for Health Sciences	4.0	1 & 2
MEDC 6925	Biostatistics and Data Analysis for Health Sciences	4.0	1 & 2
MEDC 7041	Scientific Presentation and Critique	--	1 & 2

Current areas of research include:

1. molecular epidemiology, characterization and diagnostics of multiple drug resistant microbes,
2. antimicrobial resistance and nosocomial infections,
3. infection control and prevention.

In addition to the Faculty course requirements (see above) students may also be required to complete courses specific to their research areas. Students are expected to deliver seminars, be involved in journal clubs and grand rounds presentation and tutorials.



Students may also be required to complete the Fundamentals of Medical Microbiology course; MEDC 7015 for MPhil students and MEDC 8010 for PhD students.

## PhD/ MPhil Community Health

Further information on the above-mentioned programmes can be obtained from the Department of Para-Clinical Sciences.

## PROGRAMMES IN FAMILY MEDICINE

The department offers three part-time programmes in Family Medicine, a postgraduate diploma, an M.Sc and a DM. Candidates are normally first registered for the diploma (2 yrs) and on successful completion may progress to the MSc (1 additional year) and likewise to the DM (1 more year).

### Diploma in Family Medicine

The programme is based on the principles of primary care medicine and the widely recognised professional characteristics of the primary care physician. It takes into account the health care requirements of the population and expressed needs of the general practitioners in the Caribbean for further professional education and advancement.

#### OBJECTIVES

- To provide education and training in family medicine relevant to the needs of the Caribbean community.
- To stimulate the professional development of the general practitioners based on their existing experience, and to enhance their competence and ability to function effectively and efficiently as primary care physicians in the reformed health sector.
- To provide a continuing education base for the development of a career structure for primary care physicians.

The programme is ideally suited for:

- Primary care physicians working in the public health care system.
- Recent graduates working in a primary care setting who are considering a career in full time primary care.

- General practitioners who are interested in upgrading their skills.

#### QUALIFICATIONS FOR ENTRY

Candidates seeking entry to the Diploma programme in Family Medicine must possess an MBBS degree or equivalent from an approved university. In addition, applicants must have at least one year's clinical working experience, preferably in Primary Care.

#### STRUCTURE OF THE PROGRAMME

Course Code	Course Title	Year
MEDC6511	Learning & Teaching in Primary Care	1
MEDC6521	Evidence Based Medicine Part I	1
MEDC6512	The Consultation & Communication	1
MEDC6513	Medical Ethics & Doctor and Patient Relationship	1
MEDC6515	Health Promotion, Screening and Risk Management Issues in Primary Care	1
MEDC6516	Health Care of the Elderly	2
MEDC6517	Chronic Diseases in Primary Care	1
MEDC6522	Gender Issues in Health/Women's Health	2
MEDC6523	Sexualities and STD's	2
MEDC6524	Child and Adolescent Health	2
MEDC6525	Mental Health and Substance Abuse	2
MEDC6528	Forensic Medicine & Legal Issues in Primary Care	2
MEDC6529	Clinical Sessions (Part I & II)	1 & 2

#### WHO SHOULD CONSIDER THIS PROGRAMME?

- Primary care physicians working in the public health care system.
- Recent graduates working in a primary care setting who are considering a career in full time primary care.
- General practitioners who are interested in upgrading their skills.

#### FINAL EXAMINATIONS

All modules are assessed via examinations, except MEDC 6511, 6512, 6513, 6515 and 6517 which are assessed on the basis of student presentations and course assignments. Final examinations will be held at the completion of 24 months and represents the period previously known as the Postgraduate Diploma in Primary Care and Family Medicine.

Students who have successfully completed all modules and accumulated the required module credits will be allowed to sit the final examination. The final student assessment will comprise:

- Review of the student Portfolio containing all modules - 30% of the final mark

- Assignments, reports and tutor comments
- Objective Structured Clinical Examination (OSCE) - 40% of the final mark. However the OSCE examination must be passed to succeed in the examination.
- Written examination - 30% of the final mark.

To be successful, candidates are required to achieve a passing grade in all components of the examination. Further information can be obtained from the Family Medicine office.

## **MSc in Family Medicine**

### **AIMS OF PROGRAMME**

1. To train postgraduate students of medicine in a wide range of knowledge, skills and attitudes appropriate to the practice of Family Medicine in the Community;
2. To impart and enhance knowledge in the personal, family and social aspects of health, illness and disease;
3. To enhance professional competence, values and behaviours that are inherent to the discipline of Family Medicine;
4. To enhance the skills of critical reflection and assessment of professional activities, enabling them to meet the changing health needs of patients, families, and their communities, and the changing demands of health care in modern societies.
5. To promote skills in effective, continuing medical education, to revise past knowledge, and to keep abreast of advances in medical science and technology appropriate to primary care;
6. To enhance knowledge and skills in health promotion, disease prevention and risk management;
7. To eventually deliver such training through face to face and distance modes so as to cater for the educational needs of primary care physicians in the wider Caribbean.

### **QUALIFICATIONS FOR ENTRY**

Candidates must have completed the Diploma in Family Medicine in order to proceed to the MSc programme. The programme is open to medical practitioners who have qualified from a recognised University and are registered for practice within the country in which the training occurs.

### **OUTLINE**

Candidates are expected to complete the programme within 36 months (which includes the 24 months of the Diploma). In extreme individual circumstances, an extension of twelve months may be granted by the Faculty's Graduate Studies Sub-Committee. During this time students are expected to undergo attachments to accredited family practice units and other approved clinical facilities. The MSc will be granted after a thesis proposal and presentation/defense, and successful completion of course work, written and clinical examinations.

Students are expected to register for the following core courses:

- Research Methodology (MEDC 6310)
- Statistics (MEDC 6120)

Optional Courses (students must do two of the following depending on availability)

1. Counseling Skills for Primary Care Physicians (MEDC 6600)
2. Procedural Skills for Primary Care Physicians - minor surgical skills
3. Management Skills for the Primary Care Physician
4. Teaching and Learning in the Health Professions-an extension of the 5-week programme offered during the Diploma.
5. Evidence-Based Medicine Part II (MEDC 6802) - an extension on the 10-week programme offered during the Diploma.

### **FINAL EXAMINATIONS**

Students who have achieved pass marks for the coursework and the research project report will be allowed to undertake the final MSc examination. Student assessment will consist of-

- Module Examination Mark - 60% which consists of
- Research Proposal - 40% of the final mark
- Coursework - 20% of the final mark
- Written paper - 40% of the final mark

To be successful candidates are required to achieve a passing grade in all components of the assessment.

## D.M. (Doctor of Medicine: Family Medicine)

### QUALIFICATIONS FOR ENTRY

Students will not be allowed to register for the DM in Family Medicine without first satisfactorily completing the MSc in Family Medicine.

### OUTLINE

This requires a fourth year of work, i.e. one additional year after the MSc. In this year participants are usually required to complete their MSc proposal. Although clinical work is a required part of the DM year, the major task is the actual data collection, data analysis and defense of the project in the final examination. University requirements also allow for an in-depth case book of at least 12 cases to be presented for the DM.

## Master of Public Health (MPH)

### AIMS AND OBJECTIVES

- To provide persons with the fundamental and critical skills for assessing community health problems and responding to public health challenges.
- To enable persons to use and apply principles, methods and analytical techniques of public health and allied disciplines for the improvement of population health and well-being.
- To enable persons to plan and manage public health programmes, develop and implement solutions to the public health problems, both within the context and settings of the Caribbean region and globally.

### QUALIFICATIONS FOR ENTRY

To be admitted to the prescribed course of study for the degree of Master of Public Health (MPH) candidates must either:

- Be registered medical practitioners, dental surgeons, or veterinary surgeons, with at least three years professional experience preferably in Public Health after successfully completing the final examination in their discipline; or
- Be graduates of an approved university with at least three years of relevant practical experience; or
- Hold an approved technical or professional qualification awarded by an approved body and approved by this university and have had at least five years relevant practical experience; or
- Have in the opinion of the University, other qualifications of special relevance to the course and in the opinion of the University, have had at least five years of relevant practical experience.

### COURSE OF STUDY

Candidates for the degree of Master of Public Health are required to follow the prescribed course of study by part-time attendance at the University for not less than two academic years and not more than four academic years. The required minimum time for completion of the degree of Master of Public Health is twenty-four (24) months.

Candidates may pursue studies over two to four academic years. Such candidates will need to organize their time and attendance schedules bearing in mind the usual times and offerings of courses.

Candidates for the degree of Master of Public Health are required to take core courses. Core courses provide fundamental instruction/training in the following areas:

- Biologic Basis of Health (required for students without a medical or related degrees) (0 credits)\*\*
  - Biostatistics \* (with laboratory sessions) (4 credits)
  - Research Methodology\* (3 credits)
  - Environmental Health and Occupational Health I (3 credits)
  - Epidemiology I (General Principles and Methodological issues) (3 credits)
  - Health Economics I (3 credits)
  - Integrated Team Experience (3 credits)
  - Social and Behavioural Sciences I (3 credits)
- \*Already being delivered at St. Augustine  
\*\* Self-study course with examination  
Core credits = 22

Additionally, candidates are required to take some advanced and elective courses, the choice of being made with the approval of the Department after considering the candidate's background, and subject to the availability of the course. At minimum, 10 students are required for a course to be offered.

These courses include areas such as:

- Chronic Diseases Epidemiology (3 credits)
- Disaster Preparedness and Management (3 credits)
- Financial Management (3 credits)
- Health Communication (3 credits)
- Infectious Diseases Epidemiology (3 credits)
- Monitoring and Evaluation (3 credits)
- Nutrition and Dietetics (3 credits)
- Qualitative Research (3 credits)
- Seminar courses (3 credits)
- Health Economics II (3 credits)
- Environmental Health and Occupational Health II (3 credits)
- Environmental Toxicology (3 credits)

Candidates are required to take courses totalling not less than 37 credits hours and are also required to submit a project report based on research in a chosen aspect of public health approved by the Unit of Public Health and

Primary Care (see below). Further details regarding courses related to the degree programmes may be obtained from the department.

Candidates pursuing the Master of Public Health (MPH) degree are attached to a health or other institution approved by the Specialty Board for a period of six weeks during the 3rd semester of year 2, thereby fulfilling their field placement requirements (3 credits).

After completing the field placement, each candidate is required to submit a satisfactory report describing the experience, including engagement and work process; problems, challenges and strengths identified; solutions recommended, developed or implemented; lessons derived and insights gained.

The course of study for the Master of Public Health Degree includes supervised research work or applied practice cumulating in the submission of a project report. The topic and research/ practice area should be of public health relevance and must be approved by the student's supervisor. The report should provide evidence of the student's ability to effectively review relevant literature, to undertake independent research/ practice, to analyze data, and to present and discuss findings in a systematic and scholarly form. The project report should be of a satisfactory literary standard. The project report should not exceed 20,000 words and must follow the University's Guide for the preparation of Theses, Research Papers, and Project Reports (15 credits). This work will be examined by the external examiner.

### **REGULATIONS AND ASSESSMENT PROCEDURES**

All Regulations and Assessment Procedures must be consistent with those provided in the University of the West Indies General Regulations for Postgraduate Degrees and Diplomas. Candidates must complete all modules to be eligible for the final exam. Candidates must pass all individual components of the final exam to be granted the degree of the MPH.

#### **Course Load/Semester: Part-Time/ Full-Time**

There will be 3 courses per semester and 3 semesters per year for 2 years part-time. Courses will be delivered 3 evenings per week from 4-7 pm for 10-13 weeks. Classes will also be held on Saturdays. Seminar series will require Sunday attendance.

In order to qualify to sit the end of semester module examinations students must attend at least 75% of classes in each module.

#### **Number of Failures per Semester**

No more than 1 failure per semester is permissible, subject to review by the Board of Graduate Studies and Research.

#### **Re-Sit Examinations**

Re-sit examination must be completed by the second week of the semester following that in which a candidate has failed one course.

No candidate will be permitted to repeat the examination in any one course on more than one occasion unless the Board of Graduate Studies and Research in any particular case otherwise decides.

Assessment procedures for courses, coursework, fieldwork, internships or other Modules will be assessed by course work and a written exam set and coordinated by the course coordinator. Continuous review and assessment of the candidate's performance is carried out and recorded every four months by his/her supervisor. Where assessments are found to be unsatisfactory, the Specialty Board may recommend one or more of the following:

- Counseling
- Remedial work
- Repeating unsatisfactory work
- Withdrawal from the course, if poor performance persists.

Fieldwork will be assessed by a report by the supervisor of the student, and a student report. After completing the field placement, each candidate is required to submit a satisfactory report describing the experience, including engagement and work process; problems, challenges and strengths identified; solutions recommended, developed or implemented; lessons derived and insights gained. For those individuals who only complete an enhanced report in lieu of a research project, this will be examined by the external examiner.

#### **Assessment procedures for Research Project**

These will be assessed in 2 stages, first at the end of year 1 when the preliminary report on the proposal for the study is done and secondly on completion and write up of the report at the end of the second year. This project/report will be examined by an external examiner

#### **Time limits for completion**

Research projects can be extended to a maximum of 1 year beyond the student's final exam. Students are expected to complete the MPH within 4 years.

# DEPARTMENT OF CLINICAL MEDICAL SCIENCES

The Department of Clinical Medical offers an MSc in Clinical Psychology and DM programmes in Internal Medicine, Paediatrics, Psychiatry and Radiology.

## DM Internal Medicine

### INTRODUCTION:

The Doctorate in Internal Medicine (DM (Med.) or DM) is one component of a wider graduate programme in Internal Medicine (internal Medicine) delivered by the Faculty of Medical Sciences, The University of the West Indies, St. Augustine. The full range of options for training in Internal Medicine includes:-

1. The D.M. programme in Internal Medicine - consisting of a full 4-year residency, including an elective period for research of one year. This programme is also offered at our sister Campuses, Mona, Jamaica and Cave Hill Barbados.
2. Modules in Internal Medicine - Practitioners from specialties outside Internal Medicine are allowed to access individual modules of the programme if desired ("selectives").

These programmes target doctors who have obtained an undergraduate degree in Medicine from a recognised University, and who have successfully completed their pre- registration training and are about to embark upon postgraduate training.

### AIMS AND OBJECTIVES

The aim of the D.M. in Internal Medicine is to train doctors in the specialty of Internal Medicine to a level that allows them to provide clinical support and administrative leadership to their Medicine Departments. Successful D.M. candidates will practice at the level of consultants in (General) Medicine. The D.M. programme will accept candidates at House Officer level with minimal experience in Internal Medicine and achieve the above goal within the four-year training period.

- To ensure that participants have an appreciation of personnel management, adult learning techniques, disaster management, financial management and quality assurance (including clinical and non-clinical audit).
- To promote a culture of continuing professional development among Internists. This would include the use of Evidence Based Medicine, the production

- and maintenance of personal portfolios and fostering reflective learning in clinical practice.
- To create a cadre of appropriately trained and certified Internists in Trinidad and Tobago, to fulfil local and regional needs.
- To define, regulate and monitor standards related to the certification of individuals involved in the provision of medical care in Trinidad and Tobago and the region.
- To encourage participants to develop a specialty interest.

### ADMISSIONS

Graduates of Medical Schools approved by the Medical Board of Trinidad and Tobago. Candidates **must** have successfully completed their internship and be fully registered with the Medical Board of Trinidad and Tobago.

### Date of Entry

The date of entry will normally be **January or July** and as determined by the date when the candidate begins to work in a recognised post in an accredited hospital. Application to enter the programme may be made before securing such a post. The applicant may then receive from the School of Graduate Studies and Research, on the recommendation of the Faculty Committee for Graduate Studies, provisional acceptance for entry to the programme contingent on the obtaining of an accredited post. After the successful applicant has secured an accredited post, the date of entry will be fixed by the School of Graduate Studies and Research.

The applicant will be informed of the date of entry by the relevant Campus Registrar. For the purposes of the above two paragraphs, the successful applicant must furnish evidence of being in a recognised post.

### EXEMPTIONS:

Candidates who have completed all or part of another graduate course in Internal Medicine or who have gained relevant experience at this level in a recognised institution may apply for exemption from that part of the D.M. programme. The specialty Board in Internal Medicine will consider such applications. Applications would be considered on an individual basis.

### TRAINING

The four-year D.M. programme is a full-time residency programme, of which approximately two thirds of this time is spent in Internal Medicine under the direct supervision of Internal Medicine consultants. The rest of the programme consists of rotations through acute specialties relevant to Internal Medicine.



Candidates are expected to rotate through the following sub- specialties:

**YEAR I: Emphasis on General Internal Medicine**

General Internal Medicine (3-6 months)

**YEAR II: Emphasis on subspecialty care (10 weeks each) – will involve rotation through several hospitals**

- CNS/Neurology
- Cardiology
- ICU
- Gerontology
- Haematology / Geintourinary Medicine (choose any 1)
- Gastroenterology
- Primary Adult Care 24 months (concurrent)
- Vacation leave (2 weeks every 6 months (concurrent)
- Pulmonology
- Gastroenterology
- Formulate a research proposal under supervision

While on secondment to the above specialties candidates will be under the direct supervision of the consultant in the specialty. Supervising consultants need not be a full-time academic staff member of UWI. They will, however, maintain their links with Internal Medicine through attendance at regular tutorials and training sessions for all D.M. candidates.

**YEAR III**

During third year, candidates will have the opportunity to spend 12 months in an elective specialty of their choice for research in Trinidad or abroad. Any research project (MEDC6683) undertaken MUST be under full supervision of Full Time UWI Staff of the Adult Medicine Unit.

Research leading to peer-reviewed publications is highly recommended. The research project will be assessed on the basis of a research report which must be submitted in the form of a journal paper written according to the Vancouver style and following the guidelines for articles requested by the West Indian Medical Journal. The paper must be written on research work initiated during a candidates period of registration for the DM Internal Medicine programme and will be marked according the regulations 77 and 78 in section I of the "REGULATIONS FOR GRADUATE DIPLOMAS AND DEGREES (with effect from August 2001)".

**YEAR IV**

The final year of training may be deferred by 1 year if the resident engages in a recognised research programme leading to a postgraduate academic degree in Medicine (MSc., MPhil, PhD).

During the fourth year (final year) the resident returns to the University Hospital for further intensive training in General Internal Medicine.

**GUIDELINES FOR THE TRAINING OF RESIDENTS**

A trainee must have the following:

1. On call duties 1:4 to 1:6 per month
2. Post call ward rounds during which they present their admissions to the consultant whose patients they are.
3. Experience the consultant making decisions
4. Role modeling opportunities which are very important
5. Procedures which must initially be supervised and are to be elevated in the professional assessment form.
  - a. If in the opinion of the supervising consultant there are unusually frequent complications of procedures then these should be reported to the Program Director in addition to invoking whatever procedures that are locally applicable.
  - b. Procedures should be recorded as:  
Procedure Name / Performed by whom/  
witnessed / consent / method /  
observations / plan.
6. At clinic - the opportunity to see a wide selection of cases and be able to discuss these with the consultant.
7. The assessment form for each rotation must be completed by the resident as well as an assessment with feedback by each supervising consultant.
8. Communication skills training. This is extremely important and cannot be overemphasized.
9. Medical record keeping skills which are extremely important and should be supervised.

**EVALUATION**

***A Six Monthly Evaluation of Residents***

Each resident in the DM (Medicine) programme will undergo formal assessment by Faculty every 6 months. Assessment will take the form of criterion-referenced clinical and oral examinations alternately and residents will not be allowed to progress in the programme unless performances are satisfactory. After each assessment the Programme Director or Head meets with each resident to provide feedback, identify weaknesses and suggest remedial action. Numeric, categorical and narrative assessment records will be recorded. In addition to the above the residents will be assessed by clinical consultants with whom they rotate using standardised qualitative instruments and would be included in progress reports.

### **PROMOTION FROM YEAR TO YEAR WITHIN THE PROGRAMME**

This is not an automatic process. Students are required to show proficiency at the level required for promotion and this also requires competence as demonstrated at the periodic semester examinations.

Promotion to Year 4 requires completion of the research project.

### **DM PART I EXAMINATION (MEDC6680, MEDC6681, MEDC6682)**

Once the residents have progressed satisfactorily through the first 2 years of the training programme (including satisfactory evaluations) they will be allowed to take the Part I DM examination. This consists of a written examination (essay MEDC6681 and multiple choice questions MEDC6680) and an objective structured clinical examination (OSCE) MEDC6682. The candidate is required to pass both parts of this examination at the same sitting in order to progress to Part II.

### **DM PART II EXAMINATION (MEDC6684, MEDC6685, MEDC6686, MEDC6687)**

Years 3 and 4 will be assessed as per the protocols of the first 2 years. Only candidates who have obtained satisfactory reports at the end of the 4th year will be eligible to sit the Part II examination. The Part II examination consists of two written papers (one essay MEDC6684 and one multiple choice MEDC6685), a clinical examination (OSCE) MEDC6686 and an oral examination MEDC6687. This examination is an "exit examination" with emphasis on a high level of competence in clinical skills, communications, problem solving as well as aptitude, attitude and knowledge so that to be successful the candidate must be capable of functioning at consultant level in the Caribbean context. Each candidate is required to pass each part of the clinical examination individually in order to obtain a passing grade.

