The University of the West Indies
Cave Hill Campus

The Faculty of Medical Sciences
Graduate Information Guide
2011-2012
THE UNIVERSITY OF THE WEST INDIES
CAVE HILL CAMPUS

FACULTY OF MEDICAL SCIENCES
REGULATIONS & SYLLABUSES
GRADUATE INFORMATION GUIDE
2011-2012

WWW.CAVEHILL.UWI.EDU/GRADSTUDIES

The information in this booklet is accurate at the time of printing. Subsequent publications may reflect updated information. Students should consult their programme coordinator where clarification is required.

Please note that any semester information given should be used as a guide as it is subject to change.
MISSION STATEMENT

The enduring mission of The University of the West Indies is to propel the economic, social, political and cultural development of West Indian society through teaching, research, innovation, advisory and community services and intellectual leadership.
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Dean’s Message

As incoming Dean and proud graduate of the University of the West Indies, I bid you a warm welcome to the Faculty of Medical Sciences, Cave Hill Campus and look forward to working with you during your stay with us. The UWI was founded more than 60 years ago, at the Mona Campus in Jamaica, on the site of an old sugar estate, used as the Gibraltar Camp for refugees in the Second World War. In 1948, a mere 33 students entered the university’s first ever class. They were selected from some 600 applicants across the Caribbean and many have distinguished themselves and the University, as specialists, consultants, lecturers, family practitioners, public health leaders and professors in our alma mater.

In 1967-68 the teaching programme was expanded to include satellite clinical training sites at the Queen Elizabeth Hospital in Barbados and the Port of Spain Hospital in Trinidad. It is now over 40 years since teaching began at Cave Hill and the Queen Elizabeth Hospital. In looking back we take pride in the splendid achievements of our alumni, and the progress made in health care, teaching and research. Our own Cave Hill alumni are leading in these successes, as evidenced by outstanding research work and a growing number of specialty graduate programmes.

The UWI now teaches medicine at four sites - Mona, St. Augustine, Nassau and Cave Hill - where the School of Clinical Medicine and Research recently became a full Faculty of Medical Sciences with entry of the first year class in September 2008.

The Cave Hill campus also teaches nine postgraduate programmes – including Accident and Emergency Medicine and Surgery. Recently, emphasis has been put on Primary Care and Public Health training in response to the expressed needs of the Governments, and the need for development in the region.

The Faculty is committed to providing high quality facilities at Cave Hill and the Queen Elizabeth Hospital along with strong support services. Every student is assigned a staff advisor and we are proud of our excellent counseling services as we support you in the transition to a demanding but fulfilling career in medicine.

Professor Joseph M. Branday
Dean, Faculty of Medical Sciences
The University of the West Indies
About the Faculty of Medical Sciences

The Faculty of Medical Sciences at Cave Hill offers Doctor of Medicine (DM) programmes in the following specialties:

• Anaesthesia & Intensive Care
• Accident and Emergency Medicine
• Family Medicine
• Internal Medicine
• Obstetrics and Gynaecology
• Ophthalmology
• Orthopaedic Surgery
• Paediatrics
• Psychiatry
• Surgery (General)

There is a Diploma and Master of Science programme in Family Medicine offered to persons who do not have a post at the Queen Elizabeth Hospital. In 2007-2008 the Faculty introduced a Diploma in Health Services Management and in 2008-2009 the Faculty introduced the Master in Public Health with optional specialisation in Health Services Management.

The Faculty also offers research degrees in Immunology, Medical Microbiology and Epidemiology. Entry to a research degree depends on the area of the applicant’s research interest, funding and the availability of appropriate faculty supervision.
FACULTY OFFICE & OFFICERS

Faculty Office

Tel: (246) 429-5112
Fax: (246) xxx-xxxx
WEBSITE: www.cavehill.uwi.edu/scmr
E-Mail: scmr@cavehill.uwi.edu
DEAN: Prof. J. Michael Branday
MBBS UWI, Master of Surgery UWI, MSc Wales.
DEPUTY DEAN (Graduate Studies) David Rosin
MS, FRCS, FRCS(Ed), FICS, FCCS (Hon), DOHM
DIRECTOR OF MEDICAL EDUCATION: Dr. Priscilla Richardson
BA, MA, M.Ed., Ed.D.

PROGRAMME COORDINATORS:
DM Anaesthesia & Intensive Care
Areti Yasodananda Kumar
DM Accident & Emergency
Harold Watson
MBBS (UWI), MSc (Emer Med), DM (Emer Med) (UWI)
DM Internal Medicine
Anders Neilsen
MD, MPA (Copenhagen), MPH (Gothenburg)
DM Family Medicine
Peter Adams
MBBS UWI, MSc, DM (Fam Med)
DM Anaesthesia
Yasodananda Kumar Areti
MBBS, Dip (Anaes), MD (Anaes)
DM Psychiatry
Maisha Emmanuel
MBBS (UWI), DM (Psych) (UWI), Sc. (Birm)
DM Paediatrics
P. Michele Lashley
MBBS (UWI), DCH, DM (Paed) (UWI), FRCP Edin
DM Surgery
R. David Rosin
Professor of Surgery MS, FRCS, FRCS(Ed), FICS, FCCS (Hon), DOHM
DM Ophthalmology
D. Clive Gibbons
MA, MB BCh Camb, LRCP, DO Lond, MRCS, MRCP, FRCS Ed
DM Obstetrics & Gynaecology
Garth McIntyre
MBBS FRCOG
DM Orthopaedic Surgery
Jerome Jones
MD (Cornell)
Diploma in Health Services Management
Prof. Nigel Unwin
BA BM BCh (Oxon) MSc (Manc.)
MSc Epidemiology
DM (Oxon) FRCP (Ed) FFPH (UK)
MPhil and PhD programmes
Diploma in Public Health
Alafia Samuels
MBBS, MPH, PhD
MPhil/PhD Medical Microbiology
Marquita Gittens-St. Hilaire
BSc, PhD (UWI)
MPhil/PhD Immunology
R. Clive Landis
PhD
MPhil/PhD Epidemiology
Anselm Hennis
MBBS (UWI), MSc (Lond), MRCP (UK), PhD Dip (Lond)
Professor of Epidemiology and Director, CDRC
Administrative Assistant
Judy Best
GENERAL REGULATIONS FOR GRADUATE STUDIES

Admission

1. An applicant for graduate study must go before the Board for Graduate Studies and Research, through the Faculty Sub-Committee.

2. An applicant may be:
   i) Admitted without a qualifying Examination,
   ii) Required to pass a qualifying Examination before being fully registered for graduate studies, OR;
   iii) Refused admission.

3. The nature of the qualifying examination shall be determined by the Department to which the candidate is seeking admission but shall be subject to the approval of the Faculty Subcommittee on Graduate Studies. A candidate who fails a required qualifying examination will not normally be permitted to re-sit the examination.

4. All graduate students seeking a research degree are normally required to register first for the MPhil degree.

5. Later transfer to the PhD may be made if the student's supervisor and the departmental Graduate Supervision Committee recommend it, and if the recommendation is supported by the Faculty's Sub-Committee on Graduate Studies and approved by the Board for Graduate Studies and Research.

6. Students may be registered for full-time or part-time studies. No research student may be registered for full-time studies if he/she spends an average of twelve or more hours a week in paid employment.

7. Regulations concerning the length of periods of study for the award of graduate research degrees to part-time students are given in the relevant sections below. In every other respect, e.g. qualifications for admission, attendance at seminars, conditions of award of the degree etc., Part-time students are subject to the same regulations as full-time students.

8. Wherever possible each Department or appropriate unit within a Department shall have a Graduate Supervision committee.

9. The Graduate Supervision Committee shall propose to the Faculty Sub-Committee for Graduate Studies a Supervisor or Supervisors of experience appropriate to the proposed field of study of each candidate.

10. Research students are required to consult with their supervisor(s) in person, at intervals to be specified by the Supervisor(s) but normally not less than once a semester. However, a candidate not resident the same territory as his supervisor(s) may be permitted to report in writing, except that a candidate who does not already hold a degree from the University is required to reside in one of the territories for the first year of registration.

