Welcome! The Faculty of Medical Sciences offers a range of graduate programme covering several disciplines.

Clinical Programmes

There are 20 DM clinical training programmes which are residency based. These are: Anaesthesia & Intensive Care, Haematology, Internal Medicine, Obstetrics and Gynaecology, Paediatrics, Pathology (Anatomical and Clinical), Psychiatry, Radiology, Surgery (General, Emergency Medicine, Orthopaedics, Cardiothoracic, ORL, Ophthalmology, Urology, Neurosurgery).

The duration of the programmes range from four to seven years depending on the specialty. They are open to persons with a medical degree and registerable with the medical Council of Jamaica, and in an appointed post. Each programme has a coordinator named by the Head of the Department and is managed at the Faculty level by Specialty Boards and the FMS Committee for Graduate Studies.

Taught Clinical Programmes

More recently, the Faculty has introduced clinical masters in response to the needs of the Region. Currently there are three such programmes the Sports Medicine, Sports and Exercise Medicine Physiotherapy and Medical Microbiology. These programmes include taught courses as well as either practica or lab work.

These programmes are governed both by the UWI Regulations and Faculty Regulations specific to each programme and approved by the Board for Graduate Studies and Research.

Taught Masters

There are a number of taught Masters programmes in the Faculty Nutrition, Public Health, Counselling and the recently introduced Forensic Sciences.

Research Degrees

The Faculty predominantly through the Basic Medical Sciences (BMS) offers research degrees at the MPhil and PhD levels. Many of these degrees have a strong laboratory focus and all are governed by the UWI regulations governing research degrees. There are also MPhil/PhD programmes in Public Health and Nutrition. There are joint research projects between the BMS group and the clinical disciplines which increasingly contribute to the development of new pharmaceutical and new approaches.

Nursing

Within the Faculty there has been growth and expansion of postgraduate nursing education. Nursing currently offer Masters level training in Education, Administration, Family Nurse Practitioner, Mental Health and the recently introduced Gerontological Clinical Nurse.

Dean: Professor Archibald McDonald, MBBS, DM (Surg) UWI, FRCSEd, FACS
DEPARTMENT OF BASIC MEDICAL SCIENCES

Head: Professor Wayne McLaughlin BSc Waterloo, PhD UWI

The Department currently offers undergraduate, postgraduate and professional programmes to medical, basic medical and allied health professionals in the Faculty of Medical Sciences, and offers undergraduate and postgraduate programmes to science students in the Faculty of Pure and Applied Sciences.

The principal teaching objectives of the Department of Basic Medical Sciences at the undergraduate level is the training of medical student in the MB BS programme, basic medical sciences students in the BB Med Sci programme, and physical therapy students in the BSc Physical Therapy programme within the Faculty of Medical Sciences (FMS), and the training of science students in the Faculty of Pure and Applied Sciences (FPAS) leading to BSc in Biochemistry, Molecular Biology and Biotechnology. The Department also assists in the training of allied health professionals such as nurses and nursing anaesthetist students.

The Department offers postgraduate training programmes leading to the MPhil and PhD degrees in Anatomy, Biochemistry, Molecular Biology, Pharmacology and Physiology and MSc Degree in Forensic Science.

Normally, for research degrees all students register for an MPhil Degree, in the first instance, but after one year it is possible to transfer to PhD registration. Transfer involves presentation of an Upgrade Seminar, judged by an Assessment Committee, constituted as prescribed by the regulations of the School for Graduate Studies and Research. The Committees report and recommendation has to be approved by the Board.

The MSc Degree in Forensic Science is a taught masters and takes one year on a full-time basis. The MPhil Degree normally takes a minimum of two years of intensive research on a full-time basis. The PhD Degree usually takes a minimum of three years full-time. The award of both the MPhil and PhD degrees are based on the submission of a the-
sis, and a public seminar, plus a viva voce examination for the PhD Degree only.

**GENERAL ENTRY**

The requirement for direct admission to the MSc Graduate Programme is a BSc (Hon) Degree (Lower Second Class) with a minimal cumulative GPA of 2.0. The requirement for direct admission to the MPhil/PhD Graduate Programme is a BSc (Hon) Degree (First or Second Class) in the relevant subject. However, where a candidate does not hold a BSc Degree in the relevant subject, he or she may be considered for admission subject to:

**QUALIFYING EXAMINATIONS**

A qualifying examination is deemed necessary where the Board for Graduate Studies may be in doubt of the applicants suitability for admission.

The candidate is required to follow a prescribed qualifying course(s), and writing a qualifying examination, that includes a written examination, an oral examination, and a review paper, not exceeding 5000 words, in a specialist area prescribed by the Head of Department/Supervisor/Supervisory Committee.

The candidate must achieve an overall minimum pass mark of 50%.

**DEPARTMENTAL EXAMINATIONS**

A Departmental Examination is deemed necessary where a candidate is considered to be deficient in knowledge of the subject.

The candidate is required to follow a prescribed programme specified by the Board of Graduate Studies and research on the recommendation of the Head of Department.

**SPECIAL AREAS OF RESEARCH**

The current areas of staff interest, in each section from which prospective graduate students may choose their area of work are as follows:

**ANATOMY**

Gross Anatomy
Histology
Embryology
Neuroanatomy
Reproductive biology
Teratology

**BIOCHEMISTRY**

Diabetology
Environmental Microbiology and Biochemistry
Industrial Fermentation
Medical Biochemistry
Biotechnology
Natural Products and Plant Biochemistry
**MOLECULAR BIOLOGY**
- Genetic predisposition to chronic diseases
- Genetics of athletic performance
- Molecular Microbiology
- Molecular Plant Pathology
- Molecular Plant Breeding
- Plant-Microbe Interactions

**PHARMACOLOGY**
- Choline supplementation on brain development
- Pharmacological investigation of plant-derived products.
- Experimental diabetes mellitus
- Kindled convulsions
- Regulation of tracheobronchial smooth tone.
- Toxicology
- Nitric oxide as a modulator of smooth muscle contractility.
- Effects of alcohol on cardiac functions
- Drug receptors and ion channels

**PHYSIOLOGY**
- Gastrointestinal physiology
- Endocrinology, Reproduction, Thyroid, Pancreatic physiology
- Cardiovascular Physiology
- Exercise and stress Physiology
- Electrophysiology and behavioural neuroscience
- Electrophysiological evaluation of brain function
- Physiological assays of bioactive natural products
- Haemorheological and haemodynamic changes in chronic diseases, e.g. Diabetes mellitus, Hypertension, Sickle cell disease, Systemic Lupus Erythematosus (SLE) and Pre-eclampsia

**MPhil, PhD in Biochemistry, Molecular Biology**

**Programme Objectives**
To train competent and problem-solving researchers for industry, biomedical sciences and academia.

**Entry Requirements**
BSc Degree with at least an Upper Second Class Honours or equivalent from a recognized university.

**Areas of Research**
- Biochemistry: Human, Plant
- Human Molecular Biology
- Molecular Plant Pathology
- Molecular Entomology
- Industrial and Environmental Microbiology
- Molecular Microbiology
- Molecular Genetics
- Post Harvest Biochemistry
- Use of Natural Products in the treatment of Diabetes
- Yam: Biochemistry and Biotechnology

**Seminars**
At least 1 Departmental seminar/year

**Duration of programme**
3 - 5 years part time/2 - 3 years full time for MPhil Degrees.
5 - 7 years part time/3 - 5 years full time for PhD Degrees.
Course (core)
**Course Description:** This course is designed to introduce new graduate students to the main elements of the research process, many of which are taken for granted. The course will ground the students in concepts such as research methodology (especially in developing and proving hypotheses), reviewing literature, and presentation of material, statistical analyses to determine significance, professional research ethics, biochemical calculations and separation techniques. The course will also introduce the students to bioinformatics.

Department Contact Information: 876 927 2290, 935 8794, 977 4342 (Tel), 876 977 7852 (Fax)

MSc Forensic Science

**Specializations/Options:**
(1) Forensic Chemistry, (2) Forensic Molecular Biology, (3) Forensic Pathology & Anthropology and (4) Forensic Toxicology

**Programme Objectives:**
On completion of this programme students are expected to:

1. Demonstrate an understanding of the areas that are essential to forensic science
2. Apply basic forensic science concepts to problem solving necessary for success in a modern forensic science laboratory
3. Demonstrate professional values, concepts and ethics
4. Provide expert testimony in the court
5. Demonstrate integration of knowledge and skills through a variety of experiences and tools such as comprehensive examinations, thesis, and research project.

**Entry Requirements**
The minimal admission criteria for the program are outlined below:

i. BSc degree with a minimal cumulative GPA of 2.0 (Lower Second Class Honours) from a recognized post-secondary institution

ii. Medical Degree (Candidates for Forensic Pathology and Anthropology)

The following coursework must have been passed at the undergraduate level:

i. Two semesters of Level-1 Chemistry. Two semesters of Level-2 Chemistry (including Analytical Chemistry) for candidates intending to pursue Forensic Chemistry.

ii. One semester of Statistics/Biostatistics.

iii. Two semesters of Level-1 Biology/Genetics
Seminars: Minimum 2 seminars

**Duration of programme:** 12 months F/T; 18 months P/T

**Programme Structure**

The programme combines rigorous scientific and laboratory training with exposure to the breadth of forensic science disciplines and further specialization in one of the following four areas: forensic chemistry, forensic molecular biology, forensic pathology and anthropology, and forensic toxicology. Students will also be trained in statistical evaluation of forensic evidence, legal testimony related to testing procedures, results and interpretations, proper chain of custody procedures, expert witness courtroom testimony, report writing, good laboratory practices and the value of professional ethics. The format will include lectures, practical sessions, seminars, tutorials and a research project.

The Master of Science degree requirements are met upon satisfactory completion of the minimum of 37 credits of which 24 credits make up the core courses for all disciplines. Thirteen (13) credits are specific to the disciplines of forensic chemistry, forensic molecular biology, forensic pathology and anthropology, or forensic toxicology. Students are allowed to take an additional 6 credits outside the area of their specialization.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCI6101</td>
<td>Fundamentals of Forensic Science</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6102</td>
<td>Crime Scene Management</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6103</td>
<td>Forensic Laboratory Quality Assurance</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6201</td>
<td>Legal and Ethical Issues in Forensic Science</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6202</td>
<td>Moot Court</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6301</td>
<td>Statistical Analysis of Forensic Evidence</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6401</td>
<td>Research Methods &amp; Project</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>FSCI6402</td>
<td>Graduate Seminar</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
### Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCI6302</td>
<td>Population Genetics</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6501</td>
<td>Forensic Chemistry I</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6502</td>
<td>Forensic Chemistry II</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6503</td>
<td>Forensic Chemistry Analysis Laboratory</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6601</td>
<td>Forensic Serology</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6602</td>
<td>Forensic Serology Laboratory</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6603</td>
<td>Forensic Molecular Biology</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6604</td>
<td>Forensic Molecular Biology Laboratory</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6701</td>
<td>Forensic Anthropology</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6702</td>
<td>Forensic Anthropology Laboratory</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6703</td>
<td>Forensic Pathology I</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6704</td>
<td>Forensic Pathology II</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6705</td>
<td>Forensic Pathology Laboratory</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6801</td>
<td>Forensic Toxicology I</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6802</td>
<td>Forensic Toxicology II</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>FSCI6803</td>
<td>Forensic Toxicology Laboratory</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**FSCI6101 Fundamentals of Forensic Science**

**Course Objectives**

This course will provide a broad introduction to forensic science, the history and overview of the disciplines. Students will be introduced to the theory, concepts and practices used in the analysis of biological and physical evidence, analysis of drugs, forms of trace evidence, document examination, identification of biological fluids, personal identification, quality assurance/quality control (QA/QC), chain of custody procedures, the forensic laboratory, expert testimony and the fundamentals of crime scene investigation. The importance of
application of forensic science to the criminal justice system also its role in international human rights issues, identification the victims of genocide and mass disasters will also be discussed. Guest lecturers will be invited to cover selected topics. Throughout the semester students will be provided with case studies and journal articles and be expected to read and prepare for discussions.

FSCI6102 Crime Scene Management

Course Objectives

This course will provide an in-depth study of crime scene procedures including recognition, protection, documentation techniques, and collection of biological and physical evidence; crime scene documentation (photography, crime scene sketching, information gathering, report writing, measurements, fingerprint processing, blood pattern analysis, ballistics, scene search procedures; and reconstructions from evidence and scene patterns), chain of custody. Scene investigations will include burglary, homicide, arson, motor vehicle, and sudden and unexplained death. Throughout the semester students will be provided with journal articles and be expected to read and prepare for discussions.

FSCI6103 Forensic Laboratory Quality Assurance

Course Objectives

To introduce the principles of quality assurance, current industry standards for quality systems in forensic science disciplines.

FSCI6201 Legal and Ethical Issues in Forensic Science

Course Objectives

It is important for forensic scientists to have a thorough understanding of the legal and ethical underpinnings for their work. These are important in establishing and maintaining a responsible and reputable forensic science service. The role that a forensic scientist plays in the litigation process will be discussed. Students will learn the appropriate guidelines for professionalism and conduct in expert witnessing. Students will also be exposed to both the general principles that underlie the criminal and constitutional law as well as to some specific crimes recognised by the criminal law. Legal rules regarding the search and seizure of physical evidence, standards of reliability and relevance of scientific evidence in court, the scientific interpretations and analysis of physical evidence and the development and application of professional codes of ethics will also be discussed. Several case studies will be used.

FSCI6202 Moot Court

Course Objectives

This interactive course builds upon the material discussed in Legal and Ethical Issues in Forensic Science regarding the criminal trial process, the role of the forensic witness and the presentation of scien-
scientific testimony and physical evidence in court. Students will actively participate in presenting testimony as well as critiquing the performance of others in a mock court setting. Instructors will utilize reports and projects prepared in other courses to provide the subject matter for the students testimony.

FSCI6301  Statistical Analysis of Forensic Evidence

**Course Objectives**

This course will discuss the statistical and probabilistic evaluation of forensic evidence. Among the areas to be covered are: laws of probability, conditional probability, genetic variation in human populations, likelihood ratio, Hardy-Weinberg equilibrium, Bayes theorem, evaluation of evidence, sampling and interpretation of statistical results. Statistical analysis in transfer evidence, paternity testing and mixtures, and presenting evidence.

FSCI6302  Population Genetics

**Course Objectives**

Population genetics provides the background for the forensic scientist to understand the importance of population size, migration, mating, alleles and genotypes in DNA profiling and using DNA databases. This course will examine the principles of population genetics and the practical application of these principles to understanding genetic variation within and between populations, the significance of Hardy-Weinberg equilibrium, race and ethnicity. Throughout the semester students will be provided with journal articles and be expected to read and prepare for class discussions.

FSCI6401  Research Methods and Project

**Course Objectives**

Laboratory research in forensic science subject areas. The original research problem will be written up as a formal document and submitted as part of the requirements to fulfill a Master of Science degree. Data generated from research will form the basis for the Graduate Seminars (FSCI 6402). Students will be exposed to research methodologies prior to starting their project. Students will be required to perform their research in semester 2 and during the summer. Research can be performed on campus or at an external laboratory/agency.

FSCI6402  Graduate Seminar

**Course Objectives**

A seminar series involving presentations from students on their research project, journal articles, case reviews and from invited speakers. Each student will also be required to present a one-hour seminar on the results of their research. Attendance at all seminars is compulsory.
FSCI 6501  Forensic Chemistry I

Course Objectives

This course emphasizes the use of various sensitive analytical techniques including pyrolysis-GCMS, micro-FTIR, GPC, capillary electrophoresis, spectroscopy and microscopy in the analysis of trace evidence including paint, inks, dyes, fibers, explosives and plastics. Tool marks and serial number restoration, footwear and tyre mark impression evidence will be presented. Throughout the semester students will be provided with journal articles and be expected to read and prepare for class discussions.

FSCI 6502  Forensic Chemistry II

Course Objectives

This course will introduce students to the investigation of arson and fire investigations. Students will also be introduced to explosive materials and the investigations of explosions. Sampling protocols, packaging, recovery, analytical techniques and data analysis will also be discussed.

FSCI 6503  Forensic Chemistry Laboratory

Laboratory Objectives

This laboratory-based course will provide hands-on experience with the methods, techniques and instruments used to analyze trace evidence such as glass, paint, hairs and fibers, with the ultimate goal of identifying and comparing known trace evidence materials with questioned samples.

FSCI 6601  Forensic Serology

Course Objectives

A comprehensive study of the theory and practice of isoenzyme, serum protein and immunoglobulin genetic markers in human blood and body fluids. Electrophoretic and isoelectric focusing techniques. Interpretation of genetic marker in blood individualization. Biochemical and immunologic procedures for blood and body fluid identification; typing of Rh, MNSs and other red cell antigens in blood and blood stains; antiserum selection and evaluation; ELISA techniques. Throughout the semester students will be provided with journal articles and be expected to read and prepare for class discussions.

FSCI 6602  Forensic Serology Laboratory

Laboratory Objectives

Students will be given an opportunity to apply the principles of forensic serology to actual biological samples. Techniques utilized will include screening tests, methods used to confirm the presence of specific biological material(s), microcrystalline tests, catalytic color tests, antigen-antibody interactions, gel diffusion and microscopic identification of cellular material. Serology cases will be assigned to each student where they are expected to analyse the case, write a report, and present their findings.
FSCI6603 Forensic Molecular Biology

**Course Objectives**

This course will discuss the theory and application of human genetics and molecular biology to testing of biological evidence. DNA structure, replication and organization of the human genome and types of genetic variation occurring in humans will be covered. The history of DNA analysis and current PCR based methods for testing of autosomal STR loci, Y chromosome STR loci and mitochondrial DNA will be covered. Case examples with commonly encountered forensic issues, such as degradation, mixture analysis, artifacts in PCR testing, DNA profile interpretation, statistical analysis of results and selecting the appropriate DNA test based on the case scenario and serological results will be discussed. Advanced DNA topics including SNPs, microbial DNA, mitochondrial DNA, and cutting-edge DNA technologies will be covered. Throughout the semester students will be provided with journal articles and be expected to read and prepare for class discussions.

FSCI6604 Forensic Molecular Biology Laboratory

**Laboratory Objectives**

Students will be exposed to state-of-the-art instrumentation such as capillary electrophoresis, PCR and real-time PCR instruments. Laboratory sessions will include several DNA extraction techniques, human DNA quantification, PCR amplification of STR loci, electrophoresis and DNA profile analysis. DNA cases will be assigned to each student where they are expected to analyse the case, write a report, and present their findings at seminars.

FSCI 6701 Forensic Anthropology

**Course Objectives**

A comprehensive study of the bones and teeth of the human skeleton emphasizing methods of identification, construction of the biological profile (age, sex, ancestry, stature), and trauma analysis. This course will present the methods and theory behind the analysis of skeletal remains from medico-legal contexts. Topics will include human skeletal anatomy, odontology, establishing the biological profile, trauma analysis, taphonomy, and how anthropological analyses can assist the pathologist with determining cause and manner of death. In addition to the text books, students will be provided with journal articles throughout the semester and will be expected to read and prepare for class discussions.

FSCI6702 Forensic Anthropology Laboratory

**Laboratory Objectives**

Students will learn how to identify osseous material from non-osseous material, differentiate human from non-human bone, and determine the medico-legal significance of human remains. Students will use gross morphology, odontology and osteometry.
(measurement of bones) to develop the biological profile (sex, age, ancestry, stature). Students will be provided with the opportunity to observe different types of skeletal trauma and evaluate the effects of taphonomic changes to bone.

FSC 6703  Forensic Pathology I

Course Objectives
This course will focus on the role of the medical practitioner in the investigation of crime and death. Students will be exposed to theoretical knowledge and practical skills relating to the medico-legal investigation of wounds and death and will be taught to observe and analyse evidence at death scenes. Other elements of forensic pathology will include autopsy techniques, interpretation of autopsy findings, taking into account crime scene information and medical history, determining post-mortem interval, death by drowning, asphyxia and by suicide; sudden and unexpected deaths. Throughout the semester students will be provided with journal articles and be expected to read and prepare for class discussions.

FSCI 6704  Forensic Pathology II

Course Objectives
Instruction will include techniques of forensic odontology and anthropology that are used to support forensic pathology, particularly in identifying unknown remains. Topics related to drugs and drug related deaths, physical abuse of children, child sexual abuse and sexual offenses in adults will also be covered. Throughout the semester students will be provided with journal articles and expected to read and prepare for class discussions.

FSC 6705  Forensic Pathology Laboratory

Laboratory Objectives
Forensic Pathology taught with a strong emphasis on practical learning, with students undertaking a set number of autopsies under supervision. Students will be required to draft a clear and comprehensive autopsy report that will accurately communicate to the relevant authorities, the cause, mechanism and manner of death.

FSCI 6801  Forensic Toxicology I

Course Objectives
Forensic toxicology I will deal with qualitative and quantitative analysis of biological specimens for the presence of alcohol, drugs (marijuana, cocaine, the major opiates, the common hallucinogens and amphetamines), and/or poisons and their corresponding metabolites. The principles of pharmacodynamics and pharmacokinetics as they apply to forensic toxicology, the molecular mechanisms of toxicity, drug toxicity, toxins and poisons, drug classifications will also be discussed. An overview of analytical methods used in the analysis of drugs and toxins e.g. GC, TLC, GC/MS, LC/MS and HPLC will be discussed. Throughout the semester students will be provided with journal articles and expected to read and prepare for class discussions.
<table>
<thead>
<tr>
<th>Year</th>
<th>Course Name</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year I</td>
<td>Introduction to Anaesthesia</td>
<td>10 wks</td>
</tr>
<tr>
<td></td>
<td>Anaesthesia in special patients</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>Regional &amp; Emergency</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>Anaesthesia Pharmacology</td>
<td></td>
</tr>
<tr>
<td>Year II</td>
<td>Physiology, Anatomy, Physics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; Clinical Measurement of:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respiratory System</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardiovascular System</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neurological &amp; Gastrointestinal Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Renal, Haematological &amp; Endocrine Systems</td>
<td></td>
</tr>
<tr>
<td>Year III-IV</td>
<td>Clinical Rotations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ICU</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td>Neuroanaesthesia</td>
<td>3 months</td>
</tr>
<tr>
<td></td>
<td>Obstetric anaesthesia</td>
<td>3 months</td>
</tr>
<tr>
<td></td>
<td>Paediatric anaesthesia</td>
<td>3 months</td>
</tr>
<tr>
<td></td>
<td>Cardiothoracic anaesthesia</td>
<td>3 months</td>
</tr>
<tr>
<td></td>
<td>Ac &amp; Chronic Pain</td>
<td>3 months</td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td>6 months</td>
</tr>
</tbody>
</table>
Department Contact Information:
Section of Anaesthesia & Intensive CareUHWI, Mona, Kingston 7 Tele: 1 876 977 2484 Fax: 1 876 977 6160
Email: uwimona.anaesthesia@gmail.com
Programme Coordinator: Dr. Hyacinth Harding-Goldson

DM Emergency Medicine

Programme Objectives: To train the candidate to Consultant level so that he/she may be capable of running an Emergency Department and able to care for the varying emergencies that may present.