### **DISTINCTIONS**

These will be awarded using accepted UWI standard.

### **OTHER EXAMINATIONS**

In recent times, several of the residents in the DM programme of Jamaica have taken the American College of Physicians examination. This is viewed as a most useful development as it allows the evaluation of residents by parallel programmes and also serves as a means of identifying subspecialty areas of weakness, which would benefit from remedial action.

DM graduates have also been very successful in the American Board of Internal Medicine examinations (having had to undergo further training within the U.S. system) and efforts are to be made to obtain for DM graduates some exemptions if they enter the U.S. residency system.

Graduates of the DM (Medicine) programme are now exempt from the Part I Membership Examination of the Royal College of Physicians of the United Kingdom, and DM graduates have previously demonstrated a very high success rate in the Part II component of this examination.

### **CURRICULUM**

The details of the Curriculum for the DM in Internal Medicine can be obtained from the Department of Clinical Medical Sciences and on the University of the West Indies' website for Post Graduate Studies on this Campus.

## **DM Paediatrics**

### **I. PROGRAMME SUMMARY**

This is a four (4) year Professional and Research Training Programme for qualified medical practitioners. The trainee, on completion of the prescribed courses and passing the specified University examinations, shall be awarded the degree of Doctor of Medicine in Paediatrics and shall be able to practice as an independent consultant in Paediatrics and Child Health.

The programme consists of the following components:

1. *TRAINING*
  - a) Clinical training in accredited Health institutions in Trinidad and Tobago under the supervision of consultants. This shall cover all the fields of Paediatric practice in Hospitals, Primary Health Care facilities and in the Community. The training is achieved while the trainee is actually delivering the service.
  - b) Formal training in the format of seminars and courses most of which is conducted specifically to educate the trainees.
  - c) The trainee should conduct a project under supervision and shall submit a report about it.
2. *EVALUATION*
  - a) The trainee is continuously evaluated on a day-to-day basis by the consultant to whose unit he is assigned and who should submit a written report about the candidate once every three months.



- b. The trainee should complete a course book listing his clinical activities.
- c. The project report shall be assessed by examiners.

3. *EXAMINATION*

- a. At the end of each year of training the trainee shall be promoted to the next year ONLY after satisfying all the continuous training parameters.
- b. The trainee is required to pass the Part I Examination at the end of Year 2 and the Part II Examination at the end of Year 4.
- c. The trainee shall be admitted to the final examination
  - i) after the project report has been accepted
  - ii) after he/she has passed 4 out of 8 Long Case Clinical Examinations in the last 2 years (i.e. years 3 and 4).

**II. AIMS AND OBJECTIVES**

1. *AIMS*

This four (4) year training programme aims to provide the trainee with the knowledge and skills to function competently in General Paediatrics at consultant level. This shall be achieved through adequate experience and training in preventive and curative child health, including the physical, intellectual, emotional and social aspects. Priority is accorded to the major health needs of children in the Caribbean.

2. *OBJECTIVES*

At the end of a successful training programme the trainee shall have obtained:

- advanced training and experience in the diagnosis and management of sick children presenting with physical and psychosocial disorders.
- experience and skills necessary to develop and maintain hospital and community based preventive and curative Child Health services, which are realistically related to the available resources.
- the ability to develop, promote and maintain primary health care services for children and families.
- training and experience in teaching Paediatrics and Child Health to medical students and graduates as well as other members of the health team.
- training in the principles of applied research methodology.
- adequate opportunities to develop leadership qualities with an objective and imaginative approach to Child Health problems within the context of the local customs and practices in

Trinidad and Tobago, the Caribbean and internationally.

**III. COURSE OF STUDY**

1. *DURATION OF THE COURSES AND NUMBER OF ATTEMPTS*

The total duration of training for the DM (Paediatric) Programme is four (4) years: two (2) years for Part One and (2) years for Part Two. However, the trainee may be allowed a maximum of 6 years in the programme, with a maximum of three (3) years and a maximum of two (2) attempts to pass each of the Part One and Part Two Examinations.

2. *DM PART I (YEARS 1 & 2) (MEDC6617)*

2.1 PART I - OBJECTIVES

- 2.1.1 To achieve competence in the diagnosis and management of sick children in hospital through:

acquiring refined skills in history taking and physical examination of children from birth to end of puberty.

being familiar with the continuously changing process of growth and development of children.

obtaining competence in performing the essential diagnostic procedures.  
being able to reach a diagnosis.

acquiring the ability to properly manage paediatric emergencies as well as the common acute and chronic paediatric problems.

- 2.1.2 Obtaining experience and skill in preventive Child Health Services in the hospital and in the community and acquaintance with the system of Primary Health Care as it pertains to children through:

- a. participation in the delivery of routine preventive and curative services offered to children at Primary Health Care Centres for a defined training period.
- b. participation in all screening programmes.

2.2 PART I - TRAINING

- 2.2.1 The trainee shall go through rotations of three months such that at the end of the two years of Part I, he/ she should have spent the following periods in each of the Units listed. This is subject to change depending on the human resources and clinical services demand of the Paediatric Department.

<p>General Paediatrics – three (3) rotations 9 months</p> <p>Neonatology – two (2) rotations 6 months</p> <p>Accident and Emergency – one (1) rotation 3 months</p> <p>Primary Health Care including both curative as Well as preventative services – one (1) rotation 3 months</p> <p>Leave divided in periods of three (3) weeks every 6 months 3 months</p> <p style="text-align: right;">TOTAL: 24 months</p> <p>These rotations shall be spent only in units accredited for such by the Specialty Board in Child Health.</p>	<p>2.3.1..2 To develop expertise in teaching Paediatrics and Child Health through:</p> <ol style="list-style-type: none"> <li>a. training other candidates in the junior years and the interns working under his supervision.</li> <li>b. demonstration of clinical skills to medical students.</li> <li>c. involvement in health education activities.</li> <li>d. delivering seminars to fellow candidates as part of the postgraduate activities.</li> </ol>
<p>2.2.2 During the rotations the trainees are expected to be fully involved in the delivery of clinical services as directed by the Programme Director. This shall include at least a residential on call rota 1 in 4.</p>	<p>2..31..3 To understand the principles of applied research through developing, conducting and reporting the programme project.</p> <p>2.3.1.4 understand leadership abilities through being assigned the responsibility to supervise junior residents and interns and organising their timetables.</p>
<p>2.2.3 The trainees are expected to attend and participate in the postgraduate teaching activities that shall include:</p> <ul style="list-style-type: none"> <li>• Seminar presentations on specified topics.</li> <li>• Clinical case presentations.</li> <li>• Clinical audit.</li> <li>• Clinico radiological sessions.</li> <li>• Clinico pathological conferences.</li> <li>• Grand rounds.</li> <li>• Death conferences.</li> </ul>	<p>2.4 PART II - TRAINING</p> <p>2.4.1 The rotations shall be in three month periods conducted in such a way that at the end of the 2 years the candidate should have spent the following periods in each of the units listed:</p> <p>General Paediatrics – three rotations 9 months</p> <p>Neonatology – one rotation 3 months</p> <p>Accident and Emergency – one rotation 3 months</p> <p>Elective (as specified in the regulation) - two rotations 6 months</p> <p>Leave – divided in periods of 3 weeks every 6 months</p> <p>Each of these shall be spent in an accredited Registrar post.</p>
<p>2.2.4 Establish contact with Research Supervisor to begin discussions on the project.</p>	<p>2.2.2 The candidates are expected to participate fully in the delivery of the clinical services and discharge the duties assigned to them by the Programme Director and the Clinical Supervisor. The duties shall include a residential, 1:4 on call rota.</p>
<p>2.2.5 Each trainee must keep his/her course book up to date with the necessary signatures.</p>	<p>2.2.3 The candidate shall actively participate in all the postgraduate teaching activities.</p>
<p>2.2.6 Attend two accredited intensive courses of one week duration every year.</p>	
<p>2.3 <i>DM PART II (YEARS 3 &amp; 4) (MEDC6622)</i></p> <p>2.3.1 PART II - OBJECTIVES</p>	
<p>2..3.1.1 To further develop the competence in the diagnosis and management of sick children through direct involvement in the delivery of clinical services along similar lines as in 1.2.1. with duties at Registrar level.</p>	

<b>IV. PROGRAMME REGULATIONS</b>		<b>4. VENUE</b>
<b>1. QUALIFICATIONS FOR ADMISSION</b>		
1.1 Candidates must be fully registered medical practitioners in one of the territories of the Commonwealth Caribbean, or in any country associated with The University of the West Indies where the facilities are approved by this institution for a part or the whole of the period of training.		4.1 Neonatology Mount Hope Women's Hospital
1.2 Evidence of qualifications from an institution acceptable to the Faculty of Medical Sciences, The University of the West Indies, must be provided.		4.2 General Paediatrics a) Wendy Fitzwilliam Children's Hospital at Eric Williams Medical Sciences Complex (minimum – one year) b) Paediatric Dept. at San Fernando General Hospital (maximum six months) c) Scarborough Hospital (maximum – 6 months)
1.3 Candidates must have a minimum of one year's experience in the practice of paediatrics. A minimum of six months of this time should be spent in an appointment as a senior house officer or registrar (resident) level at an approved hospital under consultant supervision. Time spent in preventive paediatrics will be recognised for a portion or all of the remaining six months on the recommendation of an approved preceptor. Evidence of satisfactory completion of this twelve months period should be available on request as a prerequisite to sitting the examination.		4.3 Primary Health a) Arima Health Facility b) Couva Health Facility c) Chaguanas Health Facility d) Woodbrook Health Facility e) Princess Elizabeth Home, Port of Spain
1.4 Candidates should have attended an approved graduate course prior to the examination. This may be concurrent with the period of clinical training.		4.4 Accident & Emergency (Paediatrics) a) Eric Williams Medical Sciences Complex b) San Fernando General Hospital
<b>2. DATE OF ENTRY</b>		4.5 The trainee may be permitted to spend a maximum of six months elective period in one or more of the following areas during the third year with a minimum of one month in one discipline provided that the Specialty Board in Child Health has approved the posting beforehand. a) Basic Science b) Pathology c) Microbiology d) Dermatology e) Psychiatry f) Paediatric Surgery g) Child Guidance h) Research
2.1 The date of entry shall normally be the date when the candidate begins to work in a recognised post in a hospital accredited for postgraduate training in Paediatrics. The application to enter the programme may be submitted before securing such a post. The Faculty Committee for Graduate Studies may provide the applicant with a provisional acceptance for entry to the programme contingent on obtaining a recognised post. The Board of Graduate Studies and Research shall determine the applicant's date of entry.		4.6 In each of these rotations the consultant under whom the trainee works shall be assigned as his Clinical Supervisor.
2.5 After an application has been processed by the University, the applicant will be officially informed of the date of entry.		<b>5. PROJECT</b>
<b>3. INTAKE</b>		5.1 The trainee will be required to submit one of the following at the end of the 3rd year of the programme. a) Report on a project of original research in a relevant child health problem. b) Published work in which the trainee has had a substantial contribution and that it shall be acceptable to the Specialty Board. c) A casebook of twenty cases with commentaries.
3.1 A maximum of 4 trainees shall be admitted every year.		

- 5.2 The trainee must make his choice and that choice shall be approved by the Specialty Board before the beginning of the 3rd year.
- 5.3 The Specialty Board shall nominate a supervisor for each trainee to guide him in the conduct of his work.
- 5.4 The work must be submitted to the Specialty Board least 6months before sitting the Part II Final Examination.
- 5.5 The Specialty Board can:
- accept the report and the trainee will proceed to complete his training and apply for the examination.
  - suggest modifications or additions to which the trainee must comply. He can proceed with the training but will not be allowed to write the Part II examination until he has carried out the modifications/additions to the satisfaction of the Specialty Board.
  - reject the report in which case the candidate has to do his project all over again and submit his report. He can proceed with his training but shall not be allowed to write the Part II examination until his project has been accepted.
6. **EXEMPTIONS**
- 6.1 Applicants who have successfully completed one year or more as registered trainees in recognised postgraduate paediatric programmes (e.g. paediatric residency in U.S.A.) and that training was pursued within the last 3 years of application are eligible for exemption of up to one year from this training programme.
- 6.2 Applicants who already obtained the DCH from a recognised institution can be exempted of one year of training.
- 6.3 Applicants with completed qualifications from recognised professional or academic institutions (e.g. MRCPCH) may be exempted from Part I examination of the DM and the first two years of training.
- 6.4 The decision on exemptions and its duration shall be recommended by the Specialty Board to the Sub-committee in Graduate Studies in response to an application by the candidate. The Board also makes the relevant recommendation on which qualifications are accepted for 6:2 and 6:3 above.
7. **CONTINUOUS ASSESSMENT**
- 7.1 DM PART ONE (THE FIRST TWO (2) YEARS)
- 7.1.1 THE EVALUATION PARAMETERS:
- The DM (Paediatrics) Booklet.**
    - Each trainee must obtain a copy of the Training Record for Doctor of Medicine (Paediatrics) Programme, also known as the “DM (Paediatrics) Booklet”, and use it to record all completed training. The Booklet shall be reviewed regularly with the trainee’s postgraduate supervisor (PGS).
    - The Booklet must be submitted at the end of every year for review to ensure that training done by the candidate is adequately and correctly documented.
  - Clinical Rotation.**

The trainee is expected to complete the clinical rotations as in Subsection 2.2 PART I- TRAINING, to the satisfaction of the Clinical Supervisor (CS). These rotations shall include in-patient, out-patient and on-call duties, where the trainee is expected to learn and perform the necessary clinical and technical skills. Towards the end of each rotation the trainee shall collect the “Structured Referee Report” (SRR) from the CHU Office and present it to the relevant CS for completion and sign-off. It is the responsibility of the trainee to submit the signed Report to the CHU Office immediately after the end of the rotation. These rotations must also be entered in the DM (Paediatrics) Booklet where the entries are to be countersigned by the CS. It is expected that the CS shall give the trainee a feedback about his performance during the period.
  - Attendance.**

The trainee is expected to attend all relevant academic sessions and courses, all of which must be recorded in the DM (Paediatrics) Booklet. The trainee should also sign the attendance register for each session/course. The register and the Booklet shall be countersigned by the session/course facilitator.
  - The Mini Clinical Examinations (Mini-CEX).**

Each trainee is expected to perform at least ten (10) Mini-CEX each year, using the official Evaluation Forms (EF). The

- evaluations should be spread over the whole period and conducted by at least three (3) different evaluators. The evaluations should cover all the six components of the EF as well as all the systems e.g. Respiratory, Neurology etc., in addition to at least one long history taking session. Assessments recorded on EFs other than the one recommended by the PSB shall be rejected.
- Trainees are expected to collect the official EF from the CHU Office and present it to the evaluator who shall complete and sign the EF. The evaluator shall then discuss the evaluation with the trainee and return the EF to the trainee. All EFs must be dated and have the names of the evaluator and trainee clearly written. It is the responsibility of the trainee to submit the completed and signed EF to the CHU Office. The trainee is advised to keep a copy of each EF and make sure that the twenty (20) forms submitted cover all the evaluation components as well as all the systems.
- e. **Participation in training of undergraduate medical students.**  
Each trainee is expected to be involved in the training of 4th year medical students as assigned by the CHU Coordinator. Each trainee is also expected to participate at least 5 times each year in the undergraduate End-of-Clerkship Objective Structured Clinical Examinations (OSCE). The trainee shall obtain a document of participation for each OSCE from the CHU Coordinator.
- f. **Case Presentation.**  
Case Presentations are delivered at the Weekly Postgraduate Meeting. Each trainee is expected to present at least one case during the first year and a minimum of three cases over the first two years. Each trainee is expected to submit to the CHU Office a report (maximum one page) of the presentation that must include the name of the trainee, date and time of the session, the diagnosis, the topic reviewed in addition to a brief clinical description of the case. This must be signed by one of the staff members attending the sessions.
- g. **Journal Club.**  
Each trainee must present at least two different articles over the two (2) year-period. The trainee is expected to submit to the CHU Office a report of the presentation (maximum one page) that includes the name of the trainee, date and time of the session, the title of the article, the authors, name of the journal, the year of publication, volume, pagination and a brief summary of the topic presented.
- h. **APLS Course.**  
Each candidate must present, within the first two years of training, a valid APLS Certificate.
- i. **Research Project.**  
DM trainees are required to submit a research thesis before being allowed to appear for the Final Part Two Examination. Each trainee is expected to think about his research as soon as (s)he starts training. It is therefore important to identify a research project and a research supervisor before the end of the first year of training and submit a brief written description of the project before the end of the second year.
- 7.2 *DM PAEDIATRICS PART TWO (AFTER PASSING DM PART ONE EXAMINATION)*
- 7.2.1 THE EVALUATION PARAMETERS:
- a. **The DM Paediatric Booklet.**  
Each trainee must obtain a copy of the Training Record for Doctor of Medicine (Paediatrics) Programme, also known as the “DM (Paediatrics) Booklet”, and use it to record all completed training. The Booklet shall be reviewed regularly with an assigned staff member.
- The Booklet must be submitted every year for review to ensure that every training done by the candidate is adequately and correctly documented.
- b. **Clinical Rotation.**  
The trainee is expected to complete all the clinical rotations stipulated in Subsection 3.2 PART II - TRAINING, to the satisfaction of the Clinical Supervisor (CS).
- This shall include in-patient, out-patient and on-call duties. The trainee is expected to perform the appropriate clinical and technical skills. Towards the end of each

- rotation the candidate shall collect the SRR from the CHU Office and present it to the relevant Clinical Supervisor for completion and sign-off. It is the responsibility of the trainee to submit the Report to the CHU Office immediately after the end of that rotation. These rotations must also be entered in the DM (Paediatrics) Booklet where the entries must be countersigned by the Clinical Supervisor.
- It is expected that the C S shall give the trainee a feedback about his performance during the period.
- c. **Attendance.**  
Each candidate is expected to attend all relevant academic sessions and courses. These should be recorded on the DM (Paediatrics) Booklet. The candidate should also sign the attendance register for each session/course. The register and the Booklet shall be countersigned by the session/course facilitator.
- d. **The Mini Clinical Examination (Mini-CEX).**  
Each trainee is advised to perform as many Mini-CEX over the two-year period using the official Evaluation Form (EF). It is advisable that the evaluations be spread over the whole 2 years and facilitated by as many as possible evaluators, covering all the six components of the Mini CEX EF as well as all the systems e.g. Respiratory Neurology etc. Efforts should be made to have at least two complete History Sessions.
- Each trainee is expected to collect the official EF from the CHU Office and present it to the evaluator who must complete, sign and discuss the evaluation with the trainee and return the EF to the trainee. It is important that all EF must be dated and have the names of the evaluator and trainee clearly written. It is the responsibility of the trainee to submit the completed, signed EF to the CHU Office. The submitted EF will be reviewed for compliance with the stipulated criteria.
- The trainee is advised to keep a copy of each EF and make sure that all the evaluation components as well as all the systems including History are covered.
- e. **Participation in training of undergraduate medical students.**  
Each trainee is expected to be the tutor for a group of 4th year medical students as assigned by the CHU Coordinator. Each candidate is also expected to participate at least 5 times each year as an examiner in the undergraduate End-of-Clerkship Objective Structured Clinical Examinations (OSCE) and obtain a document of participation from the CHU Coordinator.
- f. **Case Presentation.**  
Case Presentations are delivered at the Weekly Postgraduate Meeting. Each trainee is expected to present at least two cases during the Part Two Training period.
- Each trainee is expected to submit to the CHU Office a report (maximum one page) of the presentation which should include the name of the trainee, date and time of the session, the diagnosis, a brief clinical description of the case in addition to the topic reviewed. The report must be signed by one of the staff members attending the session.
- g. **Journal Club.**  
Each trainee must present at least two different articles over the Part Two Training period. The trainee is expected to submit a report (maximum one page) of the presentation that should include the name of the candidate, date and time of session, the title of the article, name of authors, name of the journal, the year of publication, volume and pagination and a brief summary of the topic presented.
- h. **APLS Course.**  
Trainees would have already done the Advanced Life Support Course, but must ensure that the Certificate is still valid.
- i. **The Long Case Clinical Examination.**  
All trainees shall be examined on four long cases each year during their DM Part Two training. The Examination shall be conducted by Examiners appointed by the Paediatric Specialty Board (PSB). At each examination session, the trainee shall be examined on one or two cases by two different examiner panels each consisting of two examiners.