11. Dissertation and theses presented for a graduate degree in this Faculty must be written according to the stylistic conventions as set out in the University Thesis Guide.

Oral Examination

12. The oral examination of the candidate presenting a thesis will be chaired by the Chairman of the Faculty Sub-Committee for Graduate Studies, or nominee who will also be responsible for seeing that a report on the examination is drawn up. The report shall be signed by all the Examiners present and by the Chairman of the Examination and forwarded to the Board for Graduate Studies and Research.

Qualifying Candidates

13. Candidates for admission to the degree programmes may be required by the Board for Graduate Studies and Research (BGSR) to take qualifying courses and to write examinations in these courses. Such candidates shall be registered as qualifying students and not as candidates for the degree. The qualifying courses shall be recommended by the Institute’s Entrance Committee for approval by the Campus Committee.

14. Students cannot proceed to register for a degree programme unless they have successfully completed the required qualifying courses at a prescribed level of performance.
THE MASTER OF PHILOSOPHY (MPhil) DEGREE

1. The MPhil Degree is a research degree and shall be awarded on the basis of a thesis:

2. It is open to students with at least an Upper Second Class Honours Degree.

3. A candidate who does not satisfy this requirement may be admitted in the first instance as a qualifying student, and must satisfy specified requirements before being finally admitted to the MPhil Degree.

4. A candidate will be required to undertake a minimum of six (6) credits of coursework and present two (2) seminars. The candidate will be required to pass specified departmental examinations. Such requirements for each candidate shall be determined by the department and must be approved by the Faculty Sub-Committee at the time of registration of the student.

5. A candidate registered for full-time studies shall be required to present a dissertation on an approved subject not less than 3 years and not more than five (5) full calendar years after registration.

6. Part-time candidates shall be required to present their dissertation not less than 5 years and not more than seven (7) calendar years after registration.

7. The length of the dissertation shall be in accordance with specifications laid down by the departments of the Faculty but should not normally exceed 50,000 words excluding footnotes and appendices.

8. A candidate, after consideration of his dissertation by the Board of Examiners and, where relevant, the oral examination, may be:
   a) Recommended to Senate for the award of the degree;
   b) Required to re-submit the dissertation and repeat the oral examination on one subsequent occasion within 18 months from the decision of University Board for Graduate Studies; OR
   c) Failed outright

THE DOCTOR OF PHILOSOPHY (PhD) DEGREE

1. The PhD Degree is a research degree and shall be awarded on the basis of a thesis.

2. It is normally open to students with at least an Upper Second Class honours degree who have completed appropriate Graduate qualification or who are on transfer from the MPhil research degree.

3. A candidate will be required to undertake a minimum of nine (9) credits of courses during the period of registration. He/she may be required to write examinations. Such requirements must be approved by the Faculty Sub-Committee at the time of registration of the student.

4. A candidate will be required to register for and present three (3) seminars during the period of registration.

5. A candidate registered for full-time studies will be required to present a thesis on an approved subject not less than 6 semesters, and not more than six calendar years after full registration.

6. Part-time candidates shall be required to present their thesis not less than 8 semesters and not more than eight calendar years after full registration.

7. The length of the thesis shall be in accordance with specifications laid down by the Departments of the Faculty in which the student is registered, but shall not exceed 80,000 words excluding footnotes and appendices. The Board for Graduate Studies and Research may in special circumstances give permission for its limit to be exceeded.

8. A thesis will not be deemed adequate unless:
   a) It is judged to be a new contribution to knowledge,
   b) It shows clear evidence of original research, and
   c) It is worthy of publication.
9. A candidate for the PhD will be required to take an oral examination on a general field of study and on the thesis submitted. Wherever possible, the External Examiner should be present at the oral examination. In his absence, his written report shall be made available to the examiners present.

10. A candidate, after consideration of his thesis by the Examiners and after oral examination may be:

   a) Recommended to Senate for the award of the degree,
   b) Required to re-submit the thesis within 18 months,
   c) Required to re-submit his thesis and repeat the oral examination on one subsequent occasion within eighteen (18) months from the decision of the Board for Graduate Studies,
   d) Required to make corrections to thesis within six (6) months from the decision of the Board for Graduate Studies and Research, OR
   e) Failed outright.

**MPhil/PhD Upgrade Seminar**

Candidates for the MPhil degree who have:

- Successfully defended a Thesis Proposal of a scope and depth deemed worth of an upgrade, and
- Consistently produced work of a standard, in the opinion of their Supervisor, to merit an upgrade, may be allowed to transfer to the PhD programme.

Procedures governing this are contained in the Manual of Procedures available from the School for Graduate Studies and Research or online at www.cavehill.uwi.edu/gradstudies/documentlibrary.htm..
GRADUATE PROGRAMMES IN MEDICAL SCIENCES

MPhil/PhD EPIDEMIOLOGY/ MEDICAL MICROBIOLOGY/ IMMUNOLOGY

Entry Requirements

MPhil Candidates require at least an Upper Second Class Honours degree with a strong background in the discipline into which entry is being sought. All research students must register initially for the MPhil degree but may later, with suitable progress, be upgraded to register for the PhD degree. In cases where the candidate already has an MPhil degree (or equivalent), direct entry to the PhD is possible.

Availability of Expertise and Resources

Admission is contingent upon whether candidates have a thesis proposal compatible with the expertise and resources available in the Faculty of Medical Sciences.

Course of study

Students in the MPhil and PhD degree programme are required to successfully:

1. Complete a minimum of six (6) credits of coursework for MPhil and nine (9) credits of coursework for PhD,
2. Present seminars (2 for MPhil/3 for PhD), and

Courses

Students in the MPhil and PhD degree programme should discuss with their supervisor suitable courses which would satisfy the credit requirements. Courses should be completed in the first year.

Compulsory Seminar Presentations

For each seminar, candidates are required to write and present a paper to be photocopied and distributed before hand on a topic arising out of their research, as well as to field questions put to them afterwards.

Thesis

Candidates are required to present and defend a Thesis of acceptable scope and quality for the degree. The Thesis must follow the guidelines set out in the University’s Thesis guide.
Conferment of the Degree

The successful completion of the required coursework, the compulsory Seminar presentations and the Thesis will lead to the award of the Degree.

LIST OF COURSES

Core for all students depending on their programme

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<tr>
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<td>PhD Research Seminar 2</td>
</tr>
<tr>
<td>EPDM 8000</td>
<td>PhD Epidemiology Thesis</td>
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<tr>
<td>IMMU 8000</td>
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<tr>
<td>MEDC 8000</td>
<td>PhD Medical Microbiology Thesis</td>
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Research Students may also be permitted (with the approval of their Supervisor) to take courses from other offerings within the Faculty.

MPhil/PhD in PUBLIC HEALTH

Programme Summary:

The proposed MPhil/PhD programme will provide advanced training in Public Health Research methods and contribute new knowledge to help guide Public Health interventions within the region. The programme will be open to applicants who have completed a Masters in a relevant health related area, such as a Masters of Public Health. This proposal is consistent with the long-standing equivalent programme at Mona, and was developed in close collaboration with them and with St Augustine. The proposal also builds upon the recently established MPH at Cave Hill, which will provide access to required and additional taught courses for those in the MPhil/PhD programme. It is anticipated that on average 1 to 2 students would be taken on each year. This is in keeping with current Public Health capacity within the Faculty to provide high quality student supervision. The programme would be self-funding.

AIMS AND OBJECTIVES

Public Health is the science and art of preventing disease, prolonging life and promoting health through the organized efforts of society. Public health draws on a broad range of disciplines and as such the research needed to inform, guide and evaluate public health measures is broad, including both qualitative and quantitative methods.

The overall aim of this programme is to support the further development of leadership in Public Health research within the Caribbean and wider region. This overall aim will be achieved through meeting the following objectives.

1) To provide world class training in the application of quantitative and qualitative research methods to Public Health

2) To increase capacity in Public Health leaders within academia, government and private sectors who individually are:

   a) Expert in the application of one or more research methodologies relevant to public health

   b) Expert in the critical evaluation of a breadth of research methodologies that are relevant to public health;

   c) Capable of initiating, designing and leading research programmes to address Public Health problems
3) To generate new knowledge to guide Public Health interventions within the Caribbean.