Entry Requirements:
Graduate of a Medical school recognized by the University of the West Indies who has completed internship training.

Duration of programme: Four years
Programme Structure:
The postgraduate Emergency Medicine Programme is a four-year residency programme starting in July (Mona) or January of each year. Six months of each year are spent in emergency room rotations. The other six months are spent rotating through relevant subspecialty areas including anaesthesia, child health, internal medicine, surgery, orthopaedics, obstetrics and gynaecology, family medicine and psychiatry. Anaesthesia is mandatory as an early rotation to be done in the first year. However, there is flexibility in the sequence of the rotations in the other disciplines. Candidates are encouraged to do one of the two three-month A&E periods in the fourth year at an approved emergency room in a regional or international teaching hospital. A maximum of 6 months may be spent outside of the Caribbean (A&E and elective). Overseas elective rotations can be undertaken with the approval of the Coordinator of the Emergency Medicine Residency Program.

Qualifying exams are administered after two years (Part I) and then the exit (Part II) exam.

Yearly rotations for D.M. Emergency Medicine programme

Year 1
A&E (6)
Anaesthetics (3)
Paediatrics (3)

Year 2
A&E (6)
Medicine (3)
Surgery (3)

Year 3
A&E (6)
3) Orthopaedics/ Radiology (3)

Year 4
A&E (6)
Family Medicine (3)
Orthopaedics/ Radiology (3)
Ophthalmology (3)
Psych/O&G (3)
Elective (3)
In addition a book must be prepared over the four-year residency period consisting of ten case discussions and a research project. This casebook must be completed and submitted 6 months before final exams.

In addition, all emergency medicine residents must complete the American Heart Association Advanced Cardiac Life Support (ACLS) and American College of Surgeons Advanced Trauma Life Support (ATLS) courses by the end of their first year of training. The Paediatric Advanced Life Support (PALS) or Advanced Paediatric Life Support (APLS) course is to be completed during the second year of the programme.

Department Contact Information:

Department of Surgery (876) 927-1270
Emergency Medicine Division 977-0723/927-1620 ext 3012
Programme Coordinator: Dr. Jean Williams-Johnson

MSc Sports Medicine

This modular training programme is designed to provide fundamental skills in sports medicine and exercise physiology. The course details the management of injuries, the prevention of injuries, the use of exercise in controlling chronic diseases and provides the doctor with the expertise to impart nutritional, psychological and pharmacological guidance to athletes. It prepares doctors to become team physicians as well as to organize medical facilities for large events.

Programme Objectives:

Application of applied anatomical knowledge to understand injury and recovery

Understanding of the physiological changes due to exercise and apply this to athletes and non-athletes.

Ability to diagnose, investigate and treat common sporting injuries

Ability to monitor rehabilitation of injuries

Appreciation of biomechanics of walking, running and some sports with understanding of how this leads to injury.

Appreciate differences in athletes of different ages, gender, or condition (eg. pregnancy).

Appreciation of nutrition pathways and energy systems of exercise.

Enhance recovery through nutritional principles e.g. enhancement of muscle glycogen

Thorough understanding of effects of dehydration and its prevention
Ability to formulate exercise prescriptions for patients with medical conditions e.g. cardiac and rheumatoid pa-
tients

Ability to formulate exercise programmes for fitness and sports

Understanding of prohibitive drugs and techniques and World Anti-doping Agency Regulations.
Application of sports psychology and its role for individuals and teams

Demonstrate understanding in research methods and biostaticstics culminating in a research project.

**Entry Requirements**

Registered medical practitioners with two years professional experience.
Application
Two Referee Forms
Registration License
Transcript

*Duration of programme: 2 years minimum*

**Programme Structure:**

The design is of distance teaching through weekly topics consisting of 14 week each semester produced on
DVD. The weekly tasks would include reading material through photocopied articles, web based links for other
articles, and Videos/CD Rom didactic lectures. Questions designed to emphasis the main points of the week
will be provided in the package and answers will be provided at weeks 6 and 13. Approximately four hours will
be required to complete a weeks work. There would be teleconferences on weeks 7 and 14. At the end of the
semester, there will be a three hour written examination, conducted in the doctors own country, supervised by
a mutually agreed upon invigilator.
### COURSE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPSF6001</td>
<td>Upper Body Injury</td>
<td>3</td>
</tr>
<tr>
<td>SPSF6002</td>
<td>Lower Body Injury</td>
<td>3</td>
</tr>
<tr>
<td>SPSF6003</td>
<td>Applied Sports Medicine</td>
<td>3</td>
</tr>
<tr>
<td>SPSF6004</td>
<td>Exercise Physiology (Medical Application of Exercise)</td>
<td></td>
</tr>
<tr>
<td>SPSF6005</td>
<td>Sports Physiology</td>
<td>3</td>
</tr>
<tr>
<td>SPSF6006</td>
<td>Sports Science</td>
<td>3</td>
</tr>
<tr>
<td>SPSF6007</td>
<td>Sports Nutrition/Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>SPSF6009</td>
<td>Sports Psychology/Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>SPSF6011</td>
<td>Research Methods/Biostatics</td>
<td>3</td>
</tr>
<tr>
<td>SPSF6012</td>
<td>Research Projects</td>
<td>3</td>
</tr>
<tr>
<td>SPSF613</td>
<td>Practicum I</td>
<td>2</td>
</tr>
<tr>
<td>SPSF6014</td>
<td>Practicum II</td>
<td>2</td>
</tr>
</tbody>
</table>

### Upper Body Injuries (SPSF 6001)
- Functional anatomy of head, neck, trunk and upper limb
- Common sporting injuries of this region: mechanism and pathogenesis
- Investigation and management of these injuries

### Lower Body Injuries (SPSF 6002)
- Functional anatomy of abdomen, pelvis and lower limbs
- Common sporting injuries of this region: mechanism and pathogenesis
- Investigation and management of these injuries

### Applied Sports Medicine (SPSF6003)
- Investigations of sports injuries
- Prevention of sports injuries
- Rehabilitation
- Paediatric sports medicine
- Team doctor and events coordinator including legal aspects
- Advances in sports enhancement; genetics

### Exercise Physiology (Medical Application of Exercise) (SPSF6004)
- Exercise physiology of cardiovascular system
- Fitness testing
ECG and stress testing
Benefits of exercise in chronic conditions e.g. diabetes, hypertension
Pregnancy and exercise

Sports Physiology (SPSF6005)
Exercise and respiratory function including exercise induced asthma
Temperature regulation
Adaptations to different climates; underwater, high altitude
Sleep physiology, and traveling adjustments

Sports Science (SPSF6006)
Muscle anatomy, physiology and function
Training mechanisms for strength and endurance
Factors comprising fitness testing
Endocrine aspects of exercise

Sports Nutrition/Biomechanics (SPSF6007)
Fluid requirements and dehydration
Fluid regimes and sports drinks
Energy requirements and sources
Nutritional components in sports enhancement
Eating disorders
Biomechanics of walking and running including gait analysis
Biomechanics of throwing
Sports specific biomechanics: swimming, cricket bowling, cycling
Shoes and orthotics

Sports Psychology/Pharmacology (SPSF6009)
Psychology of the successful athlete
Performance enhancing techniques; goal setting, imagery
Anxiety disorders
Team dynamics
Psychology in recovery from injuries
Pharmacokinetics

Athletes on prescribed medications
Performance enhancement drugs
WADA anti-doping regulations and lists
The doctors bag

Research Methods and Biostatistics (SPSF6011)
Medical epidemiology
Questionnaires
Basic statistics
Application of statistical software e.g. SPSS
Preparation for research project

Research Project (SPSF6012)
Formulation of research project and guidance through its execution and writing

Practicum I (SPSF6013)
To be held at Mona campus (one week)
Examination techniques, group discussions and practical points on upper limb and thorax.

Practicum II (SPSF6014)
To be held at Mona campus (one week)
Examination techniques, group discussions and practical points on lower limb and back.

Contact Information:
MSc Sports MedicineFaculty of Medical Science-
SUWI, MonaTelephone: 927-1620 ext 3051 or 977-6714
Programme Coordinator: Dr. Akshai Mansingh

MSc Sports and Exercise Medicine Physiotherapy

Programme Objectives:
Apply knowledge of anatomy to the understanding of injury and recovery
Demonstrate an understanding of the physiological changes due to exercise and apply this to athletes and non-athletes.

Diagnose and treat common minor sporting injuries
Recognize major injuries and appropriately refer to physicians

Implement and monitor progress of rehabilitation of injuries

Demonstrate an appreciation of the biomechanics of walking, running and other sports with an understanding of how this leads to injury.

Appreciate differences in athletes of different ages, gender, or condition (e.g. pregnancy).

Demonstrate an understanding of nutrition pathways and energy systems of exercise.

Understand methods of enhancing recovery through the application of nutritional principles e.g. enhancement of muscle glycogen

Understand the effects of dehydration and its prevention

Formulate and supervise exercise programmes for fitness and sports

Understanding of prohibitive drugs and doping methods used in sports. In depth understanding of the World Anti-doping Agency Regulations.

Apply the knowledge of sports psychology to the management of individuals and teams

Formulate and supervise exercise prescriptions for patients with medical conditions e.g. cardiac patients, diabetics, hypertensive patients

Demonstrate an understanding of the role of exercise in the prevention or control of many chronic conditions e.g. diabetes mellitus, hypertension, ischaemic heart disease, osteoporosis, arthritis, and renal failure.

Appreciate the use of exercise in the promotion of healthy lifestyles in all populations

Demonstrate understanding and application of research methods and biostatistics culminating in a research project.

**Entry Requirements** (MSc Sports and Exercise Medicine - Physiotherapy):

**Application**

Candidates with a minimum of lower second class pass in the Bachelors degree in Physical Therapy will be eligible for admission into the programme. Those with degrees and diplomas awarded from a University other than UWI will be admitted on the basis of a transcript evaluation to determine prior knowledge and level of training. Candidates should be fully registered in their country of practice. Candidates with Diplomas in Physical Therapy (UHWI) awarded prior to 2004 will also be considered on the basis of a transcript evaluation to determine prior knowledge and level of training. Whereas involvement in Sports and Exercise medicine is preferred, it is not absolutely necessary for consideration.

Two Referee Forms
Registration License
Transcript

Duration of programme: 2 years minimum

**Programme Structure:**

The modular distance training course is delivered through DVDs containing coursework, lectures and demonstrations. There are 9 courses as well as 4 practica held initially at Mona but can be additionally held in other territories.
Evaluation for each course takes place through a written examination in the candidates home territory. A final Objective structured clinical examination (OSCE) on practical aspects of the course will be conducted following the last practicum. Log book notations of other practical aspects are to be maintained.

**COURSES (Core)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPPT6101</td>
<td>1. Upper Body</td>
<td>3</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6102</td>
<td>2. Lower Body</td>
<td>3</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6103</td>
<td>3. Applied Sports Medicine</td>
<td>3</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6104</td>
<td>4. Exercise Physiology</td>
<td>3</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6105</td>
<td>5. Applied Exercise Physiology</td>
<td>3</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6106</td>
<td>6. Exercise in Specific Conditions</td>
<td>3</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6109</td>
<td>7. Sports Psychology/Biomechanics</td>
<td>4</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6111</td>
<td>8. Research Methods &amp; Biostatistics</td>
<td>6</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6112</td>
<td>9. Research Project</td>
<td>6</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6113</td>
<td>10. Practicum I</td>
<td>1</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6114</td>
<td>11. Practicum II</td>
<td>1</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6115</td>
<td>12. Practicum III</td>
<td>1</td>
<td>1, 2, Summer</td>
</tr>
<tr>
<td>SPPT6116</td>
<td>13. Practicum IV</td>
<td>1</td>
<td>1, 2, Summer</td>
</tr>
</tbody>
</table>

1. **Upper Body**

To detail the anatomy of upper body musculoskeletal system as it applies to sports and exercise medicine
To detail sports injuries to the upper body including emergencies
To highlight principles of rehabilitation of injuries and protocols of management

2. **Lower Body**

To detail the anatomy of lower body musculoskeletal system as it applies to sports and exercise medicine
To detail sports injuries to the lower body including emergencies
To highlight principles of rehabilitation of injuries and protocols of management
3. **Applied Sports Medicine**

The physiology of muscle function  
Energy Systems in the body and their role in the different types of exercise  
Principles of training and testing specific to exercise type  
The role of exercise to promote wellness  
Specific considerations for children involved in sports  
Effects of dehydration and its prevention  

4. **Exercise Physiology**

To highlight normal cardiovascular and respiratory changes to exercise  
To highlight abnormalities and pathologies in cardiovascular and respiratory changes to exercise  
To introduce investigations of the cardiovascular and respiratory systems.  
To introduce principles of physical testing  
To introduce the principles of sleep medicine  

5. **Applied Exercise Physiology**

To examine the role of the team physiotherapist and the interaction with other members of the Sports Medicine team  
Orientation to legal implications and responsibilities in sports medicine  
To develop an appreciation for the specifics of nutrition related sports and athletes  
Introduction to different imaging modalities in sports  
Effects of genetics on sports  
To develop an appreciation of medications used in sports medicine  
To become familiar with anti-doping regulations in sports  
Introduction to alternative and complementary medicine in sports  

6. **Exercise in Specific Conditions**

To detail unique physiology of special populations  
To detail unique physiology in specific chronic diseases  
To examine the relationship between physical activity, health, diet, and obesity, and the role of the physiotherapist in facilitating involvement in physical activity  
Introduction of the relationship between exercise and medications  

7. **Sports Psychology/Biomechanics**

To introduce key principles of sports psychology and their application in motivation and behaviour modification  
To outline specific methods to enhance focusing and concentration  
To orient the candidate to overuse conditions and exercise addiction  
To inculcate basic appreciation of biomechanics of different activities and sports  
To highlight injuries based on biomechanical abnormalities  

8. **Research Methods & Biostatistics**

To introduce the principles research methodology  
To design a research project  
To introduce basic statistics and analysis  
To familiarize candidates with commercial software for statistical analysis  

9. **Research Project**

Completion of data collection (submitted to ethics committee during Research Methods and Biostatistics course)  
Statistical analysis of data  
Writing of project using format of journal publication (West Indies Medical Journal)
Submission for assessment to supervisor and external examiner

This is an independent course with a pass / fail assessment

Project to be no longer than 20,000 words following the format from the Thesis Guide of the University of the West Indies.

10. Practicum I

To become proficient in sourcing literature from online databases
To formulate thoughts on the Research project through interaction with resource persons in the Faculty
To view fitness battery tests
To view training methods

11. Practicum II

To become proficient with devising exercise protocols in special populations
To work through case descriptions
To be able to set up a medical bag
To perform pre-participation screening of athletes

12. Practicum III

To examine the upper body and be familiar with special tests
To discuss case descriptions on upper limb injuries and formulate management protocols

13. Practicum IIII

To examine the lower body and be familiar with special tests
To discuss case descriptions on upper limb injuries and formulate management protocols

Department Contact Information:

Division of Sports Medicine/FMS Faculty of Medical Sciences UWI, Mona Telephone: 927-1620 ext 3051 or 977-6714 Fax: 702-2391 Email: sportsmedicine@uwimona.edu.jm
Programme Director: Dr. Akshai Mansingh

DEPARTMENT OF COMMUNITY HEALTH & PSYCHIATRY

Head: Professor Denise Eldemire-Shearer, BABish-ops (C), MBBS, PhD UWI

The Department of Community Health and Psychiatry offers the following graduate programs:

Diploma in Family Medicine
Master of Public Health (MPH)
Master of Public Health/Health Promotion (MPH/HP)
MPhil/PhD in Public Health
Doctorate in Public Health (DrPH)
MSc Cultural Studies
DM Psychiatry
PhD Clinical Psychology

**Diploma in Family Health**

*Programme Objectives*
To provide education and training in Family Medicine appropriate and relevant to the health needs of the Caribbean community

To allow post-internship doctors and general practitioners in the Caribbean to:

1. Broaden knowledge and understanding of health and illness and their dynamics in the community in relation to the socio-economic and cultural environment of the community

2. Enhance clinical skills necessary for the management of common conditions seen in primary health care practice

3. Enhance professional competence, attitudes, values and behaviour that are inherent to the specialty of Family Medicine

4. Develop attitudes and skills to allow them to work effectively as members and leaders of a health care team in the context of the policy and reality of the health care systems in the Caribbean.

*Entry Requirements*
To be admitted to the prescribed course of study for the Diploma of Family Medicine candidates must be:

1. A registered medical practitioner

2. Employed in primary health care (government or private) for the duration of the course and be able to be released from duties on a regular basis to attend prescribed clinical sessions and at intervals for workshops and block teaching.

3. Computer literate and have access to an Internet-linked computer

Applicants will be required to submit a written application and may in some instances be required to attend an interview to be eligible for selection to the programme

*Duration of programme*

The programme runs over two academic years and involves both distance/on-line sessions and face-to-face sessions.

*Programme Structure*

The award of the Diploma in Family Medicine is based on satisfactory completion of:

1. 12 six-week modules delivered by distance/on-line mode
2. Family Medicine Clinical Sessions
3. Specialist Clinical Sessions
4. On-Line Clinical Seminars
5. Block Face-to-face workshops

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMMS6100</td>
<td>Continuing Medical Education</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6801</td>
<td>Epidemiology and Evidence Based Medicine</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6200</td>
<td>The Consultation and Communication</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6700</td>
<td>Doctor-Patient Relationship/ Ethics</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6400</td>
<td>Health Promotion, Screening and Risk Assessment and Risk Assessment</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Chronic Disease in Primary Care</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6600</td>
<td>Sexuality and STDS</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6500</td>
<td>Child and Adolescent Health</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6201</td>
<td>Gender Issues in Health/ Women's Health</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6401</td>
<td>Health Care of the Elderly</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6402</td>
<td>Counselling</td>
<td>2</td>
</tr>
<tr>
<td>FMMS6803</td>
<td>Forensic Medical and Legal issues in Primary Care</td>
<td>2</td>
</tr>
</tbody>
</table>
FMMS6100   Continuing Medical Education  
(Continuing Medical Education)

Introduces the student to the principles of Adult Education. The features of the constructivist theory of education are examined and applied to problem-based learning. Each student assesses his/her learning style and develops a learning contract.

FMMS6801  Epidemiology and Evidence Based Medicine

Presents the tenets of Evidence Based Medicine and its application to everyday practice. The role that epidemiology plays in determining health-related events is examined. Students are exposed to the appropriate steps in clinical decision making.

FMMS6200  The Consultation and Communication

The elements of the medical consultation and the importance of proper communication techniques are presented. The seven communication transforming principles of Roter and Hall are examined and the relevance of communication to Family Medicine examined.

FMMS6700  Doctor-Patient Relationship / Ethics

The different types of Doctor-Patient Relationships and the importance of Ethics in Medical Practice are presented. Important virtues of the Family Physician and various examples of contemporary ethical issues are discussed.

FMMS6400  Health Promotion, Screening and Risk Assessment

Health Promotion Concepts, Rationale and Strategies and their application to Family Medicine Practice are examined. The student is exposed to models of health behaviour change and the value of equipping individuals with skills as part of the health promotion process.

Chronic Diseases in Primary Care

The common chronic diseases in the Caribbean—their assessment and management in Family Medicine Practice are explored. Special emphasis is placed on the conditions of obesity, hypertension and diabetes and the skills needed to assess and manage these in a holistic way are examined. The student is introduced to the use of protocols and guidelines in the management of Chronic Diseases.

FMMS6600  Sexuality and STDs

The student explores techniques for discussing human sexuality with his/her patients and diagnosing and treating sexual problems. The diagnosing and management of sexually transmitted diseases including HIV are also discussed.

FMMS6500  Child and Adolescent Health

Important elements of child and adolescent care relevant to the Family Physician are discussed. Areas
such as screening, immunisation, the chronically ill child and child abuse are covered. Common illnesses in this age group are also explored.

FMMS6201 Gender Issues in Health /Womens Health

The student is exposed to the cultural, religious and historical beliefs and values that impact on gender socialisation with specific reference to the Caribbean. Identification of gender specific health problems and their management are also explored.

FMMS6401 Health Care of the Elderly

The problems facing the elderly in the Caribbean are discussed and an ethical approach to the elderly in keeping with psychosocial theories is promoted. Skills in managing common problems of the elderly are discussed.

FMMS6402 Counselling

The student is exposed to the common mental health diseases in the community. Guidelines and protocols for the management of common mental health problems are discussed and the principles of counselling introduced.

FMMS6803 Forensic Medical and Legal Issues in Primary Care

The impact of Law on health care is explored. Important medico-legal issues are discussed and skills in dealing with these issues introduced.

Department Contact Information:

Department of Community Health and Psychiatry
Gibraltar Camp WayUniversity of the West Indies-Mona, Kingston 7, Jamaica

Telephone 876 927 2476Fax 876 977 6346

Programme Coordinator: Dr. Aileen Standard-Goldson Dr. Kristen Smith

Master of Public Health (MPH)

Programme Objectives

To equip persons with the essential skills to assess and manage the health of communities and to advance and promote public health.