- The trainee shall be assessed using recognized objective methods and the examiners are expected to determine whether the trainee passes or fails the respective case. By the end of Year 4 each trainee would have been assessed on eight Long Cases. A candidate who spends, for any reason, more than two years in the DM Part Two training shall continue to be examined on 4 long cases each year until (s)he appears for the Final Examination. Only the performance in the last two years shall be considered. The candidate is required to pass at least 4 of the 8 Long Case Examinations to be eligible to appear for the Final DM Part II Examination.
- 7.3 *APPLICATION OF THE EVALUATION PARAMETERS*
- 7.3.1 The PSB shall recommend that a trainee progresses to the second year of DM Part One Training, ONLY after ALL of the following criteria are met:
- The DM Paediatric Booklet record of activities reviewed and accepted
  - Satisfactory completion of 12 months of required clinical rotations
  - At least 75% attendance of all required academic sessions/courses.
  - Submission of 10 completed Mini-CEX EFs
  - Evidence of participation in 5 undergraduate End-of-Clerkship OSCEs
  - Presentation of one clinical case at the Weekly Postgraduate Meeting
  - Presentation of one journal topic at the Weekly Postgraduate Meeting
- 7.3.2 The PSB shall recommend that a trainee appear for the DM Part One Examination, ONLY after ALL of the following criteria are met:
- The DM Paediatric Booklet record of activities reviewed and accepted
  - Satisfactory completion of 21 months of required clinical rotations
  - At least 75% attendance of all required academic sessions/courses.
  - Submission of another 10 completed Mini-CEX EFs for this year
  - Evidence of participation in 5 undergraduate End-of-Clerkship OSCEs
  - Presentation of one clinical case at the Weekly Postgraduate Meeting
  - Presentation of one journal topic at the Weekly Postgraduate Meeting
  - Presentation of a valid APLS Certificate.
  - Submission of a written preliminary research proposal
- 7.3.3 The trainee shall be allowed to start his third year training ONLY after passing the DM Part One Examination, or exemption from such training and examination has been granted by the PSB
- 7.3.4 The PSB shall recommend that a trainee who completed his third year training to progress to fourth year training, ONLY after ALL of the following criteria are met:
- The DM Paediatric Booklet record of activities reviewed and accepted
  - Satisfactory completion of 12 months of required rotations
  - At least 75% attendance of all required academic sessions/courses.
  - Evidence of participation in 5 undergraduate End-of-Clerkship OSCEs
  - Presentation of one clinical case at the Weekly Postgraduate Meeting
  - Presentation of one journal topic at the Weekly Postgraduate Meeting
  - Presentation of a valid APLS Certificate
  - Passed at least one of the four Long Cases on which he had been examined during the previous year.
  - Showing evidence that (s)he has obtained ethical clearance for the Research Project and had started data collection.
- 7.3.5 The PSB shall recommend that a candidate appear for the Final DM Part Two Examination, ONLY after ALL of the following criteria are met:
- The DM Paediatric Booklet record of activities reviewed and accepted
  - Satisfactory completion of all required rotations
  - At least 75% attendance of all required academic sessions/courses.
  - Evidence of participation in 5 undergraduate End-of-Clerkship OSCEs
  - Presentation of one clinical case at the Weekly Postgraduate Meeting
  - Presentation of one journal topic at the Weekly Postgraduate Meeting
  - Presentation of a valid APLS Certificate
  - Passed at least four Long Cases out of the eight cases for which he had been examined in the previous two years.
  - Submission of the final thesis report



## 8. EXAMINATIONS

8.1. The DM Paediatric examination consists of two parts. The trainee must obtain approval of the Specialty Board before he can be admitted to either of these parts.

a. **Part I Examination.**

Part I examination is held at the end of the second year.

The trainee must have completed the first part of the training course (2 years) to the satisfaction of the Specialty Board.

The trainee must have passed all his annual clinical examinations.

Part I examination consists of one MCQ paper, a clinical and oral examination.

Part I examination must be passed before proceeding to the second part of the course.

Any trainee failing the Part I examination on two occasions will be asked to withdraw from the programme.

b. **Part II Examination.**

Part II examination is held at the end of the second year of the second part of the course.

The trainee must have passed Part I examination unless he was exempted from that examination by Specialty Board.

Trainee must have completed the prescribed training for the second part of the course (2 years) to the satisfaction of the Specialty Board.

The trainee must have passed at least 4 of the 8 Long Case Examinations.

The project must have been accepted by the Specialty Board.

The trainee must satisfy all The U.W.I. General Regulations.

Part II examination shall consist of two written papers, clinical examination and oral examination.

The Part II examinations should be attempted within one year of acceptance of the project report.

Only two attempts at the Part II examination are allowed.

For details of the regulations governing the conduct of the DM Part I and II Examinations, please refer to the "DM (Paediatrics) Examinations Manual (November 2009)" and the appended changes to these, effective June 2014. (Available in the Child Health Unit)

## DM Psychiatry

### COURSE CODES:

**MEDC 6614 DM Psychiatry Part I Year 1**  
**MEDC 6613 DM Psychiatry Part I Year 2**  
**MEDC 6726 DM Psychiatry Part II Year 3**  
**MEDC 6727 DM Psychiatry Part II Year 4**

### REQUIREMENTS FOR ENTRY

(See General Regulations)

1. Applicants will be eligible for entry after completing their internship and Senior House Officer rotations. Following submission of their applications, candidates may be required to attend an interview to be eligible for selection to the programme.

### DATE OF ENTRY

2. (See General Regulations)

### COURSE OF STUDY

3. This should be read in conjunction with the general regulations - Doctor of Medicine.
4. The DM Psychiatry is a four year graduate course which aims to provide the graduate with the knowledge and skills to function as a consultant equipped for independent practice in hospital-based stand-alone facilities and community mental health.
5. On acceptance to the programme there will be a six month probation period during which the candidate's performance will be assessed at regular intervals. Any candidate who fails the overall assessment during this period of probation will be required to withdraw from the programme.
6. The programme will be a minimum of four years (see exemptions) from the date of entry. Throughout the programme, candidates must hold recognized posts in accredited hospitals or be on an 'elective' approved by the Specialty Board in Psychiatry.

7. The course will be under the general supervision of the Director, nominated by the Head of the Department/Section. Each student will be assigned to a supervisor, who is a member of the Specialty Board. The supervisor will provide academic guidance as to the choice or assignment of rotations and direction in the conduct of their research and all other relevant matters.
8. The Specialty Board is in overall charge of the programme. The Head of Section or nominee chairs the Specialty Board. The sole and final authority on all matters concerning the programme is the Board for Graduate Studies and Research, and the University Senate.
9. The programme consists of two parts, over four years.

#### **PART I (YEAR 1)**

10. During this period, the students will be given instructions in the Basic Medical Sciences (Neuroanatomy, Neurophysiology Psychology).

#### **PART I (YEAR 2)**

11. Entry to the second year of the programme will depend on the recommendation of the Specialty Board based on the continuous assessments and the results of the Year 1 Part 1 (Basic Sciences).
12. During this period, students will be given instructions in Neurology and Psychiatry.
13. By the end of the first semester of Year 2 of the programme, the student will submit to the Specialty Board through his/her supervisor, a project proposal for a research project to be undertaken during Year 3 of the programme.

#### **PART II (YEAR 3)**

14. Admission to Part II of the programme depends upon the student's satisfactory performance in the Part I examination at the end of Year 2 (see below under examinations).
15. During this period, students can undertake an elective of their choice, provided that prior approval is obtained from the Specialty Board. Students are required to carry out their research project during this year.

#### **PART II (YEAR 4)**

16. During this period, the students continue working as a psychiatric resident at an approved general hospital, under supervision. By the end of the first semester of Year 4, the student will submit to the Faculty Committee for Graduate Studies, through the Director of the programme, a final report on his/her research project.
17. Students will only be allowed to sit the final examination at the end of Year 4, after submission and acceptance of the research project.

#### **INSTITUTIONS ACCREDITED FOR LEARNING**

18. A list of accredited hospitals may be obtained from the Graduate Studies Section in of the Dean's Office. Some are accredited only for the first part of the course; others are accredited to provide training in the second part of the course for a specified time.
19. To gain credit for such a period the candidate must submit a satisfactory assessment report from their supervisor.

#### **EXEMPTION**

20. All requests for exemptions should be made in writing by the student to the Specialty Board, and appropriate recommendation will be made to the Campus Committee for Graduate Studies and Research through the Faculty Committee for Graduate Studies. Each case will be considered on its own merit.

#### **VACATION LEAVE**

21. Each DM student must spend 46 weeks each year in the programme and may have a total of six weeks vacation leave per annum (3 weeks in every 6 months). A candidate who has been absent from the programme for more than six weeks in any one year will be considered to have failed to fulfil the programme's requirements for that year and will have to repeat the time of absence.

#### **LEAVE OF ABSENCE**

**(see Manual of Procedures for Graduate Diplomas and Degrees)**

22. A student may apply for leave of absence from the programme for academic or personal reasons. Applications should be submitted through the Specialty Board and the FMS Committee for Graduate Studies to the Campus Committee for Graduate Studies and Research.

The application must be accompanied by a statement of the reason for the application. Appropriate recommendations will be made by the Specialty Board through the Faculty Committee for Graduate Studies, to the Campus Committee for Graduate Studies and Research.

23. Leave of absence shall not be granted for more than one academic year in the first instance. A candidate may apply to the Campus Committee for Leave of Absence for a second year, but further extensions will be at the discretion of the Specialty Board.
24. Students who absent themselves without permission may have their names removed from the register of graduate students.

### **ASSESSMENT**

25. Continuous assessment of the candidate's performance is carried out by his/her supervisor. The supervisor will be a member of the Specialty Board in Psychiatry.
26. If the assessments are found to be unsatisfactory, the Specialty Board may recommend one or more of the following:
  - a. Counseling/academic warning in writing
  - b. Remedial work
  - c. Repeating the unsatisfactory rotations
  - d. Withdrawal from the programme, if poor performance persists
27. The Year 1 Part 1 (Basic Sciences) examination will be held at the end of the Year 1 and candidates are evaluated in the Basic Sciences (Neuroanatomy, Neurophysiology and Psychology).

### **RESEARCH PROJECT**

28. All students must submit a completed research project to the Specialty Board through the Director of the programme, by the end of the first semester of Year 4.
  - a. The research project should be produced based on cases seen and should form a distinct contribution to the knowledge of the subject presented.  
**or**
  - b. A formal research project on an area of interest.
29. The research project must be of satisfactory literary standard and should attain standards suitable for publication in a peer reviewed journal. It should not exceed 20,000 words; a typical report has approximately 12,000 words. The report must follow the University's Guide for the Preparation of Theses, Research Papers and Project Reports.

30. Following the submission of the research project, the examiners may:
  - a. accept the work and the student proceed to the final year of the programme and sit the Part II examination.  
**or**
  - b. accept the work with modification, which must be carried out in the time specified and resubmitted.  
**or**
  - c. reject the work. In this case the student will not be allowed to sit the final Part II examination.

### **EXAMINATION**

31. Before admission to any examination, candidates must be certified by their supervisors as having completed the relevant parts of the programme.
32. Examinations are in two parts, Parts I and Part II, and are normally held once per year in May/June.

### **PART I EXAMINATION (YEARS 1 & 2)**

33. Details of the Part I Year 1 examination are provided in item 27. The Part 1 Year 2 examination is held at the end of the second year. In this examination candidates are assessed in Neurology and Psychiatry. The examination comprises:
  - a. A knowledge based examination in Neurology and Psychiatry consisting of two written papers.
  - b. A clinical/oral examination in Neurology.
  - c. A clinical/oral examination in Psychiatry.

### **PART II EXAMINATION (YEAR 4)**

34. Candidates must have completed the following three (3) requirements before being allowed to sit the Part II examination:
  - a. Satisfactory continuous in-course assessments
  - b. Satisfactory completion of the Part 1 assessment
  - c. Accepted Research Projects
35. The Part II examination is held at the end of the fourth year and candidates are evaluated in Psychiatry. This exam consists of:
  - a. Two written papers
  - b. A clinical examination
  - c. An oral examination based on standardized vignettes or standardized questions.

### FAILURE OF AN EXAMINATION

36. Should any candidate fail the examination at the first attempt, a second attempt must be made within one calendar year of the first attempt. The same applies to the research project.
37. **No student will be allowed more than two attempts at any one examination or more than two attempts at submitting the project report.** Failure after the second attempt will necessitate withdrawal from the programme. Re-admission of candidates will be in accordance with the University Regulations for Graduate Diplomas and Degrees. This also applies to the Research Project.

### DEFERRAL

38. Students are normally expected to present themselves for the first examination being held following completion of the various Parts. In exceptional circumstances (such as ill health), a student may request permission from the Campus Committee for Graduate Studies and Research through the Faculty Committee to defer the date of the first sitting.

### REGISTRATION FOR EXAMINATION

39. Candidates must register for the examination at the appropriate time. Barring medical grounds or other legitimate reasons, candidates must register at the beginning of each academic year, including the third year. Candidates who fail to register will be required to withdraw from the programme. All candidates must conform to the University Regulations on Examinations for Higher Degrees.

### COMPLETION OF THE PROGRAMME

40. A candidate is deemed to complete the programme if they have met the following requirements:
- Year 1- satisfactory performance in the Part 1 Year 1 examination
  - Year 2- Pass all parts of the Part 1 Year 2 examination in the same sitting
  - Research Project - acceptance and submission of corrected project
  - Part II – Pass each written paper, pass the clinical examination and pass the oral examination in the same sitting.

## DM Radiology

### 1. QUALIFICATIONS FOR ENTRY

- 1.1. The applicant should be:  
A graduate in Medicine with acceptable qualifications of a University or a Medical School recognised by The University of the West Indies fully registered in the territory or territories in which training takes place.
- 1.2. Candidates applying for entry to the DM (Radiology) programmes must, in addition to the above requirement, have completed six (6) months in General Medicine, General Surgery or Child Health and have completed at least one year in a clinical position after the internship period.

### 2. COURSE OF STUDY

- 2.1. The DM (Radiology) Programme is divided into two parts:
- Part I (MEDC 6711, 6712, 6713, 6714) (minimum 45 weeks) consists of a course of study and Examination I Radiological Anatomy, Techniques and Practical Procedures, Radiography and Physics and Apparatus Construction. MEDC 6715 a Research Project has to be submitted.
  - Part II (MEDC 6716, 6717, 6718, 6719) (minimum 135 weeks) is training in Diagnostic in the Department and institutions accredited for this purpose including Radiography, Computerised Tomography, Ultrasound, Nuclear Medicine and Magnetic Resonance Imaging.

### 3. ASSESSMENT

- 3.1. Trainees will be assessed at least annually. Those with unsatisfactory records will be encouraged to improve; but if poor performance persists, they will be required to withdraw from the programme
- 3.2. The candidates must have reached a satisfactory standard in each of the course assessment.

### 4. EXAMINATIONS

- 4.1. Part I Examination assesses knowledge and diagnostic skills in the topics described above. It is held at the end of the first year and consists of:
- two written papers
  - an oral examination

- 4.2. Part II Examination is held at the end of the fourth year and covers the trainee's knowledge of the full range of diagnostic investigations and intervention procedures. It consists of:
- two written papers
  - an oral and film-reading examination

**5. EXEMPTION**

- 5.1. Candidates who have completed periods of study in recognised hospitals or institutions may apply to the Speciality Board for exemption from the appropriate section of the programme.

**6. LEAVE OF ABSENCE**

- 6.1 (see Manual of Procedures for Graduate Diplomas and Degrees) A student may apply for leave of absence from the programme for academic or personal reasons. Applications should be submitted through the Specialty Board and the FMS Committee for Graduate Studies to the Campus Committee for Graduate Studies and Research.

The application must be accompanied by a statement of the reason for the application. Appropriate recommendations will be made by the Specialty Board through the Faculty Committee for Graduate Studies, to the Campus Committee for Graduate Studies and Research.

- 6.2. Leave of absence shall not be granted for more than one academic year in the first instance. A candidate may apply to the Campus Committee for Leave of Absence for a second year, but further extensions will be at the discretion of the Specialty Board.

**7. DEFERRAL**

- 7.1 Students are normally expected to present themselves for the first examination being held following completion of the various Parts. In exceptional circumstances (such as ill health), a student may request permission from the Campus Committee for Graduate Studies and Research through the Faculty Committee to defer the date of the first sitting.

**8. FAILURE OF AN EXAMINATION**

- 8.1 Should any candidate fail the examination at the first attempt, a second attempt must be made within one calendar year of the first attempt. The same applies to the research project.

**9. COMPLETION OF THE PROGRAM**

- 9.1 A candidate is deemed to have completed the programme if they have met the following requirements:
- Part 1 Year 1 examination - Pass, Proceed to Part II of the Program
  - Research Project - acceptance and submission of corrected project
  - Part II – Pass each written paper, pass the clinical examination and pass the oral examination in the same sitting.

## MSc Clinical Psychology

**AIMS**

The general aim is to produce graduates with the theoretical knowledge and practical skills to work in a variety of roles and settings within the Caribbean.

**OBJECTIVES**

At the end of the programme candidates should have acquired and demonstrated substantial understanding of, and competence in the following areas:

- the breadth of scientific psychology, its history of thought and development, its research methods, and its applications to the Caribbean situation. (To achieve this end, the students shall be exposed to the current body of knowledge in at least the following areas: biological aspects of behavior; cognitive and affective aspects of behavior, social aspects of behavior; history and systems of psychology in the Caribbean; psychological measurement; research methodology; and techniques of data analysis);
- the scientific, methodological and theoretical principles of major psychological interventions and the practice of professional psychology. (To achieve this end, the students shall be exposed to the current body of knowledge in at least the following areas: individual differences in behavior; human development; dysfunctional behavior or psychopathology; and professional standards and ethics);
- diagnosing or defining problems through psychological assessment and measurement and formulating and implementing intervention strategies (including training in empirically supported procedures). (To achieve this end, the students shall be exposed to the current body of knowledge in at least the following areas: theories and methods of assessment and diagnosis; effective

- intervention; consultation and supervision; and evaluating the efficacy of interventions);
- (d) design and implementation of research. (To achieve this end, the students shall be exposed to the current body of knowledge on ethics in research, conducting clinical research, research methodology and data analysis as well as report writing);
- (e) issues of cultural and individual diversity that are relevant to all of the above; and
- (f) attitudes essential for life-long learning, scholarly inquire, and professional problem-solving as psychologists in the context of an evolving body of scientific and professional knowledge.

- Psychology Research Project- Direct experience of conducting a research project either at an undergraduate level or in subsequent work is required
- Personal Statement- This statement gives you an opportunity to submit information that you would like to have evaluated with your application
- Two Letters of Recommendation. The committee views in-depth letters from persons who know your work in a number of courses or a variety of settings and can attest to your interpersonal attributes and competence as more important than a vague, general letter addressing your competence or academic prowess.
- A curriculum vita listing educational and professional experiences and accomplishments.

### ADMISSION CRITERIA AND REQUIREMENTS

The selection of students for the MSc Clinical Psychology Programme is a lengthy and difficult process as many excellent applications are received annually. Many factors play a role in the selection process including an applicant's academic history, research experience, clinical experience, recommendations, motivation for professional study and promise for the field. Stronger applications will show evidence of a comprehensive educational foundation in Psychology and experience in working (paid or voluntary) with client groups relevant to the practice of Clinical Psychology. Ideal applicants will embody the attributes of emotional maturity, self awareness and interpersonal skills as these are critical prerequisite factors for professional development. The programme does not typically consider applicants currently studying psychology as undergraduates. Short listed candidates will be invited to attend an interview.

The following represents the minimal requirements for admission to the MSc Clinical Psychology programme:

- A Bachelors degree in Psychology from a recognised university with first class honours or good upper second class honours.
- Candidates are expected to have successfully completed courses in the following areas:
  - Research Design/Statistics and Experimental Psychology - competency using statistical software (e.g. SPSS) is expected
  - Developmental Psychology
  - Physiological Psychology
  - Abnormal Psychology
  - Cognitive Psychology

### PROGRAMME DESCRIPTION

This programme extends over two (2) years full-time and consists of fifty-two (52) credits consisting of:

- 10 taught courses
- seminars on Issues of Caribbean Psychology: Ethics and Professional Practice
- a research thesis supervised by a psychologist
- supervised internal and external practicum experiences
- internal clinical supervision

The curriculum which is outlined below, is highly structured, and is designed to maximise the development of professional skills while also developing the student's understanding of fundamental areas in the discipline of psychology.