In meeting this aim and objectives we will be contributing to the University Strategic Plan by responding to national and regional needs identified by Governments and Intergovernmental Organizations for strengthening capacity in Public Health.

**ACCESS AND SUPPORT**

**Entry to the programme**

The entry requirements to the MPhil and PhD programme are as follows:

1) A Masters degree in a relevant health related area, ideally an MPH, completed within the previous 5 years. The Masters degree must have included a research project in which the applicant obtained a B plus average, and have included courses in at least one of: quantitative research methods, qualitative research methods, biostatistics, basic epidemiology, advanced epidemiology, in which they also obtained a B plus average.

2) Individuals who do not have a Masters degree but are keen to undertake a research degree in Public Health will be advised, if they meet the entry criteria, to undertake an appropriate health related Masters degree, such as an MPH, and with satisfactory completion of this to then move into the MPhil/PhD programme.

Students who wish to remain resident overseas in an OECS country outside Barbados will be welcomed so long as they are able to meet the University criterion of spending a minimum of one Semester in person at Cave Hill.

**Mode of delivery**

The MPhil/PhD programme is very largely based on a substantive piece of research, and thus the main method of delivery is through structured supervision as outlined in University guidance.

**Material support**

As Public Health research is largely based ‘in the community’ lab space as such is not required. The main requirement is for desk space and access to appropriate software. At present there is more than adequate space for at least 4 students, although space will be used up on a first come first served basis and will need to be reviewed on a regular basis.

**REGULATIONS AND ASSESSMENT PROCEDURES**

All Regulations and Assessment Procedures will be consistent with those provided in the University of the West Indies Regulations for Graduate Degrees and Diplomas.

Both the MPhil and PhD degrees are predominantly based on a substantial piece of research undertaken by the candidate, with examination by thesis and oral examination. Oral examination is mandatory for the PhD and at the discretion of the examiners for the MPhil.

As stated above, candidates will initially register for the MPhil degree, and those who wish to progress to a PhD will be allowed to do so on evidence of satisfactory progress, which includes assessment at an upgrade seminar as per University regulations.

As outlined in University guidance, the successful MPhil candidate must demonstrate a sound understanding of the research process and independent critical thought. In addition, the successful PhD candidate must demonstrate how their work has made an original contribution to knowledge. Work from both degrees must be considered by the examiners to be at a level that is suitable for peer reviewed publication.
DM (ANAESTHESIA AND INTENSIVE CARE)

Introduction

The DM Anaesthesia and Intensive Care programme is a four year graduate course which aims to provide the graduate with the knowledge and skills to function as a consultant anaesthetist and intensivist, equipped for independent practice in hospital-based and stand-alone facilities.

The programme is run under the general supervision of a Director, nominated by the Head of the Department and appointed by the Committee for Graduate Studies. The Director will normally be the chair of the Specialty Board in Anaesthesia and Intensive Care. Each student will be assigned to a supervisor, who is a member of the Specialty Board in Anaesthesia and Intensive Care. The supervisor will provide academic guidance as to the choice or assignment of rotations, the elective period and direction in the conduct of their research and all other relevant matters.

The Specialty Board in Anaesthesia and Intensive Care is in overall charge of the programme. The sole and final authority on all matters concerning the programme is the Campus Board for Graduate Studies and the University Senate.

Entry Requirements
(See general regulations – Doctor of Medicine)

Applicants will be eligible for entry after completing their internship.

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.

On acceptance to the programme there will be a six month probation period during which the candidate’s performance will be assessed at regular intervals. Any candidate who fails the overall assessment during this period of probation will be required to withdraw from the programme.

Duration

The programme will be a minimum of four years (see Exemptions) from the date of entry. At least three years of the programme must be spent in the Commonwealth Caribbean. Throughout the programme, candidates must hold recognised posts in accredited hospitals or be on an ‘elective’ approved by the Board for Graduate Studies and Research through the Faculty Committee for Graduate Studies or “equivalent bodies”. A minimum of three (3) months in the first two (2) and three months in the last two (2) years must be spent at the University-affiliated hospital of the campus territories. The remaining time may be spent in accredited hospitals.

Course of study

The programme consists of TWO parts:

Part I

The first Part is of TWO year’s duration. During the FIRST year a candidate working in those hospitals where only adults are treated, must spend no less than three months in an accredited paediatric hospital. Conversely, for candidates working in a hospital where only paediatric patients are treated, no less than six months must be spent in an accredited adult multi-disciplinary hospital. There must be a minimum of three months exposure to obstetric anaesthesia during the first year. At the end of the FIRST year the candidate will have to take an internal exam. Only after successful completion of this exam the candidate will be allowed to progress to the SECOND year.

Provided the in-course assessments are satisfactory, the Part I examination is taken at the end of the SECOND year. Admission to the second part depends on a satisfactory assessments and performance in the Part I Examination.

Part II

The second part is of TWO year’s duration. It may include a period not exceeding one year, in the penultimate year only, spent as an elective, providing that approval has been obtained from the Faculty Committee for Graduate Studies and the Board for Graduate Studies and Research beforehand. Such approval must be obtained at least six months prior to the commencement of the elective period. The elective year may be spent in a hospital, which can provide the candidate with experience not readily available in the hospital to which he/she is employed.

A maximum of three (3) months may be spent in a course of study in an affiliated area eg research methodology, epidemiology, teaching methods, medical administration etc. provided that prior approval has been obtained from the Specialty Board in Anaesthesia and Intensive Care.

During the SECOND part, rotations through all anaesthesia subspecialties must be undertaken. These include cardiothoracic, faciomaxillary, otorhinolaryngology, paediatric, obstetric,
ambulatory and neuroanaesthesia. Rotation through intensive care, preanaesthetic services, acute and chronic pain services are also a requirement. Teaching and training in teaching methods and research methodology are integral components of the programme. All trainees should appreciate the need for ongoing research in the field and are encouraged to cooperate with research efforts of department/division members.

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

Exemptions
Candidates who have completed periods of study or work experience in recognized hospitals or institutions in non-Commonwealth Caribbean territories may apply to the Campus Committee for Graduate Studies for exemption from an appropriate part of the course. Exemptions in the programme can be recommended by the Specialty Board in Anaesthesia and Intensive Care only after a period of review and assessment of the student’s performance within the programme. Candidates must have achieved the level at which proposed exemptions will put them.

Students having completed at least TWO year training in anaesthesia and hold the Primary FRCA, Primary FRACI, or equivalent may apply and be granted exemption from Part I. Students who hold the Fellowship in Anaesthesia of the British, Irish or Australian college, or the certificate of the American Board of Anaesthesiology or the Fellowship in Anaesthesia of the Royal College of Physicians in Canada or such other degrees or diplomas as the University (the Faculty Committee for Graduate Studies) may accept, may be exempted from the Part 2 of the programme.

In order for such students to be eligible to sit the Part II examination, they are required to spend a minimum of TWO (2) year in the programme and fulfill all the requisite aspects of the Part II of the programme i.e. an acceptable research project submitted six (6) months prior to the final examination, an acceptable case log/minimal competencies and satisfactory assessments.

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

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

If the assessments are found to be unsatisfactory, the Specialty Board may recommend one or more of the following:

a) Counseling/academic warning in writing
b) Remedial work
c) Repeating the unsatisfactory rotations
d) Withdrawal from the programme, if poor performance persists

Case Book / Research Report
All students must submit to the Campus Committee for Graduate Studies through the Director of the Postgraduate programme, at least six months before the final (Part II) examination,

a) A research project. This should form a distinct contribution to the knowledge of the subject presented. It must be of satisfactory literary standard and should attain standards suitable for publication in a peer reviewed journal. It should not exceed 20,000 words but must not be less than 8,000 words and must follow the University’s Guide for the Preparation of Theses, Research Papers and Project Reports.

The cases/research project/project report must be typewritten and printed on one side only of good quality white bond paper (usually of 20lb. weight) 8½” 11” (Standard Letter Size), with left hand margin of 2”. The top, bottom and right hand margins should not be less than 1”. The same grade of paper should be used throughout the report.