Primary Objectives

To provide persons with 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 analytic 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, particularly within the context and settings of the Caribbean region

**Entry Requirements**

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

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.

Applicants will be required to submit a written application and may in some instances be required to attend an interview to be eligible for selection to the programme.

**Duration of programme:**

This degree is offered over twelve months and includes both classroom and field activities.

**Programme Structure:**

The award of the Master of Public Health Degree is based on satisfactory completion of:

Coursework
Written and oral examinations
Research project
Field Placement
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 6001</td>
<td>Research Methods I</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6002</td>
<td>Research Methods II: Project Report</td>
<td>6</td>
</tr>
<tr>
<td>PUBH 6101</td>
<td>Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 6201</td>
<td>Epidemiology I: Core Concepts</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6202</td>
<td>Epidemiology II: Methodological issues</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6301</td>
<td>Family Health I</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 6302</td>
<td>Family Health II</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6401</td>
<td>Management I: Core Concepts</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 6402</td>
<td>Management II: Policy, Planning and Programs</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 6403</td>
<td>Management III: Financial Management Management</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6404</td>
<td>Management IV: Health Economics</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6501</td>
<td>Primary Health Care</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6601</td>
<td>Environment Health</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6602</td>
<td>Disaster Management</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6901</td>
<td>Health Education I: Core 2 concepts and principles</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6003</td>
<td>Qualitative Research</td>
<td>2</td>
</tr>
</tbody>
</table>
### COURSE (Electives)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 6203</td>
<td>Epidemiology III: Infectious Disease Epidemiology</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6204</td>
<td>Epidemiology IV: Non-Communicable Disease Epidemiology</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6701</td>
<td>Community Mental Health</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6603</td>
<td>Occupational Health</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6905</td>
<td>Health Education &amp; Health Promotion Program Administration</td>
<td>2</td>
</tr>
<tr>
<td>PUBH6906</td>
<td>Communication</td>
<td>2</td>
</tr>
</tbody>
</table>

### DESCRIPTION OF COURSES/MODULE:

**PUBH 6001 (HE60A) Research Methodology**  
*(2 credits)*

Covers principles involved in the writing of a research proposal, design of investigations, methods of data collection and report writing. This is followed by an application of principles in planning and conducting a research project that is examined externally as part of the examination process. Research projects of students in the Health Education and Health Promotion track must have a Health Promotion slant and include qualitative methods.

**PUBH 6002 (HE60B) Project Report** *(6 credits)*

All students are expected to apply the principles of biostatistics, epidemiology and research methods in planning and conducting research on a topic of public health relevance. Both qualitative and quantitative measures are expected in this research. Research projects of students in the Health Education and Health Promotion track must in addition to the foregoing, have a Health Promotion slant.

**PUBH 6201 (HE61A) Biostatistics** *(3 credits)*

This course introduces students to the field of statistics and its application in public health. It will cover data analysis using descriptive, inferential and hypothesis-testing techniques. The use of the computer in data analysis will be an important feature of this course.

**PUBH 6201 (HE62A) Epidemiology I** *(2 credits)*

Introduces methods of epidemiology with special reference to disease entities and conditions found in the Caribbean. Principles, uses and methods of epidemiology; host-agent-environment relation-
ships, measures of disease frequency, investigation of outbreaks, disease surveillance, aspects of community health analysis, rates and ratios, introductory demography are addressed in this course.

PUBH 6202 (HE62B) Epidemiology II (2 credits)

Details methodological issues in epidemiology including measurements, rates, risk, study designs and statistical methods and their value in the prediction and management of illnesses and diseases.

PUBH 6203 (HE62C) Infectious Epidemiology (2 credits)

Describes and outlines principles of prevention and control of communicable diseases with special emphasis on diseases of particular significance to the Caribbean. Disease control programmes and associated problems are analyzed and their impact assessed and debated.

PUBH 6204 (HE62D) Chronic Disease Epidemiology (2 credits)

Provides overview of major non-communicable and chronic diseases prevalent in the Caribbean. Related risk factors and methodologies, compliance problems, nutrition and other issues and their implications for Health Education and Health Promotion are discussed. Delineates approaches for chronic non-communicable disease reduction and control.

PUBH 6301 (HE63A) Family Health I (3 credits)

Focuses on the concepts, content and approaches to the provision of health care services for families throughout the life cycle. Discussions though centered around Caribbean issues are pertinent to global situations. There is a focus on the application of those principles to real families in the community through case studies and working with families at risk.

PUBH 6302 (HE63B) Family Health II (2 credits)

Reinforces the concepts, content and approaches to the provision of health care services for families throughout the life cycle as covered in Family I. Contemporary issues affecting the family including violence and rape are dealt with, not only from a theory based perspective but course participants access and utilize state and community agencies to improve the health and welfare of the families with which they work. Capacity and asset building skills for empowerment are taught.

PUBH 6401 (HE64A) Health Management I (3 credits)

Involves didactic exploration and critique of the health management process including general and social systems theory, health service structure and function (national and international) and the major steps in the planning process.
PUBH 6402 (HE64B) Management II (3 credits)

Builds on concepts covered in Health Management I by delving into issues relating to policy, planning and health sector reform. Participants critically analyze the health care systems and significant attention is given to how to operationalize health care systems.

PUBH 6403 (HE64C) Management III (2 credits)

Emphasis is placed on the development of skills and the practical application of Financial Management concerns in government, government accounting system, strategic planning process within the government of Jamaica and the Financial Cycle of Control (Budgeting).

PUBH 6404 (HE64D) Health Economics (2 credits)

Introduces the key concepts, methods, applications and issues in health economics. Emphasis is on the use and application of the tools and techniques of health economics to planning, policy-making implementation and evaluation of programmes in the health sector.

PUBH 6501 (HE65A) Primary Health Care (2 credits)

Reviews and discusses Alma Ata, from a health sector perspective. Examines the contribution of non-health sectors, health service structure and functions, community participation, intersectoral co-ordination, international health regulations, natural and international health agencies to primary health care. Analyses of the primary health care approach to the promotion and maintenance of health and development are included.

PUBH 6601 (HE66A) Environmental Health (2 credits)

Provides a general overview of environmental health, its scope and practice. Emphasis is placed on the interrelationship between man and his environment and the resulting impact on health. The vast dimensions of the environment including air, land and water and related issues including physical, biological and chemical agents known to be harmful to health are included.

PUBH 6701 (HE67A) Community Mental Health (2 credits)

This course covers the concepts and principles related to mental health, the organization and delivery of relevant services and the principles underlying choice of service models in the Caribbean. The emphasis/philosophy in this course is on seeing Community Mental Health as an integrated component of public health services.

PUBH 6602 (HE68A) Disaster Management (2 credits)

Highlights the importance of disaster management and its relevance to public health in the Caribbean.
The course describes the essential elements for consideration in disaster management and mitigation. The challenges and approaches inherent in pre-disaster, intra-disaster and post-disaster phases and the role of the public health team in all phases are discussed. The course also includes site visits to disaster areas and agencies involved in disaster management.

PUBH 6603 (HE68B) Occupational Health
(2 credits)

The definitions and principles of occupational health and the range and classification of OH hazards and how to manage and prevent these are detailed. Visits to specific sites adds a practical dimension to the content covered.

PUBH 6901 (HE 69A) Health Education I (2 credits)

Explores the philosophies, goals and principles on which health education and health promotion are founded and the relevance of the health promotion approach to Caribbean Public Health. The promotion of individual responsibility and community participation are also covered.

PUBH 6902 (HE69B) Health Education II (2 credits)

Provides a guide to planning implementing and evaluating health education and health promotion programmes in a variety of settings. The value and use of theories and models in planning and implementing interventions are integral features of this course.

PUBH 6903 (HE69C) Advanced Health Education
(3 credits)

This is a basic course for health education and promotion specialists. This course explores the philosophies, goals and principles on which health education and health promotion are founded. It further provides a context for practicing health education, focusing on the range of responsibilities, ethical guidelines and introduces theories and models relating to individual and community behaviour change.

PUBH 6904 (HE69D) Issues in Health Education
and Health Promotion
(2 credits)

Examines current trends in the field and implications for further development and action. Topical issues are discussed and these include but are not limited to issues relating to chronic disease, mental health, dental health and ageing.

PUBH 6905 (HE69E) Health Education and Health
Promotion Programme
Administration (2 credits)

Analyzes resources, needs, use and organization of those resources to match health education and health promotion needs at all levels. This includes approaches to forge partnerships, build networks and general collaboration at all levels.
PUBH 6003 (HE69F) Qualitative Research Processes (2 credits)

Describes and discusses various methods of qualitative research. Emphasis is placed on the development of skills and the practical application of such methods of research to health education, health promotion and public health.

PUBH 6906 (HE69G) Communication (2 credits)

Focuses on the principles and practices involved in effective communication for mobilizing individual and community action for health. The use of integrated marketing communication (including social marketing) as a strategy for promoting health is covered.

Department Contact Information:
Department of Community Health and Psychiatry
Gibraltar Camp Way
University of the West Indies-Mona, Kingston 7, Jamaica
Email: Phone: 1-876-512-3637; 1-876-927-1752
Fax: 1-876-977-6346

Programme Coordinator: Dr. Kenneth James
Dr. Janet LaGrenade

Master of Public Health in Health Education/Health Promotion (MPH-HE/HP)

Programme Objective
To equip persons with the essential skills to assess and manage the health of communities and to advance and promote public health

Primary Objectives
The Master of Public Health (MPH) in Health Education and Health Promotion curriculum aims to facilitate personal and professional development in the field of health education and health promotion for persons whose career-base is in health, education, and other relevant disciplines; enabling them to manage health education and promotion programmes in any setting.

Demonstrate knowledge and understanding of the principles and practices of health education/health promotion.

Plan, implement, manage and evaluate education and health promotion programmes in any setting.

Develop health communication strategies and resources.

Entry Requirements
To be admitted to the prescribed course of study for the degree of Master of Public Health (MPH) in Health Education and Health Promotion candidates must:

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.

Applicants will be required to submit an application and may be required to attend an interview to be eligible for selection to the programme.

**Duration of programme**

This degree is offered over fifteen months and this includes twelve (12) months of classroom activities and three (3) months internship.

**Programme Structure**

The award of the Master of Public Health Degree is based on satisfactory completion of:

- Coursework

  Written and oral examinations
  Research project
  Internship
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 6001</td>
<td>Research Methods I</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6002</td>
<td>Research Methods II: Project Report</td>
<td>6</td>
</tr>
<tr>
<td>PUBH 6101</td>
<td>Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 6201</td>
<td>Epidemiology I: Core Concepts</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6202</td>
<td>Epidemiology II: Methodological Issues</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6301</td>
<td>Family Health I</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 6302</td>
<td>Family Health II</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6401</td>
<td>Management I: Core Concepts</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 6402</td>
<td>Management II: Policy, Planning and Programs</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 6403</td>
<td>Management III: Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6404</td>
<td>Management IV: Health Economics</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6501</td>
<td>Primary Health Care</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6601</td>
<td>Environment Health</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6602</td>
<td>Disaster Management</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6901</td>
<td>Health Education I: Core concepts and principles</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6003</td>
<td>Qualitative Research</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6905</td>
<td>Health Education &amp; Health Promotion ProgramAdministration</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6906</td>
<td>Communication</td>
<td>2</td>
</tr>
</tbody>
</table>
COURSE (Electives)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 6203</td>
<td>Epidemiology III: Infectious Disease Epidemiology</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6204</td>
<td>Epidemiology IV: Non-Communicable Disease Epidemiology</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6701</td>
<td>Community Mental Health</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 6603</td>
<td>Occupational Health</td>
<td>2</td>
</tr>
</tbody>
</table>

DESCRIPTION OF COURSES/MODULES

PUBH 6001 (HE60A) Research Methodology (2 credits)

Covers principles involved in the writing of a research proposal, design of investigations, methods of data collection and report writing. This is followed by an application of principles in planning and conducting a research project that is examined externally as part of the examination process. Research projects of students in the Health Education and Health Promotion track must have a Health Promotion slant and include qualitative methods.

PUBH 6002 (HE60B) Project Report (6 credits)

All students are expected to apply the principles of biostatistics, epidemiology and research methods in planning and conducting research on a topic of public health relevance. Both qualitative and quantitative measures are expected in this research. Research projects of students in the Health Education and Health Promotion track must in addition to the foregoing, have a Health Promotion slant.

PUBH 6201 (HE61A) Biostatistics (2 credits)

This course introduces students to the field of statistics and its application in public health. It will cover data analysis using descriptive, inferential and hypothesis-testing techniques. The use of the computer in data analysis will be an important feature of this course.

PUBH 6201 (HE62A) Epidemiology I (2 credits)

Introduces methods of epidemiology with special reference to disease entities and conditions found in the Caribbean. Principles, uses and methods of epidemiology; host-agent-environment relationships, measures of disease frequency, investigation of outbreaks, disease surveillance, aspects of community health analysis, rates and ratios, introductory
demography are addressed in this course.

PUBH 6202 (HE62B) Epidemiology II (2 credits)

Details methodological issues in epidemiology including measurements, rates, risk, study designs and statistical methods and their value in the prediction and management of illnesses and diseases.

PUBH 6203 (HE62C) Infectious Epidemiology (2 credits)

Describes and outlines principles of prevention and control of communicable diseases with special emphasis on diseases of particular significance to the Caribbean. Disease control programmes and associated problems are analyzed and their impact assessed and debated.

PUBH 6204 (HE62D) Chronic Disease Epidemiology (2 credits)

Provides overview of major non-communicable and chronic diseases prevalent in the Caribbean. Related risk factors and methodologies, compliance problems, nutrition and other issues and their implications for Health Education and Health Promotion are discussed. Delineates approaches for chronic non-communicable disease reduction and control.

PUBH 6301 (HE63A) Family Health I (2 credits)

Focuses on the concepts, content and approaches to the provision of health care services for families throughout the life cycle. Discussions though centered around Caribbean issues are pertinent to global situations. There is a focus on the application of those principles to real families in the community through case studies and working with families at risk.

PUBH 6302 (HE63B) Family Health II (2 credits)

Reinforces the concepts, content and approaches to the provision of health care services for families throughout the life cycle as covered in Family I. Contemporary issues affecting the family including violence and rape are dealt with, not only from a theory based perspective but course participants access and utilize state and community agencies to improve the health and welfare of the families with which they work. Capacity and asset building skills for empowerment are taught.

PUBH 6401 (HE64A) Health Management I (2 credits)

Involves didactic exploration and critique of the health management process including general and social systems theory, health service structure and function (national and international) and the major steps in the planning process.

PUBH 6402 (HE64B) Management II (2 credits)

Builds on concepts covered in Health Management I by delving into issues relating to policy, planning and health sector reform. Participants critically analyze
the health care systems and significant attention is given to how to operationalize health care systems.

PUBH 6403 (HE64C) Management III (2 credits)

Emphasis is placed on the development of skills and the practical application of Financial Management concerns in government, government accounting system, strategic planning process within the government of Jamaica and the Financial Cycle of Control (Budgeting).

PUBH 6404 (HE64D) Health Economics (2 credits)

Introduces the key concepts, methods, applications and issues in health economics. Emphasis is on the use and application of the tools and techniques of health economics to planning, policy-making implementation and evaluation of programmes in the health sector.

PUBH 6501 (HE65A) Primary Health Care (2 credits)

Reviews and discusses Alma Ata, from a health sector perspective. Examines the contribution of non-health sectors, health service structure and functions, community participation, intersectoral coordination, international health regulations, natural and international health agencies to primary health care. Analyses of the primary health care approach to the promotion and maintenance of health and development are included.

PUBH 6601 (HE66A) Environmental Health (2 credits)

Provides a general overview of environmental health, its scope and practice. Emphasis is placed on the interrelationship between man and his environment and the resulting impact on health. The vast dimensions of the environment including air, land and water and related issues including physical, biological and chemical agents known to be harmful to health are included.

PUBH 6701 (HE67A) Community Mental Health (2 credits)

This course covers the concepts and principles related to mental health, the organization and delivery of relevant services and the principles underlying choice of service models in the Caribbean. The emphasis/philosophy in this course is on seeing Community Mental Health as an integrated component of public health services.

PUBH 6602 (HE68A) Disaster Management (2 credits)

Highlights the importance of disaster management and its relevance to public health in the Caribbean. The course describes the essential elements for consideration in disaster management and mitigation. The challenges and approaches inherent in pre-disaster, intra-disaster and post-disaster phases and the role of the public health team in all phases are discussed. The course also includes site visits.
to disaster areas and agencies involved in disaster management.

PUBH 6603 (HE68B) Occupational Health (2 credits)

The definitions and principles of occupational health and the range and classification of OH hazards and how to manage and prevent these are detailed. Visits to specific sites adds a practical dimension to the content covered.

PUBH 6901 (HE 69A) Health Education I (2 credits)

Explores the philosophies, goals and principles on which health education and health promotion are founded and the relevance of the health promotion approach to Caribbean Public Health. The promotion of individual responsibility and community participation are also covered.

PUBH 6902 (HE69B) Health Education II (2 credits)

Provides a guide to planning implementing and evaluating health education and health promotion programmes in a variety of settings. The value and use of theories and models in planning and implementing interventions are integral features of this course.

PUBH 6903 (HE69C) Advanced Health Education (3 credits)

This is a basic course for health education and promotion specialists. This course explores the philosophies, goals and principles on which health education and health promotion are founded. It further provides a context for practicing health education, focusing on the range of responsibilities, ethical guidelines and introduces theories and models relating to individual and community behaviour change.

PUBH 6904 (HE69D) Issues in Health Education and Health Promotion (2 credits)

Examines current trends in the field and implications for further development and action. Topical issues are discussed and these include but are not limited to issues relating to chronic disease, mental health, dental health and ageing.

PUBH 6905 (HE69E) Health Education and Health Promotion Programme Administration (2 credits)

Analyzes resources, needs, use and organization of those resources to match health education and health promotion needs at all levels. This includes approaches to forge partnerships, build networks and general collaboration at all levels.
PUBH 6003 (HE69F) Qualitative Research Processes (2 credits)

Describes and discusses various methods of qualitative research. Emphasis is placed on the development of skills and the practical application of such methods of research to health education, health promotion and public health.

PUBH 6906 (HE69G) Communication (2 credits)

Focuses on the principles and practices involved in effective communication for mobilizing individual and community action for health. The use of integrated marketing communication (including social marketing) as a strategy for promoting health is covered.

PUBH 6907 (HE61B) Field Practicum (10 credits)

In the first semester of the second academic year (September to November), candidates for the degree of Health Education and Health Promotion track do an internship in an assigned organization determined by the opportunity available in such organization to practice health promotion. Each participant spends two weeks in developing skills in using media in health promotion prior to assignment to a specific organization. Interns are expected to engage in activities to demonstrate competence in a minimum of three of the graduate competencies targeted in the training. This course culminates in a health promotion seminar organized and presented by students in which field experiences are shared with a panel of examiners.

Programme Coordinator: Mrs. Desmalee Holder-Nevins

MPhil Public Health

Entry Requirements:

Normally only a University Graduate with a first class honours or an upper or lower second class undergraduate degree in Public Health or a related field will be accepted for the MPhil Degree.

Duration of programme

The programme extends over not less than 21 months including any departmental courses required. It consists largely of work on a research topic examined by thesis and oral examination. One or more supervisors for the proposed research must be available and adequate facilities for the particular work must exist.

Programme Structure

The MPhil thesis is based on research in the field and/or library and archival studies. It should comprise not less than 15,000 words and should be supported by maps, diagrams and photographic illustrations, etc. Candidates for the MPhil degree may be required to take an oral examination on the general field of study and on the thesis.

Programme Coordinator: Professor Denise Eldemire-Shearer
PhD Public Health

Entry Requirements
Graduates intending to study for the PhD may register for the degree programme if they hold an approved Masters Degree in an appropriate field of study in Public Health. All other graduates must apply to take the MPhil degree and must apply to transfer to the PhD not less than one year after being admitted as a MPhil candidate.

Duration of programme
Candidates will normally pursue research over a minimum of two academic years as full-time students, or three years as part-time students.

Programme Structure
The PhD is fundamentally a research degree, and is examined by thesis.

Additional Information/Notes
The PhD thesis should make a distinct contribution to the content and advancement of public health, and show evidence of originally either through the discovery of new facts or by the exercise of independent critical power. It should meet the professional standards of the discipline, be satisfactory as it regards literary presentation, and be suitable for publication. The examination for the degree is by assessment of the thesis and by oral examination.

Programme Coordinator: Professor Denise Eldemire-Shearer

Doctorate in Public Health (DrPH)

Programme Objectives:
1. Upon completion of the course of study the graduate should be able to:
2. Demonstrate leadership in the organization of the public health services
3. Apply the skills of policy analysis and program development to improve individual and community health
4. Demonstrate in-depth understanding of the core areas of public health theory and practice
5. Analyze issues and problems in public health using critical evaluation of information from a variety of sources
6. Apply the analytic tools of epidemiology and biostatistics to address specific public health issues
7. Apply management and financial management skills in the practice of public health
8. Demonstrate effective communication and advocacy skills

Entry Requirements
Applicants to this programme should have completed an MPH or other equivalent Masters degree with
at least an Upper Second Class Honours or equivalent and should preferably be employed in a local, regional or international health organization. A letter of support from the current employer would be desirable.

**Duration of programme**

Normally from 4 years to a maximum of 7 years.

**Programme Structure**

1) This is a part time course that will be delivered by a combination of online and face to face modules. Students must complete the 10 core modules and 5 elective courses (40 Credits). Normally requires 2 years but not more than 5 years.

2) This taught component will be followed by supervised field placements normally extending over a 2 year period.

3) Students will also conduct a research leading to a thesis.

Consideration for an adjustment in the duration of the programme will be given to candidates who fall within either of the following two categories;

An applicant with an MPH or a similar degree attained within the last 5 years, who has demonstrated competency in specific areas, may apply for exemptions from specific courses, up to a maximum of 20 credits.