### COURSE CODES AND CREDITS

#### YEAR I

##### Semester I

Course Code	Course Title	Credits
CLSY6100	Psychopathology	3
CLSY6200	Psychological Assessment – Adult	3
CLSY6300	Clinical Research Skills	3
CLSY6400	Caribbean Psychology	3
CLSY6501	Practicum I – Diagnosis and Assessment of Adult Psychopathology (1 day per week)	1



<b>Semester II</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
CLSY 6201	Psychological Assessment – Child	3
CLSY 6101	Individual Psychotherapy – Research and Theory	3
CLSY 6203	Group Therapy	3
CLSY 6502	Practicum II – Diagnosis and Assessment of Adult and Child Psychopathology (2 days per wk (Summer Session)	2
CLSY 6700	Caribbean Ethics and Professional Practice Seminar- I	1

<b>Summer Session</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
CLSY 6101	Individual Psychotherapy (Continued)	3
CLSY 6503	Practicum III (4 days per week)	4

## **YEAR 2**

<b>Semester I</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
CLSY 6102	Applied Health Psychology	3
CLSY 6103	Clinical Neuropsychology	3
CLSY 6401	Issues of Human Development	3
CLSY 6504	Practicum IV (2 - days per wk, yr long)	7
CLSY 6800	Research Paper	6

<b>Semester II</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
CLSY 6701	Caribbean Ethics and Professional Practice Seminar-II	1
CLSY 6504	Practicum IV (2 - days per wk, yr long)	4
CLSY 6800	Research Paper	6

## **MSc in Palliative Care**

The MSc in Palliative Care is a two-year part-time programme designed to increase the knowledge base of Palliative Care in Trinidad and Tobago and the Caribbean.

### **AIMS AND OBJECTIVES**

This programme will enable students to:-

- Acquire essential knowledge and skills that will prepare them to provide care services for people living with end stage chronic diseases including cancer and end stage organ failure such as renal failure, congestive cardiac failure, liver failure, respiratory failure and the dementias.
- Understand strategies that can be used to ameliorate problems that arise in end of life care.
- Deliver the knowledge and skills for effective healthcare in relation to terminal illness.
- Provide a range of policy perspectives and developments in treatment and care of end stage diseases.

### **1. QUALIFICATIONS FOR ENTRY**

#### **1.1 Admission Criteria to the MSc in Palliative Medicine Programme**

The minimum entry requirement shall be a Lower Second Class Hons degree from a recognized university or its equivalent.

#### **1.2 The programme is relevant for the following categories:**

- Medical doctors,
- Nurses with graduate degrees from a recognized university,
- Registered Nurses with a minimum of five (5) years experience,
- Social Workers with a graduate degree from any recognized university or at least five (5) years experience in palliative care or an allied specialty,
- Mid-level management staff from government ministries, private sector and NGOs, e.g.: individuals working for at least three (3) years as Managers of Hospices related NGOs who have a degree from a recognized university,
- Tutors and Lecturers in training institutions. Mature students with alternative qualifications and considerable work experience will be considered on a case basis.

### **2. DATE OF ENTRY**

The date of entry will normally be in September in conjunction with general regulations.



### 3. COURSE OF STUDY

The duration of the programme is fifty-two (52) weeks part-time (12 hours per week). Candidates must complete all courses as well as either a research project OR a practicum.

### 4. ASSESSMENT

- 4.1 Assessment consists of coursework examinations and end of semester examinations. For all the courses other than the Practicum/Research Project, 50% of the weighting will be from the coursework exams and 50% will be from the semester exams.
- 4.2 A candidate will be deemed to have passed a given course provided that he or she has passed each of the component Coursework and Semester exams for that course.
- 4.3 The Practicum/ Research Project will be weighted as 100% coursework.

Further information on the above-mentioned programme can be obtained from the Department of Clinical Medical Sciences.

## Diploma in the Management of HIV Infection

This is a taught part-time course with the instruction provided by local and international professionals with the necessary expertise in treatment, care and support of PLHA. Teaching methods will be through blended learning and shall include face-to-face, distance learning, debates and team presentations.

### AIMS AND OBJECTIVES

This programme will enable candidates to:-

- Acquire essential knowledge and skills that will prepare them to provide care services for people living with and affected by HIV and AIDS.
- Understand the transmission of HIV and strategies that can be used to prevent its spread.
- Deliver the knowledge and skills for effective healthcare in relation to HIV infection.
- Provide a range of policy perspectives and developments in treatment and care of PLHA.

This programme is relevant for the following categories of individuals:

- Medical doctors, pharmacists and dentists
- Nurses with bachelor degrees from any recognized university
- Registered Nurses with a minimum of three (3) years experience
- Social workers

- Mid-level management staff from government ministries, private sector and NGOs, e.g. individuals working for at least three (3) years as managers of HIV/AIDS related NGOs, counsellors with training or experience in assisting PLHA
- Tutors and lecturers in training institutions

### 1. QUALIFICATIONS FOR ENTRY

- 1.1. Applicants must possess a bachelor's degree in the health related sciences or appropriate social science from an approved university, or equivalent qualification and work experience.
- 1.2. Applicants who may not have a first degree must demonstrate a body of relevant professional experience. In these instances where qualification and experience other than approved degree are being considered, a decision on enrolment will be based on a completed application form, recommendation from employer, a personal letter indicating interest in the field of study, CV information and interview with the potential candidate.

### 2. DATE OF ENTRY

The date of entry will normally be January or September in conjunction with general regulations.

### 3. COURSE OF STUDY

Candidates are expected to complete the programme in one year and are expected to participate on a part-time basis in training for eight (8) hours per week for thirty (30) weeks. The candidates must complete seven (7) core courses in addition to one (1) of the elective courses.

- I. Candidates with medical, social work, pharmacy, dietetics and nursing background will be expected to complete the elective practicum on Treatment and Care, and submit a casebook **OR** complete a research project and submit a dissertation.
- II. Candidates without a medical background will be expected to complete
  - four (4) practicum rotations
  - a Research Project and submit a report/dissertation.

### 4. STRUCTURE OF THE PROGRAMME

#### Semester 1

Course Code	Course Title	Credits
MHIV 5007	Research Methods and Design	2
MHIV 5001	HIV Epidemiology and Pathogenesis	4
MHIV 5002	Laboratory Techniques for Diagnosis of HIV	1
MHIV 5003	General Management of HIV/AIDS	5

<b>Semester 2</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
MHIV 5003	General Management of HIV/AIDS	5
MHIV 5004	HIV Co-Infections and Other Related Issues	5
MHIV 5005	HIV and Health Systems	1
MHIV 5006	Sexual and Reproductive Health	2

<b>Semester 3</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
MHIV 5008	Dissertation	2
MHIV 5009	Practicum	2

## 5. ASSESSMENT

- 5.1. Candidates will be assessed through a combination of formative and summative course assignments.
- 5.2. Dissertation: The aim of this course is to in still scientific research skills to enable the candidate to solve problems using recognised scientific methodologies.
- 5.3. Practicum: The aim of this practicum is to give the candidate hands-on clinical experience in the form of bed-side teaching and dealing with psychosocial issues while attending clinics supervised by consultants and other specialized HIV workers.

## 6. EXAMINATION

Final Course examinations will be held in December and May. Before admission to any examination, candidates must be certified by the programme coordinator as having completed the relevant parts of the courses.

## 7. COMPLETION OF THE PROGRAMME

- 7.1. The Diploma in the Management of HIV Infection (UWI) shall be awarded to students who have successfully completed the seven core and one elective courses.
- 7.2. Students who fail the continuous assessment of any course shall be asked to withdraw from the programme.
- 7.3. Students passing the continuous assessment but failing any end of course examinations shall be eligible for one re-sit of the examination at the next available sitting. This applies to all semesters.

# DEPARTMENT OF CLINICAL SURGICAL SCIENCES

## PROGRAMMES

DM Anaesthesia & Intensive Care, DM Obstetrics and Gynaecology, DM Orthopaedics, DM Surgery, DM Emergency Medicine, MSc Emergency Medicine, Diploma in Emergency Medicine, DM Ophthalmology and DM Otorhinolaryngology (ORL).

## DM Anaesthesia & Intensive Care

**COURSE CODES: MEDC 6671 PART I  
MEDC 6672 PART II**

## PROGRAMME INTRODUCTION

The DM Anaesthesia & Intensive Care is open to registered medical practitioners as an approved residency programme. The required four-year training can be carried out at all Clinical Campuses of the University of the West Indies; or at one or more approved centres. It is a two-part examination programme. The course is intended to prepare candidates for a consultant level anaesthesia and intensive care responsibilities including teaching and research. The part I (MEDC 6671) course has a syllabus which consists of eight modules to be completed over the first two years. The part II (MEDC 6672) covers a further eight modules and requires a research project to be completed over two years.

Candidates seeking entry into any DM programme must be graduates in medicine of a university or medical school recognised by The University of the West Indies, and fully registered in the territory (or territories) in which they want their training to take place. Training normally takes place at The University of the West Indies or at institutions in the contributing countries approved by The University for this purpose. Candidates applying for the DM Anaesthesia & Intensive Care programme must be appointed in the department of Anaesthesia and Intensive Care in any of the hospitals recognised by the University of the West Indies and must have at least one year experience in the specialty.

### 1.0 ENTRY REQUIREMENTS

1.1. The applicant should be:

- a) a graduate in Medicine of a University or Medical School recognized by The University of the West Indies.
- b) fully registered in the territory or territories in which training will take place
- c) Normally candidates will be eligible for entry after gain experience for one(1) year in a recognised post of the specialty.

### 2.0 SELECTION OF CANDIDATES

- a) The date of entry will normally be determined by the date when the candidate begins to work in a recognized post in Anaesthesia in an accredited hospital.
- b) The applicant will be informed of the date of entry by the relevant Campus Registrar.
- c) When applying to the programme, a candidate must furnish evidence of being in a recognized post, and reference certification from his/her supervisor of satisfactory performance.

### 3.0 COURSE OF STUDY

This should be read in conjunction with the general regulations for Doctorate of Medicine.

- a) a) The DM Anaesthesia and Intensive Care programme is a four year graduate course which aims to provide the graduate with the knowledge and skills to function as a Consultant Anaesthetist and Intensivist, equipped for independent practice in hospital-based and stand-alone facilities.
- b) On acceptance to the programme during the first one (1) year period, the candidate's performance will be assessed continuously at regular intervals. At the end of one year, there will be an in-house examination. Any candidate who fails the overall assessment during this period will be required to withdraw from the programme.
- c) The programme will be a minimum of four years (see Exemptions) from the date of entry. At least three years of the programme must be spent in the Commonwealth Caribbean. Throughout the programme, candidates must hold recognized posts in accredited hospitals or be on an 'elective' approved by the Board

for Graduate Studies and Research through the Faculty Committee for Graduate Studies or "equivalent bodies". A minimum of three (3) months in the first two (2) and three months in the last two (2) years must be spent at the University-affiliated hospital of the campus territories. The remaining time may be spent in accredited hospitals.

- d) The course will be administered under the general supervision of the Unit Coordinator, nominated by the Head of the Department and appointed by the Campus Committee for Graduate Studies and Research. The Unit Coordinator will normally be the chair of the Specialty Board in Anaesthesia and Intensive Care. The supervisor will provide academic guidance as to the choice or assignment of rotations, the elective period and direction in the conduct of their research and all other relevant matters.
- e) The Specialty Board in Anaesthesia and Intensive Care is overall in-charge of the programme. The sole and final authority on all matters concerning the programme is the Campus Board for Graduate Studies and the University Senate.
- f) The old DM programme which consisted of three parts: Part I (MEDC 6605), Part II (6615) and Part III (MEDC 6625) has been phased out. Currently there are no students enrolled at St. Augustine Campus remaining in the programme.
- g) Teaching and training in teaching methods and research methodology are integral components of the programme. All trainees should appreciate the need for ongoing research in the field and are encouraged to cooperate with research efforts of department/unit members.
- h) A list of accredited hospitals is given in Section 12 and also may be obtained from the Graduate Studies Section of the Dean's Office. Some are accredited only for the first part of the course; others are accredited to provide training in the second part of the course for a specified time. To gain credit for such a period the candidate must submit a satisfactory assessment report from their supervisor.

#### 4.0 DM ANAESTHESIA AND INTENSIVE CARE PROGRAMMES

##### 4.1 Part I (MEDC 6671)

- a. The Part I is two (2) years in duration. This part focuses on the essentials and basic sciences that underpin the practice of anaesthesia and intensive care. It includes basic and applied physiology, relevant anatomy, basic and clinical pharmacology, basic physics and clinical measurements, equipment and monitoring as well as perioperative assessment and management.
- b. The course content will be covered in modules. The candidate is expected to attend and participate in the postgraduate seminars. There will be regular assessments covering the material of the modules that have been covered in the postgraduate seminars. It will be the discretion of the supervisor and programme coordinator to allow candidates to continue in the programme if they fail more than two assessments.
- c. At the end of the first year, the candidate will have to appear for the common internal examination held across the campuses. This internal examination will determine whether the candidate will be allowed to continue in the programme. A satisfactory performance in this assessment is required before the student is allowed to advance to the second year of the programme.
- d. If a candidate fails this internal Examination, depending on the degree of failure, he/she may be required to:
  - i. undergo remedial study and repeat the examination in 6 months
  - ii. repeat the entire first year and then re-sit the examinationIf the candidate is unsuccessful in the internal examination at the second attempt, then he/she will not proceed to the second year of the programme and will be required to withdraw from the programme.
- e. During the second year, the assessments of the candidate will include course content as well as clinical skills/competency assessments. It will be the discretion of the supervisor and programme coordinator to

approve that the assessments were satisfactory. At the end of the second year, normally one year after satisfactory performance at the internal examination, the candidate will be allowed to take the Part I examination. The scope of the MEDC 6671 examination will encompass the first two years of the curriculum.

- f. During the first year of the programme, the candidates must be exposed to anaesthesia for adult, paediatric and obstetric patients as well as intensive care management. There are some accredited hospitals where only adult patients or only paediatric patients are treated. However, the candidates must spend no less than six (6) months in an accredited multidisciplinary adult hospital and no less than three (3) months in an accredited paediatric hospital. The candidate must also have a minimum of three (3) months exposure to obstetric anaesthesia and should get exposure to intensive care.
- g. A candidate must successfully pass the DM Part I examination (MEDC 6671) before he/she is allowed to advance to the second part of the programme.
- h. If a candidate fails the DM Part I examination (MEDC 6671), he/she may be allowed no more than one more attempt, and in accordance with the recommendation of the Speciality Board of Examiners, the candidate may re-sit the examination
  - i. in six (6) months
  - ii. in one (1) yearIf the candidate is unsuccessful at the second attempt, then he/she will be required to withdraw from the DM programme.

##### 4.2 Part II (MEDC 6672)

- a. The Part II is two years in duration. The Part II (MEDC 6672) examination must be completed within three (3) years of successful completion of the Part I (MEDC 6671).
- b. Part II consists of two years (Years Three and Four) of clinical rotation in an accredited hospital.
- c. The first year is considered an optional "elective" year. During this period, the candidate has the option of working in a

- hospital abroad to gain experience/expertise in a special subject area unavailable in the hospital where he/ she is currently employed. If a candidate chooses to utilize this “elective” period, prior approval must be obtained from the Board of Graduate Studies and Research. Such approval must be obtained at least six months prior to the commencement of the elective period.
- d. During this elective year, a maximum of three (3) months may be spent in a course of study in an affiliated area e.g., research methodology, epidemiology, teaching methods, medical administration etc. provided that prior approval has been obtained from the Specialty Board in Anaesthesia and Intensive Care.
- e. During Part II, clinical rotations through all Anaesthesia subspecialties must be undertaken. These include, but are not limited to, anaesthesia for General, Orthopaedic, Cardiothoracic, Faciomaxillary and Paediatric surgery, Urology, Otorhinolaryngology, Obstetrics, and Gynaecology, Neurosurgery and Ambulatory surgery. Rotation through Intensive Care Unit, Preanaesthetic Outpatient services, Acute and Chronic Pain services are also a requirement. A steady progression of speciality skills, judgement, professional and ethical responsibility and clinical independence is expected over the four years of training.
- f. Candidates are required to undertake an original research project during the period of the Part II clinical rotations. The candidate is required to complete a project report/thesis to be submitted in partial fulfillment of the requirements for the Degree of Doctorate in Anaesthesia and Intensive Care of the University of the West Indies. This is the pre-requisite which must be submitted no later than six (6) months prior to sitting the Part II (MEDC 6672) examination. The Part II examination is normally attempted at the end of the fourth year in the programme.
- g. If a candidate fails the DM Part II examination (MEDC 6672), he/she may be allowed no more than one more attempt and, in accordance with the recommendation of the Speciality Board of Examiners, the candidate may re-sit the examination
- h. in six (6) months
- in one (1) year
  - If the candidate is unsuccessful at the second attempt, then he/she will be required to withdraw from the DM programme.

### 5.0 EXEMPTIONS:

- a. Candidates who have completed periods of study or work experience in recognized hospitals or institutions in non-Commonwealth Caribbean territories may apply to the Campus Committee for Graduate Studies for exemption from an appropriate part of the course. Exemptions in the programme can be recommended by the Specialty Board in Anaesthesia and Intensive Care only after a period of review and assessment of the student’s performance within the programme. Candidates must have achieved the level at which proposed exemptions will put them.
- b. Candidates who hold the Fellowship in Anaesthesia of the British, Irish or Australian college, or the certificate of the American Board of Anaesthesiology or the Fellowship in Anaesthesia of the Royal College of Physicians in Canada or such other degrees or diplomas as the University (the Faculty Committee for Graduate Studies) may accept, may be exempted from Part I examination.
- c. In order for such students to be eligible to sit the Part III examination, they are required to spend a minimum of two (2) years in the programme and fulfill all the requisite aspects of the Part II of the programme i.e. an acceptable research project submitted six (6) months prior to the final examination, an acceptable caselog/minimal competencies and satisfactory assessments.

- d. All requests for exemptions should be made in writing by the student to the University Registrar through the Chairman of the Faculty Committee for Graduate Studies. This request will then be forwarded to the Board of Graduate Studies and Research through the Campus committee.

#### **6.0 VACATION LEAVE**

- a. Each DM student must spend 46 weeks each year in the programme and may have a total of six weeks vacation leave per annum (3 weeks in every 6 months).
- b. A candidate who has been absent from the programme for more than six weeks in any one year will be considered to have failed to fulfill the programme's requirements for that year and will have to repeat the time of absence.

#### **7.0 LEAVE OF ABSENCE**

##### **(See Manual of Procedures for Graduate Diplomas and Degrees)**

- a. A candidate may apply for leave of absence from the programme for academic or personal reasons. Application for leave of absence should be addressed to the Chairman of the Campus Committee, through the Faculty Committee for Graduate Studies after approval by the Specialty Board. The application must be accompanied by a statement of the reason for the application.
- b. Leave of absence shall not be granted for more than one academic year in the first instance. A candidate may apply to the Campus Committee for Leave of Absence for a second year, but further extensions will be at the discretion of the Board.
- c. Students who absent themselves without permission may have their names removed from the register of graduate students.

#### **8.0 ASSESSMENT:**

- a. Continuous assessment of the candidate's performance is carried out by his/her supervisor and recorded every 6 months. The supervisor will be a member of the Specialty Board in Anaesthesia and Intensive Care.

- b. If the assessments are found to be unsatisfactory, the Specialty Board may recommend one or more of the following:
  - i. Counseling/academic warning in writing
  - ii. Remedial work
  - iii. Repeating the unsatisfactory rotations
  - iv. Withdrawal from the programme, if poor performance persists
- c. Research Project Report
  - i. All students must submit a research project to the Campus Committee for Graduate Studies through the Unit Coordinator of the Postgraduate programme, at least six months before the final Part II examination (MEDC 6672).
  - ii. This should form a distinct contribution to the knowledge of the subject presented. It must be of satisfactory literary standard and should attain standards suitable for publication in a peer reviewed journal. It should not exceed 20,000 words but must not be less than 8,000 words and must follow the University's Guide for the Preparation of Theses, Research Papers and Project Reports.
  - iii. The review of the literature should not be more than 25% of the project report.
  - iv. The Research Project must have been previously agreed on by the Specialty Board and must be carried out under the guidance of a supervisor appointed by the Campus Committee for Graduate Studies on the recommendation of the Specialty Board.
  - v. The reference style used will follow the West Indian Medical Journal (WIMJ) guidelines available under instructions for Authors on the WIMJ website. This entails quoting the references in the text as Arabic numerals within plain brackets (no square brackets or superscripts).



- vi. The research project/project report must be typewritten and printed on one side only of good quality white bond paper (usually of 20lb. weight) 8½"x 11" (Standard Letter Size), with left hand margin of 2". The top, bottom and right hand margins should not be less than 1". The same grade of paper should be used throughout the report.
- vii. Students are advised to discuss the preparation of the research project with their Supervisor(s) while in preparation and should not wait until it is completed. This project offers the students the opportunity to study in detail, conditions of their own choice and to express views based on personal investigation and on review of the literature. From these project reports, the examiners will assess the critical faculties, powers of observation and the level of evaluation of various techniques used in anaesthesia &/ or intensive care by the students.
- viii. The submission dates for the research project are as follows:
- For DM students sitting the May/June examination- December 15
  - For DM students sitting the November/December examination- June 15
- ix. Following the submission of the work, the examiners may:
- accept the work and the student may proceed to the examinations or
  - accept the work with modification, which must be carried out in the time specified and resubmitted or
  - reject the work with recommendations regarding changes, additions, or revisions necessary for acceptance. A date for resubmission will be determined by the examination board in Anaesthesia and Intensive Care.
- d. The research project report should be submitted for assessment at least six months before the date of the final examination. Acceptance of the project report is a prerequisite to proceed to the final examinations. If the work is found to be unsatisfactory and requires major changes, the students will not be allowed to sit the final examination and will be deferred until the next sitting provided that the resubmission is accepted. The Part II (MEDC 6672) examination must be attempted for the first time within one year of the acceptance of the research project report.
- e. Case log & minimal competencies  
Students are required to keep a record of all anaesthesia and intensive care procedures performed. In addition they are required to complete a predetermined list of minimal competency in cognitive and procedural skills felt to be fundamental to the training of specialists in anaesthesia and intensive care.
- f. The following three (3) requirements must be completed before the Part III examination:
- A satisfactory standard of in-course assessments
  - Case log & minimal competencies
  - Research Project report

## 9.0 SYLLABUS

9.1 A detailed syllabus for the course is available from the UWI Anaesthesia and Intensive Care Unit.

## 10.0 EXAMINATIONS

- a. Students are normally expected to present themselves for the first examination being held following completion of the various Parts. In exceptional circumstances (such as ill health), a student may request permission from the Board for Graduate Studies and Research to defer the date of the first sitting.
- b. Students who have deferred sitting of an examination must sit the examination within one year of the deferral being approved.