Students are advised to discuss the preparation of research reports with their Supervisor(s) while the book is in preparation and not wait until it is completed. These research report could provide the opportunity for the student to put his/her clinical experience in the form of a research project which could be later developed for publication. From these records, the examiners will assess the critical faculties, powers of observation and the level of evaluation of various techniques used in anaesthesia & intensive care by the students.
Following the submission of the work, the examiners may:

i) Accept the work and the student proceed to the examinations, OR

ii) Accept the work with modification, which must be carried out in the time specified and resubmitted, OR

iii) Reject the work with recommendations regarding changes, additions, or revisions necessary for acceptance. A date for re-submission will be determined by the examination board in Anaesthesia and Intensive Care.

The research project should be submitted for assessment at least six months before the date of the final examination. If the work is found to be unsatisfactory and requires major changes, the students will not be allowed to sit the final examination and a new date will be set. The Part II examination must be attempted for the first time within one year of the acceptance of the research project.

**Case log & minimal competencies**

Students are required to keep a record of all anaesthetics and procedures performed. In addition they are required to complete a predetermined list of minimal competency in cognitive and procedural skills felt to be fundamental to the training of specialists in anaesthesia and intensive care.

The following **three** (3) requirements must be completed before the Part III examination:

- A **satisfactory standard of in-course assessments**
- **Case log & minimal competencies**
- **Research Project**

**Syllabus**

A detailed syllabus for the course is available from the Faculty Office.

**Examinations**

Before admission to any examination, candidates must be certified by their supervisors as having completed the relevant parts of the programme.

Examinations are in **THREE** parts, end of **FIRST** year Interanl Assessment Exam, Part I and Part II (DM Anaesthesia & Intensive Care). They are normally held twice per year in May/June and November/December and rotate amongst the three university campuses.

The end of first year internal assessment examination is held at the end of the first year and comprises:

a) a multiple choice paper

On successful completion of the end of first year exam., continuation in the training programme will be dependent on the recommendation of the Specialty Board based on its continuous assessment and the results of the end of first year examination. The candidate must sit the Part I examination within 2 years after progressing to the second year.

The Part I examination is held at the end of the second year and consists of:

a) a written paper and a multiple choice paper
b) an oral examination

Candidates will be invited to an oral examination depending on their performance in the MCQ. Candidates receiving less than 45% will not be invited for the orals as this represents an irretrievable situation.

The Part II examination is held at the end of the second year and consists of:

a) two written papers
b) a clinical examination
c) an oral examination

Students are normally expected to present themselves for the first examination being held following completion of the various Parts. In exceptional circumstances (such as ill health), a student may request permission from the Board for Graduate Studies and Research to defer the date of the first sitting. Candidates must register for the examination at the appropriate time.

Should any candidate fail the examination of any Part at the first attempt, completion of this part must be within one calendar year of the first attempt.

**No student will be allowed more than two attempts at any one examination.**

Failure after the second attempt will necessitate withdrawal from the programme. A third attempt may be granted by the board of graduate studies in accentuating circumstances based on the recommendation from the Programme Director for DM (Anaesthesia and Intensive Care) Re-admission of candidates will be in accordance with the University regulations for Graduate Diplomas and Degrees.
Candidates must conform with the University Regulations on Examinations for Higher Degrees

Completion of the Programme
Students will be considered as having successfully completed the programme when the following FOUR requirements have been met:

- Satisfactory performance of all rotations
- Acceptance of their certified case log/minimal competencies
- Acceptance of the Research Project
- Satisfactory performance in the Part I, II and III examinations

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

DM (EMERGENCY MEDICINE)

Qualifications for Admissions
The applicant must be:

- A graduate in Medicine of a University or Medical School recognized by the University of the West Indies.
- Fully registerable in the territory or territories in which the programme of study will be undertaken. (Criteria for registration should be obtained from the relevant medical council.)

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

Course of study
The postgraduate Emergency Medicine Programme is a four-year residency programme consisting of two parts. The programme takes place either at the University of the West Indies or at institutions in the contributing territories recognised by the University for this purpose.

Six months 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 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 Programme.
Yearly rotations for D.M. Emergency Medicine programme

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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</thead>
<tbody>
<tr>
<td>A&amp;E (6)</td>
<td>Anaesthetics (3)</td>
<td>Paediatrics (3)</td>
<td>A&amp;E (6)</td>
</tr>
<tr>
<td>Medicine (3)</td>
<td>Surgery (3)</td>
<td>A&amp;E (6)</td>
<td>Orthopaedics (3)</td>
</tr>
<tr>
<td>Psyche/O&amp;G (3)</td>
<td>Family medicine (3)</td>
<td>Elective (3)</td>
<td>A&amp;E (6)</td>
</tr>
</tbody>
</table>

In addition, all Emergency Medicine residents should complete 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 should be completed during the second year of the programme.

Course Supervision
The specialty board in Surgery is in overall charge of the programme. The programme will be under the general supervision of a Programme Coordinator, nominated by the Head of Department and appointed by the Specialty Board in Surgery. Each student will be assigned to a supervisor who will advise the student as to choice or assignment of rotations, the elective period, direction in the conduct of their research and all other relevant matters.

Exemption
(Should be read in conjunction with the general regulations)
Candidates who have completed periods of work experience in relevant areas at recognized hospitals or Institutions may apply to the specialty board for exemption. This experience may be in Accident & Emergency Medicine, Psychiatry, Internal Medicine, Orthopaedic Surgery, Family Medicine, Surgery, Child Health / Paediatrics, Obstetrics and Gynaecology and Anaesthesia. Exemption is not automatic and should not be assumed.

Assessment
Student performance will be assessed (by observation, orally or in writing) at the end of each rotation and will be recorded on prescribed forms. A satisfactory standard of in-course assessments is mandatory prior to taking the Part I and Part II examination.

Those with unsatisfactory records will be encouraged to improve and a warning letter issued; counselling and or remedial work may be required that it is repeated. If poor performance persists, the student will not be allowed to complete the programme and will be required to withdraw.

Entry to Part II is dependent on satisfactory completion of the Part I.

The following two requirements must also be met before the Part II examination.

Reach satisfactory standard in on-going assessments.
Submission of a casebook and a research report

All DM Emergency Medicine candidates must submit both of the following to the Speciality board or Coordinator of the postgraduate programme at least six months before the final Part II examination:-

1) A case book of ten cases - these cases should reflect the range of pathology seen in the practice of Emergency Medicine, and up to three may be rare cases of unique relevance that may have important educational content for journal publication AND

2) A research project - this must be discussed with the Programme coordinator by the start of the second year of the residency programme.

The format of the case book/research project report should conform to the University regulations dealing with the preparation of projects and dissertations. Each submission book or project should not exceed 15,000 words but must not be less than 10,000 words.

The cases /research project must be typewritten and printed on one side only of good quality white bond paper 8½” x 11” (standard letter size) with left hand margin of 2”. The top, bottom and right hand margins should not be less than 1”. The same grade paper should be used throughout the thesis. Case reports should follow the format of case reports submitted for journal publication, namely: introduction, case history, discussion, conclusion and references. References should follow the format of the West Indian Medical Journal. The case reports should be of high quality suitable for publication in a peer reviewed journal.
Following submission of the work, the examiners may:
i) Accept the work allowing the student to proceed to the examination, OR
ii) Reject the work, with recommendations regarding changes additions or revisions necessary for acceptance. The examiners will indicate a deadline for resubmission of the work

The casebook/project report should be submitted for assessment at least six months before the date of the final examination. If the work is found to be unsatisfactory and requires major revision the student will not be allowed to sit the final examination and a new date will be set. A final decision on acceptance of the casebook/research project will be communicated to the candidate at least 6 weeks before the final examination.

Syllabus
A detailed syllabus will be available from the Emergency Medicine Division or the Department of surgery.

Examinations
Before admission to any examination, candidates must be certified by the Programme Coordinator as having completed relevant parts of the programme.