An experienced Public Health Practitioner, who can demonstrate mastery of specific competencies listed among those to be attained during the field placement, may apply for up to a maximum of 12 months exemption of field placement.
<table>
<thead>
<tr>
<th>COURSE</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>Social and Cultural Determinants of Health</td>
<td>3</td>
</tr>
<tr>
<td>Health systems management &amp; Organizational Behaviour</td>
<td>3</td>
</tr>
<tr>
<td>Programmes development, Management and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>Public Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>Research Methods for Public Health Practice</td>
<td>3</td>
</tr>
<tr>
<td>Statistical Methods in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>Applied Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>Doctoral Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>Doctoral Seminars II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

Students are required to complete elective courses totaling 10 credit hours.

These can be selected from existing courses offered across the UWI or from courses offered by other universities and that are approved by the Graduate Board.

**Health across the lifespan**

Course Description: This course introduces and examines the principles which guide growth and development of individuals across the lifespan, from conception through childhood, adolescence, adulthood and to the elderly. Also examines the major determinants and facilitators of optimal health within each stage. The epidemiology of disease within each stage and the interdependence of each stage will also be reviewed.

**Social and Cultural Determinants of Health**

Course Description: In this course participants explore how social science disciplines are useful in analyzing and solving public health challenges. Structural violence as a social force will be examined. The relationship between these health determinants and public health interventions will be explored. The principles of behaviour change communication will be
Health systems management & organizational behaviour

Course Description: This course builds on management principles developed in the MPH. Reviews current health system types and underscores the principles that govern them and their effectiveness in achieving public health goals. The management of organizations will be addressed including the issue of authority and power in the health sector, strategic planning and organizational leadership.

Programme development, management and evaluation

Course Description: This course will focus on the assessment of needs and the development of appropriate programmes to address same using selected methodologies of programme / project planning. Option appraisal, strategic planning, organizational leadership and social marketing of the programme will also be addressed. The conceptualization of an evaluation process from the initial stages of the programme development and its implementation is also expected.

Public Health Policy

Course Description: This course will address areas such as policy development in public health. Grant proposal writing; relationships with funding agencies and their role in setting research agenda. Local, regional and international frameworks governing Public Health Practice.

Research Methods for Public Health Practice

Course Description: This course will build on that which was delivered by the MPH. The various methods of qualitative and quantitative research will be reinforced. Emphasis will be placed on being able to lead and coordinate a research team. The principles of human subject research and academic ethics including authorship, scientific misconduct and conflicts of interest in scientific research and evaluation will be addressed. Also the role of funding agencies in setting of research agenda and responsibilities to studied populations.

Statistical Methods in Public Health

Course Description: This course will build on that delivered by the MPH and will include additional relevant subject areas.

Applied Epidemiology

Course Description: This course will review and enhance the core principles of epidemiology as well as equip students to respond to the new and emerging challenges in the field of epidemiology.

Course Code/Name: Doctoral Seminars I
Course Description: The doctoral seminars will explore a number of topics of critical importance to public health that together will reveal the essence and scope of public health with particular attention to meeting the needs of the Caribbean and developing countries.

**Doctoral Seminars II**

Course Description: The doctoral seminars will explore several major approaches to understanding leadership based on current literature and personal experience. It will also examine leadership issues of critical importance to public health that will equip public health practitioners with skills needed to meet the needs of the Caribbean Region.

**Additional Information/Notes:**

Students are required to complete supervised field placements that will normally extend for up to two years. Students may be placed at local ministries of health or at regional or international health organizations.

Department Contact Information:
The Department of Community Health and Psychiatry
Faculty of Medical Sciences
The University of the West Indies, Mona
Jamaica, West Indies

Programme Coordinator: Dr. Michelle Harris

**MSc Cultural Therapy**

In achieving its objectives, the program will provide the means whereby all students can acquire and demonstrate substantial understanding of and competence in the following areas:

(a) The scientific, methodological, and theoretical foundations of Cultural Therapy in which the program has its training emphasis. To achieve this end, the students shall be exposed to the current body of knowledge in at least the following areas: the use of cultural expressions and awareness as catalysts for change; principles of psychology; principles of psychohistoriography; principles of psychotherapy; management of small and large groups; wealth creation; the development of organizations; principles of management and mobilization; principles of social work; facilitation and stabilization of intellectual and social capital; human resource development; use of teams and catalysts;

(b) The practical aspects of cultural therapy in which the program has its training emphasis. To achieve this end, the students shall be exposed to the current body of knowledge in at least the following areas: dance; music; art; drama;

(c) Defining problems 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: effective intervention; and evaluating the efficacy of interventions, research methodology; and techniques of data analysis;

(d) Issues of cultural and individual diversity that are...
relevant to all of the above including group dynamics; role of the family; dysfunctional behavior or psychopathology; human frailty, and professional standards and ethics; and
(e) Attitudes essential for life-long learning, scholarly inquiry, and professional problem-solving in the context of an evolving body of scientific and professional knowledge.

Entry Requirements
Applicants should possess a first degree at the level of a Lower Second status at minimum. Graduates from a wide range of backgrounds will be considered for entry. Through the programme, persons who would not ordinarily have access to careers in health-related and community development fields, e.g. actors, artists, will be given that opportunity.

Duration of programme
Three years part-time or equivalent

Programme Structure
All Courses are 3 Credits unless otherwise indicated. All new courses are designated CT, CULT or MC. Students take their Supervised Practicum Experience either in Year 1 or Year 2. Course codes have been designated according to the old and new (Banner) systems.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 1</th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td>Semester 2</td>
<td>Summer</td>
</tr>
<tr>
<td>CT60A/CULT6000</td>
<td>CT60A/CULT6000</td>
<td></td>
</tr>
<tr>
<td>Capstone Course</td>
<td>Capstone Course</td>
<td></td>
</tr>
<tr>
<td>In Cultural Therapy</td>
<td>in Cultural Therapy</td>
<td></td>
</tr>
<tr>
<td>CT61A/CULT6100</td>
<td>MS-66T</td>
<td>MC-666</td>
</tr>
<tr>
<td>Educational Pedagogy</td>
<td>Tourism Management</td>
<td>Communication Skills</td>
</tr>
<tr>
<td>PS-61A</td>
<td>PS-65A (1CR)</td>
<td></td>
</tr>
<tr>
<td>Psychopathology</td>
<td>Ethics Seminar</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>---------</td>
</tr>
<tr>
<td>CT64A/CULT6400</td>
<td>Supervised Practicum Experience (Group A)</td>
<td>0 CR</td>
</tr>
<tr>
<td>CT63A/CULT6300</td>
<td>Practical Module</td>
<td>2 Cr</td>
</tr>
<tr>
<td>CT60B/CULT6001</td>
<td>Capstone Course in Cultural Therapy</td>
<td></td>
</tr>
<tr>
<td>CT62A/CULT6200 (2 CR)</td>
<td>Elective Module</td>
<td></td>
</tr>
<tr>
<td>CT66A/CULT6600</td>
<td>Rehabilitation Management</td>
<td></td>
</tr>
<tr>
<td>Research Methods (multiple course options)</td>
<td>Project Report</td>
<td></td>
</tr>
<tr>
<td>CT64A/ CULT6400 (0 CR)</td>
<td>Supervised Practicum Experience (Group B)</td>
<td></td>
</tr>
</tbody>
</table>
CT63B/CULT6301 (2 CR)

Practical Module

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Year 3</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td>Semester 2</td>
<td>Summer</td>
</tr>
</tbody>
</table>

CT60C/CULT6002  
Capstone Course  
in Cultural Therapy

Project Report  
Preparation

CT65A/CULT6500 (0 CR)

Creative Practicum

CT63C/CULT63002 (2 CR)

Practical Module
<table>
<thead>
<tr>
<th>COURSES (Core)</th>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
</table>
|                | CT60A, B,C  | Cultural Therapy | 9             | Record keeping - 25%  
Analyses of processes and outcome - 25%  
Oral Presentations - 25%  
Participation and facilitation of group activities - 25%  
An evaluation will be made at the end of each 3-credit component (A,B and C) of the course. |
|                | CT61A       | Educational Pedagogy | 3             | Activity Plan - 25%  
Group Paper - 25%  
End of Term Examination- 50% |
|                | CT66A       | Rehabilitation Management | 3             | Essay - 25%  
Group Paper - 25%  
End of Term Examination- 50% |
|                | CT63A B,C   | Practical Modules | 6             | Site Supervisors Evaluation - 10%  
Portfolio - 30%  
Oral Presentation - 30%  
Written Report - 30% |
|                | CT64A/B     | Supervised Practicum Experience | Pass/Fail 3 | Site Supervisors  
Evaluation - 10%  
Portfolio - 30%  
Oral Presentation - 30%  
Written Report - 30% |
### COURSES (core) - CONTINUED

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT65A</td>
<td>Creative Practicum</td>
<td>Pass/Fail 100%</td>
<td>Project Report - 100%</td>
</tr>
<tr>
<td>PS61A</td>
<td>Psychopathology</td>
<td>3</td>
<td>Individual/Group Papers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>End of term examination</td>
</tr>
<tr>
<td>PS63A</td>
<td>Clinical Research Skills</td>
<td>3</td>
<td>Coursework End of Term Examination</td>
</tr>
<tr>
<td>MC666</td>
<td>Effective Communication</td>
<td>3</td>
<td>Course work End of Term Examination</td>
</tr>
<tr>
<td>MGMT 6136</td>
<td>Entrepreneurship &amp; Innovation Management</td>
<td>3</td>
<td>Course work End of Term Examination</td>
</tr>
<tr>
<td>PS65A</td>
<td>Issues of Caribbean Psychology: Ethics and</td>
<td>Pass/Fail 100%</td>
<td>Student-led seminars 100%</td>
</tr>
<tr>
<td></td>
<td>Professional Practice Seminar</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### COURSES (Elective)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT62A</td>
<td>Elective Module</td>
<td>2</td>
<td>Dependent</td>
</tr>
<tr>
<td></td>
<td>on course chosen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Course Description:**

**CT60A, B,C: Cultural Therapy**

The program of Cultural Therapy consists of five broad areas: Ethno historical large group meetings; Centring Exercises; Psychohistoriographic Analysis; Collective poetry, play and musical writing/creation; Evaluation.

**CT61A: Educational Pedagogy**

This course is designed to equip students with a basic understanding of the theory behind teaching and learning. Emphasis will be made on the role of education as a tool for social change. Areas emphasized include planning for instruction, instructional strategies and evaluation and assessment of student learning. Classroom management strategies will also be addressed. The technology aspect of the course will include word processing, presentations, record keeping, and computer-aided instruction (CAI).

**CT66A: Rehabilitation Management**

Students in this course will examine the practical aspects of nursing, physiotherapy and occupational therapy that relate to Cultural Therapy. The course explores human movement and its importance in motivation, the detection of signs of medical illness, dealing with elderly, frail or disabled individuals, behaviour management in rehabilitation, and the assessment and management of daily living and vocational skills.

**CT63A, B, C: Practical Modules**

The practical module is designed to expose students to the Visual and Performing Arts, Music and Dance, Floral Arrangement and Crafts as well as other activities deemed appropriate by the course coordinator. It is expected that students will complete modules outside of their area of expertise in order to broaden their skill base.

**CT64A/B: Supervised Practicum Experience**

After their first or second year in the programme students will spend their summer attached to sites where they can receive practical experience in Cultural Therapy and build upon skills developed during the year. Students must be under the supervision of a person working in the field. Students would be required to spend at least 4 days per week at their site. Students experiences will vary but should include opportunities to strengthen key Cultural Therapy skills, including planning, analysis, writing, organization, record keeping, teamwork, and problem solving. In addition, students will be involved in evaluating the effectiveness of their site by collecting empirical data. The course will bridge the gap between academic coursework and the practical knowledge, skills and emotional challenges that are inherent in the real world of the helping professional.
CT65A: Creative Practicum

At the end of their programme students will create and participate in a project designed to create or stimulate wealth in a community setting. Students will design their own work projects, set goals, and work throughout the summer on achieving the preset outcomes. Students will make adjustment to the design of their project when their current contexts indicate it is necessary to do so. Any such allowances will be recorded in the final report, and details of how these adjustments affected the project outcome will be presented. Results will be written up and presented to the course coordinator for assessment.

PS61A: Psychopathology

This course aims to provide students with the knowledge and skills required to accurately diagnose the wide range of mental health problems affecting adults, adolescents and children in the Caribbean. The course will focus on the multi-axial diagnostic approach of the Diagnostic and Statistical Manual - IV.

The course will begin with a review of the development of the multi-axial approach, cover issues pertaining to the reliability and validity of making a diagnosis and discuss the stigma of being diagnosed with a mental illness. All major diagnostic categories of mental illness will be discussed, including the diagnostic criteria, associated features and risk factors. Special attention will be given to the application and relevance of the diagnostic categories to the Caribbean people.

PS63A: Clinical Research Skills

This course will commence with an overview of the research process. The course will progress by walking students through the research process, and the consideration necessary for good research design and results. Students will throughout the course be exposed to a wide range of statistical analyses that will strengthen their ability to make informed decisions about the tools available to provide the best results in their own research. Basic statistical concepts, including correlation, regression, and comparison of means, will be covered, as well as more advanced statistical procedures, such as multiple regression, factor analysis, and advanced analysis of variance techniques.

MC666: Effective Communication

The course aims at helping students develop their listening, speaking and writing skills for a variety of workplace situations and professional purposes. Activities centre on planning, organizing, composing, and revising messages with sensitivity to verbal and non-verbal cues. Documents developed both in class and as home assignments include occupational writing for correspondence letters, memos, e-mail, reports and proposals. Participants will also enhance their skills in public speaking and other forms of oral presentations conveying messages with an emphasis on clear, concise communications.
PS65A: Issues of Caribbean Psychology: Ethics and Professional Practice Seminar

This course will be attended by all students in the programme and delivered via student led seminars. The goal is to develop an awareness of current professional and ethical issues in the practice of clinical psychology, and to foster an awareness of the specific context of future practice within the Caribbean region.

List and describe other courses here

CT62A: Elective Module

At the end of the course students will be able to demonstrate competence in the areas they have chosen for study.

Programme Coordinator: Prof. Frederick Hickling

DM Psychiatry

Programme Objectives:

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 psychiatrist equipped for independent practice in hospital-based settings, stand-alone facilities and community mental health services.

Entry Requirements

(The general regulations for the degrees of Doctor of Medicine apply).

Applicants will be eligible for entry after completing their medical internship and becoming fully registered as medical practitioners by the Medical Council of Jamaica. Candidates will be required to submit a written application and may be required to attend an interview to be eligible for selection to the programme.

Duration of programme

Four years full-time

Programme Structure

Part I (Year 1): Psychology, Anatomy, Physiology, Adult & Emergency Psychiatry


Part III (Year 3): Psychotherapy, Supervised Research, Consultation-Liaison Psychiatry, Geriatric Psychiatry, General Adult & Emergency Psychiatry

Part IV (Year 4): Forensic Psychiatry, Community Psychiatry, Outpatient Services, General Adult & Emergency Psychiatry
## Course Description:

**Part I (Year 1):** During this period, which lasts twelve months, the students work as a psychiatric resident at an approved general hospital. Instruction is given in the Basic Medical Sciences (including Anatomy, Physiology) as well as in Psychology and Psychiatry.

**Part II (Year 2):** Entry to the second part of the course will depend on a satisfactory performance in the Part I examination.

During this period which lasts twelve months, the students work as a psychiatric resident at an approved general hospital. Instruction is given in Neurology, Psychology and Psychiatry.

During the first half of Year 2 of the programme, the Student will submit to the Specialty Board through his/her supervisor, a proposal for a project to be undertaken during Part III of the programme.

**Part III (Year 3):**

Admission to Part III of the programme depends upon the students performance in the Part 2 examination. During Part III, the candidate is required to spend six months working in an approved psychiatric service and at least twelve months working in the psychiatric services of an approved general hospital.

At least six months of this year must be spent in the Caribbean during this period. At the end of the time period, students may submit a Case Book or Research Report.

**Part IV (Year 4):**

During this year the student continues to work under supervision in an approved psychiatric service.

**Department Contact Information:**

The Department of Community Health & Psychiatry-Faculty of Medical Sciences

The University of the West Indies, Mona

Jamaica, West Indies

Programme Coordinator: Dr. Roger Gibson
DEPARTMENT OF MICROBIOLOGY

Head: John Lindo, BSc, PhD

The Department of Microbiology offer the following graduate programmes

**MSc Medical Microbiology**

MPhil/PhD Medical Microbiology (by research)
DM Medical Microbiology
Master of Science in Medical Microbiology

**Aims and Objectives of the programme**

Provide graduates with a systematic understanding of the scientific basis of microbiological concepts.

Produce graduates who are equipped with the knowledge, analytical and practical skills to permit them to pursue careers in the microbiology in hospital, diagnostic laboratory or research settings.

Prepare graduates for terminal degree training in medical microbiology (MD, DM, PhD, DPhil).

**Entry Requirements**

**MSc**

Candidates for the MSc Microbiology must hold a degree in medicine or at least an Upper Second-class Honours degree of a recognised university in science or medicine. Candidates with an appropriate technical qualification and work experience, or equivalent qualifications, will also be considered for admission to the course following an interview by the Specialty Board. Graduates in a science not specializing in General Microbiology or Medical Microbiology will be required to complete a qualifying year and examination before admission to the programme. Candidates who hold the MBBS and BBMedSci of this University or those who have similar qualifications may apply for exemption from the qualifying examination by presenting details of their courses and examination results.

**Doctor of Philosophy**

Candidates intending to study for the PhD degree must hold an appropriate Masters Degree in Medical Microbiology. All other candidates must first register for the MPhil but may transfer their registration after at least one year of study based on the recommendation of the supervisory committee and:

(a) Submission of a research proposal of a standard suitable for a terminal research degree

(b) Presentation and defence of their research proposal before an assessment committee

(c) Independent assessment by the department

The award of the degree is based on presentation of a thesis of original research which significantly advances the discipline of microbiology.
The examination for the degree is by assessment of the thesis and a viva voce examination.

**Doctor of Medicine Microbiology**

**Requirements for entry**
1. Candidates must be fully registered medical practitioners in one of the territories of the Commonwealth Caribbean.
2. Applicants will be eligible for entry after completing their internship

**Areas of Research**
1. Antibiotic resistance
2. Immunological, molecular and genetic bases of infectious diseases
3. Autoimmune diseases
4. Epidemiology of Parasitic and Neglected Tropical Diseases
5. Central nervous system viruses

**Seminars:**
- PhD and MPhil: 1 per semester
- MSc: 1 per year
- DM: 1 per year

**Duration of programme:**
(Including Internship, Research Project, other) 2 years

**Programme Structure:**
This programme is an upgrade of the current MSc (Medical Microbiology). In the revised format the course offers the following advantages:

1. Allows GPA ratings and therefore more acceptability internationally
2. Facilitates easier delivery and accreditation.
3. Lends itself to students assessment of teaching and course evaluation.
4. Formal teaching of Research skills which will ensure a graduate with better potential to design studies, conduct research and undertake a terminal degree (PhD, DPhil, DM) training
5. Provides funds to the department from fees which can be used to support the programme and turn a profit. Currently, the MSc programme is funded from the departments annual subvention and Consultation Funds, neither of which have line listings for graduate studies.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR6210</td>
<td>Medical Bacteriology</td>
<td>5</td>
</tr>
<tr>
<td>MICR6225</td>
<td>Medical Mycology</td>
<td>3</td>
</tr>
<tr>
<td>MICR6250</td>
<td>Molecular Biology Applied to Diseases</td>
<td>2</td>
</tr>
<tr>
<td>MICR6703</td>
<td>Research Project</td>
<td>6</td>
</tr>
<tr>
<td>MICR6554</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>MICR6380</td>
<td>Medical Virology</td>
<td>5</td>
</tr>
<tr>
<td>MICR6285</td>
<td>Applied Medical Immunology</td>
<td>3</td>
</tr>
<tr>
<td>MICR6290</td>
<td>Medical Parasitology</td>
<td>2</td>
</tr>
<tr>
<td>MICR6560</td>
<td>Diagnostic Medical Microbiology</td>
<td>6</td>
</tr>
</tbody>
</table>

**Course Description:**

**MICR6210 Medical Bacteriology**

The module will provide candidates with advanced knowledge of General and Systematic Medical Bacteriology. Core elements of the course are principles of bacterial classification and pathogenesis, prevention, treatment and control for medically important bacterial infections. Further, the module will enable the student to understand the principles, advantages and limitations of commonly performed laboratory diagnostic methods for bacterial isolation and identification.

**MICR6380 Medical Virology**

The course will provide candidates with advanced knowledge of medical virology. At the end of this module, the student should demonstrate an understanding of the principles of viral classification, pathogenesis, prevention, treatment and control. Further, the module will enable the student to understand the principles, advantages and limitations of commonly performed laboratory diagnostic methods for viral isolation and identification.

**MICR6285 Applied Medical Immunology**

The course aims to provide an understanding of the
interaction of viruses, fungi, bacteria and parasites with the immune system of humans and to examine the role of vaccination in protection against these diseases. Furthermore, it will examine the biological basis of common immune disorders of humans including autoimmune diseases. On completion of this module, the student will be able to understand the nature of humoral and cell-mediated immune responses to infections and to discuss the role of cytokines in the modulation of response to infection.

MICR6250 Molecular Biology Applied to Infectious Diseases

Molecular biological techniques have become an important aspect of understanding the pathogenesis of infectious diseases and a tool in their laboratory diagnosis. The aim of the course is to provide students with knowledge of the structure and function of nucleic acids of infectious agents and how this understanding can be applied to study of their pathogenesis and laboratory procedures.

MICR6290 Medical Parasitology

Parasites remain a major threat to human welfare and there is heightened interest in their epidemiology and control and in some instances elimination. The course is designed to provide the candidates with knowledge of the range of parasitic infections of humans and their associated morbidity and mortality.

MICR6225 Medical Mycology

This module will expose candidates to advanced medical mycology enabling them to describe the classification, pathogenesis and clinical features of fungal infections. Candidates will become familiar with the principles of laboratory diagnosis of fungal infections including recently developed techniques. The approach to antifungal therapy with the range of antifungal agents, their mechanisms of action and susceptibility testing as well as the side effects commonly associated with them will be explored.