- c. Candidates must register for the examination at the appropriate time.
- d. Before admission to any examination, candidates must be certified by their supervisors as having completed the relevant parts of the programme.
- e. Should any candidate fail the examination of any Part at the first attempt, completion of this part must be within one calendar year of the first attempt.
- f. No student will be allowed more than two attempts at any one examination. A candidate who fails the second attempt will be required to withdraw from the programme. Re-admission of candidates will be in accordance with the University regulations for Graduate Diplomas and Degrees.
- g. Examinations are normally held twice per year in May/June and November/December. The hosting of the clinical component and the oral examinations is rotated amongst the three University campuses.
- h. The DM (Anaesthesia & Intensive Care) programme will normally last four years. During the four years after enrolling in the DM programme, a successful candidate will normally take the common cross-campus internal examination at the end of the Year ONE. At the end of Year TWO, one year after successful completion of internal exam, the successful candidate will normally take the Part I (MEDC 6671) examination. At the end of Year FOUR, two years after successful completion of the Part I exam, the successful candidate will normally take the Part II (MEDC 6672) examination. The candidate must fill the other requirements as set out by the Speciality Board in order to be allowed to take the examinations.
- i. Internal examination
  - a. The internal examination will normally be attempted at the end of Year ONE.
  - b. The internal examination will be held in all the three Campuses on the same day.
- c. If the candidate fails this examination, he/she will be allowed no more than one more attempt/ re-sit of the examination in six (6) months but no later than one (1) year after failing the internal examination.
- d. A candidate who fails the internal examination for a second time will be required to withdraw from the programme. There will be no more attempts allowed for this examination.
- j. The Part I (MEDC 6671) examination
  - i. The Part I examination will normally be attempted at the end of Year TWO.
  - ii. The Part I examination comprises of a written paper and a multiple choice (MCQ) paper and an oral examination.
  - iii. Candidates will be invited to the oral examination depending on their performance in the MCQ paper. Candidates receiving a mark of less than 45% in the MCQ paper will not be invited for the orals as this represents an irretrievable situation.
  - iv. Continuation of a candidate in the training programme will be dependent on the recommendation of the Specialty Board, based on his/her continuous assessments and the results of the Part I examination.
  - v. If the candidate fails the Part I examination, he/she may be allowed, no more than one more attempt/ re-sit of the examination, in accordance with the recommendation of the Speciality Board, in six (6) months or one (1) year after failing the examination.
  - vi. If the candidate is unsuccessful at the second attempt of the Part I examination, then he/she will be required to withdraw from the DM programme.
- k. The Part II (MEDC 6672) examination
  - i. The Part II examination will normally be attempted at the end of Year FOUR.
  - ii. The research project report must be submitted no later than six (6) months prior to the Part II examination. The project report must be accepted before the candidate can proceed to the Part II examination.

- iii. The Part II (MEDC 6672) examination comprises of two written papers, a clinical and an OSCE type examination and an oral examination.
  - iv. The candidate must sit the Part II examination within one (1) year of acceptance of the research project report. The candidate must sit the Part II examinations within 3 years of passing the Part I examination.
  - v. Candidates MUST pass ALL papers/ components of the examination to be deemed an overall pass, regardless of the cumulative score. However a score 47.5% or more but less than 50% in one component (except in the clinicals) is redeemable provided the performance in the other components is above average.
  - vi. If the candidate fails the clinical examination, the candidate CANNOT PASS the Part II (MEDC 6672) examination, even if he/she has passed the other components of the examination.
  - vii. If the candidate fails the Part II examination, he/she may be allowed, no more than one more attempt/resit of the examination, in accordance with the recommendation of the Speciality Board, in six (6) months or one (1) year after failing the examination.
  - viii. If the candidate is unsuccessful at the second attempt of the Part II examination, then he/she will be required to withdraw from the DM programme.
- I. Candidates must conform to the University Regulations on Examinations for Higher Degrees. Any further examination details can be obtained from the UWI Anaesthesia and Intensive Care Unit.

## 11.0 COMPLETION OF THE PROGRAMME

- a. Students will be considered as having successfully completed the programme when the following FOUR requirements have been met:
  - i. Satisfactory performance of all rotations
  - ii. Acceptance of their certified case log/minimal competencies
  - iii. Acceptance of the Research Project
  - iv. Satisfactory performance in the Part I (MEDC 6671) and Part II (MEDC 6672) examinations
- b. Failure to complete the programme in the prescribed time periods will require withdrawal from the programme

## 12. LIST OF ACCREDITED HOSPITALS

### TRINIDAD

- Port of Spain General Hospital
- San Fernando General Hospital
- Eric Williams Medical Sciences Complex
- Mount Hope Women's Hospital (approved only Part I - 3mths, Part II - 6mths)
- Scarborough General Hospital (approved for only Part I)
- Sangre Grande Hospital (approved for only Part II)

### JAMAICA

- University Hospital of the West Indies (UHWI)
- Kingston Public Hospital (KPH) (Residents employed at this hospital must spend three months at Bustamante Hospital for Children (BHC) in the 1st year and six months at UHWI in the 2nd or 4th years).
- Bustamante Hospital for Children (Residents employed to this hospital must spend six months at UHWI or KPH during the 1st year, and a further six months at UHWI in the 2nd or 4th years)
- Cornwall Regional Hospital (CRH) (accredited for six months during first year only).

### BARBADOS

- Queen Elizabeth Hospital (QEH)

# DM Obstetrics and Gynaecology

**COURSE CODES: MEDC 6630 PART I  
MEDC 6635 PART II**

## INTRODUCTION

The doctor of medicine degree in Obstetrics and Gynaecology (DM) is one component of a wider graduate programme in Obstetrics and Gynaecology delivered by the Faculty of Medical Sciences, The University of The West Indies, St Augustine.

A candidate who has been successful in the DM part 2 final examinations and has fulfilled the relevant university's criteria would be awarded the degree of doctor of medicine (Obstetrics and Gynaecology).

The full range of options for training in obstetrics extends over four (4) years and the Doctorate Degree makes the doctor eligible for consultant status in the sociality of Obstetrics and Gynaecology. The course requirements are similar to those for membership in the Royal College Obstetricians and Gynaecologist. Clinical work in the Department covers a wide range of operative procedures, medical and surgical disorders and obstetric abnormalities. There are organised ward rounds, tutorials, lectures and pathology and perinatal mortality conferences.

## AIMS AND OBJECTIVES

The aim of the Doctor of Medicine is to train doctors in the specialty of Obstetrics and Gynaecology to a level that allows them to provide clinical support and administrative leadership to Obstetrics and Gynaecology. Successful D.M. candidates will practice at the level of consultants in Obstetrics and Gynaecology.

## 1. EXAMINATION

The examination consists of:

- Part I (MEDC 6630) - Examination in the Basic Sciences of Physiology, Anatomy, Pathology, Embryology, etc.
- Part II (MEDC 6635) - Written papers in Obstetrics and Gynaecology, Clinical and Oral Examinations and the presentation of a book case records and commentaries.

Further details on this programme are available from the Department of Clinical Surgical Sciences.

## 2. QUALIFICATIONS FOR ENTRY

The applicant should be:

- a. a well-rounded medical graduate of The University of the West Indies or a University or Medical School recognized by The University of the West Indies.
- b. fully registered in the territory or territories in which training will take place.
- c. employed by the respective Ministry of Health or Regional Health Authority especially in territories where there is no The University of the West Indies teaching hospital
- d. working in the Department of Obstetrics and Gynaecology at recognized teaching institutions of The University of the West Indies.
- e. must have worked for at least one year after internship in a related field of Medicine such as General Surgery or Paediatrics.

## 3. STRUCTURE OF DM PROGRAMME IN OBSTETRICS AND GYNAECOLOGY (UWI)

- Spread over four years' post-internship
- Using a modular (or block) approach
- Vertical strands linking the various modules or blocks from Year 1-4

## 4. COMPONENTS

- 1) Core curriculum- 'need to know'
- 2) Intergrated, concurrent or sequential elective(s)

## 5. CORE CURRICULUM

- Building on prior learning (constructivist approach)
- Integration of the required competencies, skills, knowledge and attitudes required of a generalist obstetrician and gynaecologist with essential Basic Sciences.
- Assessment using a multi-modal approach; application of instruments that are valid, reliable and practical.

## 6. ELECTIVES

This may be in the form of a Block (sequential) in the Year 3 or it may be a concurrent or integrated elective.

**7. RATIONALE FOR ELECTIVE(S)**

- To create an opportunity for further study in an area of interest.
- To spend time abroad whether in the region or elsewhere to broaden ones' experience
- To participate or collaborate in research or audit
- To provide a foundation for sub-specialty training post DM.
- To pursue another degree or course, for example, MBA or Medical Education.
- To 'make-up' or 'catch-up' in areas of weaknesses in core.

**8. STRUCTURE OF CURRICULUM**

**Year 1:** Foundation: General Overview of Obstetrics and Gynaecology and Relevant Basic Sciences

**Year 2:**

- 2A** Development of Investigative and Surgical Skills 1.
- 2B** Obstetrics 1: Common Obstetrical Problems.
- 2C** Gynaecology: Common Gynaecological Problems.

**Year 3:**

- 3A** Reproductive Endocrinology
- 3B** Advanced Investigative and Surgical Skills 2
- 3C** Project/ Electives

**Year 4:**

- 4A** Obstetrics 2: Advanced Obstetrics
- 4B** Gynaecological Oncology
- 4C** Urogynaecology

**9. LEARNING OUTCOME OF A DM SPECIALIST OBSTETRICIAN AND GYNAECOLOGIST**

1. To provide 'high-quality' care in Obstetrics and Gynaecology as a Generalist (Service provide and professional)
2. To create a lifelong long learner with critical thinking, problem -solving, clinical reasoning, time management and prioritizing skills; and to engender a feeling of self-efficacy.
3. To establish a foundation for subspecialty training as needed, be a patient advocate, demonstrate managerial and administrative capabilities.
4. To be a teacher, trainer and have skills in research

5. To be aware of the relevance of clinical governance in practice, create guidelines and protocols and have skills in stress management
6. To utilise as far as possible EBM in administering health care to clients, be a collaborator and effective communicator
7. Always maintain patient's confidentiality, be well informed concerning medico-legal issues and keep
8. Abreast with development in Medicine especially Obstetrics and Gynaecology, e.g. stem cell research, gene therapy, molecular basis of disease.

**10. ASSESSMENT**

Assessments are designed to test students' attainment with regards to core Knowledge, skills, attitudes and competencies.

- (1) Formative (continuous) or ongoing) assessment with relevant, effective and timely feedback.

**SUMMATIVE ASSESSMENT**

Two Final Examinations:

- (1) Doctor of Medicine (DM) Part 1  
Written paper: Multiple Choice Questions (MCQs), Extended Matching Items (EMIs), Structured Answer Questions (SAQs).  
Candidates must pass both Papers (1 and 2) to be awarded a Pass. Candidates are eligible to sit the DM Part 1 Examination after a minimum of 12months from the date of registration/entry into the DM programme.

Maximum number of attempts at DM Part 1 is two. There would no longer be an Oral Examination at the DM Part 1 Level for borderline or failing candidates.

- (2) Doctor of Medicine (DM) Part 2 (One in Obstetrics and the other in Gynaecology)  
Consists of Two Written Papers and Structured Extended Oral Examination (SEOE)  
The part 2 Examination must be attempted for the first time, 3 years after successfully completing the Part 1 Examination.

The traditional Case-Book may be amended to include a detail account of research project in the form of a prospective study instead of commentary which is usually in the form of a review of the literature. The study should commence immediately after the candidate passes the DM Part 1 Final Examinations. The title of the study as well as the methodology

would be determined by the candidate in collaboration with his or her supervisor. It should be the intention that this study should be published in a refereed journal.

Case book should include only a short description of up-to-date hospital statistics (such as annual report), with comparison on national and/or regional figures, description of standard procedures with a focus on safety and governance. Case book must also include ten Obstetrics and ten Gynaecology cases managed by the candidate.

### **11. LEAVE OF ABSENCE**

**(See Manual of Procedures for Graduate Diplomas and Degrees)**

A student may apply for leave of absence from the programme for academic or personal reasons. Applications should be submitted through the Specialty Board and the FMS Committee for Graduate Studies to the Campus Committee for Graduate Studies and Research.

The application must be accompanied by a statement of the reason for the application. Appropriate recommendations will be made by the Specialty Board through the Faculty Committee for Graduate Studies, to the Campus Committee for Graduate Studies and Research.

Leave of absence shall not be granted for more than one academic year in the first instance. A candidate may apply to the Campus Committee for Leave of Absence for a second year, but further extensions will be at the discretion of the Specialty Board.

Students who absent themselves without permission may have their names removed from the register of graduate students.

### **12. DEFERRAL**

**(See Manual of Procedures for Graduate Diplomas and Degrees)**

Students are normally expected to present themselves for the first examination being held following completion of the various Parts. In exceptional circumstances (such as ill health), a student may request permission from the Campus Committee for Graduate Studies and Research through the Faculty Committee to defer the date of the first sitting.

### **13. WITHDRAWALS**

**(See Manual of Procedures for Graduate Diplomas and Degrees)**

Students may withdraw from the programme after having a consultation with the programme coordinator. The students will then be required to complete a voluntary withdrawal form and attach it to a cover letter which must be processed in the Department, Faculty and finally Graduate Studies.

## **DM Surgery (Orthopaedics)**

**COURSE CODES: MEDC 6607 PART I  
MEDC 6619 PART II**

### **PROGRAMME INTRODUCTION**

The DM in Orthopaedics programme is a six (6) year graduate course which aims to provide the candidate with the knowledge and skills to enable independent specialist orthopaedic practice.

#### **1. EXEMPTION**

Exemption from Part I may be granted to the candidates depending upon their qualifications and experience.

#### **2. EXAMINATION**

Before admission to the examination, candidates must be certified by their Supervisors stating that the course of training necessary to sit that examination has been satisfactorily completed.

#### **PART I**

The Part I examination will consist of a Written and Oral component of the following:

Section A – Principles of Surgery

Section B – Anatomy, Basic Pathology,  
Microbiology, Physiology (Including  
Biochemistry)

The students must pass Section A and at least two (2) parts of Section B to qualify for entry into the second part of the programme.

Students must sit the Part I Examination no later than two and a half years (2 1/2) after entering the programme.

Students who have not completed the Part I examination within one (1) calendar year of the last sitting of the examination will normally be required to withdraw from the programme. Students who do not pass Part II within five (5) years of completion of Part I will normally be required to withdraw from the programme.

**Students will not usually be allowed more than two (2) attempts at any one examination.** Failure at the second attempt will necessitate withdrawal from the programme. The student may not reapply to the programme after withdrawal. Both parts of the DM (Orthopaedics) programme have separate examinations.

*Further details on this programme are available from the Department of Clinical Surgical Sciences.*

### **1.0 QUALIFICATIONS FOR ENTRY**

- 1.1 The applicant should be:
- A graduate in medicine of a University or Medical School recognised by the University of the West Indies.
  - Fully registered in the territory or territories in which training will take place
- 1.2 Applicants for entry to the DM programme in Orthopaedics must in addition to the requirements set out in paragraph 1.1 have completed twelve (12) months at House Officer level in an approved post, of which at least six (6) months must have been in Orthopaedics with the remaining period in Accident and Emergency, General Surgery, Neurosurgery or Urology.
- 1.3 The applicant should show evidence of having successfully completed an Advanced Trauma Life Support (ATLS) course as well as a Basic Surgical Skills (BSS) course.

### **2.0 DATE OF ENTRY: JULY 1**

- 2.1 The date of entry will normally be determined by the date when the applicant begins work in a recognised post in an accredited hospital. An applicant may apply to enter the programme before (s) he secures such a post.
- 2.2 (S)he may then receive form the School of Graduate Studies and Research provisional acceptance for entry to the programme contingent upon his/her obtaining an accredited post.
- 2.3 After the applicant has secured such a post, the date of entry will be determined by the School of Graduate Studies and Research.

### **3.0 COURSE OF STUDY**

**This should be read in conjunction with the general regulations – Doctorate of Medicine**

- 3.1 The Programme consists of two Parts
- 3.1.1 Part 1 (2 years)  
This is common with the DM in General Surgery: Residents will rotate through any six to eight (6-8) of the following specialties for a period of three (3) months each:
- General Surgery
  - Accident and Emergency
  - Neurosurgery
  - Cardiothoracic Surgery
  - Orthopaedic Surgery
  - Paediatric Surgery
  - Plastic Surgery
  - Urology
  - Otolaryngology
  - Anaesthetics/ICU
- 3.2 A maximum of six (6) months may be spent in either: The Basic Medical Sciences Department of the University of the West Indies (Unit of Anatomy, Biochemistry or Physiology)  
**or**  
The Department of Pathology in Port of Spain General Hospital, San Fernando General Hospital or the Eric Williams Medical Sciences Complex in an approved research project provided that prior approval for the research project has been obtained from the Specialty Board in Surgery.
- 3.2.1 Part 2 (4 years)  
During the second part of the programme the resident will be expected to remain within the speciality of Orthopaedics. S(he) will spend a minimum of six (6) months but not exceeding twelve(12) months on one unit. It is expected that during this time s(he) will have exposure to the following:
- Trauma
  - Joint Reconstruction
  - Paediatric Orthopaedics
  - Sports Medicine
  - Spine
- 3.3 Training will normally take place at the following approved institutions:
- Eric Williams Medical Science Centre
  - Port of Spain General Hospital
  - San Fernando General Hospital
  - Sangre Grande Hospital (6 months ONLY)



3.4 An elective period of up to twelve (12) months may be spent at institutions abroad approved by the School for Graduate Studies and Research, provided that prior approval has been obtained from the Board. This elective is restricted to the penultimate year, and institutions may be recognised for part or all of the time spent there during this period.

3.5 Residents may be allowed up to twelve (12) months of Out of Programme Experience at an institution that is not approved for training but which may nevertheless provide good surgical experience. This time will not count towards residency training and it is expected that s(he) will resume training in an approved institution at the end of this period.

#### **4.0 VACATION LEAVE**

4.1 Each resident may have a total of six (6) weeks vacation leave per annum (3 weeks in every 6 months)

4.2 A resident who has been absent from the programme for more than six weeks in any one year will be considered to have failed to fulfill the programme's requirements for that year and will have to repeat the time of absence.

#### **5.0 LEAVE OF ABSENCE**

**(See Manual of Procedures for Graduate Diplomas and Degrees)**

5.1 A resident may apply for leave of absence from the programme for academic or personal reasons. Application for leave of absence should be addressed to the Chairman of the Campus Committee, through the Faculty Committee for Graduate Studies after approval by the Specialty Board. The application must be accompanied by a statement of the reason for the application.

5.2 Residents who absent themselves without permission may have their names removed from the register of graduate students.

#### **6.0 ASSESSMENT**

6.1 Residents are subject to continuous work place based assessment (WPBA) of performance by their supervisor. The Annual Review of Competence Progression (ARCP) will form the basis of progression within the programme. Residents are expected to have the following documents available for assessment:

- a. Current Curriculum Vitae
- b. Log Book

c. Completed Assessment Forms

6.2 If the assessment is found to be unsatisfactory, the Speciality Board may recommend one or more of the following:

- a. Counselling/Academic warning in writing
- b. Remedial work
- c. Repeating of the unsatisfactory rotations
- d. Withdrawal from the programme, if poor performance persists

6.3 All DM II residents are expected to sit the American Association of Orthopaedic Surgeons (AAOS) Orthopaedic In Training Examination (OITE) as part of their continuous assessment.