There are two examinations, one each at the end of the Part I and the Part II. The clinical exam must be passed in all sections for the candidates to be awarded the DM degree in Emergency Medicine. Persistent demonstration of dangerous behaviour during the clinical or oral examination is an absolute ground for failure irrespective of grades up to that point.

Part I
Candidates will be eligible to sit the Part I examination two years but not greater than three years after the entry into the programme. The Part I DM examination is designed to test the knowledge attitudes and skills of residents at the end of their second year of the DM programme. They must be able to apply basic science knowledge to clinical scenarios and show a proficiency in communication skills.

The examination will consist of written, clinical and oral examinations.

a) The written examination will consist of two papers
   1) An MCQ paper of questions covering all five sections of the syllabus
   2) A data Interpretation paper

b) The clinical examination
   1) The clinical examination will be in the form of an Objective Structured Clinical Examination.

c) The oral examination
   1) The oral examination will cover all sections of the Part I course. Candidates must pass Part I before proceeding to Part II.

Part II
Candidates will be eligible to sit the part II examination at least two years but not more than three years after successful completion of the Part I examination.

The part II examination consists of the following components:

a) The written paper (Modified essays and data interpretation)
b) Clinical Examination (long case plus short cases/OSCE)
c) Oral examination (clinical plus non-clinical situations)
d) Defense of the Case book/research project (an oral examination)

There are only two attempts at sitting each part of the DM Emergency Medicine examination and failure at both attempts requires the student to withdraw from the programme. The student may not reapply to the programme after withdrawal before a period of three years.

Completion of the Programme and award of Degree
Students will be considered as having completed the programme and eligible for the award of the DM degree when the following requirements are met

1) Satisfactory performance of all rotations
2) Acceptance of the Case book and research project
3) Satisfactory performance in the Part I and Part II examinations

The final grade in the DM is Pass/Fail.
**DIPLOMA, MSc AND DM FAMILY MEDICINE**

**Introduction**

The objectives of this programme are

1) To train postgraduate students of medicine in a wide range of knowledge, skills and attitudes appropriate to the practice of Family Medicine in the Community.
2) To impart and enhance knowledge in the personal, family and social aspects of health, illness and disease.
3) To enhance professional competence, values and behaviours that are inherent to the specialty of family medicine.
4) To enhance the skills of critical reflection and assessment of professional activities, enabling them to meet the changing health needs of patients, families, and their communities, and the changing demands of health care in modern societies.
5) To promote skills in effective, continuing medical education, to revise past knowledge, and to keep abreast of advances in medical science and technology appropriate to primary care.
6) To enhance knowledge and skills in health promotion, prevention and risk management.

**Entry Requirements**

**Diploma and MSc**

To be eligible the applicant must fulfill the entry requirements of the Faculty of Medical Sciences, University of the West Indies, Cave Hill. The applicant is expected to have completed internship. Further the applicant is expected to be employed in General Practice/ Family medicine for the duration of the course.

**DM**

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.

**METHODOLOGY**

**DIPLOMA AND MSc**

The Diploma and MSc courses in Family Medicine will commence in September. The Diploma will last 2 years, while the MSc will be of 3 years duration (including the 2 years spent doing the Diploma).

The Diploma can be considered as ‘Part I’ of the MSc Candidates who successfully complete the MSc will be able to progress to the DM.

The minimum period of study to complete the Diploma is 2 years, and the maximum time is 3 years. Students will not be allowed to enter the MSc year (or year 3) until the Diploma has been obtained.

Students who do not successfully complete the MSc year at first attempt will be allowed one additional attempt. Thus the minimum time for completion of the MSc is 3 years and the maximum time 5 years.

Students will complete 12 modules during the first 2 years and 4 modules during the third year. These modules will be delivered by distance education methods with the help of a study manual. This will be in print format and/or on compact disc. Students will need to read the manuals, and complete the included exercises and assignments.

The student is expected to have a job in a Family Practice setting (in a polyclinic or privately). In addition the student will have to attend both Family Practice and Specialist clinic sessions.

The student is to keep a portfolio containing all assignments and activities.

**DM**

The DM in Family Medicine is a four year programme which consists of three parts.

Part 1 of the DM programme is identical to the Diploma programme and is of two years duration. Students must successfully complete Part 1 before being permitted to advance to Part 2.

Part 2 of the DM programme is identical to the MSc programme and will last one year after attainment of Part 1. Students must successfully complete Part 2 before being permitted to advance to Part 3. Students who do not successfully complete Part 2 at first attempt will be allowed one additional attempt.
Part 3 is of one year’s duration spent in an approved training area and includes the preparation of either:

i) A project report; OR

ii) A case book of twenty cases with commentaries.

The alternative must have been previously agreed on by the Specialty Board and the work carried out under the guidance of a supervisor appointed by the Board.

Candidates who have been fully registered as medical practitioners for more than one year may apply for exemption from the relevant parts of the course. Candidates who have been registered for five or more years may apply for modification of the training programme, but their practice organisation must be acceptable to the Board and they will be required to attend special courses (including attendance at approved hospitals) specified by the Board. Exemption is not automatic and should not be assumed.

The student is to keep a portfolio containing all assignments and activities.

LIST OF MODULES in Diploma / DM Family Medicine Years 1 and 2

**Year 1**
- Teaching and Learning in Primary Care
- Evidence Based Medicine
- The Consultation and Communication
- Medical Ethics and the Doctor – Patient Relationship
- Health Promotion, Screening and Risk Assessment
- Chronic Disease in Primary Care

**Year 2**
- Human Sexuality and STDs
- Child Health
- Gender Issues / Women’s Health
- Care of the Elderly
- Mental Health / Counselling
- Medico-legal issues
LIST OF MODULES in
Master of Science /
DM Family Medicine Year 3

**Year 3**
There is a year long supervised research project (6 credits). A report with a maximum of 15,000 words is to be submitted.
In addition the following modules need to be completed:

- 20 weeks research skills training – compulsory
- Research Methodology – 10 weeks
- Statistics/SPSS Training – 10 weeks

Plus 2 options from list below. Each option is equivalent to 2 credits.

Each option will last 10 weeks. The options will be put into two groups. Students will be able to choose one module from each group. How the modules will be grouped has not been decided as yet. The therapeutics module has not been prepared as yet, and will only be offered if this can be achieved.

A module will usually only be offered if a minimum of 4 students request it.

- Evidence based medicine
- Teaching and Learning
- Management for PC Physicians
- Counselling
- Minor Surgical Procedures
- Therapeutics
- Geriatric Medicine
- Epidemiology

**Portfolio**
A portfolio is to be kept.

This is a file in which students will keep

1) All assignments from the completed modules,
2) Evidence of attendance of clinic sessions,
3) Evidence of attending CME sessions, and a report of each session attended, and
4) Reflections

**Clinical sessions**
The student should be working in an approved Family Practice for the duration of the course.

The student must complete 120 hours of Family Practice clinic sessions during the first two years for which 4 credits will be assigned. This would normally be made up of 30 four-hour sessions (15 sessions per year). In year three, 30 four-hour sessions will have to be completed.

If available the student may opt to attend a weekly four-hour session in an approved Family Medicine Centre. The student sees patients and is supervised by an experienced qualified Family Physician.

Alternatively the student may opt to remain in his/her own practice. In this case the time allocated for clinic sessions will be spent meeting with his/her supervisor. A review of practice organization and patient management will be done. In addition the implementation of a Family Practice audit will be done. A presentation of the audit result will be made to the other students and be included in the portfolio.

**Specialist Clinic Sessions**
The following 60 four-hour sessions must be completed.
Sessions can consist of seeing patients in the outpatient clinic, attending ward rounds, night duty, and minor operations. An example is given below, but the exact order in which the sessions are done can vary. Supervisors where possible will be drawn from UWI faculty. Objectives for these sessions have to be worked out with the supervisors, so that the students can obtain the maximum benefit.