MICR6554 Research methods

This course provides the theoretical basis for successful design and conduct of scientific research projects. The objective of the course is to give candidates the requisite skills to design and conduct a research project; analyse and report in writing and orally on the finding.

MICR6703 Research Project

The objective of the module is to train the candidate in the rigours of scientific research through the conduct of a research project. Candidates will have primary responsibility for all aspects of the research project including definition of problem, proposal writing and ethical approval, data management and thesis preparation. Each student will be assigned a Departmental supervisor who will form a research committee according to the Graduate Studies Guide for Students and Supervisors.
**MICR6560 Diagnostic Medical Microbiology**

The course is designed to train the candidate in the laboratory diagnosis of infectious diseases. Candidates will spend time in the diagnostic laboratories of the various sub-disciplines of microbiology including bacteriology, virology, immunology, mycology and parasitology. A manual with full details of the microscopic, serological and molecular assays which the candidates are expected to learn and perform will be presented at the start of the course.

**Department Contact Information:**
Cheryl Blackwood
Department of Microbiology
University of the West Indies,
Mona, Kingston, Jamaica, West Indies

Programme Coordinator: John Lindo

**DEPARTMENT OF OBSTETRICS, GYNAECOLOGY AND CHILD HEALTH**

Head: Professor Horace Fletcher B.Sc, MBBS, DM(O&G), FRCOG, FACOG

The main focus of the department is to improve the health and welfare of families, in particular women and children in the region. This is done through clinical (service) work and academic (teaching and research).

One of our main mandates is training of students at the undergraduate and post graduate level to ensure that there is an excellent cadre of doctors at all levels available to our women to ensure good health through prevention and treatment of disease.

**DM Obstetrics and Gynaecology**

**Entry Requirements:**

(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.

Students who are required to must have passed the CAMC Exam

**Areas of Research**

Research must be done in an area directly associated with Obstetrics and Gynaecology

**Duration of programme:** The program lasts four years

**Programme Structure:**

At the end of the first year students do part one examination in basic sciences related to Obstetrics and Gynaecology

At the end of the fourth year students do Part two exit examination.
In addition students must write 10 Gynaecological and 10 Obstetric short commentaries of interesting cases they have managed during training. Also they must write One Gynaecological and One Obstetric long commentary of a prospective or retrospective study in an area chosen by them or their supervisor.

**Course Description:**

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

**Year 2: 2 A**
Development of Investigative and Surgical Skills 1.

2 B Obstetrics 1:
Common Obstetrical Problems.

2 C Gynaecology:
Common Gynaecological Problems.

Year 3:
3 A Reproductive Endocrinology.
3 B Advanced Investigative and Surgical Skills 2.

3 C Project/ Electives.

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

**Additional Information/Notes:**

At the end of the course successful applicants can be registered as specialist consultants in Obstetrics and Gynaecology in the contributing territories of the University of the West Indies and also in other countries where the degree is recognised.

**Department Contact Information:**

Professor Horace Fletcher UWI, Mona, Kingston, Jamaica

Dr Bharat Bassaw Mount Hope, St. Augustine, Trinidad

Dr Garth McIntyre Cave Hill, Barbados

Dr James Johnson Princess Margaret Hospital, Nassau, Bahamas

Programme Coordinator: Professor Horace Fletcher

**DEPARTMENT OF CHILD HEALTH**

Head: Professor Minerva Thame, MBBS, DCH,DM, PhD

**DM Paediatrics**

The Department of Child Health offers a full-time degree leading to the awarding of a Doctor of Medicine (Paeds) degree. The programme aims at providing exit qualifications for graduates to practice inde-
pendently at Consultant Paediatric level. Since its inception in 1970, there have been 100 graduates in Paediatrics up to December 2009. Graduates are scattered throughout the Caribbean, North Americas and the UK with many of our graduates currently practicing in the region.

Programme Objectives:

On completion of the DM Paediatric Programme the graduate will be competent to function as a consultant paediatrician having been trained with sound knowledge of normal growth and development and the knowledge, skills and attitudes encompassing the diagnosis and treatment of a broad range of clinical conditions from newborn to adolescence. This graduate will be equipped for independent practice in the community and hospital based settings (in-patient and ambulatory). He/she should be able to collaborate with other segments of the health team (including subspecialties) as well as community resources. He/she should be a health advocate who is sensitive to the cultural, social and ethnic needs of the community, in addition to having a commitment to life long learning and personal development.

Entry Requirements

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.

Evidence of undergraduate medical qualification from an institution acceptable to the Faculty of Medical Sciences, the University of the West Indies, must be provided.

Candidates should have a minimum of three months post internship experience in the practice of paediatrics at an approved hospital under constant supervision. This three month period is additional to the period of three months of paediatric training required during the internship period.

Candidates will be required to submit a written application and attend an interview to be eligible for selection to the programme.

Duration of programme: Four years

Programme Structure:

The DM Paediatrics programme is a four year graduate course which aims to provide the graduate with the knowledge and skills to function as a consultant paediatrician, equipped for independent practice in the community and hospital based settings.

There are two parts to the course DM 1 (years 1 and 2) and DM 2 (years 3 and 4).

During the first two years of training, the resident will have three month rotations in in-patient, neonatal care, and ambulatory settings. The core content of training includes basic sciences as applied to general paediatrics, normal growth and development, common primary care problems and emergencies, common subspecialty problems, public health is-
sues and basic research methods and skills.

Years 3 and 4 of training encompass learning of the pathophysiologic mechanisms related to growth, development and disease, clinical exposure and training in the subspecialties, development of leadership skills and professional qualities, completion of the required research project and a six month elective period.

DM1

Year 1 and Year 2

Rotations: inpatient, nursery, ambulatory (clinics, walk-in, emergency)
Core general paediatric content
Basic sciences as applied to general paediatrics
Normal infant, child and adolescent growth and development
Common primary care problems
Common emergencies
Community paediatrics
Common subspecialty problems
Public health, health promotion and prevention issue
Basic research methods and skills*

DM 2

Year 3: Completion of research project and subspecialty core rotations; elective

Year 4: Elective; Senior supervisory role

Pathophysiologic mechanisms related to growth, development and disease
Subspecialty exposure and training
Focused development of the following areas to enhance supervisory function:
Clinical Decision Making
Team leadership
Collaboration
Professional development
Scholarly activity

*It has been suggested that residents in year 2 should formulate and present their research protocols as an application of knowledge in basic research methodology. This will also facilitate expeditious implementation of their projects in year 3 of the programme.

Additional Information:

Trainees will be eligible to sit the DM 1 examination at the end of year 2 having had satisfactory assessments for that period. Candidates will be eligible to sit the DM 2 examination two years after successful completion of the DM 1 examination but not greater than four years after at the next available examination. The candidate must submit their research project at least six months before the completion of the DM 2 programme.

The research project 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.
The acceptance of the research project by the Specialty Board is a requirement for eligibility to sit the DM 2 examination.

**Examination Format**

The DM 1 examination consists of

(a) One multiple choice question paper

(b) A clinical examination

(c) An oral examination.

The DM 2 examination consists of

(a) Two written papers, which may include multiple choice questions

(b) A clinical examination

(c) An oral examination.

**Department Contact Information:**

Department of Child Health
University of the West Indies, Mona
Telephone Number: 970-0329
Fax Number: 927-1446

Programme Coordinator: Minerva Thame

**THE HUGH WYNTER FERTILITY MANAGEMENT UNIT**

Director: Professor Joseph Frederick, MBBS, DM, FRCOG, FACOG

The Hugh Wynter Fertility Management Unit, Department of Obstetrics and Gynaecology, Department of Obstetrics, Gynaecology and Child Health, offers the following graduate degree programmes and in-service training programmes for senior nurses, Obstetricians and Gynaecologists in 2009/2010.

**Graduate Programme: MSc Counselling**

Short In-Service Departmental Training Courses for Registered Nurses, Nurse-Midwives, Nurse Practitioners and Obstetricians and Gynaecologists are also offered for continuing education:

1. Family Planning and Sterilization Techniques for Nurses (February 15-26, 2010).

2. Family Planning and Reproductive Health Administration (May 10-21, 2010)

3. Sexual and Reproductive Health for Medical Doctors and Senior Nurses (October 18-29, 2010).

For details of these brief in-service training courses please see the attached training schedule for 2009-2010.

**MSc Counselling**

Specializations/Options:

- Psychodynamic Counselling
- Cognitive-Behavioural Counselling
- Eclectic-Integrative Counselling
**The objectives of the programme are:**

1. To develop a thorough knowledge of the philosophy, assumptions, principles, elements, concepts, and techniques of Person Centred, Existential, Psycho-dynamic and Cognitive- Behavioural Schools of Counselling.

2. To develop high levels of competence in the practical application of this theoretical knowledge so as to facilitate specialization in any one of these approaches to counselling or the use of an ecletic or an integrative approach in keeping with the counsel-lors personal preferences, philosophy or values and the needs of their clients.

3. To provide supervision in a variety of counselling practica to increase skill levels in counselling.

4. To improve self-awareness and counselling effectiveness by providing on-site group therapy training and by encouraging students to obtain therapy for themselves.

5. To develop a cadre of counsellors in the fields of education, social services and health who will be trained to deliver individual and group counselling and family therapy services in their respective countries in the West Indies.

6. To develop a cadre of highly trained and qualified counsellors who are able to adapt predominantly European and North American counselling models to the West Indian context and who will have the re-search skills, the theoretical foundation and the practical expertise required to ultimately develop their own models of counselling which will be relevant to West Indian experiences.

7. To provide counsellors with the kinds of experiences which will increase their awareness of the high standards of ethical practice which are expected and required of counsellors and which they should demonstrate in their own personal and professional conduct.

**Entry Requirements:**

Applicants should have an Upper Second Class honours first degree in Counselling or in related fields in Health, Education, Social Work, Psychology or Pastoral Counselling/Theology from an institution acceptable to the University of the West Indies for this purpose. Applicants should also have at least three years work experience. All applicants must possess an advanced level of ability to work in English. Entrance is competitive so only the most qualified persons will be accepted.

Applicants should also have done the following qualifying courses at the undergraduate degree level, or if not, they will be asked to do the following qualifying or pre-requisite courses before starting the Masters programme:

- Pre-Qualifying Programme (2009-2010)
- OG60A. Introduction to Individual Counselling
OG60D Developmental Psychology

OG60B Introduction to Group Counselling

OG60C Abnormal Psychology

**Duration of programme:**

Three years part-time and four years for those without a Psychology first degree who need to do the qualifying/pre-requisite courses.

**Programme Structure:**

The MSc Counselling programme will be offered as a three year programme, except for persons who lack the qualifying courses and who will therefore have to complete and pass the qualifying courses before being admitted to the Masters programme.

<table>
<thead>
<tr>
<th>Year 1 Semester 1</th>
<th>Year 1 Semester II</th>
<th>First Summer School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Person-Centred Counselling</td>
<td>1. Existential Counseling with Individuals</td>
<td>1. Group Counseling: Personal Growth Groups</td>
</tr>
<tr>
<td>3. Practicum 1 shop</td>
<td>3. Practicum 2</td>
<td>3. Sexuality Work-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year II Semester I &amp; Year II Semester II</th>
<th>Second Summer School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either Option I</td>
<td>1. Developing an Eclectic/Integrative Approach to Counselling</td>
</tr>
<tr>
<td>1. Psycho-dynamic Counselling with Individuals</td>
<td>1. Vocational Counselling</td>
</tr>
</tbody>
</table>
2. Practicum 3
Counselling with Groups

3. Practicum 4

Or Option II
And Option II contd

**Year II Semester I**

1. Cognitive-Behavioural
Counselling with Individuals Part I

2. Cognitive-Behavioural
Group Counselling

3. Practicum 3

Or Option III
And Option III contd

**Year II Semester I**

1. Cognitive-Behavioural
Counselling with Individuals Part I

2. Cognitive-Behavioural
Counselling with Groups

3. Practicum 4

**Year II Semester II**

1. Cognitive –Behavioural
Counselling with Individuals Part II

2. Family Therapy
Counselling with Groups

3. Practicum 4

**Second Summer School**

1. Vocational
Counselling

2. Psycho-dynamic

3. Conflict Resolution
Workshop

**Year II Semester II**

1. Cognitive-Behavioural
Counselling with Individuals Part II

2. Developing an Eclectic/Integrative Approach to Counselling

3. Family Therapy

**Second Summer School**

1. Vocational
Counselling

2. Psycho-dynamic
Counselling with Groups

3. Conflict Resolution
Workshop
4. Practicum 3

4. Practicum 4

**Year III Semester I**

1. Research Project
2. Practicum 5

**Year III Semester 2**

1. Submission of the Research Project
2. Practicum 6

Courses (Electives)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credit</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>OG62A</td>
<td>Psycho-dynamic Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td>with Individuals</td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62B</td>
<td>Psycho-dynamic Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td>with Groups</td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62D</td>
<td>Cognitive-Behavioural Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td>with Individuals Part I</td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62E</td>
<td>Cognitive-Behavioural Group Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62F</td>
<td>Developing an Eclectic/Integrative Approach to Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG621</td>
<td>Cognitive-Behavioural Coun-</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>No. of Credits</td>
<td>Course Weighting</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>OG61A</td>
<td>Person-Centred Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG61B</td>
<td>Group Counselling: Personal Growth Groups</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG61C</td>
<td>Professional Issues Part I: Ethical and Legal</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td></td>
<td>Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OGH61D</td>
<td>Existential Counselling with Individuals</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG61E</td>
<td>Vocational Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG61F</td>
<td>Professional Issues Part 2: Programme Development</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OG62C</td>
<td>Research Methods I: Quantitative Methods</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OG62G</td>
<td>Family Therapy</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62H</td>
<td>Research Methods II: Qualitative Methods</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OG63A</td>
<td>Research Project Tutorials and submission of the Research Project</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OG69A</td>
<td>Practicum 1</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>OG69B</td>
<td>Practicum 2</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>OG69C</td>
<td>Practicum 3</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>OG69D</td>
<td>Practicum 4</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>OG68E</td>
<td>Practicum 5</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>OG69F</td>
<td>Practicum 6</td>
<td>3</td>
<td>100% Coursework</td>
</tr>
</tbody>
</table>
### COURSES (Electives)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>OG62A</td>
<td>Psycho-dynamic Counselling with Individuals</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62B</td>
<td>Psycho-dynamic Counselling with Groups</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62D</td>
<td>Cognitive-Behavioural Counselling with Individuals Part I</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62E</td>
<td>Cognitive-Behavioural Group Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>OG62F</td>
<td>Developing an Eclectic/Integrative Approach to Counselling</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
</tbody>
</table>

**Course Description:**

Qualifying (Pre-Requisite) Courses

Course OG60A: An Introduction to Individual Counselling

This course is designed to introduce participants to the field of counselling by clarifying terminology, examining research findings on the effectiveness of counselling and counsellors, discussing the principles of counselling, providing an overview of the counselling process and relating these to the participants awareness of themselves, their motives and needs in choosing Counselling as a career. The course continues by providing participants with an overview of the principal schools of counselling as they emerged chronologically and then provides an in-depth look at counselling skills with particular reference to the counselling of individuals. The limitations of a skills approach to counselling are also explored. The course ends with an examination of some of the concerns of trainee counsellors as they consider the counselling process and the role of the supervisor.
Course OG60B: Introduction to Group Counselling

This course begins by discussing the definitions, rationale, goals and types of groups included in group counselling. Group leadership characteristics, strategies, skills, functions and styles are then explored, together with issues of concern to group leaders. The process and practice of group counselling and the nature, roles and behaviour of group members are then analyzed. The practical considerations involved in starting a group and the kinds of communication activities which students can use in groups are then described. Students are taught how to evaluate groups and the module ends by exploring the wider applications of group counselling.

Course OG60C: Abnormal Psychology

This course begins by identifying the benefits and pitfalls of psychiatric classifications and how they have been used and misused by counsellors and other health professionals. Instruments which are used in the assessment and diagnosis of the conditions covered in the course are discussed as each new topic is introduced. Learning disabilities are then explored and Block A ends with a focus on mental retardation. Block B begins by looking at stress and coping and the aetiology, signs, symptoms, treatment and management of anxiety disorders, mood disorders, schizophrenia, personality disorders and eating disorders. In Block C the focus shifts to substance abuse with an emphasis on a typology of abused substances, signs and symptoms of substance abuse, treatment, and management. The course ends with a general discussion of the psycho-social impact of these conditions, legal issues and the role of the counsellor. Throughout the course the actual experiences of people who have been challenged by these conditions are shared in order to retain the emphasis on people rather than on impersonal and potentially destructive psychiatric labels.

Course OG60D: Developmental Psychology

This course offers an introduction to physical, social, cognitive, moral and linguistic development with an emphasis on theory and methodology. The biological and social bases of behaviour are explored and the pathology associated with failure to achieve psycho-social tasks at each stage is explored.

Course OG61A: Person-Centred Counselling

The course begins with an introduction to Carl Rogers and to Person-Centred Counselling. Rogers original writings are used to develop a thorough understanding of the philosophical base, the theoretical assumptions, beliefs and values which underlie Rogerian Counselling. Theoretical perspectives on the acquisition and maintenance of maladaptive behaviour and on the process of effecting therapeutic personality change are explored. Primary emphasis is placed on how to establish a therapeutic relationship and on developing the counsellors ability to demonstrate the conditions which facilitate personal growth. The focus then shifts to Person-Centred Counselling in action and to a detailed examination of the counselling process and the development of...
Person-Centred Counselling Skills. Case studies are used to develop insight into the practical application of Counselling theory. The course ends with a detailed critique of Person-Centred Counselling in which research findings on efficacy are explored and the wider applications of Person-centred Counselling in families, groups, educational and other institutions are discussed.

Course OG61B: Group Counselling: Personal Growth Groups

This course explores the application of Person-Centred Counselling Theory to Group Counselling with specific references to Personal Growth Groups. The course begins with a description of types of Personal Growth Groups such as T. groups, Encounter Groups, Marathon Groups and Systematic Human Relations Training. The goals and verbal and non-verbal techniques which are used in such groups are then presented. Leadership, group development, group dynamics, communication and counselling skills utilized in these groups are then discussed. The course continues with practical information on how to organize and evaluate these groups and ends with a discussion of the professional issues, ethics and criticisms which have to be considered in using such groups, and wider applications to special populations.

Course OG61C: Professional Issues Part I

This course is designed as a series of seminars in which various presenters will be initiating a discussion of professional issues which are of concern to counsellors. Students are required to attend 80% of the classes on Professional Issues which will be delivered by teleconferencing. The course begins by examining the ethical, legal and professional development issues which counsellors confront in their practice. Models for ethical reasoning and codes of ethics from various cultures are discussed in order to lay the foundation for the development of a West Indian code of ethics to guide Counsellors in individual and group counselling. The course then seeks to help counsellors in training to explore their own reactions to different, and, in some cases, socially proscribed groups by looking at the problems facing these groups. The course then ends by looking at the role of the counsellor as a change agent in West Indian societies.

Course OG61D: Existential Counselling

Existentialism is a philosophical approach to counselling rather than a method of counselling. It has been included in the programme because it encourages counsellors to grapple with life and death issues and concerns inherent in human existence which clients often bring to the counselling situation. Accordingly, this course begins with an introduction to Existential Counselling in which some of the main assumptions and themes of this approach are discussed. The therapeutic relationship is then highlighted followed by a detailed exploration of writings by existential psychotherapists and other existential authors on psychotherapy. Emphasis is given to the practical application of existential philosophy in
counselling and to a discussion of the wider applications of this approach.

Course OG61E: Vocational Counselling

The course begins by reviewing historical information on the introduction of career counselling in West Indian schools. Participants are then introduced to new trends in the job market which have arisen as a result of new technological developments and economic changes sweeping the world. Theories and research findings pertaining to vocational/career choice and development are then explored. Societal and individual factors influencing career choice and development are analysed. In the next unit, the world of work, the vocational counselling needs of special groups such as the handicapped are addressed. Block A ends with a unit on how to start and manage a business for those clients seeking to be self-employed. Block B focuses on the process of finding and succeeding on the job. Detailed treatment is given to job hunting skills, interpersonal relationships on the job, financial planning and coping with change. Educational considerations are then explored in Block D not only for the secondary school student selecting subjects in grade nine or third form, but also for the mature student seeking higher education and for people who need to re-enter the work force. The course ends with guidelines on developing a vocational guidance programme in schools.

Course OG61F: Professional Issues Part II

This course is designed to teach participants how to plan counselling programmes in different organizational settings. It then discusses the processes and skills involved in Conflict Resolution and Mediation. In Block B, the focus shifts to the development and organization of Counselling Programmes and the course ends with a discussion of issues involved in the management and delivery of Counselling programmes and services.

Course OG62A: Psycho-dynamic Counselling with Individuals

This course examines the psychoanalytic roots of psychodynamic counselling with special emphasis on the philosophical assumptions, the principal concepts and techniques which Sigmund Freud pioneered. Freud's theories of Psycho-sexual development, his theories on the development of human personality and the functioning of the mind will be analysed. The work of selected Neo-Freudians will also be discussed as will object relations theory. The emphasis throughout will be on the adaptation of long-term psychoanalysis to short-term psychodynamic counselling. The therapeutic process, the acquisition and maintenance of maladaptive behaviour, the principles and mechanisms of change and psychodynamic counselling skills and techniques will all be thoroughly examined. The wider applicability of psychodynamic counselling to groups and family therapy will also be addressed.
Course OG62B: Psycho-dynamic Counselling with Groups

The course examines the application of psycho-dynamic theory to Group Counselling and attendant leadership, membership, communication, group dynamics and professional issues. Participants will explore in-depth the application of psychoanalytic techniques to group counselling. The course ends with a discussion of criticisms and research findings on the effectiveness of psycho-dynamic group counselling and its application to special groups, as well as the contribution which Psycho-dynamic Group Counselling can make to Eclectic and Integrative Approaches to Counselling.