6.4 All DM residents are expected to take part in the following activities:

- a. Journal Club Meetings
- b. Multidisciplinary Team Meetings
- c. Morbidity and Mortality Meetings
- d. Teaching of Undergraduates
- e. Attendance at local, regional and international courses and conferences

#### **7.0 RESEARCH PROJECT**

All residents must submit to the Campus Committee for Graduate Studies through the Unit Coordinator of the Postgraduate Programme, at least six months before the final Part II examination,

- a. A research project. This should form a distinct contribution to the knowledge of the subject presented. It must be of satisfactory literary standard and should attain standards suitable for publication in a peer reviewed journal. It should not exceed 20,000 words but must not be less than 8,000 words and must follow the University's Guide for the Preparation of Theses, Research Papers and Project Reports.
- b. The review of the literature should not be more than 25% of the project report.
- c. It must have been previously agreed on by the Specialty Board and the project carried out under the guidance of a supervisor appointed by the Campus Committee for Graduate Studies on the recommendation of the Specialty Board.
- d. The research project/project report must be typewritten and printed on one side only of good quality white bond paper (usually of 20lb weight) 8½" X 11" (Standard Letter Size), with left hand margin of 2". The top, bottom and right hand margins should not be less than 1". The same grade of paper should be used throughout the report.



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|--|--|
| <p>e. Residents are advised to discuss the preparation of the research project with their Supervisor(s) while in preparation and should not wait until it is completed. This project offers the students the opportunity to study in detail, conditions of their own choice and to express views based on personal investigation and on review of the literature. This research project could be later developed for publication. From these records, the examiners will assess the critical faculties, powers of observation and the level of evaluation of various techniques used in orthopaedics by the residents.</p> | <p>11.2 The resident must pass Section A and at least two (2) parts of Section B to enter into the second part of the programme.</p>   |
| <p>f. Following the submission of the work, the examiners may:</p> <ul style="list-style-type: none"> <li>i. accept the work and the resident proceed to the examinations</li> <li>ii. accept the work with modification, which must be carried out in the time specified and resubmitted</li> <li>iii. reject the work with recommendations regarding changes, additions, or revisions necessary for acceptance. The resident will not be allowed to sit the final examination and a new date will be set.</li> </ul>   | <p>11.3 Residents must sit the Part 1 Examination no later the two and a half years (2 ½) after entering the programme.</p> <p>11.4 The following four (4) requirements must be completed before the Part II examination:</p> <ul style="list-style-type: none"> <li>a. A satisfactory standard of in-course assessments</li> <li>b. Log book</li> <li>c. Completed Case Book</li> <li>d. Completed Research Project</li> </ul>  |
| <p>g. The Part II examination must be attempted for the first time within one year of the acceptance of the research project.</p>  | <p>11.5 Residents must conform to the University Regulations on Examinations for Higher Degrees. Any further details can be obtained from the UWI Orthopaedic Unit.</p> <p>11.6 The Part II examinations are taken at the end of a minimum of four (4) years after passing the Part I examination. It consists of the following:</p> <ul style="list-style-type: none"> <li>a. Assessment of <ul style="list-style-type: none"> <li>i. Log Book</li> <li>ii. Case Book</li> <li>iii. Research Project</li> </ul> </li> <li>b. Written Papers 1 and 2</li> <li>c. Oral Examination</li> </ul> |
| <p><b>8. LOG BOOK</b></p> <p>8.1 Residents are required to keep a record of all orthopaedic procedures performed in the format of the Royal College of Surgeons e Logbook.</p>   | <p>11.7 Residents must pass all components of the Part II examination.</p>   |
| <p><b>9. CASE BOOK</b></p> <p>9.1 A series of ten (10) cases with commentaries must be submitted. These cases should be presented in a case report type format.</p>  | <p>11.8 Residents who have not completed the Part I or II examination within one (1) calendar year of their last sitting of the respective examinations will normally be required to withdraw from the programme.</p>  |
| <p><b>10. SYLLABUS</b></p> <p>10.1 A detailed syllabus for the course is available from the UWI Orthopaedic Unit at Port of Spain General Hospital</p>   | <p>11.9 Residents will not usually be allowed more than two (2) attempts at any one examination. Failure at the second attempt will necessitate withdrawal from</p>  |
| <p><b>11. EXAMINATIONS</b></p> <p>11.1 The Part I examination is taken at the end two (2) years and consists of a written paper and oral examination in the following disciplines:</p> <ul style="list-style-type: none"> <li>Section A: Principles of Surgery</li> <li>Section B: Anatomy<br/>Physiology<br/>Pathology</li> </ul>   | <p>11.10 Residents may not reapply to the programme after withdrawal.</p>  |

## 12. COMPLETION OF THE PROGRAMME

- 12.1 Residents will be considered as having successfully completed the programme when the following four (4) requirements have been met:
- Satisfactory performance of all rotations
  - Acceptance of the certified Log Book
  - Acceptance of the Case Book
  - Acceptance of the Research Project
  - Satisfactory performance in the Part I and II examinations

- 12.2 Failure to complete the programme in the prescribed times will require withdrawal from the programme.

Studies and Research provisional acceptance for entry to the programme contingent upon his/her obtaining an accredited post. After the candidate has secured such a post, the date of entry will be determined by the School of Graduate Studies and Research.

- 2.3. After the application has been processed by the University, the applicant will be officially informed of the date of entry by the Campus Registrar.

## 3. COURSE OF STUDY

- 3.1. The programme consists of two parts: The first part of the programme normally occupies two years. The Part I examination is taken at the end of two year. The second part of the programme, normally of these three years duration, is normally spent exclusively in the speciality. A maximum of one year may be spent in an approved training programme at another institution (regionally or internationally) provided there have been satisfactory in-course assessments.

- 3.2. During the first part of the course, a maximum of six months may be spent in the Department of Preclinical Sciences (Unit of Anatomy, Biochemistry, or Physiology), in the Unit of Pathology, Department of Para-clinical Sciences, or in an approved research project, provided that prior approval has been obtained from the School of Graduate Studies and Research.

- 3.3. During the second part of the programme the trainee must submit one of the following at least six (6) months before the final (Part II) examination, either:
- a research project report; or
  - a case book of twenty (20) cases with commentaries.
  - The students' research project or there book of twenty cases MUST be submitted through TURNITIN or some plagiarism software. The report must be included in the submission.

- 3.4. The alternative chosen must have been previously agreed to by the School of Graduate Studies and Research and the work carried out under the guidance of a supervisor approved by the Board. Following the submission of the work the examiners may:
- accept the work, and allow the candidate to proceed to examination or

## DM General Surgery

**COURSE CODES: MEDC 6620 PART I  
MEDC 6621 PART II  
MEDC 6649 PART III**

### 1. AIM

The programme's aim is to produce, for the territories served by The University of the West Indies, individuals with sufficient knowledge, skill and experience to fill Consultant posts in the appropriate disciplines. Trainees are eligible to take the examinations leading to the relevant DM degree in the discipline after satisfactorily completing the training programme. The postgraduate degree is awarded on satisfactory completion of the training programme and passing of the necessary examinations.

### 2. QUALIFICATIONS FOR ENTRY

- 2.1. The applicant should be:
- A graduate in Medicine of a University or Medical School recognised by The University of the West Indies.
  - Fully registered in the territory or territories in which training will take place.
- 2.2. Candidates applying for entry to the DM programme in Surgery must, in addition to the requirements set out in paragraph 2.1 have completed six months in an approved post, in Casualty or a similar Department, Surgery or Community Health, in an approved hospital.

#### *Date of Entry - July 1 or January 1*

The date of entry will normally be determined by the date when the candidate begins to work in a recognised post in an accredited hospital. A candidate may apply to enter the programme before (s)he secures such a post. (S)he may then receive from the School of Graduate

- b. reject the work, and outline what additional or new work is required and when the work should be re-submitted.
- 3.5. Candidates must have reached a satisfactory standard during the in-course assessments before being allowed to enter for the Part II examination.
- 3.6. Before being admitted to the Part II examination, all trainees are required to submit a tabulation of all operations performed by them and certified by their supervisor during the period of training.
- 3.7. The period of training for the DM General Surgery will be a minimum of five (5) years following full registration, but a maximum of six months exemption during the first two years of these courses may be obtained following experience in an approved Casualty Department or similar hospital emergency facility.
- 3.8. During the first two (2) years of the programme in General Surgery the trainee will rotate through any six to eight (6-8) of the following specialities for a period of THREE (3) months EACH
- General Surgery
  - Orthopaedics
  - Pathology
  - Neurological Surgery
  - Cardiothoracic Surgery
  - Paediatric Surgery
  - Plastic Surgery
  - Urology
  - Otolaryngology
  - Anaesthetics/ICU
- An elective period of three (3) months may be spent repeating a weak rotation, or in a further period in General Surgery.
- 3.9. Training will normally take place at the Eric Williams Medical Sciences Complex or at the Port of Spain or San Fernando General Hospitals, or at institutions in the region recognised by the University for this purpose. However, an elective period of up to one (1) year may be spent at institutions within or without the Caribbean approved by the School for Graduate Studies and Research, provided that prior approval has been obtained from the Board. This elective period is limited to the penultimate year for trainees in General Surgery. Institutions may be recognised for part or all of the training programme. The Specialty Board in Surgery will keep a list of approved institutions and appointments for the guidance of candidates. This list will be updated from time to time as necessary.
- 3.10. Each DM candidate can have a total of six (6) weeks leave per annum three (3) weeks in every six (6) months) or a maximum of two (2) weeks in every three (3) month rotation.
- 3.11. Each DM candidate is expected to fully participate in journal presentations, oncology and radiology multidisciplinary team meetings and morbidity and mortality meetings, grand rounds, research activities and tutoring of the undergraduates.
- 3.12. Details of the programmes may be obtained from the Chairman of the Specialty Board or the School of Graduate Studies and Research.
- 3.13. The clinical responsibilities of the candidate will be defined by the Head of Department / Consultant of the institution of employment.
- 4. EXEMPTIONS**
- 4.1. Candidates who have completed periods of study in recognised hospitals or institutions may apply to the School of Graduate Studies and Research for exemption from the appropriate section of the programme.
- 4.2. For trainees in the General Surgery programme, this will be in addition to any exemptions granted on the basis of experience in an approved Casualty Department or other hospital emergency facility (see paragraph 3.7)
- 4.3. Candidates who have been successful in the Fellowship or Membership examinations (Part I & II) of one of the Royal Colleges of Surgery and who have had experience acceptable to the School of Graduate Studies and Research may apply for exemption from part or all of the Part I DM examination. All the other training requirements must be fulfilled prior to being granted entry into Part II of the programme.
- 5. ASSESSMENT**
- 5.1. Trainees will be assessed at least semi-annually. Those with unsatisfactory records will be encouraged to improve; but if poor performance persists they will be asked to withdraw from the programme.

## 6. EXAMINATION:

Before admission to the examination, candidates must be certified by their Supervisors stating that the course of training necessary to sit that examination has been satisfactorily completed.

### PART I

The Part I examination will consist of a Written or MCQ and Oral component of the following:

Section A – Principles of Surgery

Section B – Anatomy, Basic Pathology, Microbiology, Physiology (Including Biochemistry)

The students must pass Section A and at least two (2) parts of Section B to qualify for entry into the second part of the programme.

Students must sit the Part I Examination no later than two and a half years (2 1/2) after entering the programme.

Students who have not completed the Part I examination within one (1) calendar year of the last sitting of the examination will normally be required to withdraw from the programme. Students must SUCCESSFULLY complete ALL FOUR (4) components of the DM Part I within three (3) years of commencing the programme. Students who do not pass Part II within five (5) years of completion of Part I will normally be required to withdraw from the programme.

Students will not usually be allowed more than TWO (2) ATTEMPTS at any one examination. Failure at the second attempt will necessitate withdrawal from the programme. The student may not reapply to the programme after withdrawal.

## DM Surgery (Urology)

**COURSE CODES: MEDC 6651 PART I  
MEDC 6652 PART II  
MEDC 6653 PART III  
MEDC 6654 PART IV**

This course of training extends over a five (5) year programme and provides structured training in the surgical sub-specialty that deals with the diagnosis and treatment of diseases and disorders affecting the male genitourinary system and female urinary tract. The training of a urological surgeon is aimed at producing a graduate who can perform and use appropriately the current techniques in general urology. Knowledge of available treatment options in more specialised areas such as urologic oncology, urogynaecology, andrology, renal transplantation and vascular access, reconstructive urology, paediatric urology and endourology / laparoscopy is also required. Further training in one or more of these is available by obtaining a fellowship at the end of general urological training.

### QUALIFICATIONS FOR ENTRY

Applications are invited for entry in September of each academic year from suitably qualified persons. Applicants should have:

- at least one (1) year post internship with a registrable undergraduate degree.
- an interest in Urological Surgery including Endoscopic Urology.
- at least one (10 year's experience in General Surgery after internship.

All applicants must hold Medical Degrees registerable with the Medical Board of Trinidad and Tobago. Candidates with the Part I DM in Surgery or the F.R.C.S. Part II will be exempt from the Basic Medical Sciences Examination.

### COURSE OF STUDY

This programme spans five (5) years. The first two (2) years are the same as those for the DM General Surgery. The curriculum covers the following examinable areas:

- Benign Prostatic Hyperplasia
- Andrology
- Bladder Dysfunction
- Trauma
- Female Urology
- Reconstructive Urology
- Oncological Urology
- Paediatric Urology
- Stones and Endourology
- Urinary Tract Infection
- Nephrology and Transplantation

- Applied Patho-Physiology, Nephrology, Transplantation and Principles of Urology
- Investigative & Technical Aspects
- Examinations: See DM General Surgery.

## PROGRAMMES IN EMERGENCY MEDICINE

**IMPORTANT NOTE: The department offers three postgraduate programmes in Emergency Medicine; a Diploma, an MSc and a DM.** The Diploma in Emergency Medicine is one of a range of courses in Emergency Medicine offered by The University of the West Indies. Other courses in Emergency Medicine include: the MSc in Emergency Medicine (a 1-year part time programme for which the Diploma in Emergency Medicine is an essential pre-requisite) and the DM in Emergency Medicine, which is a 4 year full time programme of residency training in Emergency Medicine. The aforementioned programmes allow the delivery of Emergency Medicine training to all practitioners in Emergency Medicine to a level commensurate with their clinical responsibilities. It should be stressed that only those doctors successfully completing the DM are eligible for consideration as specialists in the field of Emergency Medicine.

### Diploma in Emergency Medicine

This programme is an 18-month part-time programme primarily aimed at specialists in fields other than Emergency Medicine who are likely to have a substantial responsibility in Emergency Care (for example, District Medical Officers who have regular sessions in the peripheral Emergency Departments, or Paediatricians with fixed sessions in the Paediatric Emergency Department of the Children's Hospital). Practitioners from specialties outside Emergency Medicine are allowed to access individual modules of the programme if desired (Modules in Emergency Care).

#### 1. AIMS

The aim of the Diploma in Emergency Medicine is to equip medical practitioners working in emergency situations with the core knowledge required to provide safe and effective emergency medical care in a variety of clinical settings.

#### 2. ADMISSION CRITERIA

##### Diploma in Emergency Medicine

Graduates of Medical Schools approved by the Medical Board of Trinidad and Tobago are eligible to apply for admission. Candidates should ideally have at least 1 year's post-internship clinical experience, including at least 6 months' experience in the field of Emergency Medicine.

##### Modules in Emergency Medicine

The following are eligible to apply for access to individual modules within the Diploma for Emergency Medicine.

1. Graduates of Medical Schools approved by the Medical Board of Trinidad.
2. Individuals with recognized degrees from the paramedical sciences, for example the AS Degree in Emergency Medical Services, or with at least 3 years experience in Emergency Medicine.

It should be noted that completion of 8 modules via this method does not automatically result in the award of the Diploma.

#### 3. PROGRAMME STRUCTURE

The Emergency Medicine programme has a total of eight (8) modules. Each module is assessed by means of a written assignment. The final examination will contain questions pertaining to all 8 modules.

Candidates must successfully complete all modules as well as the final examination to qualify for the Diploma in Emergency Medicine. Successful completion of the Diploma includes successful completion of ALL assignments by the deadline set by the course director or module supervisor.

- MEDC 6902 Principles of Emergency Medicine & Life Support 90 hours/ 6 credits
- MEDC 6903 Toxicological and Environmental Emergencies 30 hours/2 credits
- MEDC 6904 Paediatric Emergencies 60 hours/ 4 credits
- MEDC 6905 Adult Medical Emergencies 60 hours/ 4 credits
- MEDC 6906 Trauma Management 60 hours/ 4 credits
- MEDC 6908 Behavioural and Psychiatric Emergencies 30 hours/ 2 credits
- MEDC 6916 Management of the Acute Surgical Patient 30 hours/ 2 credits
- MEDC 6521 Evidence Based Medicine 30 hours/ 2 credits
- MEDC 6920 Diploma in Emergency Medicine Examination

Module	Number of Weeks
Introductory Module	January – February (6 weeks)
MEDC 6902 Principles of Emergency Care	2 weeks (March)
MEDC 6905 Adult Medical Emergencies	6 weeks (March – April)
MEDC 6802 Evidence Based Medicine	6 weeks (May to June)
MEDC 6904 Paediatric Emergencies	8 weeks (September – October)
MEDC 6908 Behavioural and Psychiatric Emergencies	4 weeks (November)
MEDC 6903 Toxicological Emergencies	3 weeks (December)
Repeat of Introduction/Revision	6 weeks (January – February)
MEDC 6906 Trauma Management	6 weeks (March – April)
MEDC 6916 Management of the Acute Surgical Patient	3 weeks (April – May)
(Revision time)	(3 – 4 weeks)
MEDC 6920 Diploma Examination	1st week in June

Students must have successfully completed all [8] Modules to be considered for award of the Diploma in Emergency Medicine. This will include any course-work; log books and end of year examinations. Students must also register for all modules inclusive of the examination to be able to undertake the examination and graduate from the programme.

#### 4. ASSESSMENT AND REGULATIONS

Assessment will be through a combination of module assignments (Module assignments will concentrate on the development of protocols and guidelines relevant to each module, using up to date evidence), clinical logbooks, and examinations.

Logbooks and portfolios or diaries of care will consist of clinical cases and critical incidents (both clinical and non-clinical) encountered by students during their training, with a reflection on the relevance of the incident, and how it has changed the student's practice of Emergency Medicine.

Summative assessments will consist of multiple-choice questions (MCQ's), short structured questions (SAQ's) and Objective Structured Clinical Examinations (OSCE's) and an oral exam. These examinations will be held at the end of the year.

#### **Diploma Emergency Medicine final Examination:**

The written paper. There will be two (2) parts to the written paper:

A multiple-choice paper (choose the best of five options). This will contain 60 questions, and contribute 60% of the total written mark.

A data interpretation paper. This will contain 20 questions based on clinical and laboratory material and will contribute 40% of the written mark.

The clinical examination

This will be an OSCE examination with 10 stations each of 10 minutes' duration.

The oral examination.

Each candidate will be examined by a panel of examiners for a total of 60 minutes.

#### **Candidates who fail all or part of the examination**

Those candidates who fail all or part of the examination will be required to re-sit the entire examination either within six (6) months or after one (1) year, at the discretion of the examiners. Candidates who receive a grade of 'irretrievable' in any part of the examination will be required to repeat the examination.

\*Candidates MUST pass the OSCE examination and written examination to pass the examination overall.



## 5. LEAVE OF ABSENCE

(See Manual of Procedures for Graduate Diplomas and Degrees)

A student may apply for leave of absence from the programme for academic or personal reasons. Applications should be submitted through the Specialty Board and the FMS Committee for Graduate Studies to the Campus Committee for Graduate Studies and Research.

The application must be accompanied by a statement of the reason for the application. Appropriate recommendations will be made by the Specialty Board through the Faculty Committee for Graduate Studies, to the Campus Committee for Graduate Studies and Research.

Leave of absence shall not be granted for more than one academic year in the first instance. A candidate may apply to the Campus Committee for Leave of Absence for a second year, but further extensions will be at the discretion of the Specialty Board.

Students who absent themselves without permission may have their names removed from the register of graduate students.

## 6. DEFERRAL

(See Manual of Procedures for Graduate Diplomas and Degrees)

Students are normally expected to present themselves for the first examination being held following completion of the various Parts. In exceptional circumstances (such as ill health), a student may request permission from the Campus Committee for Graduate Studies and Research through the Faculty Committee to defer the date of the first sitting.

## 7. WITHDRAWALS

(See Manual of Procedures for Graduate Diplomas and Degrees)

Students may withdraw from the programme after having a consultation with the programme coordinator. The students will then be required to complete a voluntary withdrawal form and attach it to a cover letter which must be processed in the Department, Faculty and finally Graduate Studies.

## DM Emergency Medicine

This is a full-time residency programme in Emergency Medicine lasting 4 years, offered to junior doctors who wish to specialise in Emergency Medicine, but have little or no prior clinical experience. Candidates must be working in a hospital in Trinidad recognised for graduate training.

### 1. AIMS

1.1. The aim of the DM in Emergency Medicine is to train doctors in the specialty of Emergency Medicine to a level that allows them to provide clinical support and administrative leadership to their Emergency Departments. Successful DM candidates will practice at the level of consultants and Emergency Medicine. The DM programme will accept candidates with minimal experience in Emergency Medicine and achieve the above goal within the four-year training period.