**Year 1**
- Internal Medicine – 8 sessions
- Paediatrics – 8 sessions
- Dermatology – 5 sessions
- General surgery – 4 sessions
- Orthopaedics – 3 sessions

**Year 2**
- Obstetrics & Gynaecology – 8 sessions
- Psychiatry – 6 sessions
- Accident and Emergency – 5 sessions
- ENT – 3 sessions

**Year 3**
- Ophthalmology – 3 sessions
- Elective – 7 sessions
ASSESSMENT

Diploma
This is assessed at the end of year 2.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Portfolio</td>
<td>30%</td>
</tr>
<tr>
<td>Examination (OSCE)</td>
<td>40%</td>
</tr>
<tr>
<td>Examination (written)</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

The final grade in the Diploma is Pass/Fail.

MSc
The candidate would have successfully completed the diploma, and in addition at the end of year 3 is assessed as follows.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio</td>
<td>20%</td>
</tr>
<tr>
<td>Examination (written)</td>
<td>40%</td>
</tr>
<tr>
<td>Defence of project report</td>
<td>40%</td>
</tr>
</tbody>
</table>

The final grade in the MSc is Pass/Fail.

DM
Following the submission of the project report or case book at the end of the fourth year, the examiner may:

- Accept the work, the trainee being then eligible for the award of the degree of DM Family Medicine, OR
- Reject the work, and they will then indicate what additional or new work needs to be carried out and when the work must be resubmitted.

The final grade in the DM is Pass/Fail.

Portfolio Grading Criteria

Module assignments - 80 marks.
Each module will be given a mark. This will be determined by averaging the marks given for the assignments for that module. The marks for the individual modules will be then averaged, and converted to a mark out of 80 for the final Portfolio mark.

Clinic sessions
Clinic sessions will be assessed by means of an evaluation form that will record attendance and performance at clinic sessions.

CME sessions - 10 marks
Evidence that the student has been attending well selected CME courses both local and abroad, which have relevance to primary care. – 6 marks
Evidence that there has been learning because of CME exposure. – 4 marks

Reflections - 10 marks
Evidence that students reflect on his/her learning, trying to relate learning to previous knowledge and experience, and evidence that the student is using reflective pieces as an instrument for growth. – 6 marks
Evidence that the student has experienced positive, expected change because of this course- change in attitude towards medicine, their learning, patients, and the health care system. – 4 marks

Students are expected to pass all modules and the OSCE to obtain the Diploma and the MSc.

Upon completion of a module, if a student does not achieve a passing grade the student will be allowed to repeat the assignments of that module. If the student still does not achieve a passing grade, the student would be deemed to have failed the module and will have to repeat the module in another year.

Students who have failed three modules in one year will normally be asked to withdraw from the course.

Students can therefore fail up to 4 modules and remain in the two-year Diploma programme and a further 2 modules in the MSc year. They may sit the examinations, but will have to subsequently redo the failed modules. They need to pass all modules to be awarded the Diploma and MSc.

Students will not normally be allowed to continue the Diploma course beyond 3 years. They will not normally be allowed to continue the MSc year beyond 2 years.
MODULE DESCRIPTIONS

MODULE TITLE: Teaching and Learning in Primary Care

Description
On completion of this course, students will be able to: Outline the principles of Adult Education, Discuss the inadequacies and resultant student stresses of traditional medical education, List the features of the constructivist theory of Education and show the application of these features in problem-based learning, Assess one’s learning style using a given learning style questionnaire, Identify the variables affecting student’s motivation to learning, Discuss the problems with present CME for General Practitioners in the Caribbean, Write a learning contract, and Identify various methods of CME.

MODULE TITLE: Evidence Based Medicine

Description
The course aims to assist the Family Medicine practitioner, to: Understand the tenets of Evidence Based Medicine, thus enabling you to apply them in your everyday practice, Be able to make the right decision, by following the appropriate steps in clinical decision-making, Appreciate the role that epidemiology plays in determining health-related events and the health status of the community, prevention of disease and promotion of health, and Realize the epidemiological trends occurring in the Caribbean today, as well as the natural history of some of the diseases which are now significant threats to the welfare of the region.

MODULE TITLE: The Consultation and Communication

Description
On completion of this course, students will be able to: Define and distinguish the different forms of medical consultation, Discuss the limitations and successes of the biomedical approach to patients, with special reference to the Caribbean setting, List and discuss in writing (500 words) the various tasks of the consultation, Explain the Pendleton cycle of care, Distinguish in writing between illness and sickness, Discuss the importance of the patient’s health understanding, Explain in writing “Balint’s Flash”, Explain how consultations may be measured and compared, Discuss the limitations a doctor faces in his/her practice, List and discuss briefly each of the 7 communication transforming principles of Roter and Hall, Describe in writing a rationale for learning about communication, and its relevance to Family Practice today, Being aware of at least 4 research studies which demonstrate how communication can affect health outcome, and of the significance of the findings of these studies, List 20 action skills that can enhance communication within a consultation, Explain how to break bad news to patients, and Analyse a transcript with respect to communication quality using fixed criteria.

MODULE TITLE: Medical Ethics and the Doctor – Patient Relationship

Description
On completion of this course, students will be able to: List at least 8 types of the Doctor-Patient relationship; Discuss the main ethical concern of each type of relationship listed; Identify the appropriate Doctor-Patient relationship for various health care settings, justifying their choice; Discuss 5 distinguishing features of any Doctor-Patient relationship; State in writing how a general practitioner’s increased self-awareness can enhance his relationship with patients; List situations where professional boundary concerns become important, and be able to discuss the significance in Primary Care; Identify and discuss the 4 main Medical ethical principles; Analyse an ethical case scenario with respect to the ethical principles involved in its resolution; Identify 10 virtues important to the Primary Care physician, Identify any other principle(s) or virtue(s) which might be specifically important for the Caribbean doctor, justifying your selection; Discuss the importance of informed consent to General Practice; Outline ways a General Practice office can maintain confidentiality; Describe case scenarios where truth-telling becomes a challenge for the beneficent General Practitioner and suggest ways of resolving these cases; Outline the ethical issues arising out of the Caribbean governments’ recent Health Care Reform proposals; Suggest ways that the health care system can be operated at the primary care level, so that this is ethical; Discuss the ethics involved in: A patient’s request for the termination of life, A patient’s request for abortion, A Down’s syndrome patients request for fertility pills; Identify medical library resources especially helpful in the subject of medical ethics; Discuss, making use of medical literature, ethical issues relating and/or peculiar to the Caribbean General Practice; and Design, using established contemporary medical oaths, a medical oath adjunct suitable for the Caribbean.

MODULE TITLE: Health Promotion, Screening and Risk Assessment

Description
This course covers five (5) units: Health Promotion Concepts, Rationale and Strategies; Clinical Perspectives in Health Promotion; Models of Health Behaviour Change; Developing Personal Health Skills; and Facilitating Health Promotion in Practice
MODULE TITLE: Chronic Disease in Primary Care
Description
This course aims to: To update knowledge on hypertension, diabetes, and obesity and their complications relevant to the Primary Care Physician; To promote skills in history taking, examination and management of patients with hypertension, diabetes and obesity; To promote an understanding of social, economic and lifestyle factors in chronic diseases; To promote the use of protocols and guidelines in the diagnosis and management of hypertension, diabetes and obesity; To enable students to plan and implement health education for chronic diseases; and To enable students to enhance community efforts in health promotion and illness prevention.

MODULE TITLE: Human Sexuality and STDs
Description
This course covers three (3) units: Human Sexuality; Sexually Transmitted Diseases; and Managing HIV

MODULE TITLE: Child Health
Description
On completion of this course, the student will be able to:- List the issues that need to be considered when consulting with children and their parents; Describe the role of the Family Physician in the health surveillance and screening of children; To learn about the principles of immunisation, and the indications, use, adverse effects and contraindications of commonly used vaccines; Describe the management of children with fever; Discuss the important health concerns of adolescent patients; To outline important aspects of caring for chronically ill children; and Describe the management of abused children.

MODULE TITLE: Gender Issues / Women's Health
Description
On completion of this course, the student will: Be able to identify and discuss the cultural, religious and historical beliefs and values that impact on gender socialisation with specific reference to the Caribbean; Have knowledge of gender specific health problems and their management; Be able to describe gender differences in health problems that are not gender specific; Be able to critically appraise gender sensitivity in the provision and delivery of health care; and Be able to recognise the influence of gender socialisation on the physician's own relationships with patients and the health team, and on the provision of appropriate care.