Course OG62C: Research Methods Part I: Quantitative Research Methods

This course examines the steps and skills involved in conducting quantitative research. The course begins by exploring the nature of enquiry, and then describes how to select and construct hypotheses, how to review the literature, identify and label variables and construct operational definitions of these variables. Techniques for the manipulation and control of variables and problems of validity and invalidity are then explored. The course continues by teaching participants how to construct research designs, engage in proper procedures for observation and measurement, construct and use questionnaires and interview schedules and utilize sampling procedures and statistical tests. Parametric and non-parametric statistical tests are discussed. The course ends by teaching participants how to use data processing procedures and write a research report.

Course OG62D: Cognitive-Behavioural Counselling with Individuals

This course explores the interaction between thought, perception, emotions and the many factors which shape behaviour. It begins with an overview of the cognitive-behavioural school of counselling and then focuses in depth on cognitive-behavioural theory and the practical counselling skills and techniques which are used to help individual clients learn new patterns of behaviour. The course ends with a critique of this approach and the wider applications of this model to groups, families and educational institutions.

Course OG62E: Cognitive Behavioural Group Counselling

This course discusses the application of cognitive behavioural theory to group counselling. It begins with problem identification and goal setting and then continues by examining how to organize cognitive behavioural group counselling in terms of logistics, content, sequence, methods, leadership, membership, activities, group dynamics and process issues, monitoring, evaluation, termination and follow-up. The course ends with a critique of cognitive behavioural group counselling and a discussion of the wider applications of the theory with specific reference to Family therapy, and a detailed treatment of the place of Cognitive Behavioural Group Counsell-
ling Theory and Practice in Eclectic and Integrative Approaches to Counselling.

Course OG62F: Developing an Eclectic/Integrative Approach to Counselling

This course seeks to help the student to consider the integrative themes underlying all of the major schools of counselling included in this M.Sc programme as a prelude to developing the students own personal theory of counselling. The course begins by considering the extent to which it is possible to reconcile conflicting philosophical assumptions, beliefs and values as expressed in the Psycho-dynamic, Humanistic and Cognitive-Behavioural schools of counselling. It then encourages the student to consider the implications of these schools of thought for his or her own self-development, self-exploration and self-knowledge. It then systematically explores the extent to which these counselling theories can be integrated in an effort to help counsellors to understand their clients concerns and to improve their professional practice. The course ends with each student thinking through and writing down his or her own personal theory of counselling to guide his or her own counselling practice.

Course OG62G: Family Therapy

This is an introductory course on theoretical and therapeutic components of major schools of therapy concerning marital and family therapy. Videotapes, training films and simulations will be used to explore therapeutic behaviours which differentiate schools of therapy. There will be an emphasis on perceptual, conceptual and clinical skills of family therapists. This course provides a foundation for future training in this area.

Course OG62H: Research Methods Part II: Qualitative Research Methods

This course focuses on the nature, principles, theories and methods of qualitative research. It begins by discussing the nature of knowledge and qualitative research as well as theories and principles guiding this kind of research. Different approaches and methods are examined including action research, case studies, ethnographic research, discourse analysis and comparative methodologies. Participants are taught how to use data gathering techniques and how to analyze and write research reports using qualitative research methods.

Course OG62I: Cognitive-Behavioural Counselling with Individuals Part II

This course builds on Course OG62D by discussing how to select and implement strategies to use in Cognitive-Behavioural Counselling of individuals. Additional strategies are also described, including symbolic modelling, using oneself as a model and participant modelling, emotive imagery and covert modelling, cognitive modelling and problem solving, cognitive restructuring, re-framing and stress inoculation, meditation, muscle relaxation, systematic desensitization and self-management strategies. Issues relating to termination and follow-up
are explored, and the course ends by presenting a range of criticisms of the wider applications of this approach to counselling.

**Course OG63A: Tutorials on the Research Project**

These sessions have been designed as tutorials whose purpose is to assist students on a weekly basis via teleconferencing, as they work on their research projects. The presenters will act as resource persons and the tutorials will be developed and directed by students to meet their own needs for supervision as they design and conduct research and write their projects.

**The Research Proposal**

At the end of the first week of the first semester in the third year, MSc students are required to submit a research proposal on a subject that is of interest to them and that is in keeping with Counselling and Psychotherapy.

**Additional Information/Notes:**

MSc Counselling students are also required to participate in a therapy group at each site, hence the need to have a minimum of six persons at each site to form a viable therapy group.

Short In-Service Departmental Training Courses for Registered Nurses, Nurse-Midwives, Nurse Practitioners and Obstetricians and Gynaecologists are also offered for continuing education:

1. Family Planning and Sterilization Techniques for Nurses (February 15-26, 2010).
2. Family Planning and Reproductive Health Administration (May 10-21, 2010)
3. Sexual and Reproductive Health for Medical Doctors and Senior Nurses (October 18-29, 2010).

For details of these courses please see the attached training schedule for 2009-2010.

**Department Contact Information:**

The Training Department
The Hugh Wynter Fertility Management Unit
The Faculty of Medical Sciences
UWI, Mona.

Programme Coordinator: Mrs. Lillith Williams

**DEPARTMENT OF PATHOLOGY**

Head: Professor Carlos T. Escoffery, BSc (Hons), MBBS (Hons), DM (Path) UWI, MIAC

The Department of Pathology offers three graduate courses leading to the DM (Pathology) Degree of the University of the West Indies. These training programmes are designed to produce graduates for consultant posts in the various subspecialties of Pathology in the Commonwealth Caribbean. Candidates may choose to be trained in the following Graduate programmes:
Specializations/Options:

Anatomical

Programme Objectives:

The objectives of the programme are to:

the attitudes that are essential for lifelong learning, scholarly enquiry and professional problem solving as pathologists in the context of an evolving body of scientific and professional knowledge by building on previous undergraduate and general medical training experience so that relevant knowledge of disease processes is acquired and maintained at a level consistent with the requirements of independent practice in this group of medical specialties

critical skills for the assessment of published literature and, where possible, to contribute to the advancement of such knowledge

interpretive skills based on the theory and practice of pathology as a clinical laboratory science at both macroscopic and microscopic levels such that clinically useful opinions can be produced from surgical, biopsy and cytology specimens and from the findings of post-mortem examinations

sufficient technical knowledge of the processing, sectioning and staining of histological sections (including special techniques such as immuno-histochemistry) and of cytological preparations to be able to function as a consultant Pathologist equipped for independent practice in hospital-based and stand-alone clinical laboratories and to interact appropriately with medical technologists colleagues over those aspects of the technical work for which they are responsible.

Familiarity with health and safety regulations relating to the practice of histopathology and its subspecialties such that the working environment is safe both for themselves and for their colleagues

understanding of information technology sufficient to be able to use computers for producing pathology reports and laboratory statistics, to search databases and to access e-mail and internet services

management and communication skills in order to interact appropriately with medical, scientific, technical and clerical colleagues in the workplace and eventually to function as a team leader, if so requested

responsibility for their standard of professional practice with an awareness of their own limitations, the benefits of team working and of the requirements of the Medical Council of Jamaica.
**Entry Requirements:**

(*See general regulations Doctor of Medicine*)

Applicants should be Medical Graduates of a University or Medical School recognized by the University of the West Indies and fully registered in the territory or territories in which training will take place after completing their Internship and Senior House Officer Rotations.

Candidates will be required to submit a written application and may be required to attend an interview to be eligible for selection to the programme.

**Duration of programme:**

Four years full-time

**Programme Structure:**

The programme will be a minimum of four years. The course of study will normally take place at the University Hospital of the West Indies or at institutions in the contributing territories recognized by the University for this purpose; but up to one year's elective period may be spent at an approved institution in or out of the Caribbean. Throughout the programme, candidates must hold recognised posts in accredited hospitals or be on the elective period. The Specialty Board in Pathology is in overall charge of the programme and is the sole and final authority on all matters concerning the programme.

**Academic**

<table>
<thead>
<tr>
<th>Basic Histology</th>
<th>3-month rotation through Chemical Pathology laboratory paediatric, and renal pathology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of the Microscope</td>
<td>Sub-specialty areas including but not limited to: cardiovascular, gastrointestinal, neuropathology pathology, paediatric and renal pathology</td>
</tr>
<tr>
<td>Presentation methods, research methodology</td>
<td>Sub-specialty area including but not limited to: cardiovascular, gastrointestinal, neuropathology pathology, paediatric and renal pathology</td>
</tr>
<tr>
<td>Basic Pathology Rotation</td>
<td>6-month laboratory quality assurance laboratory quality assurance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conferences and Seminars</th>
<th>Conferences and Seminars</th>
<th>Conferences and Seminars</th>
<th>Conferences and Seminars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through</td>
<td>and management</td>
<td>and management</td>
<td>and management</td>
</tr>
<tr>
<td>Haematology/ Oncology</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Service Based

<table>
<thead>
<tr>
<th>Autopsy</th>
<th>Autopsy</th>
<th>Autopsy</th>
<th>Autopsy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Introductory Surgical Pathology Through scribing

<table>
<thead>
<tr>
<th>Introductory</th>
<th>Surgical Pathology</th>
<th>Surgical Pathology</th>
<th>Surgical Pathology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>Surgical pathology</td>
<td>Surgical pathology</td>
<td>Surgical pathology</td>
</tr>
<tr>
<td>labaratory</td>
<td>and cytology</td>
<td>and cytology</td>
<td>and cytology</td>
</tr>
<tr>
<td>work flow and management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical pathology and cytology</td>
<td>NB: Increasing levels of responsibility and competence</td>
<td>NB: Increasing levels of responsibility and competence</td>
<td></td>
</tr>
<tr>
<td>Sub-specialty areas including but not limited to: cardiovascular, gastrointestinal, neuropathology, paediatric, adrenal pathology</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Paper

<table>
<thead>
<tr>
<th>Research Paper</th>
<th>Research paper</th>
<th>Research Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional Approved elective</td>
<td></td>
<td>research paper</td>
</tr>
</tbody>
</table>
DM Part IDM Part II

Course
Course Code: Course Name

RETH 9004DM Pathology

Course Description:
The DM Anatomical Pathology programme is a four year graduate courses which aims to provide the graduate with the knowledge and skills to function as a consultant Anatomical Pathologist equipped for independent practice in hospital-based and stand-alone clinical laboratories.

Additional Information/Notes:
During the programme, students will be expected to teach undergraduate medical students and other allied professionals and to present the research work of the department at learned conferences locally and internationally. With advancement through the programme, senior students will be involved in the guidance of residents at lower stages of training.

Department Contact Information:
Department of Pathology
University of the West Indies
Mona, Kingston 7, Jamaica
W.I.
Ph: (876) 927-1410 / 977-3942
Fax: (876) 977-1811

Programme Coordinator: Dr Nadia P Williams

DM (Pathology)

Specializations/Options:
Chemical Pathology

Programme Objectives:
The objectives of the programme are to:

Provide a solid foundation in the theory and practice of pathology as a clinical laboratory science

Provide training in the diagnosis of disease by laboratory methods

Provide the graduate with the knowledge and skills to function as a consultant Pathologist equipped for independent practice in hospital-based and stand-alone clinical laboratories

Encourage the development of attitudes that are essential for life-long learning, scholarly enquiry and professional problem solving as pathologists in the context of an evolving body of scientific and professional knowledge

Entry Requirements:
(See general regulations Doctor of Medicine)

Applicants should be Medical Graduates of a University or Medical School recognized by the University of the West Indies and fully registered in the territory or territories in which training will take place.
after completing their Internship and Senior House Officer Rotations. Candidates will be required to submit a written application and may be required to attend an interview to be eligible for selection to the programme.

**Duration of programme:**

Four years full-time

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETH 9004</td>
<td>DM Chemical Pathology</td>
</tr>
</tbody>
</table>

**Course Description:**
The DM Chemical Pathology programmes is a four year graduate course which aim to provide the graduate with the knowledge and skills to function as a consultant Chemical Pathologist and Laboratory Manager, equipped for independent practice in hospital-based and stand-alone clinical laboratories.

**Additional Information/Notes:**
During the programme, students will be expected to teach undergraduate medical students and other allied professionals and to present the research work of the department at learned conferences locally and internationally.

Department Contact Information:
Department of Pathology
University of the West Indies
Mona, Kingston 7
Jamaica W.I.
Ph: (876) 927-1410 / 977-3942
Fax: (876) 977-1811

Programme Coordinator: Dr Eric Choo Kang

**TROPICAL MEDICINE RESEARCH INSTITUTE**

Director: Professor Terrence Forrester, MBBS, DM, PhD, MRCP, FRCP

The Tropical Medicine Research Institute offers the following Graduate programmes:

- MSc Nutrition
- MPhil / PhD Nutrition
- MSc Epidemiology
- PhD Epidemiology

**Masters of Science in Nutrition**

**Rationale**
The Caribbean region is in nutrition transition with increasing incidence of nutrition related chronic diseases while nutritional deficiencies persist. In addition, the peoples of the region are increasingly targeted and influenced by nutrition information from a variety of sources of varying accuracy. Within this context it is essential to have a cadre of professionals with a clear understanding of the scientific bases of nutrition and its application at the individual, community and national levels. The Masters of Sciences in Nutrition programme will provide students with a comprehensive core knowledge of nutrition and an awareness of the interface with other disciplines, to equip them with the necessary range of skills to ad-
dress the nutrition needs of the region.

**Objectives**

To provide training that will equip graduates with the necessary knowledge, analytical, communication and research skills to be capable of:

1) assessing food and nutrition needs at the individual, community and national levels

2) critically evaluating research and other nutrition information in order to provide accurate and current information to the general public and persons in the education and health sectors

3) providing appropriate nutritional advice in both clinical and public health settings

4) utilizing evidence based methodology to inform policy and programme design and implementation and contribute to the research agenda in their countries

**Entry Requirements:**

Applicants must be graduates of approved Universities with a minimum of a lower second class honours or equivalent degree in Natural Sciences, Social Sciences, Agriculture or other subjects acceptable to the Faculty of Medicine.

Duration of programme: 15 months full-time

**Programme Structure:**

The Masters programme is comprised of four courses followed by a six-month research project (TU680). The first two courses, Concepts and Principles of Nutritional Sciences (TU60A) and Essentials of the Scientific Method (TU61A) are taught in the first semester while Public Health Nutrition (TU60B) and Clinical Nutrition (TU61B) are taught in the second semester.
CONCEPTS AND PRINCIPLES OF NUTRITION SCIENCES (TU60A)

1. Foods.
Food groups, food composition tables, toxins, food microbiology, processing and nutrient losses.

Diets of vulnerable groups - pregnant and lactating women, infants and young children, school children, adolescents, the elderly.
Growth and development, physiology of pregnancy and lactation and ageing.

3. Nutritional biochemistry and physiology.
Chemistry and metabolism of carbohydrates, proteins, lipids, vitamins and trace elements.
Integration, coordination and regulation of macronutrient metabolism
Energy expenditure and energy balance.
Protein quality evaluation
Gastrointestinal physiology and digestion

4. Assessment of diet and nutritional status.
Dietary assessment - for individuals and groups.
Anthropometric assessment and body composition
Clinical and biochemical assessment.

5. Dietary Reference Intakes (DRI)
Definitions, estimation of requirements and derivations of recommended intakes, uses and limitations of DRIs.

ESSENTIALS OF THE SCIENTIFIC METHOD (TU61A)

1. Epidemiology
Introduction to epidemiology, historical highlights of epidemiology, introduction to demography, measures of disease frequency, sources of health statistics in country, concepts of cause and causal theory, measures of effect (association), principles of measurement, study designs in epidemiology, statistical methods in epidemiology. Ethics.

2. Research methods
Research principles, sampling methods, principles of measurement, study designs, organization of surveys, questionnaire design, data collection methods, interviewing techniques. Reliability and validity.

3. Statistics and Data Analysis
Types of data, frequency distributions, data summary, probability, normal, binomial and Poisson distributions, sampling distributions, confidence intervals, hypothesis testing, simple linear regression, correlation, analysis of variance, transformation, distribution free tests, sample size determination. Data management and analysis using STATA.

4. Interpretation and presentation of data
Literature reviews - critical review of scientific journal articles.

5. Techniques for the development of a research proposal

PUBLIC HEALTH NUTRITION (TU60B)

1. Food and nutrition policy and planning and interventions
World nutritional problems, food security, problem identification, programme planning, implementation, monitoring and evaluation.
Nutrition surveillance, nutrition education, nutrition supplementation and fortification, food based approaches.
Goals and guidelines for meal planning, surveys of food consumption. Food based dietary guidelines.
Food safety, laws and regulation, food labeling.


3. Nutrition Epidemiology
Diet and disease relationships, types of studies, methodology and interpretation.

4. Nutrition in Primary Health Care
Field trips organized by the Nutrition Division of the
Ministry of Health.

5. Sports Nutrition
Physiology and biochemistry of exercise, nutritional requirements, nutritional considerations for an event.

CLINICAL NUTRITION (TU61B)

1. Under-nutrition
Malnutrition-classification and clinical features, treatment, stunting and wasting, Kwashiorkor -aetiology, associated factors; infection, immunity, diarrhoea, parasites, mental development, social background, long term effects and implications. Anaemia. Anorexia and starvation.

2. Chronic non-communicable diseases

3. Altered nutritional requirements in relevant disease states, unusual requirements.

4. Assessment of Clinical and Functional Metabolic State
Clinical skills, history taking, recognizing physical signs, diagnosis of primary and secondary nutritional diseases.

5. Therapy and Management
Acute and chronic illnesses, rehabilitation, institutional and community care, palliation, artificial feeding. Application of appropriate management skills for investigations, nutritional advice and treatment, referrals, institutional care and community care.


OTHER ACTIVITIES

Introduction to word processing and presentations

Ward rounds on the ward for malnourished children at the Tropical Metabolism Research Unit

Discussion of research being carried out by staff

Research seminars given by staff and invited guests weekly during the semester.

RESEARCH PROJECT (TU680)

Investigation and written report of an approved topic.
The research proposal and introduction should be completed during the second semester and presented before the end of semester examinations. The following phases should be carried out during the next six (6) months: - project preparation, data collection, data entry and analysis and preparation of a written report which should be submitted at the end of November.
The written report should not exceed 25,000 words
and should conform with the Universitys regulations for preparation of theses.

**Department Contact Information:**

Tropical Medicine Research Institute
The University of the West Indies, Mona
Kingston 7, Jamaica, W.I.
Email: tmri@uwimona.edu.jm
Tel: (876) 927-1884 / 977-6251
Fax: (876) 977-0632

Programme Coordinator: Dr. Christine Powell

**MPhil / PhD Nutrition**

Programme Objectives: The aim of these courses is to train professional nutritionists capable of assuming leadership roles in academia, government, industry and private sector enterprises nationally and internationally. They will be expected to advance knowledge in nutrition through research and the application of evidence based methodology to guide policy and decision making.

**Entry Requirements:**

Candidates seeking to enter the MPhil programme should possess a first degree with upper second or first class honours. They will be required to pursue the first year of the MSc Nutrition programme and achieve an average of B+ or higher to be eligible for transfer to the MPhil programme.

Candidates applying for the PhD programme should hold an MSc or MPhil degree in Nutrition. Other health related masters degrees may be considered but these persons would be required to complete courses in nutrition as determined by the department. All candidates will be required to register for the MPhil degree in the first instance (unless they already hold such a degree) and may have their registration upgraded to the PhD after a minimum of one year if conditions outlined for transfers from MPhil to PhD by the Office of Graduate Studies and Research are met.

Some examples of areas of research currently being undertaken in the Institute:

- Jamaica Healthy Lifestyle Survey II
- Jamaica Youth Risk and Resiliency Behaviour Survey
- Impact of early life experience on cardio-respiratory risk and bone mineral density in adolescence in Jamaica
- Human resources for Health
  - The effects of early childhood stimulation on economic, cognitive and social outcomes in a cohort of stunted Jamaican children: The 22 years follow-up study
  - Caregiver training and early stimulation for young children in child care facilities
Nutrition in sickle cell disease

Gluthathione homeostasis in sickle cell disease

Amino acid requirements in sickle cell disease

Relationship between body composition and utilization of protein and fats as fuels

Protein and amino acid metabolism in severe childhood malnutrition

Relationship between birth weight and urea kinetics in children

Energy requirements, body composition and cardiovascular risk in adults from urban and rural Jamaica

Seminars

One departmental seminar per academic year.

Duration of programme

The MPhil degree normally takes a minimum of two years of intensive research on a full-time basis. A PhD degree usually takes a minimum of three years full-time. Part-time studies may also be pursued.

Programme Structure:

The MPhil Degree
This programme consists largely of work on a research topic which is examined by thesis. In addi-

The PhD degree

The PhD is fundamentally a research degree, and is examined by thesis and an oral examination. Candidates are also required to complete a mandatory 9 credit hours of courses but may also be required to do additional courses based on their background knowledge. The PhD thesis should make a distinct contribution to the advancement of the field of nutrition and show evidence of originality and independent critical thought. It should meet the professional standards of the discipline, be satisfactory as regards
### COURSE (Core)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR6001</td>
<td>Concepts and Principles of Nutrition Sciences</td>
<td>6</td>
</tr>
<tr>
<td>NUTR6002</td>
<td>Essentials of the Scientific Method</td>
<td>6</td>
</tr>
<tr>
<td>MICR6560</td>
<td>Diagnostic Medical Microbiology</td>
<td>6</td>
</tr>
</tbody>
</table>

(Candidates may choose from among these or other available courses based on their area of interest)

### COURSE (Electives)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR6002</td>
<td>Public Health Nutrition</td>
<td>6</td>
</tr>
<tr>
<td>NUTR6102</td>
<td>Clinical Nutrition</td>
<td>6</td>
</tr>
<tr>
<td>EPID6104</td>
<td>Critical evaluation of the scientific literature and writing scientific manuscripts</td>
<td>3</td>
</tr>
<tr>
<td>EPID6102</td>
<td>Introduction to Statistics and computing</td>
<td>6</td>
</tr>
<tr>
<td>EPID6101</td>
<td>Fundamentals of epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>EPID6202</td>
<td>Ethics and Research methods</td>
<td>6</td>
</tr>
</tbody>
</table>

**Course Description:**
For Nutrition courses see the MSc Nutrition programme and for Epidemiology courses see the MSc Epidemiology programme.