### 2. ADMISSION CRITERIA

2.1. Graduates of Medical Schools approved by the Medical Board of Trinidad and Tobago.  
2.2. Candidates must have successfully completed their internship and are fully registered with the Medical Board of Trinidad and Tobago.  
2.3. Candidates must ideally have at least 1 year experience in Emergency Medicine and presently working in a tertiary or secondary Hospital in Trinidad and Tobago

### 3. PROGRAMME STRUCTURE

3.1. The DM in Emergency Medicine is a full time residency programme, based on a comprehensive curriculum. Candidates will spend approximately half their time in Emergency Medicine, and will be expected to rotate through the following specialties during the programme:

- Anaesthesia (3 months)
- Surgery (6 weeks)
- ENT (2 weeks)
- Ophthalmology (2 weeks)
- Radiology (2 weeks)
- Adult Medicine (3 months)
- Orthopaedics (3 months)
- Paediatrics (6 months)
- Obstetrics & Gynaecology / Psych (3 months)
- Family Medicine / Community (3 months)
- Elective (3 months)



**Programme Course Codes**

- PART I
  - MEDC 6657 YEAR 1
  - MEDC 6658 YEAR 2
  - MEDC 6637 PART I Examination
- PART II
  - MEDC 6659 YEAR 3
  - MEDC 6660 YEAR 4
  - MEDC 6647 PART II Examination

**4. TEACHING METHODS**

- 4.1. DM candidates will be expected to cover their curriculum through a variety of educational opportunities. These would include:
- **Clinical supervision:** The majority of clinical training in the DM programme will be facilitated through direct clinical supervision during normal work. Supervisors will include consultants in Emergency Medicine as well as those consultants in charge of candidates during their secondments to other specialties.
  - **Weekly tutorials:** All DM candidates will be expected to meet weekly for tutorials in Emergency Medicine, which would aim to cover the core curriculum over the first three years.
  - **Monthly tutorials:** DM candidates will be required to attend monthly teaching sessions with candidates from the MSc programme. These tutorials will provide a systems-based approach to topics in Emergency Medicine and utilise a variety of educational tools including problem based learning, formal tutorials and skills labs.
  - **Other educational activities:** Candidates will be expected to attend other educational activities during their course, including departmental teaching (both in Emergency Medicine and during secondments) and monthly Emergency Medicine Grand Rounds
  - **Short Courses:** DM candidates will be offered the opportunity to attend relevant short courses in emergency care, including the Advanced Life Support Courses (Cardiac, Paediatric and Trauma).

**5. CURRICULUM**

- 5.1. While the majority of teaching in the DM will be related to direct clinical supervision, the programme follows a fixed curriculum, which is the same as the DM programmes in Barbados and Jamaica.
- 5.2. The DM curriculum covers the following topics on a four-year rolling
- teaching cycle:
  - Principles of Emergency Care
  - Major and Soft Tissue Trauma
  - Otolaryngologic Disorders
  - Ophthalmologic Disorders
  - Cardiovascular Disorders
  - Thoracic/Respiratory Disorders
  - Abdominal & Gastrointestinal Disorders
  - Urogenital Disorders
  - Obstetrics and Gynaecological Disorders
  - Infectious Diseases
  - Paediatric Disorders
  - Musculoskeletal Disorders
  - Toxicologic Emergencies
  - Neurologic Disorders
  - Environmental Emergencies
  - Immune System Disorders
  - Metabolic and Hormonal Disorders
  - Haematological Disorders
  - Dermatological Disorders
  - Psycho behavioural Disorders
  - Administration and Management
  - Emergency Medical Services
  - Physician Interpersonal Skills
  - Manipulative Skill

**6. LEAVE OF ABSENCE**

**(See Manual of Procedures for Graduate Diplomas and Degrees)**

A student may apply for leave of absence from the programme for academic or personal reasons. Applications should be submitted through the Specialty Board and the FMS Committee for Graduate Studies to the Campus Committee for Graduate Studies and Research.

The application must be accompanied by a statement of the reason for the application. Appropriate recommendations will be made by the Specialty Board through the Faculty Committee for Graduate Studies, to the Campus Committee for Graduate Studies and Research.

Leave of absence shall not be granted for more than one academic year in the first instance. A candidate may apply to the Campus Committee for Leave of Absence for a second year, but further extensions will be at the discretion of the Specialty Board.

Students who absent themselves without permission may have their names removed from the register of graduate students.

## **7. DEFERRAL** (See Manual of Procedures for Graduate Diplomas and Degrees)

Students are normally expected to present themselves for the first examination being held following completion of the various Parts. In exceptional circumstances (such as ill health), a student may request permission from the Campus Committee for Graduate Studies and Research through the Faculty Committee to defer the date of the first sitting.

## **8. WITHDRAWALS** (See Manual of Procedures for Graduate Diplomas and Degrees)

Students may withdraw from the programme after having a consultation with the programme coordinator. The students will then be required to complete a voluntary withdrawal form and attach it to a cover letter which must be processed in the Department, Faculty and finally Graduate Studies.

# **DM Ophthalmology**

**COURSE CODES: MEDC 6661 PART I  
MEDC 6662 PART II  
MEDC 6663 PART III**

### **AIMS**

- To provide a programme that facilitates the acquisition of knowledge, understanding, skills and attitudes to a level appropriate to an ophthalmic specialist, who has been fully prepared to begin his/her career as an independent ophthalmologist.
- To promote the appreciation of audit and research.

### **COURSE OF STUDY**

The six year programme is divided into 3 parts (Part I, Part II, Part III):

#### **Part 1 (2 years)**

This involves the basic sciences, including:

- anatomy of the eye, adnexae, visual pathways and associated aspects of head and neck and neuroanatomy. It will also include embryology
- physiology of the eye, adnexae and CNS, including general physiology (laws and phenomena). It will include organisation, function, mechanism of action, regulation and adaptations of structures and their components tissues relevant to the clinical methods of assessment (eg. acuity, visual fields, electrodiagnostics, intraocular pressure)
- medicine in association with ocular disease (Diabetes, Hypertension, Collagen Vascular disease, Rheumatology, Thyroid, Sickle cell Anaemia, etc)
- basic principles of Pathology (with emphasis on Ocular pathology), Microbiology, Biochemistry

Part 1 will be examined at the end of 2 years. Candidates will have to achieve an adequate standard of performance before they can proceed to the second part of the programme.

#### **Part II (1 year)**

This part covers:

- the optics, theory and practice of refraction (including contact lens),
- application of physical and physiological optics to clinical management,
- principles of instrumentation such as the direct and indirect ophthalmoscope, keratometers, focimeters, microscope.

During this period the candidate will continue to gain clinical and surgical ophthalmology skills.

Part 2 will be examined after 1 year. Candidates will have to achieve an adequate standard of performance before they can proceed to the final part of the programme.

### Part III (3 years)

This final part consists of 3 years, at least 2 of which must be spent locally and an elective one year period which must be spent overseas. The candidate will be expected to cover all aspects of the medicine, therapeutics and surgery for the eye, adnexae and visual pathways. For specific diseases processes, they should be enhancing and consolidating their knowledge with respect to aetiology, pathogenesis, genetics, clinical manifestations, differential diagnosis, investigations and treatment options (medical and surgical). Enhancing surgical skills, audit and research will be emphasised. The candidate will be examined at the end of the three years.

## EXAMINATIONS

### Part I

This exam will be undertaken after 2 years in the programme.

- |            |   |
|------------|---|
| Section A: | Principles of Ophthalmic Surgery  |
| Section B: | Anatomy of Head and Neck (including Embryology and Neuro anatomy)<br>Basic Pathology,<br>Microbiology, Biochemistry<br>Physiology of eye , adnexae,<br>CNS including related<br>general physiology<br>General Medicine in<br>association with Ocular<br>pathology |

Candidates must pass Section A and pass at least 4 parts of Section B to qualify for entry into the second part of the programme.

Candidates who have not completed the Part 1 exam within one calendar year of the first sitting of the examination will normally be required to withdraw from the programme.

### Part II

This exam will be undertaken at the end of the 3rd year in the programme.

- |            |   |
|------------|---|
| Section A: | Basic Optics (Principles of Instrumentation) & Theory of Refraction |
| Section B: | Practical Refraction exam & OCSE                                    |

### Part III

This exam will be undertaken at the end of the fellowship. This will consist of 2 parts:

- Papers: MCQs/ Essay
- Oral Examination

No candidate will be allowed more than 2 attempts at any one examination. The final Part III examination must be taken within one year of submission of the project or case book (20 cases).

### LOG BOOK:

All candidates must maintain a surgical logbook, which will be assessed annually.

### CASEBOOK:

Each candidate must collect 20 cases for the case book. These cases must cover the breadth of Ophthalmology including at least one case from each subspecialty:

- Cataract and Refractive Surgery
- Cornea
- Glaucoma
- Paediatrics
- Uveitis
- Orbit, Oculoplastics, Adnexal and Lacrimal
- Neuro ophthalmology
- Ocular motility/ Strabismus
- Medical Retina
- Surgical Retina

## DM Otorhinolaryngology (ORL)

### COURSE CODES:

MEDC 6631 Part I

MEDC 6633 Part II- RESEARCH PROJECT

MEDC 6634 Part II- CASE BOOK

### COURSE SUMMARY

This is a Six (6) year Postgraduate Programme in Otorhinolaryngology (ORL) designed to produce the future Otorhinolaryngologists of Trinidad and Tobago and the Caribbean. The Programme is divided into two Parts, Part 1 & Part 2.

Part 1 lasts for two years, at the end of which the trainee sits an examination. If successfully completed, the trainee proceeds to Part 2 of the programme. Part 2 lasts four years (including a one year elective) and culminates in a final examination.

The course is to be taught at the Eric Williams Medical Sciences Complex, San Fernando General Hospital and Port-of-Spain General Hospital, to enable the trainee to gain a wide exposure to different types of cases and to be taught by a wide variety of Otorhinolaryngology Specialists.

An elective period is factored into the programme to allow the trainee to experience the practice of Otorhinolaryngology in different countries. The trainee is also mandated to be involved in research before writing the Part 2 Examination.

### GOALS

The goals of the programme are to:

1. Identify and select medical doctors who are eligible and interested in becoming Otorhinolaryngologists.
2. Teach trainees to diagnose Otorhinolaryngological conditions using history, clinical examination and special investigations.
3. Teach trainees to treat Otorhinolaryngological conditions using conservative means or surgical interventions as appropriate
4. Emphasize the importance of practicing evidence-based Medicine using Journal review and research techniques
5. Instill the significance of a multidisciplinary approach for the management of patient's problems and to develop the interpersonal and communication skills to work on such a team.
6. Train specialists who are able to help the development of public policies relevant to the specialty, both nationally and regionally.

7. Develop professional behavior, including honesty, compassion, level headedness, decorum and respect for others.
8. Teach trainees to employ clear, concise, accurate and precise verbal communication with colleagues, other staff, patients and patients' family members.

### QUALIFICATIONS FOR ENTRY

1. The candidate should be:
  - a. A graduate in Medicine of a University or Medical School recognized by The University of the West Indies.
  - b. Fully registered in the territory or territories in which training will take place.
2. Candidates applying for entry to the DM programme in Otorhinolaryngology, in addition to the requirements set out in paragraph 1, must have completed six months in an approved post, in Emergency Medicine or a similar Department, Surgery or Community Health, in an approved hospital.

### *Date of Entry – September 1.*

The date of entry will normally be determined by the date when the candidate begins to work in a recognized post in an accredited hospital. A candidate may apply to enter the programme before (s)he secures such a post. (S)he may then receive from the School of Graduate Studies and Research provisional acceptance for entry to the programme contingent upon his/her obtaining an accredited post. After the candidate has secured such a post, the date of entry will be determined by the School of Graduate Studies and Research.

### COURSE OF STUDY

The Programme consists of two parts – Part 1 which normally will run for two years and Part 2 which normally will run for four years.

#### Part 1

1. During the Part 1 of the Programme:
  - a. The trainees will rotate through two six month rotations in ORL and
  - b. Four three month rotations which may include the following: General Surgery, Cardiothoracic Surgery, Neurosurgery, Plastic Surgery, Critical Care medicine, Emergency Medicine and Oral-Maxillofacial Surgery or any other rotation approved by the Programme Director. Each trainee will be assessed at the end of each rotation.
2. A maximum of six months may be spent in the Basic Medical Sciences Department of The University of the West Indies (Unit of Anatomy, Biochemistry or Physiology), the Department of Pathology in Port of Spain General Hospital, San Fernando General

Hospital or the Eric Williams Medical Sciences Complex in an approved research project provided that prior approval for the research project has been obtained from the Specialty Board in Surgery.

3. The Part 1 examination is taken at the end two years in the basic sciences such Anatomy, Physiology, Pathology and Principles of Surgery, provided there have been satisfactory in-course assessments.

#### **Part 2**

1. The Part 2 of the Programme normally occupies 4 years. During this period, trainees are assigned to ORL rotations with increasing levels of responsibility.
2. During the Programme the trainees will rotate through the three Major Hospitals – Eric Williams Medical Sciences Complex, Port of Spain General Hospital and San Fernando General Hospital or at approved institutions in the Region. The trainee will be assessed at the end of each rotation.
3. An Elective period in ORL of a total of one year must be spent at Institutions in or out of the Caribbean provided prior approval is obtained from the Specialty Board in Surgery. Such approval must be obtained at least six months prior to the commencement of the Elective period.
4. Institutions may be recognized for part or all of the training programme. The Specialty Board in Surgery will keep a list of approved institutions and appointments for the guidance of candidates. This list will be updated from time to time as necessary.
5. At least nine (9) months before the final Part II examination the trainee must submit
  - a. a research project report; and
  - b. a case book of ten (10) cases with commentaries.

Both of these must be accepted by the Board of Examiners before the trainee is eligible to do the Part II Examination.

Trainees must have reached a satisfactory standard during the in-course assessments (as determined by the Programme Director) before being allowed to enter for the Part II examination.

6. Before being admitted to the Part II examination, all trainees must submit a tabulation of all procedures performed by them and certified by the respective supervisor during each rotation.

7. Each trainee may have a total of six (6) weeks leave per annum – no more than three (3) weeks every six (6) months.
8. Details of the programme can be obtained from the Programme Director, Chairman of the Specialty Board or School of Graduate Studies and Research.

### **LEARNING OBJECTIVES**

#### **1ST YEAR**

##### **A. KNOWLEDGE:**

*Knowledge of the material will be tested in 6 monthly exams (both clinical and oral).*

The trainees will be able to demonstrate a thorough knowledge of the:

- Anatomy, Physiology and Pathology of the Ear, Nose, Throat, Head and Neck
- Microbiology and Antimicrobial Therapy of Ear, Nose, Throat
- Radiology and Imaging in Otorhinolaryngology
- Fundamental Principles and Techniques of Surgery
- Basic Immunology
- Principles of Laser Surgery
- Interpretation of Audiological Testing
- Principles of Endoscopy

##### **B. CLINICAL SKILLS / PROCEDURES:**

*The trainee should be able to perform independently or under supervision.*

- Otoscopic Examination, Nasal Endoscopy, Ear Syringing, Microscopy and suction clearance of ear, Temporal bone dissection, Local anaesthesia for nasal examination and for minor surgical procedure, Anterior nasal packing, Postnasal packing, Clinical examination of hearing and balance, Caloric Test, F.B removal from ear/nose/oropharynx, Nasal cautery (chemical), Fiberoptic laryngoscopy, Pure tone audiogram, Impedence audiometry and Facial Nerve stimulation test.

##### **C. SURGICAL PROCEDURES**

*The trainee should be able to perform these procedures independently, under supervision or assist/ scrub.*

- Adenoidectomy, Tonsillectomy, Nasal bone repositioning, Lymph node biopsy, Myringotomy and grommet insertion, Drainage of peritonsillar abscess, Myringoplasty, Septoplasty, Mastoidectomy, Drainage of septal abscess, Direct laryngoscopy, Endoscopic sinus surgery, Tracheostomy and Control of post tonsillectomy hemorrhage.

## 2ND YEAR

### A. KNOWLEDGE

*The trainee will be able to demonstrate a thorough knowledge of the:*

- Principles and complications of Radiotherapy and Chemotherapy in Head and Neck Cancer
- Intensive Care and Resuscitation in Otorhinolaryngology
- Anaesthesia in Otorhinolaryngology
- Surgery in Children
- Concepts in Mastoid surgery.
- Concepts in Speech therapy.
- Concepts in Audiology
- Evidence Based Medicine

### B. CLINICAL SKILLS AND PROCEDURES

*The trainee should be able to perform independently or under supervision*

- Fibreoptic Laryngoscopy, Removal of Foreign Body – Ear, Nose, Pharynx in Outpatient setting, Temporal bone dissection, Nasal Endoscopy, Topographic test for facial palsy, Pure Tone Audiogram, Otoacoustic Emissions, Caloric test, Dix Hallpike Positioning Test, Speech Audiometry, Brainstem Evoked Response Audiometry, Post Nasal packing and Excision biopsy of lesion under L.A .

### C. SURGICAL PROCEDURES

*The trainee should be able to perform these procedures independently, under supervision or assist/scrub.*

- Adenoidectomy, Tonsillectomy, Myringotomy and Grommet insertion, Nasal bone repositioning, Lymph node biopsy, Drainage of septal abscess, Septoplasty, Antral Lavage, Myringoplasty, Direct laryngoscopy, Control of Post Tonsillectomy Hemorrhage, Endoscopic Sinus surgery, Mastoidectomy (Cortical, Modified radical, Hypopharyngoscopy/upper Oesophagoscopy, Rigid Bronchoscopy, Tracheostomy, Submandibular Gland Excision, Neck Dissection (Radical, Modified, Selective), Pre Auricular sinus excision and Endoscopic control of Epistaxis.

## 3RD YEAR

### A. KNOWLEDGE

*The trainee will be able to demonstrate a thorough knowledge of the:*

- Principles of advanced otological procedures.
- Principles of Airway Management
- Management of Head & Neck Neoplasms
- Management of Head & Neck trauma
- Principles of Endoscopic Sinus Surgery
- Fundamentals of Sleep Medicine

### B. CLINICAL SKILLS AND PROCEDURES

*The trainee will be able to perform:*

- Temporal bone dissection, Intra Tympanic Injection (Gentamicin/Steroid) and Endoscopic Sinus Surgery dissection.

### C. SURGICAL PROCEDURES

*The trainee should be able to perform these procedures independently, under supervision or assist/scrub:*

- Septoplasty, Rhinoplasty, Myringoplasty, Direct Laryngoscopy, Microlaryngoscopy, Endoscopic control of epistaxis, Endoscopic Middle Meatal Antrostomy, Cortical Mastoidectomy, Hypopharyngoscopy, Oesophagoscopy and removal of F.B, Meatoplasty ,Drainage of neck abscess, Airway assessment in new born, Harvesting skin thickness skin graft, Submandibular gland Excision, Superficial Parotidectomy, Bronchoscopy, Exploratory tympanotomy, Excision of Thyroglossal duct cyst, Excision of Branchial Cyst, Excision tumour Oral cavity, Mandibulectomy (Marginal/Segmental), Neck dissection (Radical, Modified, selective), Laryngectomy, Thyroidectomy and Uvulopalatopharyngoplasty.

## 4TH YEAR

### A. KNOWLEDGE AND FUNDAMENTALS

*The trainee will be able to demonstrate a thorough knowledge of the:*

- Principles of nerve grafting.

### Principles of Electromyography and Electronueronography.

- Principles of electronystagmography.

### Principles of repair of defects after Head& Neck tumour excision

- Occult, Synchronous & Metachronous lesions in Head & Neck Cancer
- Concepts of laryngeal framework surgery/Phonosurgery.
- Principles of Facial Plastic Surgery

### B. SURGICAL PROCEDURES.

*The trainee should be able to perform these procedures independently, under supervision or assist/scrub*

- Cortical Mastoidectomy, ESS (Middle Meatal Antrostomy, Endoscopic Ethmoidectomy), Pediatric airway assessment, Modified radical Mastoidectomy, Ossiculoplasty , Excision of Thyroglossal, Branchial Cyst, Excision of Oral cavity lesion, Neck dissections, Stapedectomy, Facial Nerve decompression, Revision Septoplasty Rhinoplasty, Extended application of Endoscopic surgery (Orbital decompression, dacryocystorhinostomy, mucocoele etc.), Excision of Angiofibroma, Partial & complete Maxillectomy, Superficial Parotidectomy, Thyroidectomy and UVPP.