MODULE TITLE: Care of the Elderly
Description
This course aims:- To promote an ethical approach to the elderly, that is in keeping with psychosocial theories; To be able to discuss the problems facing the elderly in the Caribbean, and to develop Primary Care approaches that can help the resolution of these problems; and To enhance skills in managing some of the common problems of the elderly.

MODULE TITLE: Mental Health / Counselling
Description
This course aims:- To update students on the common mental health diseases seen in the community; To improve diagnostic management skills in the care of mental health problems; Update students on the nature and causes of substance abuse- both legal and illegal causes; To familiarise students with guidelines and protocols that can be used in managing common mental health problems; To familiarise students with guidelines and protocols that can be used to detect and manage substance abuse; and To introduce the principles of counselling

MODULE TITLE: Medico-legal issues
Description
This course aims:- To increase the knowledge of the students regarding law and the boundaries it provides for acceptable behaviour in the society; To improve the understanding of doctors regarding the impact of law on health care; To sensitise doctors to important medico-legal issues; and To enhance the skills of Family doctors in medico-legal procedures in the Caribbean.

Third year

MODULE TITLE: Research Methodology
Description
On completion of this course, the student will be able to:- Conduct a literature review related to a subject of interest, to become familiar with current published literature on the subject; Present an argument (rationale) demonstrating the potential usefulness of a proposed research project; Differentiate between aims and objectives, and write a set of aims/objectives related to a proposed research project; Demonstrate an understanding of the following terms as used in sampling theory: population, sample, simple random sample, stratified random sample, systematic sample, case series, accidental
sample, one stage and multi-stage sampling; Demonstrate an understanding of the following terms as used in measurement and data collection: reliability, validity, accuracy, precision, single-blind, double-blind; Prepare data for manual or computer analysis; Write a report in the conventional IMRAD format following a consistent style of presentation as in one of the leading medical/health journals; and Critique published research reports with regard to adequacy of study design and appropriateness of conclusions.

MODULE TITLE: Statistics objectives

Description
On completion of this course, the student will be able to:- Correctly use and interpret the following tools in descriptive statistics: contingency tables and tables of frequency distributions, measures of central tendency (mean, median, mode) and dispersion (standard deviation, percentiles, quartiles, range); bar charts, histograms, frequency polygons; the normal distribution; correlation and regression; and Use and interpret the following techniques in inferential statistics: confidence intervals for means and proportions, significance tests (chi-squared test, t-test, 3-test).

MODULE TITLE: Management for Primary Care Physicians

Description
This course seeks:- To familiarize students with national health policy and reform proposals; To foster an understanding of major issues and players in national health decision policymaking; To appreciate the reasons for health reform understanding health systems in other selected countries of the world; To understand the role of insurance companies in health care delivery; To be familiar with management issues in primary care at regional and office levels; To enable students to manage a primary care office in an efficient, cost effective manner; To appreciate the concept of health team and understand the functions of the team in present and future projections of the health system; To foster a deep and broad understanding of primary care, primary health care and primary medical care; and To critically analyse and discuss crucial issues peculiar to primary care delivery.

MODULE TITLE: Practice Management

Description
This course seeks to familiarize students with:- basic accounting principles; Principles of managing a practice profitably; Principles of inter-personal relations and informal organizations; Principles of performance appraisals; Various private sector health systems; and The elements of health finances.

MODULE TITLE: Counselling

Description
On completion of this course, the student will be able to:- Describe the nature of counselling; Explain and demonstrate the techniques used in counselling; Identify the dynamics of the counselling relationship; Identify the indications for crisis intervention; Demonstrate the technique of crisis intervention; Recognize the manifestations of stress in your own life; and Demonstrate effective stress-reducing techniques.

Cost
US $3 500 for each year of the Diploma programme and US$ 2 500 for the third year (or MSc year).
**DM (INTERNAL MEDICINE)**

**Requirements for Entry**

(See general regulations for DM degree)

Applicants for entry to the DM (Internal Medicine) programme should, in addition to the general requirements, show proof of some exposure to a Casualty and Emergency Medicine or similar experience in an approved hospital, or community based institution, and should have completed 6 months in general medicine. Candidates will not normally be eligible for entry until 18 months from the start of their internship.

**Course of Study**

The DM Internal Medicine is a 4 year programme and consists of two parts as follows:

**Part 1**

A duration of two years and includes one year in General Internal Medicine in approved institutions where the students will be working in both in-patient and an out-patient settings under the supervision of senior residents and consultants.

During the second year the resident is assigned to a rotation of sub-specialties at approved hospitals or institutions. The residents pursue 10 week rotations in the following subspecialties: Cardiology, Neurology, Nephrology, Gastroenterology, Endocrinology and Pulmonology.

**Part 2**

A duration of two years in which the first year (3rd year of the programme) - the elective year - will be substantially engaged in acquiring research skills while continuing clinical work and will be required to do a research project. This elective year allows the resident the choice of spending it either at the University Hospital of the West Indies or at any other approved Institution within the Caribbean region or outside. The resident is allowed to select the clinical or laboratory area they would like to work in.

Year 4 will be spent acquiring further intensive training in Internal Medicine. During this year the residents return to the University Hospital for further intensive training in General Internal Medicine.

**Course Supervision**

The course will be under the general supervision of the Head of the Department or his nominee. Each student will be assigned to a supervisor, who is a member of the Specialty Board. The supervisor will provide academic guidance as to the choice or assignment of rotations, the elective period and direction of the conduct of their research and all other relevant matters.

The Specialty Board in Internal Medicine is in charge of the programme.

**Exemption**

Students who have completed periods of study in Internal Medicine in approved hospitals or institutions may apply through the Specialty Board and the Faculty Committee for Graduate Studies for exemption from the appropriate section of the programme.

**Assessment**

Each student will be assessed by examination every six months. Also, each student will be assessed by their supervisor monthly. If the assessments are found to be unsatisfactory, the Specialty Board may recommend one or more of the following:

a) Counseling
b) Remedial work
c) Repeating the unsatisfactory rotations
d) Withdrawal from the programme, if poor performance persists

**Research Project**

All Students will be required to do a research project or research thesis for publication. This project should have been previously agreed on by the Specialty Board during the Part I programme and the project commenced in the third year under the guidance of a supervisor appointed by the Specialty Board or the Head of the Department or the Director of the programme.

The research project report should not exceed 20,000 words and the format should confirm to the University regulations dealing with the preparation of projects and dissertations. The project reports must be must be typewritten and printed on one side only of good quality white bond paper (usually of 20lb. weight) 8½” 11” (Standard Letter Size), with left hand margin of 2”. The top, bottom and right hand margins should not be less than 1”. The same grade of paper should be used throughout the thesis.

Following the submission of the work, the Head of the Department
or Director of the programme will appoint reviewers or examiners who may:

i) Accept the work allowing the student to proceed to the examination OR

ii) Reject the work, with recommendations regarding changes, additions, or revisions necessary for acceptance. The examiners will indicate a deadline for re-submission of the work.

The research project should be submitted for assessment at least six months before the date of the final examination. If the work is found to be unsatisfactory and requires major revision the students will not be allowed to sit the final examination and a new date will be set.

Examinations
The DM Internal Medicine Examination consists of two parts: Part I and Part 2.

The Part I examination is taken at the end of 2 years. Once the candidates have progressed satisfactorily through the first 2 years of the training programme (including satisfactory examinations and monthly assessments) they are allowed to take the Part I DM examination. This consists of:

a) Written papers (essay and multiple choice questions)
b) A clinical examination (objective structured format)

The candidate is required to pass both parts of this examination. Students will not be allowed to proceed to year 3 of the programme until they have passed the Part I Examination. Students are allowed two attempts at the Part I examination.

The Part 2 examination will be taken at the end of the year 4 of the programme. Having passed the Part 1 examination and then satisfactorily completed years 3 and 4 in a similar manner to years 1 and 2 above, the candidate progresses to Part 2 of the examination. This examination consists of:

a) Written papers (essay and multiple choice questions)
b) A clinical examination (objective structured format)
c) An oral examination.