**Department Contact Information:**
Tropical Medicine Research Institute
The University of the West Indies, Mona, Kingston 7, Jamaica
Tel: 876-927-1884, 876-977-6251
Fax: 876-977-0632
Email: tmri@uwimona.edu.jm
Programme Coordinator: Dr. Christine Powell

**MSc Epidemiology**

**Programme Objectives:**

Graduates of the MSc program are expected to:

- Have knowledge of epidemiological concepts, principles, methods, sources of data and relevant ethical issues; be able to work with and interpret existing data.

- Describe trends and patterns of disease incidence, prevalence, burden of major diseases (both new and emerging) and factors affecting health status; indicate major etiologic and prognostic factors for the same.

- Read, understand and evaluate the scientific literature relevant to epidemiology.

- Understand the strengths and weaknesses of major methodological and analytical techniques used in epidemiology.

- Develop testable hypotheses, set out relevant research questions, design and develop a feasible research proposal.

- Apply epidemiological concepts, principles, methods and analytical techniques in research studies. Exhibit practical skills, including subject selection, data collection, study logistics; construct a data set; analyse a data set using existing statistical software.

- Prepare a paper for presentation or publication.

- Appreciate the policy implications of epidemiologic research.

- Contribute to health service delivery policy development.

**Entry Requirements:**

Candidates should be graduates in medicine, dentistry, veterinary medicine, other health sciences, or social sciences. The undergraduate record should be distinguished and an aptitude for the study of a quantitative discipline should be demonstrated. Candidates are expected to meet any and all other all matriculation requirements of the University of the West Indies.

Assessment and selection will be via review of curriculum vitae and interview.

**Duration of programme:**

Full time for 12 months starting in September

Programme Structure: Award of the MSc Epidemiology requires a minimum of 40 credit hours (inclusive of core courses and options) and a satisfactory project report.
Semester 1
Epidemiology 1Introduction to Statistics and ComputingResearch MethodsCritical Evaluation of the Medical Literature and Scientific ManuscriptsResearch EthicsEpidemiology of Infectious Diseases and HIV

Semester 2
Epidemiology 2Statistical Methods in EpidemiologyData Management for Epidemiology StudiesEpidemiology of Chronic Non-Communicable DiseasesMaternal and Child HealthHealth Services ResearchGenetic & Molecular EpidemiologyNutritional Epidemiology

Semesters 1 & 2 Research Report

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPID6101</td>
<td>Epidemiology</td>
<td>6</td>
<td>20% Coursework</td>
<td>80% Exam</td>
</tr>
<tr>
<td>EPID6102</td>
<td>Introduction to Statistics and Computing</td>
<td>6</td>
<td>30% Coursework 70% Exam</td>
<td></td>
</tr>
<tr>
<td>EPID6103</td>
<td>Research Methods</td>
<td>4</td>
<td>20% Coursework 80% Exam</td>
<td></td>
</tr>
<tr>
<td>EPID6104</td>
<td>Critical Evaluation of the Medical Literature Writing Scientific Manuscripts</td>
<td>3</td>
<td>100% Coursework</td>
<td></td>
</tr>
<tr>
<td>EPID6105</td>
<td>Research Ethics</td>
<td>2</td>
<td>100% Exam</td>
<td></td>
</tr>
<tr>
<td>EPID6106</td>
<td>Epidemiology of Infectious Diseases and HIV</td>
<td>3</td>
<td>20% Coursework 80% Exam</td>
<td></td>
</tr>
<tr>
<td>EPID6100</td>
<td>Research Report</td>
<td>6</td>
<td>100% Coursework</td>
<td></td>
</tr>
<tr>
<td>EPID6201</td>
<td>Epidemiology 2</td>
<td>4</td>
<td>20% Coursework 80% Exam</td>
<td></td>
</tr>
<tr>
<td>EPID6202</td>
<td>Statistical Methods in Epidemiology</td>
<td>4</td>
<td>30% Coursework 70% Exam</td>
<td></td>
</tr>
<tr>
<td>EPID6203</td>
<td>Data Management for Epidemiology Studies 2</td>
<td>2</td>
<td>100% Coursework</td>
<td></td>
</tr>
<tr>
<td>EPID6204</td>
<td>Epidemiology of Chronic Non-Communicable Diseases</td>
<td>3</td>
<td>100% Coursework</td>
<td></td>
</tr>
<tr>
<td>EPID6205</td>
<td>Maternal and Child Health Epidemiology</td>
<td>2</td>
<td>30% Coursework 70% Exam</td>
<td></td>
</tr>
<tr>
<td>EPID6206</td>
<td>Health Service Research</td>
<td>2</td>
<td>100% Exam</td>
<td></td>
</tr>
</tbody>
</table>
EP6101: Epidemiology 1

The aim of this course is to provide an introduction to the basic concepts and methods of epidemiology. Content areas include: History of epidemiology, Scope of epidemiology (including introduction to outbreak investigation), Measures of disease frequency (case definition) Measures of Effect (Risk) natural history of disease, indices of population health, ICD10, study designs, interpretation of epidemiological studies, cause and association, measurement and measurement error, Preventive strategies & measures of public health impact, General principles of comparative trial, Randomization: rationale, organization, ethics and statistical methods, Size of trials: power calculations, need for large trials, problems of small trials, alternative trial designs, principles of meta-analysis, Data monitoring and clinical trials reporting, Practical on drafting a trial protocol.

EP6102: Introduction to Statistics and Computing

The aim of this course is to introduce the basic statistical methods used in medical and public health research and to help students develop the skills needed to apply these methods with a statistical computer package. Content areas include definition and classification of variables, basic methods of presenting data, measures of position and variability, fundamentals of probability, including an introduction to the basic distributions normal, binomial. Poisson), classical inference, comprising: population, including the ideas of model and parameter: types of population (notional, actual etc.), response variable (measured, nominal, ordinal etc.), sample, including ideas of randomness, statistic, emphasizing the distinction from population values, sampling distribution, approximate and exact, relevance of sample size, estimation, properties of estimators, hypothesis tests, type I and II errors, sensitivity and specificity, confidence intervals, comparison: the central idea of the comparison of groups, role of randomization, tests of significance, blocking: pairing and matching, association: contingency tables and correlation, ANOVA: basic idea, reliability, repeatability, agreement, Assumptions: their importance and relevance, examination, transformations, sampling variation, estimation and hypothesis testing, regression analysis, analysis of trends.

EPID6103 Research Methods

This module aims to introduce the concepts of study design, data management and data analysis which are suitable for epidemiological research which will allow the student to design studies and write competitive proposals on contemporary issues in epidemiology and public health; provide the practical skills necessary to plan and carry out research projects as well as explore the principles and concepts associated with the design of sample surveys which are representative of populations and the analysis of data from such surveys. Content areas include preparing a research proposal, systematic review methodology, study design issues in epidemiological studies, sampling, budgeting, developing a field protocol, questionnaire design, managing a research team, data presentation and report writing.
EPID6104 Critical Evaluation of the Medial Literature and Writing Scientific Manuscripts

This module aims to describe and illustrate the methods available for identifying and reviewing quantitative and qualitative literature. This will provide students with a perspective on the development and uses of epidemiology through discussion of key epidemiological papers. The student should develop the skills to find, interpret and criticize information in the epidemiological literature and the competence to write scientific manuscripts in accordance with the requirements of journals and other publications. Content areas include planning the review: the role of the literature review and specification of the task, identification of relevant literature both published and unpublished: developing a search strategy and using bibliographic databases, appraising the literature: methods for assessing the quality of quantitative and qualitative research, synthesizing the evidence: integration of the evidence using both quantitative and qualitative methods; principles of meta-analysis, formulating recommendations and writing reviews.

EPID6105 Research Ethics

The aim of this module is for students to develop an awareness and knowledge of the ethical principles which guide researchers, especially those studying human subjects. Content areas include historical events that have influenced current ethical guidelines, the fundamental ethical principles that guide the ethical conduct of research involving human participants, International guidelines in the protection of human participants, the responsibilities of organizations or individuals in protecting human participants, maintaining confidentiality throughout the research process, the informed consent process and vulnerable populations, the role of regulatory bodies and institutions in maintaining ethical standards, Research Ethics in the Caribbean.

EPID6106 Epidemiology of Infectious Diseases and HIV/AIDS

The aim of this module is to provide a multidisciplinary framework for understanding the principles of interventions against infectious diseases. It provides perspectives on the epidemiology of communicable diseases: basic concepts and methods; epidemiological aspects of vaccination; surveillance and outbreak investigation; and detailed discussion of the epidemiology of important representative infectious diseases.

It also provides students with an understanding of the control of communicable diseases in countries with a developed public health infrastructure. Special emphasis will be placed on HIV/AIDS as one of the threats to health in the Caribbean. Content areas include Principles of infectious disease (ID) epidemiology, principles of surveillance, epidemiological methods I: Lot Quality Assurance Sampling (LQAS), Infectious Disease Outbreak investigation and selection of appropriate comparison groups and logistical issues; mathematical models for ID; New vaccines:
The Jamaica rotavirus experience; Emerging infectious diseases and bioterrorism; HIV/AIDS - epidemiology, natural history, evaluation and treatment and prevention including vaccine trials.

EPID6201 Epidemiology 2

This module aims to provide an advanced understanding of, and confidence to chose and execute, study design, analysis and interpretation of epidemiological studies and to understand epidemiological methods applied to public health. Content areas include definition of cases in epidemiological studies, rates (including Standardization) and measures of frequency and effect (risk), measures of public health impact (population attributable risk and number-needed-to-treat), study design, planning and execution, developing instruments, achieving good measurement technique and reducing random error, bias, confounding, data management and analysis, measures of reliability (e.g. Kappa statistics), validity (sensitivity, specificity, predictive validity, likelihood ratio, receiver operating characteristic (ROC) curves, screening and surveillance, including comparison and analysis of routine data, causality philosophical (inductive and deductive reasoning) and mathematical basis (probability concepts) and decision making.

EPID6202 Statistical Methods in Epidemiology

This module aims to equip students with the skills needed to analyze and interpret data from cohort, case-control and cross-sectional studies by cross-tabulation, stratification and regression and introduce them to the analysis of large, population-based datasets. Content areas include analysis of cohort studies using classical methods. Stratification, confounding and interaction, design issues in case-control studies, analysis of case control studies using classical methods, matching in case control studies, likelihood theory, logistic regression for the analysis of case-control, cross-sectional and fixed cohort studies, regression methods for case-control studies (Unconditional and conditional logistic regression), advanced design issues in case-control studies, regression methods for cohort studies, regression methods for cohort studies and survival analysis. Assessing goodness of fit. Multiplicative and additive models. Attributable fractions. Meta-analysis and systematic reviews, survey analysis - weighted data, analysis of clustered data, repeated measures, design effects, dealing with missing data.

EPID6203 Data Management for Epidemiological Studies

The module aims to give students the practical skills to create, check and manage a database suitable for epidemiological studies. Content areas include Data entry/data entry verification, data quality and data checking, data management and manipulation, data analysis and data summary and presentation.
EPID6204 Epidemiology of Chronic Non-Communicable Diseases

The course aims to make the student aware of the burden of chronic non-communicable diseases (CNCDs) on the public health agenda of countries, at various stages of development and to examine and understand the methodological issues in different types of study design aimed at identifying the determinants of major CNCDs and to be able to plan, implement and evaluate preventive strategies.

Content areas include the Epidemiology of lifestyle related issues such as obesity, cardiovascular diseases (hypertension, stroke, coronary artery disease), diabetes, cancer and depression, with particular reference to developing countries, with reference to the main studies in these areas, application of different types of study design to the epidemiology of major CNCDs, including ecological, cohort and case-control studies and intervention trials, issues of screening for chronic disease: methodological issues, implementation and evaluation and the role of genetics and the environment on chronic disease aetiology.

EPID6205 Maternal and Child Health Epidemiology

The aim of this module is to explore the nature and determinants of ill-health in pregnant women and children (0-10 years), and to demonstrate the contribution of methods drawn from epidemiology, demography and the social sciences to problem identification and to the design and evaluation of strategies to improve the health of pregnant women and children with particular reference to developing countries.

Content areas include issues related to reproductive biology; bearing healthy children (maternal health, infertility and adverse foetal and child outcomes), avoiding childbearing (contraception and induced abortion), maintaining a healthy reproductive system (STDs, HIV, reproductive cancers), the social context in which reproductive health concerns arise and will cover concepts of reproductive rights, gender perspectives, reproductive health services, programmes and policies among others, developing the skill to identify and process new information, the public health problems facing pregnant women and babies and the complex of factors which contribute to these problems, indicators of levels of maternal and perinatal health, methods of measurement and sources of information e.g. millennium development goals, methods and techniques from different disciplines which can contribute to the study of the health problems of pregnant women and babies, current strategies for the improvement of maternal and perinatal health, examining links between the health of women and children.

EPID 6206 Health Services Research

This module aims to provide students with a range of ways of thinking about health services and health systems by assessing its component parts. Drawing on public health, epidemiology, economics and sociology, the Teaching Unit will help students understand how services function, the reasons services have developed in the way they have, the basis of
some universal, persistent problems, and possible solutions to such difficulties. Content areas include Inputs of health services: Introduction to course and to health services - what is meant by health care, lay care and formal care, different levels of health services. Diseases and medical knowledge. Sources of finance and health care expenditure; Processes of health services: Need, demand and use. Health professionals. Professional-patient interaction. Financial management. Assessing health services and systems: Methods for assessing health services at micro and meso levels, and whole systems and The Response to challenges to health care: in industrialized and developing countries.

**EP6207 Genetic and Molecular Epidemiology**

The aim of this module is to give students a basic understanding of the techniques used, and an appreciation of the importance of molecular epidemiology and introduce to them the ways in which genetic analysis may be used with epidemiological studies to provide a powerful means of exploring the aetiology of disease.

Content areas include an Introduction to Genetics: genes and chromosomes, alleles and polymorphisms, Mendelian Inheritance, linkage, penetrance, quantitative genetics, computational analysis, Designing studies to determine the extent of genetic contribution to the aetiology of a disease, and its mode of transmission: family studies, twin studies, segregation analysis, Designing studies to determine the location of the gene, and the allele responsible for a disease: linkage studies, affected sib studies, association studies, family-based association studies, Appreciation of the importance of genetics to public health, the role of ethical issues in the study of genetic determinants of disease and an appreciation of the role of race/ethnicity and genetics in disease causation.

**EP6208 Nutritional Epidemiology**

The aim of this course is to introduce students to key issues in the design and interpretation of nutritional epidemiological studies, and to evaluate current understanding of the relationship between nutrition and disease.

Content areas include an Introduction to the changing patterns of diet, nutrition and health, the relationship between dietary intake and disease, epidemiological methods used in the investigation of the association between diet and disease, methods for assessing dietary intake at a population and individual level, dietary methodology food frequency questionnaire, 24 hour recall, food diaries and their validation, retrospective and prospective methods of determining dietary intake, the meaning and analysis of total dietary intake, body composition and anthropometry, biomedical assessment of nutritional status, correction of measurement error in data analysis, regression analysis of nutritional data, the relationship between diet and some chronic diseases such as cardiovascular diseases, cancer, obesity, diabetes and osteoporosis.
EPID6100 Research Report

Investigation and written report of an approved topic.
The research proposal and introduction should be completed during the first semester and presented before the end of semester examinations. The following phases should be carried out during the next semester: - project preparation, data collection, data entry and analysis and preparation of a written report which should be submitted at the end of July. The written report should not exceed 5,000 words and should conform to the University's regulations for preparation of theses.

Department Contact Information:
The Epidemiology Research Unit, TMRIThe University of the West Indies, MonaJamaica, West IndiesE-mail: tmri.eru@uwimona.edu.jmTel: (876) 927-2471 / 977-6151Fax: (876) 927-2984

Programme Coordinator: Dr. Marshall Tulloch-Reid

MPhil / PhD Epidemiology

Programme Objectives:
The aim of the MPhil/PhD programme is to produce epidemiologists who are capable of assuming leadership roles in academia, government, industry and private sector enterprises nationally and internationally.

They will be expected to have a sound knowledge of epidemiological concepts, principles, methods, sources of data and relevant ethical issues; be able to work with and interpret existing data, read and understand and evaluate the scientific literature relevant to epidemiology and their areas of expertise, develop testable hypotheses and set out relevant research questions and design and develop a feasible research proposal, exhibit practical skills - including subject selection, data collection, study logistics, construction a data set, data analysis skills and scientific writing skills and contribute to health service delivery policy development.

Entry Requirements:
The MPhil/PhD in Epidemiology is considered a research degree with most of the period within training focused on the development and execution of the planned project. All University Regulations for matriculation must be fulfilled.
Candidates with an MSc in Epidemiology or an equivalent degree in Epidemiology are eligible for the MPhil/PhD programme and can apply to Graduate Studies for admission to the programme.
Candidates who do not have a graduate degree are encouraged to pursue the MSc in Epidemiology prior to applying to the MPhil/PhD programme.
Candidates with a Graduate Degree who are interested in pursuing the MPhil/PhD in Epidemiology will also be considered for admission. Some of these candidates, depending on their previous training and experience, may be required to complete taught courses that are offered with the MSc in Epidemi-
ology as determined by their Supervisor. Consideration may be given to the possible equivalence of other qualifying courses offered by the UWI or other institutions. These UWI courses include:

   a. Masters in Public Health (MPH)
   b. MSc Nutrition
   c. MPhil (Biomedical or Social Sciences)
   d. MSc Family Medicine

Some examples of areas of research currently being undertaken in the Institute:

The ERU aims to make a significant contribution to the improvement of health in the Caribbean and the world by developing collaborative programmes of excellence in research under the theme Epidemiology for Population Health

Jamaica Healthy Lifestyle Survey II

Jamaica Youth Risk and Resiliency Behaviour Survey

Impact of early life experience on cardio-respiratory risk and bone mineral density in adolescence in Jamaica

Health Human Resources Information Datasets in the Americas: Jamaican Database of Human

Resources in Health

Overweight/Obesity in Children 6-10 Years Old in the North East Health Region, Jamaica: Prevalence, Risk Factors and Dietary & Physical Intervention

The economic impact of obesity

The Impact of Diabetes on Morbidity and All-Cause and Cardiovascular Mortality in the Caribbean and an Evaluation of Health Provider Practice in Respect of CVD Risk Reduction in Diabetic Patients

The Classification of Youth Onset Diabetes in Jamaica

The burden and cost of diabetic foot complications among patients attending a specialist diabetic clinic in Jamaica

The effects of early childhood stimulation on economic, cognitive and social outcomes in a cohort of stunted Jamaican children: The 22 years follow-up study

Future studies on the role of social risk factors on chronic diseases, qualitative interviews of persons with chronic diseases, health and nutrition in the elderly and intervention programmes to prevent type 2 diabetes and its complications are planned.

Seminars:
One departmental seminar per academic year.

Duration of programme:
The MPhil degree normally takes a minimum of two years of intensive research on a full-time basis. A
PhD degree usually takes a minimum of three years full-time. Part-time studies may also be pursued.

**Programme Structure:**

**The MPhil Degree**

This programme consists largely of work on a research topic which is examined by thesis. In addition candidates are also required to complete a mandatory 6 credit hours of courses but may also be required to do additional courses based on their background knowledge. Candidates for the MPhil degree may be required to take an oral examination on the general field of study and on the thesis.

**The PhD degree**

The PhD is fundamentally a research degree, and is examined by thesis and an oral examination. Candidates are also required to complete a mandatory 9 credit hours of courses but may also be required to do additional courses based on their background knowledge. The PhD thesis should make a distinct contribution to the advancement of the field of epidemiology and show evidence of originality and independent critical thought. It should meet the professional standards of the discipline, be satisfactory as regards literary presentation, and should be suitable for publication

<table>
<thead>
<tr>
<th>COURSE (Core)</th>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EPID6101</td>
<td>Fundamentals of Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>EPID6102</td>
<td>Introduction to Statistics and Computing</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>EPID6103</td>
<td>Ethics and Research Methods</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>EPID6104</td>
<td>Critical Evaluation of the Scientific Literature and writing Scientific manuscripts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EPID6202</td>
<td>Statistical Methods in Epidemiology</td>
<td>4</td>
</tr>
</tbody>
</table>
Electives

(Candidates may choose from among available courses based on their area of interest and their previous training and experience)

Course Description:
For Epidemiology courses please see the MSc Epidemiology programme

Department Contact Information:
Epidemiology Research Unit
Tropical Medicine Research Institute
The University of the West Indies, Mona, Kingston 7, Jamaica
Tel: 876-927-2471, 876-977-6151
Fax: 876-27-2984
Email: tmri@uwimona.edu.jm

Programme Coordinator: Professor Rainford Wilks

THE UWI SCHOOL OF NURSING, MONA

Head/Director: Joanna Bennett, PhD, BScN, RM, RN

The UWI School of Nursing offers the MSc Nursing. The majors are categorized as follows.

Nurse Specialist
Nursing Administration
Nursing Education
Clinical Nurse Specialist
Advanced Nursing Practice
Family Nurse Practitioner

Mental Health/Psychiatric Nurse Practitioner

MSc Nursing

Specializations/Options (If Applicable):
Nursing Administration, Nursing Education, Clinical Nurse Specialist, Family Nurse Practitioner, Mental Health/Psychiatric Nurse Practitioner

The objectives of the programme are:

To apply knowledge synthesized from critical analysis and theoretical concepts relevant to nursing practice

Contribute to the body of nursing knowledge through research and critical analysis of concepts and theories relevant to nursing

Conduct research as a major mean of initiating changes and elevating standards of practice

Provide consultation in their particular area of specialization

Justify practice on the basis of sound scientific evidence

Advance the discipline of nursing based on research, publication and evidence based practice

Strengthen personal and professional values and attitudes through continuing education with particular reference to clients/patients, their families and the
health team.