## 5TH YEAR

### A. KNOWLEDGE OF FUNDAMENTALS

*The trainee will be able to demonstrate a thorough knowledge of the:*

- Controversies in the management of Head and Neck cancer.
- Surgical approaches to C.P angle tumors
- Concepts of surgical treatment of Menieres disease
- Approaches to anterior and lateral skull base

### B. SURGICAL PROCEDURES

*The trainee should be able to perform these procedures independently, under supervision or assist/scrub.*

- Tympanoplasty/ Ossiculoplasty (incus sculpting), Modified radical Mastoidectomy Revision Tympanoplasty, Tracheotomy, F.E.S.S (Ethmoidectomy and exposure of frontal recess and ostium) Excision of Thyroglossal duct cyst, Branchial cyst, Revision Septoplasty, Rhinoplasty (Basic), Submandibular gland excision, Laryngectomy, Glossectomy, Mandibulectomy, Neck dissection, Superficial Parotidectomy and Thyroidectomy.

## ASSESSMENT

### (1) Part 1

- Each trainee will be assessed by the Programme Director at the end of each rotation and must achieve a satisfactory assessment in each rotation in order to progress. If the trainee does not achieve a satisfactory assessment he/she may be asked to repeat the rotation.
- Once satisfactory assessments are gained in each rotation the trainee will be allowed to sit the Part 1 examination at the end of two (2) years. If the trainee has not been able to gain satisfactory assessments for all rotations after three (3) years, the trainee will be asked to withdraw from the Programme.
- Any trainee who fails the Part 1 Examination may repeat the exam in 6 months. If the trainee fails a second time, he/she may repeat in 6 months.
- Any trainee failing the Part 1 examination on three occasions will be asked to withdraw from the Programme.

### (2) Part 2

- Each trainee will be assessed at the end of each rotation by the Programme Director and must achieve a satisfactory assessment in each rotation to progress. If the trainee does not achieve a satisfactory assessment he/she may be asked to repeat the rotation.
- Trainees will be eligible to sit the Part II examination 4 years but not greater than 5 years after successful completion of the Part I examination
- Only (two) 2 attempts at the Part II examination are allowed.

- The Part II examination must be completed within one calendar year of the first attempt.

## SCHOOL OF PHARMACY

The University of West Indies has started BSc (Pharmacy) programme in 1995 to produce qualified Pharmacy graduates to practice Pharmacy in the Caribbean region. After considerable amount of service and experience, the department of Pharmacy is recently upgraded to an independent School. The school is currently in the process of developing MPhil and PhD degrees in Pharmaceutical Sciences and other postgraduate programmes. Although no graduate programmes are currently on offer, staff are involved in the supervision of students enrolled in MPhil and PhD programmes in Pharmacology.

## SCHOOL OF DENTISTRY

The School of Dentistry is well equipped with state-of-the-art dental equipment and has ample clinical teaching space; a computer assisted learning facility, lecture rooms and a student recreation room. Although the school does not currently offer any graduate programmes, staff are involved in research some of which is in collaboration with other departments and schools with graduate research programmes. Current research areas in the School of Dentistry include tooth wear in Caribbean populations, dental education, dental materials science, oral health needs in young children, children's emergency dental care, dental health education, oral health promotion and dental health of people with special needs.

In addition to its teaching function, the Dental Hospital provides emergency dental facilities, radiology and diagnostic examinations, the treatment of trauma, deformities and malignancies by means of oral and maxillo-facial surgery and extensive restorative dentistry. Specialised attention is given to children's dental problems with particular emphasis on orthodontics, preventive dentistry and community dental health education.

# SCHOOL OF VETERINARY MEDICINE

## **Postgraduate Programmes**

The School of Veterinary Medicine offers postgraduate studies leading to MPhil and PhD degrees of Veterinary Anatomy, Veterinary Physiology, Veterinary Microbiology, Veterinary Pharmacology & Toxicology, Veterinary Public Health, Veterinary Pathology, Veterinary Parasitology and Veterinary Clinical Medicine. The degree programmes are primarily by research and guided studies with limited course work requirements where necessary. Current research interests include:

### **Veterinary Anatomy**

- Neuropathological evaluation of swayback disease as compared with Alzheimer's disease
- Rabbits as an animal model for Alzheimer's disease
- Anatomical studies in the agouti.
- Distribution and types of congenital abnormalities in animals
- Gross anatomical studies of rare species of animals

### **Veterinary Virology**

- Respiratory viruses of poultry
- Viruses affecting pig production in Trinidad
- Prevalence of arboviruses and their vectors in Trinidad and Tobago
- Viruses affecting dairy production

### **Veterinary Microbiology**

- Development of a nested-PCR method and the detection of Bartonella spp in blood
- Molecular diagnostics for Newcastle disease, Eimeria species and respiratory viruses
- Enhancement of food safety programmes in CARICOM through PCR- based diagnostics
- Identification and detailed characterization of bacterial pathogens affecting duck production.
- Development of an in vivo system to monitor bacterial growth and colonisation
- Molecular analysis of multidrug resistant bacterial pathogens associated with food-producing animals.

### **Veterinary Parasitology**

- Investigations into the phytoacaricidal action of Neem oil in Boophilus microplus
- Internal parasites and gastrointestinal microbiology of wild agouti.
- Hematological values in copper deficient sheep

- Studies on skeletal pathology of wildlife
- The role of pathology in forensic veterinary medicine
- The development and evaluation of health monitoring protocols for use in birds and reptiles
- Refinement of the use of field kits for use in the tropics

### **Veterinary Physiology**

- Establishment of ELISA techniques to measure progesterone concentrations in samples
- Involvement of protein kinase C (pck) in the self priming of gonadotrophin-releasing hormone (GnRH)
- Grazing behaviour and physiological adaptability of large and small ruminants
- Attainment of puberty in buffalo heifers

### **Veterinary Public Health and Epidemiology**

- Isolation and characterisation of E. coli and Salmonella spp in pets
- Use of a rapid assay system for detection of Campylobacter spp prevalence in chickens from 'pluck shops'
- Evaluation of the efficacy of Brucella abortus vaccine strain RB51 in domestic water buffalos (Bubalus bulbalis).
- Subclinical mastitis and antimicrobial residues in dairy cows
- Bacterial aetiology of pneumonia
- Microbial quality of antimicrobial residues in table eggs
- Evaluation of the antibacterial activity of plant extracts
- Microbial quality of water supplied to urban and rural communities
- Epidemiology of zoonotic bacterial diseases
- Microbial quality of ready-to-eat foods of animal origin
- Food safety problems in the Caribbean
- A Study on Johne's disease (Mycobacterium paratuberculosis) in water buffalo using gamma interferon assay
- Comparison of the enzyme-linked immunosorbent assay (ELISA), gamma interferon assay and faecal examination in detecting subclinical infections by Mycobacterium paratuberculosis
- Toxoplasmosis in pregnant women and their offspring
- Dog bites in primary school children
- Use of herbal remedies in race horses

### **Veterinary Pharmacology**

- Evaluation and standardisation of medicinal plants with varied biological activity

### **Veterinary Toxicology**

- Evaluation of risk factors associated with selenium status in dairy cows

### **Veterinary Clinical Medicine**

- *Campylobacter fetus* subspp *veneralis* and *Trichomonas fetus* subspp *veneralis* in some selected dairy herds

### **Qualifications For Entry**

The following are eligible for admission to the MPhil degree programme.

1. Graduates of The University of the West Indies or of any other university, recognised for this purpose, holding the Doctor of Veterinary Medicine degree (DVM) or its equivalent.
2. Graduates of The University of the West Indies or of any other university, recognised for this purpose, holding first class or second class degrees (preferably second class upper degrees)
3. Applicants who do not satisfy the requirements outlined in nos. 1 and 2 (above) may be admitted to the MPhil programme only if they have passed prescribed qualifying courses. Such candidates may be admitted as qualifying students.
4. Only candidates who hold Doctor of Veterinary Medicine (DVM) degrees qualify for degrees in Veterinary Clinical Studies. Degrees in non-clinical areas are open to holders of Doctor of Veterinary Medical degrees (DVM) as well as holders of other suitable degrees, which must be obtained at the level of second class upper or first class. Those with second-class lower degrees may apply only if they have a minimum of B grade in the area of interest at the degree examination and are usually required to fulfil certain conditions.

## **MPhil Programmes**

### **COURSE OF STUDY**

- 1.1 Candidates for the MPhil degree are required to register for taught courses amounting to a minimum of six (6) credit hours. These courses normally include Biostatistics and Research Methodology, and any other courses that the supervisory committee may deem necessary for the candidate.
- 1.2 Candidates are required to present two (2) seminars before the completion of the MPhil degree programme, one in the first half of the course and the second at the end of the course based on their research. Attendance at postgraduate seminars is mandatory.

### **DURATION OF THE MPhil PROGRAMME**

- 1.3 The MPhil programme is offered to both full-time and part-time students. Full-time students are expected to complete the programme within 24 months of registration. Part-time students are expected to complete the programme within 36 months.

### **AWARD OF THE DEGREE**

- 1.4 The degree is awarded upon completion of the programme which includes the submission and successful defence of the MPhil thesis, and the successful completion of the coursework requirements.

## PhD Programmes

### ADMISSION INTO THE PHD PROGRAMME

- 2.1 Candidates for admission into the PhD programme should be: Holders of MPhil degrees of The University of the West Indies, or of any other University recognised by The University of the West Indies.
- 2.2 Holders of Masters of Science Degrees (MSc), by thesis, of The University of the West Indies or of any other University recognised for that purpose.
- 2.3 Candidates may have their registration upgraded from MPhil to PhD degrees, if the requirements of the upgrade are met. (The requirements are outlined in the regulations for postgraduate studies of The University of the West Indies).

### COURSE OF STUDY

- 2.4 The minimum duration of the programme is three calendar years (36 months) of full-time study or five calendar years (60 months) of part-time study.
- 2.5 Candidates are required to register for taught courses amounting to a minimum of nine (9) credit hours (credits gained prior to upgrade from MPhil to PhD contribute towards this total). The PhD programme is fundamentally a research degree however the supervisory committee may recommend some course work but this should not form a significant part of the programme.

### SEMINARS

- 2.6 Candidates are required to present at least three (3) seminars based on their research, before the completion of the programme. Attendance at postgraduate seminars is mandatory.

### AWARD OF THE DEGREE

- 2.7 The Degree is awarded upon the successful defence of the PhD thesis.

# THE UWI SCHOOL OF NURSING

## MSc. Advanced Nursing (MSN)

The Master of Sciences in Advanced Nursing (MSN) degree programme is designed to meet the critical need for leaders, teachers and advanced clinicians in Nursing. The programme is structured around the major components of theory, research and clinical practice. The concepts of leadership, critical thinking, decision making, and planned change are integrated throughout the curriculum. The graduate nursing student at SANE will develop specific competencies through refinement of existing professional skills, expansion of the knowledge base for practice, and development of advanced proficiencies in particular areas of practice. The programme is offered full and part-time in modular format and includes different forms of Distance Education, print, media, teleconference, computer Assisted Instruction (CAI), mentoring and preceptor practicum.

### AIMS

- To utilise the multidisciplinary setting of the University to provide a broad-based liberal arts education for nurses.
- To engage Nursing students in in-depth analysis of nursing, health, and health related issues/problems of the region.
- To provide opportunities to develop advanced nursing expertise in the areas of clinical, education, leadership/management and research at the postgraduate level.
- To develop and implement staff development programmes.
- To provide opportunities to develop human resources for the sustainability of the nursing profession.
- To establish the organisational and administrative infrastructure for the sustainability and expansion of programmes in Nursing.
- To initiate and maintain affiliation with relevant regional and international agencies.
- To collaborate with other nursing/health and related institutions and agencies with a view to strengthening the health care services of the Caribbean.

## OBJECTIVES

Upon successful completion of the MSN programme, the graduate will be able to:

- incorporate advanced knowledge and skills into practice as a nurse educator, nurse leader/manager, or a nurse practitioner/clinician;
- utilise research, advanced knowledge, and theories from nursing and other disciplines to improve nursing practice and nursing education, thus improving the quality of health care;
- contribute to the development of the scientific knowledge base in nursing by recognising researchable problems and participating in research to advance the practice of nursing;
- utilise leadership strategies to effect improvements in the health care system;
- contribute as leaders to the restructuring of professional nursing roles as health care needs emerge in society;
- apply theoretical concepts and research findings as bases for clinical organisational decision making in order to provide compassionate care, initiate change, and improve nursing practice;
- demonstrate proficient utilisation of research including the evaluation of research, problem identification within the clinical practice setting, awareness of practice outcomes, and the clinical application of research;
- develop an understanding of health care policy, organisation and health care financing in order to provide quality cost-effective care, participate in the design and implementation of care in a variety of health care systems, and assume a leadership role in the management of health care resources;
- integrate ethical principles, personal beliefs, and spiritual values to provide a framework for advanced nursing practice, and ethical decision-making as it affects the community, society, and health care delivery system;
- implement advanced nursing practice and work effectively in interdisciplinary relationships or partnerships, recognising the uniqueness and similarities among various health care providers;
- provide care that is culturally sensitive to individuals or population groups based on an understanding and appreciation for human diversity in order to encourage health promotion and wellness strategies that maximise one's quality of life;
- assume responsibility and accountability for the health promotion, risk reduction, assessment, diagnosis, and management of patient problems across the life span;
- interpret the global environment in which health care is provided and modify patient care and health care delivery in response to global environment factors;
- participate in political and professional organisation to influence health policy, improve health care, and advance the profession of nursing;
- engage in professional and personal activities that show evidence of a commitment to life-long learning and a contribution to society.

## ENTRY REQUIREMENTS

The Master in Advanced Nursing (MSN) programme is available to general, psychiatric and midwifery trained nurses who are registered/licensed in their current jurisdiction of practice; can verify first registration/licensure if it is different from that which is presently held, and qualify for registration/licensure in the region served by The University of the West Indies.

Candidates should have a total of three (3) years clinical experience post registration/licensure. Time spent on any educational programme is not included in this three (3) years practice requirement.

Candidates should also hold an undergraduate degree with not less than a Second Class Honours OR hold a postgraduate degree OR hold approved technical and/or professional qualification(s) awarded by an approved body and approved by this University and currently holds a position comparable for the area of the degree sought within the Regulations, all attempts will be made to facilitate the goals of the individual student, professional and career expectations, and employment realities.

**A candidate may be required to complete an entrance examination and/or attend an interview and/or have a period of orientation relevant to their programme of study before admission.**

## Selection of Applicants

Students are admitted based upon their application for a particular plan of study.

- The selected applicants will be offered provisional or full admission and will be so advised and their respective programme of study outlined.
- Applicants requiring prerequisites will be provisionally admitted. Full admission status is achieved on successful completion of these courses within the specified time frame.
- Pre-requisite courses may be pursued by registering in the course(s). With the approval of the Director, a student requiring pre-requisite courses may have one opportunity to challenge a course(s). Such a student may be permitted to challenge by examinations three (3) to nine (9) credits, depending on the interpretation of his/her transcripts and the number of credits required.
- Students who perform successfully on the challenge examination(s) will be deemed to have satisfied the

requirements of the respective course(s) and gain the relevant credit(s).

- Students who are successful on the challenge examination(s) will have the opportunity to register and successfully complete the required course(s) including coursework and examination(s).
- Challenge examinations are assigned a fee that is the responsibility of the student.
- Holding a Bachelor of Science in Nursing (BScN) Degree from an accredited programme or an accredited programme or a Registered Nurse (RN) with a Bachelor's degree in a health related field.

### PROGRAMME OVERVIEW

The MSN requires a minimum of forty-four (credits) including a thesis or a research project. Whenever applicable, all prerequisite courses must be completed prior to full admission to the MSN programme.

Each candidate will select a major identified on their application. Common to all the majors are identified core courses, a total of twenty-two to twenty-four (22-24) credits with the Education and Leadership/Management majors having a total of twenty-two (22) credits. Students must successfully complete all core courses except the Research Project/Thesis, and an Elective and/or Independent Study prior to matriculating into their identified majors.

### TEACHING STRATEGIES

All courses will be presented using the "blended learning" approach that will utilise on-line and face-to-face techniques. Each student will be assigned a tutor/mentor who will provide academic supervision and advising throughout the programme.

### Course of Study - MSN Programme

Course Code	Course Title	Credits
NURS 6017	Theoretical and Scientific Basis for Advanced Practice	3
NURS 6018	Current Issues in Nursing and Health Care	2
NURS 6019	Methods of Clinical Research	2
NURS 6020	Research Project/Thesis	9
NURS 6021	Leadership and Fiscal Management of Healthcare Systems	2
NURS 6022	Cultural/Spiritual Aspects of Advanced Practice Nursing	2
	Elective	2-4
	<b>Total Credits</b>	<b>22-24</b>

### Course of Study - MSN – Education Programme

Course Code	Course Title	Credits
NURS 6001	Curriculum Development for Advanced Practice in Nursing Education	3
NURS 6002	Seminar in Education and Evaluation	2
NURS 6003	Teaching and Learning Strategies	3
NURS 6004	Nursing Education Practicum I	3
NURS 6040	Nursing Education Practicum II	3
NURS 6005	Instruction Application of Technology	3
NURS 6006	Theories and Concepts in Nursing Education	3
NURS 6007	Seminar in Nursing Education	2
	<b>Total Credits</b>	<b>22</b>

### Course of Study - MSN – Leadership/Management Programme

Course Code	Course Title	Credits
NURS 6008	Nursing Management of Clinical Systems	3
NURS 6009	Managing within Health care Organisations	3
NURS 6010	Nursing Management of Human Resources	3
NURS 6011	Introduction to Health care Financing	3
NURS 6012	Finance and Budgeting for Nursing Systems	2
NURS 6013	Nursing Leadership/Management Seminar	3
NURS 6016	Nursing Leadership/Management Practicum	5
	Elective	2
	<b>Total Credits</b>	<b>22-24</b>

### Regulations and Assessment Procedures

Candidates for the MSN degree may pursue the prescribed courses by either full-time or part-time study. The full-time option will consist of two regular semesters and one third semester or three regular semesters; and part-time option may be completed in two years but not more than five consecutive years.

- *Full-Time Study:* Candidates normally require a minimum of twelve (12) credits each semester, and will be required to complete all courses in a minimum of three (2) semesters and not more than four (4) semesters.
- *Part-Time Study:* Candidates normally require six (6) credits per semester, and will be required to complete all courses and a project, in a minimum of nine (9) semesters and not more than fifteen (15) semesters.



- Having successfully completed one (1) year of part-time study, the candidate may seek full-time registration for the ensuing year, showing where his/her circumstances now enables him/her to do so. The regulation for full-time study will apply.
- Registration for courses includes registration for examinations.
- Continuous assessment will be the major method of assessment for graduate education.
- Candidates will have coursework and final assessments by written, oral and practicum functional examination, with internal and external examiners appointed by the Faculty.
- The minimum pass is Grade B for each theoretical course and for each course with a practicum.
- Written papers as well as oral presentations will be the preferred form of theoretical examinations. With written tests, there will be clinical or practical examinations related to the major chosen.
- Students have only one (1) opportunity to repeat a failed course and must register for and pursue the course(s) when they are next available or normally given.
- Pre-requisites are to be successfully completed before proceeding to those which require them. Students are required to pass pre-requisites at a Grade B and are not allowed to re-sit.
- Neither full-time nor part-time students will be allowed to proceed to the Clinical/Practicum course unless they have successfully completed the required core courses.

A student pursuing nine (9) or more credits in any semester, and who is within five (5) points of the passing grade, that student may be offered an oral, written, or practical accelerated re-sit within a specified time. If the student accepts the option offered, his/her successful performance will earn the credits for the course. This offer will be based on consistent satisfactory work in the course including any practicum and recommendation of the academic staff directly involved in the teaching an examination of the course, and the external examiner where this applies. Passing the clinical component of a course is mandatory.

The student who does not accept the offer of accelerated re-sit or who is unsuccessful in the examination will repeat the course including the relevant course work and or examination when next available.

Students are required to pass in both written examinations and coursework at the first attempt. For a student who fails the coursework or written examination at the first attempt, the Board of Examiners shall recommend to the Campus Committee whether a second attempt should be permitted (Regulations 2, p.17). Normally passing of the coursework and written examinations are required for a student to proceed to a clinical/practicum course.

A student may be given:

1. One opportunity to rewrite his/her proposal for the research project
2. One opportunity to rewrite his/her research project
3. One opportunity to repeat an oral presentation of the research project

Repeating courses, re-sitting examinations, rewriting research proposals and projects could have implications for the length and cost of the programme.

#### **UNSATISFACTORY RATE OF PROGRESS**

Students whose rate of progress is considered **UNSATISFACTORY** could be asked to withdraw.

Unsatisfactory rate of progress is defined as:

When a full-time student fails

1. More than two (2) courses in Semester I or
2. More than three (3) courses in Semester II or
3. Five courses between Semester I and II or
4. Any course with a practicum
5. Fails to adhere to professional nursing standards

**OR**

When a part-time student fails

1. The course(s) taken in Semester I or II, Year I or
2. One or more courses in any subsequent semester and before acquiring thirty (30) credits or
3. Any course with a practicum
4. Fails to adhere to professional nursing standards

A full-time student will be asked to withdraw if he/she fails more than three (3) courses in Semester I.

A part-time student will be asked to withdraw if he/she fails all courses taken in Semester I, Year I.