Integrate ethical principles and legal accountability in the delivery of nursing care to clients, families and communities

Demonstrate leadership in nursing care based on sound clinical judgment and critical analysis of issues

Demonstrate effective interpersonal and communication skill in interaction with the health team, clients and their families

Display a knowledgeable and informed perspective as a member of civil society

**Entry Requirements**

(Nursing Administration, Nursing Education and Clinical Nurse Specialist)

The programme is offered to general or trained nurses who hold registration/licensure in their current jurisdiction of practice; can verify first licensure/registration if it is different from that which is currently held, and is eligible for licensure/licensure in any of the countries served by the UWI. AND

1. have a total three (3) years post RN licensure/registration clinical practice as a registered nurse in an approved recognized agency, institution or organization where Primary, Secondary, Tertiary or extended Health Care Services are offered. Applicants requiring admission to an Advanced Nursing Practice programme must have three (3) years current clinical practice. The time spent on any educational programme is not included in this three (3) years requirement.

2. Hold an undergraduate degree with normally not less than second class honors. OR

3. Hold a graduate degree. OR

4. Hold approved technical and/or professional qualification(s) awarded by an approved body and approved by this University and currently hold a middle level position. OR

5. Have in the opinion of the University, other qualification(s) and experience of special relevance to the programme.

An applicant may be required to: -

Sit an Entrance Examination and/or

Attend an interview and/or

Have a period or orientation appropriate to their programme of interest, BEFORE admission

An applicant will:

1. Have the relevant educational transcripts sent directly by the educational institution to the UWI

2. complete a portfolio relevant to nursing education/
administration/clinical experience

3. Have two (2) referees complete and send their respective recommendation the prescribed UWI form directly to the University of the West Indies

4. Provide any other documentation requested

5. Meet the deadlines stated for the submission of documents

6. Be computer literate

**Entry Requirements**

(Family Nurse Practitioner & Mental Health/ Psychiatric Nurse Practitioner)

The programme is offered to general and trained psychiatric nurses who hold registration/licensure in their current jurisdiction of practice; can verify first licensure/registration if it is different from that which is currently held, and is eligible for licensure/registration in any of the countries served by the UWI. AND

1. have a total five (5) years post RN licensure/registration clinical practice as a registered nurse in an approved recognized agency, institution or organization where Primary, Secondary, Tertiary or extended Health Care Services are offered. Applicants requiring admission to an Advanced Nursing Practice programme must have five (5) years current clinical practice. The time spent on any educational programme is not included in this five (5) year requirement.

2. Hold an undergraduate degree with normally not less than second class honors. OR

3. Hold a graduate degree. OR

4. Hold approved technical and/or professional qualification(s) awarded by an approved body and approved by this University and currently hold a middle level position. OR

5. Have in the opinion of the University, other qualification(s) and experience of special relevance to/the programme.

6. Registration licensure as a Midwife is also required for certain programmes and will be considered in the evaluation of (3) and (4). Male Nurses who do not hold Midwifery Registration or Licensure may present transcripts and certification of appropriate and comparable programmes.

An applicant may be required to:-

1. Have the relevant educational transcripts sent directly by the educational institution to the UWI.
2. Complete a portfolio relevant to nursing education/administration/clinical experience
3. Have two (2) referees complete and send their respective recommendation the prescribed UWI form directly to the University of the West Indies
4. Provide any other documentation requested
5. Meet the deadlines stated for the submission of documents
6. Be computer literate

**Duration of programme**

One year full-time and Two years Part-time (Nursing Administration, Education, & Clinical Nurse Specialist)

Two (2) years full-time and four (4) years part-time (Family and Mental Health Practitioners)

**Programme Structure**

The Nursing Administration, Education and Clinical Nurse Specialist major is offered for one (1) year full time and two (2) years part-time including summer.

The Family Nurse Practitioner and Mental Health/Psychiatric Nurse Practitioner major are offered for two (2) years full-time and four (4) years part-time, including summer in the first year.

These (4) Courses below are common to all majors

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE62A</td>
<td>Research Methods Applied to Nursing</td>
<td>4</td>
<td>60% Exam</td>
</tr>
<tr>
<td>NE62B</td>
<td>Nursing Research Project</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td>NE63C</td>
<td>Theoretical Frameworks &amp; Advanced Nursing Practice with Practicum</td>
<td>4</td>
<td>60% Exam</td>
</tr>
<tr>
<td>NE66A</td>
<td>Mental &amp; Physical Health Education</td>
<td>3</td>
<td>60% Exam</td>
</tr>
</tbody>
</table>
### COURSES (Core) : Administration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE67A</td>
<td>Theoretical Perspectives in Nursing Administration</td>
<td>3</td>
<td>60% Exam, 40% Coursework</td>
</tr>
<tr>
<td>NE67B</td>
<td>Models of Nursing/Health Care Administration</td>
<td>3</td>
<td>60% Exam, 40% Coursework</td>
</tr>
<tr>
<td>NE67C</td>
<td>Practice Issues in Managing Nursing/Health Care Delivery Work System</td>
<td>3</td>
<td>60% Exam, 40% Course</td>
</tr>
<tr>
<td>NE67D</td>
<td>Human Resource Management in Nursing/Health Administration</td>
<td>3</td>
<td>60% Exam, 40% Coursework</td>
</tr>
<tr>
<td>NE67E</td>
<td>Nursing Administration Practice &amp; Seminar</td>
<td>5</td>
<td>60% Exam, 40% Coursework</td>
</tr>
</tbody>
</table>

### COURSES (Core) : Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE68A</td>
<td>Theoretical Perspectives in Nursing Education</td>
<td>3</td>
<td>60% Exam, 40% Coursework</td>
</tr>
<tr>
<td>NE68B</td>
<td>Curriculum Development, Implementation and Evaluation Work in Nursing/Midwifery Education</td>
<td>3</td>
<td>60% Exam, 40% Course</td>
</tr>
<tr>
<td>NE68C</td>
<td>Testing &amp; Measurement in Nursing Education</td>
<td>3</td>
<td>60% Exam, 40% Coursework</td>
</tr>
<tr>
<td>NE68D</td>
<td>Theoretical &amp; Clinical Teaching Practicum</td>
<td>3</td>
<td>60% Exam, 40% Coursework</td>
</tr>
<tr>
<td>NE68E</td>
<td>Nursing Education Practice &amp; Seminar</td>
<td>3</td>
<td>60% Exam, 40% Coursework</td>
</tr>
</tbody>
</table>
### COURSES (Core) : Clinical Nurse Specialist

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE60D</td>
<td>Advanced Nursing</td>
<td>7</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td>Practicum I &amp; Seminar</td>
<td></td>
<td>49% Coursework</td>
</tr>
<tr>
<td>NE63A</td>
<td>Growth &amp; Development and Clinical Practicum</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE63B</td>
<td>Specialization Seminar Advanced Nursing Practice</td>
<td>5</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td>Advanced Nursing Practice</td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE68D</td>
<td>Theoretical &amp; Clinical Teaching Practicum</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
</tbody>
</table>

### COURSES (Core) : Family Nurse Practitioner

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE60A</td>
<td>Advanced Nursing</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td>Practicum I and Seminar</td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE60B</td>
<td>Advanced Nursing</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td>Practicum II and Seminar</td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE60C</td>
<td>Advanced Nursing Practicum III and Seminar</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td>Pathophysiology for Advanced Nursing Practice</td>
<td>8</td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE61C</td>
<td>Pathophysiology for Advanced Nursing Practice</td>
<td></td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE63A</td>
<td>Growth &amp; Development and Clinical Practicum</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE69A</td>
<td>General Pharmacology</td>
<td>2</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE69B</td>
<td>Special Pharmacology</td>
<td>4</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE69C</td>
<td>Psychopharmacology</td>
<td>2</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>No. of Credits</td>
<td>Course Weighting</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------</td>
<td>----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>NE60A</td>
<td>Advanced Nursing Practicum I and Seminar</td>
<td>3</td>
<td>60% Exam 40% Coursework</td>
</tr>
<tr>
<td>NE60B</td>
<td>Advanced Nursing Practicum II and Seminar</td>
<td>3</td>
<td>60% Exam 40% Coursework</td>
</tr>
<tr>
<td>NE60C</td>
<td>Advanced Nursing Practicum III and Seminar</td>
<td>3</td>
<td>60% Exam 40% Coursework</td>
</tr>
<tr>
<td>NE61A</td>
<td>Neuro-Sciences</td>
<td>3</td>
<td>60% Exam 40% Coursework</td>
</tr>
<tr>
<td>NE61B</td>
<td>Psychopathology for Advanced Nursing Practice</td>
<td>5</td>
<td>60% Exam 40% Coursework</td>
</tr>
<tr>
<td>NE63A</td>
<td>Growth &amp; Development and Clinical Practicum</td>
<td>3</td>
<td>60% Exam 40% Coursework</td>
</tr>
<tr>
<td>NE69A</td>
<td>General Pharmacology</td>
<td>2</td>
<td>60% Exam 40% Coursework</td>
</tr>
<tr>
<td>NE69B</td>
<td>Special Pharmacology</td>
<td>4</td>
<td>60% Exam 40% Coursework</td>
</tr>
<tr>
<td>NE69C</td>
<td>Psychopharmacology</td>
<td>2</td>
<td>60% Exam 40% Coursework</td>
</tr>
</tbody>
</table>
### Electives

An elective chosen by the student and normally not more than three (3) credits which must be approved by the MScN Coordinator and the Head (or her/his designate) in the Department where the elective is sought. The elective can be taken on any campus of the UWI or in another University with comparable education and with the necessary approval from both UWI and the selected University, and at the students expense. An elective can be taken in any semester or during the summer.

Departmental Courses (for Nursing Education, Nursing Administration & Clinical Nurse Specialist)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>No. of Credits</th>
<th>Course Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE64A</td>
<td>Nursing &amp; Health Information System</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
<tr>
<td>NE65A</td>
<td>Policy &amp; Ethical Issues in Nursing Health</td>
<td>3</td>
<td>60% Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% Coursework</td>
</tr>
</tbody>
</table>

**Course Description:**

**NE60A** The course exposes postgraduate students to advanced and current practices in caring for children and adolescents during specific the growth development episodes along the life cycle.

Students gain beginning prescriptive skills, proficiency in using the nursing process and documentation system through three (3) days weekly direct preceptored interaction with clients/patients and their families and to be enabled to practice at an advanced nursing level. Students are preceptored 1:1 practicum provides ongoing guidance and assessment of clinical practice focusing on caring, critical thinking, clinical judgment, problem solving and documentation.

**NE60B** The student for four (4) days weekly engages in a more extensive continuation of Practicum 1 with more independent and less closely monitored preceptorship and assessments. The student increasingly undertakes responsibility for a client/patient load on a daily basis.
NE60C  This course enables students to synthesize evidence-based knowledge and learning from previous nursing courses into practice. The student consolidates his or her practice experiences through independent and interdependent practice under preceptorship in the prospective working environment (or as near as possible) with regular ongoing monitoring, supervision and guidance. This practicum concludes with a one (1) week review by the preceptor where the student is engaged in oral and written presentations, self and programme evaluation and exit interview.

NE60D  This course exposes students to concepts, scientific bases and theoretical constructs that underpin clinical nurse specialization; explores current issues related to advanced nursing practice; differentiates among advanced nursing practices; and assist in linking organizational instruments to clinical nursing operations. It challenges students to engage in critical thinking, use of evidence-based practice and in using the nursing process effectively as the modality of problem solving and bases for clinical judgment in nursing practice. It also builds on the clinical and management skills of students by exposing them to complex patient care situations and human resources management strategies required for making quality decisions. In this course caring and effective interpersonal relationships are incorporated into patient care delivery and interpersonal relationships with emphasis on the communication process between nurse and patient and other health team members.

NE61A  The course engages graduate students in a discussion forum that enables critical thinking the application of evidence-based knowledge of basic brain biology as a basis for understanding mental health disorders, brain technology and psychopharmacology. The course focuses on neuro-anatomy, genetic/familial correlates, systems of neuro-regulation, psycho-endocrinology, psycho-immunology, normal biological rhythms, psycho-biological dysfunctions, biological theories of major psychiatric disorders, brain imaging and diagnosing of mental illness and physiological indices of mental health and illnesses.

NE61B  This course exposes graduate students to evidence-based knowledge in pathopsychology and empowers them to be effective in caring for persons throughout the life cycle and along the wellness-illness continuum. Students are guided in using critical thinking and sound clinical judgment in interpreting psychopathological findings in making differential diagnosis and selecting appropriate treatment modalities. The course familiarizes students with research based evidence based on etiological theories including organic, familial, interpersonal and psycho-social perspectives. It seeks to develop the skills of the student in recognition of the various factors that influence the development of psychopathology.

NE61C  Students will be enabled to develop a deeper and broader understanding of normal body functioning, system integration, common recurrent deviations and their pathophysiological manifestations, investigative measures, pharmacological as
well as other treatment and care modalities, direct and indirect interventions, palliative, rehabilitative, or restorative measures and their respective anticipated outcomes. The course assists students to effectively use the nursing and medical processes in identifying deviations through health assessment, formulation of diagnoses, selection and interpretation of diagnostic investigations, planning, implementation and evaluation of appropriate treatment regimes. Students are facilitated to integrate critical thinking, developing the clinical skills, clinical judgment and decision-making ability necessary for ethical advanced nursing practice.

**NE62A** This course enables students to gain critical thinking skills in critiquing research findings and to decide on the best evidence in making decisions in nursing practice. It exposes students to a variety of research designs and their application to nursing practice. Emphasis is placed on quantitative and qualitative research principles, research methods and the application to evidence-based practice in nursing phenomena and the importance of research in advancing nursing practice.

**NE62B** Students will refine the project proposal developed to address a specific nursing project in NE62A, (Research Methods applied to Nursing) collect and analyze data and write a project report.

**NE63A** The primary focus of this course is the growth and development of individuals along the life cycle. Emphasis is placed on critical thinking and the acquisition of evidence-based knowledge and skills in determining normal physical characteristics and behaviours. A substantial portion of the course will be devoted to transferring theory to practice. Practical experiences will be gained at major hospitals and selected care centres.

**NE63B** Students are enabled to integrate theory and clinical practice, develop critical thinking skills and demonstrate clinical judgment in analyzing patient problems. A forum for developing leadership and initiating change is also facilitated. Students will reflect on and discuss their practice in terms of interviewing, assessment, diagnosis, planning, intervention, documentation, evaluation, knowledge gaps, problems encountered, actual or potential resolutions.

**NE63C** This course exposes post graduate students current theories development and substruction and the use of theoretical frameworks and principles in guiding nursing practice. It assists students to integrate evidence based theoretical models and the nursing process in decision-making for quality care of persons throughout the life cycle and along the wellness-illness continuum. The course enables students to become proficient in comprehensive subjective and objective assessment of persons along the life cycle as the foundation for caring and delivery of quality nursing practice. Students will benefit from demonstration and supervised return demonstration in physical examination. Competency in physical examination will be accomplished through use of simulators and practice with peers.
**NE64A** This course is practice based and introduces students to nursing and health information systems from the Caribbean and global perspectives. The use of standardized nursing languages in the information age is critically analyzed in the context of the Caribbean and in relation to functional and clinical nursing practice also nursing research. It is designed to assist postgraduate students to think critically in selecting information systems for their practice and in using evidence-based information to decision-making in nursing practice and research. It builds on experiences in learners areas of nursing specializations. The course addresses current issues and practices in information management systems. It also exposes students to the capabilities and usage of information systems and networks and their use in nursing practice. Learners are guided through laboratory practice sessions to be adept in intranet/internet navigation and database development and usage. Throughout the course issues related to copyright, legal and ethical issues pertaining to information, knowledge and technology usage and application to nursing practice are explored.

**NE65A** This course focuses postgraduate students on the processes and strategies of policy formulation, implementation and evaluation in nursing and health care practice. It explores the trends, projections, legal and ethical issues inherent in the policy process. It assists students to become familiar with their roles in the policy process and the impact of policy on the lives of individuals throughout the life cycle and along the wellness illness continuum. Students are enabled to think critically on the implications of national policies on health care financing and the quality of health care delivery and nursing practice.

**NE66A** The course enables nurses to be familiar with the concepts, principles and methods of health education and health promotion and their use in promoting physical and mental health to persons along the wellness-illness continuum and throughout the life span. Emphasis is placed on integration of the Caribbean Charter for Health Promotion and evidence-based information in designing programmes and activities in nursing practice. The course requires learners to apply ethical principles, critical thinking and effective interpersonal relationships in designing, promoting and implementing patient physical and mental health messages.

**NE67A** This course analyses management theories, organizational practices and techniques with a view of devising problem-solving strategies to resolve organizational issues and problems in nursing administration. Emphasis is placed on critical thinking, evidenced based nursing practice and ways to incorporate effective interpersonal relations in delivering quality management for nursing organizational and clinical effectiveness.

**NE67B** This course provides an overview of the evolution of Caribbean health care delivery systems including their organizational structure, financing system and models of health care delivery. Comparison is made with international health and nursing care models, and their relevance to health care delivery
in the Caribbean region. Students will examine the impact of current health care policies upon the health status of individuals. The importance of effective information management on quality operations and strategic decision making in health care delivery will also be explored.

**NE67C** This course follows NE 67B Models of Nursing/Health Care Administration and explores contemporary practice issues within the framework of managing Caribbean nursing/health care delivery systems. It critically analyzes trends in managing quality nursing/health care practice issues within the context of ethical, bio-ethical, economic and legislative parameters.

The course further highlights roles and responsibilities of the Nurse Administrator in developing initiatives for implementing, monitoring and evaluating evidence-based nursing research and practice. Emphasis is placed on the roles and responsibilities of the Nurse Administrator in evidence-based implementation of suitable management strategies. Additionally, it gives prominence to critical thinking in examining the dynamic impact of health sector reform on nursing and health care delivery internationally, regionally and locally.

**NE67D** The design of this course provides a wide perspective of the theories and principles of human resource management and their application to nursing/health care. It introduces students to the most relevant issues in personnel and human resource management and critically examines the nurse managers roles in enhancing the growth and development of the human capital in nursing. Issues of employee appraisal and discipline, union management relations and quality management are addressed.

**NE67E** This course provides students with planned opportunities to apply evidence-based knowledge from the managerial sciences into nursing administrative practice. It provides opportunities for learners to gain competence and experiences in use of administrative techniques, methods and management concepts, theories, and principles in a variety of institutions and health agencies. Emphasis is placed on critical thinking and the integration and transfer of evidence based knowledge to practice and the development of nursing administrative competence to meet the challenges of the Caribbean and global trends.

**NE68A** The course enables students to explore current educational concepts, theories and principles and their application to nursing education within the Caribbean context. The appropriateness of educational models is analyzed to develop students critical thinking skills and in the process of applying evidence based teaching and learning in nursing education. Emphasis is placed on self directed learning, experiential learning, adult learning and the designing of teaching/learning models and teaching plans, that enable transfer of educational principles in the teaching of nursing learners along the learners life cycle.
**NE68B** This course will enable students majoring in nursing/midwifery education to acquire in depth knowledge and understanding of the curriculum planning and development process. This course will equip students with skills to synthesize knowledge from various theoretical constructs and concepts and use it to guide the development, implementation and evaluation of professional nursing curriculum. Throughout this course, students will be guided in analyzing models. Frameworks and principles used in curriculum development, implementation and evaluation. Students will apply principles, knowledge of nursing science and understanding of health issues in the wider society to design a nursing curriculum. Plan its implementation and develop evaluation strategies for the proposed curriculum.

**NE68C** The course is designed to enable students to acquire knowledge and develop skills in test construction and measurement in curriculum evaluation. The focus will be on application of testing and measurement principles to nursing education.

**NE68D** This course consolidates the concepts, theories, principles and teaching techniques of NE68A, NE68B and NE68C and integrates these into teaching of nursing students to apply evidence based nursing practice to patients at any stage of the wellness-illness continuum along the life cycle and in any clinical setting. It enables aspiring nursing teachers to apply critical thinking and develop confidence in transferring theory to practice while concurrently assisting nursing students to develop critical thinking and sound clinical judgment in using the nursing process and in skills development. This course involves in-depth examination of the principles of teaching and learning both in the classroom and clinical areas. It also analyzes the critical elements necessary for clinical teaching and guidance. Current teaching methods and instructional technologies are examined and applied where appropriate and feasible. Teaching laboratories are used to develop competencies and practice teaching for skill refinement. Major emphasis is on applying knowledge to clinical practice. Laboratory and clinical experiences are integrally interwoven into this course. The focus is to uncover and discover knowledge implicit in the clinical practice. Use of the androgogical approach is emphasized.

**NE68E** This course provides students with planned opportunities to apply theoretical knowledge gained in NE68A, 68B, 68C, 68D, to practical situations in selected health care and educational agencies. Students will begin with observation visits in general education institutions and selected nursing agencies progressing to gain teaching/learning experiences in schools of nursing. The course emphasizes teaching methodologies and techniques and fosters self-directed learning and professional developmental attitudes.

**NE69A** This course provides the student with evidence-based knowledge in pharmacotherapeutic principles with special emphasis on pharmacokinetics and pharmacodynamics of drugs. It also engages the learner to apply critical thinking and use of evidence-based practices in advance practice nursing
in prescribing and management of pharmacologic preparations.

**NE69B** This course exposes students to a wide spectrum of drugs commonly used in clinical practice. According to the approved protocols, dosages, interactions, side effects and the implications of drug therapy are emphasized, enabling the nurse to appropriately prescribe on the basis of clinical evidence and to teach clients/patients and their families to manage their health maintenance through drug therapy. Focus is placed on the features of drug dosages with reference to pharmacokinetics, pharmacodynamics and pharmacotherapeutics enabling the nurse to appropriately prescribe.

**NE69C** Students are exposed to current developments in psychopharmacology and their uses in the treatment of mental illness. The nurses role in managing patients drug regime is explored. Indications for use of psycho- pharmacological agents, their therapeutic value effects and side effects are examined.

Department Contact Information:

The UWI School of Nursing Faculty of Medical Sciences UWI, MONA

Programme Coordinator: Dr. Joanna Bennett