Candidates must pass all parts of the examinations ie Paper I, Paper II, Clinical and oral. Candidates who fail to satisfy the examiners in Part 2 of the examination at the first attempt will be required to make one further attempt within a year and if unsuccessful will be required to withdraw.

DM (OBSTETRICS & GYNAECOLOGY)

Requirements for Entry
(See general regulations – Doctor of Medicine)

In addition to the general regulations, candidates will not normally be eligible for entry until at least one full year after completing their internship and must have had at least six months’ in post internship experience in general surgery and general medicine or child health in an approved hospital. Six months experience in Obstetrics and Gynaecology (post internship) will count for up to three months’ experience in general surgery. Experience in Accident/Emergency/Casualty (post internship) will count for up to three months’ experience in general medicine or surgery.

Course of Study
The course of study will be a minimum of four years from the date of entry and is divided into two parts.

The first part is of one year’s duration and admission to the second part depends upon a satisfactory performance in the Part I Examination at the end of this period.

The second part is of three years duration and may include a period of six months in a related discipline or in an approved research project provided that approval has been obtained from the Specialty Board beforehand.

At least three years of the course must be spent in the Commonwealth Caribbean. Throughout the course, the student must hold recognised posts in accredited hospitals or be on an “Elective” approved by the Specialty Board.

Exemption
No exemption will be given for training in a DGO Programme.

Course Supervision
The course will be under the general supervision of a Director, nominated by the Head of the Department. The Director will normally be Chair of the Specialty Board in Medicine. Each student will be assigned to a supervisor, who is a member of the Specialty Board. The supervisor will provide academic guidance as to the choice or assignment of rotations, the elective period and direction of the conduct of their research and all other relevant matters.

The Specialty Board in Medicine is in charge of the programme.
Assessment
Students will be assessed (by observation, orally or in writing) at the end of each rotation and will be recorded on prescribed forms. A satisfactory standard of in-course assessments is mandatory prior to taking the apart I and Part II examination.

Those with unsatisfactory records will be encouraged to improve and a warning letter issued; counseling and/or remedial work may be recommended. An unsatisfactory performance in a rotation may require that it is repeated. If poor performance persists, the students will not be allowed to complete the programme and will be required to withdraw.

Entry to Part II is dependent on satisfactory completion of the Part I.

Case Book / Project
All students must submit to the Specialty Board or Director of the Postgraduate programme at least six months before the final (Part 2) Examination, either:

a) A casebook of twenty cases (ten Obstetrical and ten Gynaecological) and two major commentaries limited to 3,000 words each. The major commentaries should be based on a clinical research project approved by the student’s supervisor and must include references to the literature. Students are advised to discuss the preparation of case records and commentaries with their consultant or supervisor, while the book is in preparation and not wait until it is complete. From these records, the examiners will assess the critical faculties of candidates, their powers of observation and their evaluation of various methods of treatment. The long obstetrical and gynaecological commentaries offer students the opportunity to study in detail, conditions of their own choice and to express views formed from personal investigation and on a study of the literature. These commentaries could provide the opportunity to conduct a research project on clinical material within the department to be later developed into a publication. or

b) A project report or a research paper. The alternative must have been previously agreed on by the Specialty Board and the work carried out under the guidance of a supervisor appointed by the Board.

Following the submission of the work, the examiners may

a) Accept the work, and the candidate proceed to the examination, OR

b) Reject the work, and they will then outline what additional or new work is required and when the work should be resubmitted.

Examinations
Examinations are in two parts: Part I and Part 2 (Final). No candidate will be allowed more than two attempts at either examination.

The Part I Examination is held at the end of the first year and comprises: a written paper and an oral examination in Obstetrics and Gynaecology and related disciplines in the basic sciences;

The Part 2 Examination consists of:

a) Two written papers
b) A clinical examination which will include presentation and discussion of Obstetrical and Gynaecological cases
c) An oral examination

The Part 2 Examination must be taken within one year of the submission of the project report or case book.
DM (OPHTHALMOLOGY)

Requirements for Entry
(see Regulations for DM General Surgery)

The regulations are similar to the General Surgery except for the course of study and examinations as indicated below:

Course of Study
The programme consists of 3 parts (Part I, Part II, Part III) over a minimum of six years. The final year of the programme should be undertaken as an elective at an institution outside of the Caribbean.

Research will be an integral part of the programme.

Part 1
This will involve the Basic sciences studies with an emphasis on the eye. It will be a 2 year programme leading to an examination in which an adequate standard of performance is required before the candidate can proceed to the second part of the programme.

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

This one year study will lead to an examination in which an adequate standard of performance is required before the candidate can proceed to the third part of the programme.

Part III
This final part consists of 3 years enhancing surgical skills, at least 2 of which must be spent locally and an elective one year period which must be spent overseas.

The candidate will be expected to cover all aspects of the medicine, therapeutics and surgery for the eye, adnexae and visual pathways.

Examinations

Part 1
The Part 1 examinations will be undertaken after 2 years in the programme and consist:

Section A: Principles of Ophthalmic Surgery
Section B: Anatomy of Head and Neck (including Embryology and Neuro anatomy)

Basic and Ocular Pathology including microbiology and biochemistry.
Physiology of eye, adnexae, CNS including related general physiology.
General Medicine in association with Ocular pathology

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

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

Section A Exam consists of 4 Essay questions (3 hours)
Section B Exam consists of 3 papers of 100 MCQ’s each (each paper will be 3 hours). The 3 papers shall be Anatomy (Head and Neck), Ocular Physiology, and Ocular Pathology.

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

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

Part III
The Part III examination will be undertaken at the end of the fellowship. This will consist of 2 parts:
1) 2 Papers : MCQs/ Essay
2) Oral Examination

No candidate will be allowed more than 2 attempts at any one examination. Failure after the second attempt will necessitate withdrawal from the programme. The student may not reapply to the programme after withdrawal. The final Part III examination must be taken within one year of submission of the project or case book (20 cases).

Assessments
(see regulations for DM General Surgery)

Log Book
All candidates must maintain a surgical logbook, which will be assessed quarterly

Casebook
Each candidate must collect 20 cases for the case book. These cases must cover the breadth of Ophthalmology including at least one case from each sub specialty.
1) Cataract and Refractive Surgery
2) Cornea
3) Glaucoma
4) Paediatrics
5) Uveitis
6) Orbit, Oculoplastics, Adnexal and Lacrimal
7) Neuro ophthalmology
8) Ocular motility/ Strabismus
9) Medical Retina
10) Surgical Retina

See Regulations for DM General Surgery for details on case book. Following the submission of the work, the examiners may

i) Accept the work allowing the student to proceed to the examination OR

ii) Reject the work, with recommendations regarding changes, additions or revisions necessary for acceptance. The examiners will indicate a deadline for re-submission of the work.

The casebook should be submitted for assessment at least six (6) months before the date of the final examination. If the work is found to be unsatisfactory and requires major revision the student will not be allowed to sit the final examination and a new date will be set.

Completion of the Programme

Students will be considered as having completed the programme when the following FOUR requirements have been met:

1) Satisfactory performance for each year of the programme
2) Acceptance of certified list of operative procedure
3) Acceptance of the Case Book
4) Satisfactory performance in the Part I, Part II and Part III examinations

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

DM, ORTHOPAEDIC SURGERY

Aims and Objectives

The objectives of this programme are to offer a program that provides the instructional framework which allows the candidate (Orthopaedic Resident) to acquire knowledge, understanding, skills, and attitudes to a level appropriate for an Orthopaedic Surgeon Specialist who has been fully prepared to begin his/her career as an independent orthopaedic surgeon.

The goals of the program are:

i. To produce competent, dedicated and compassionate surgeons.

ii. To produce effective communicators, capable of interacting with patients, parents, relatives, peers and other health care professionals.

iii. Individuals should be trained to international standards and also to meet the needs of the Caribbean.

It is expected that the program once implemented, will be on-going. The Orthopaedic Residents in the program will become the primary physicians staffing the Department of Orthopaedic Surgery at the Queen Elizabeth Hospital.

ACCESS & SUPPORT

1) Criteria for admission

The applicant must have successfully completed the DM Part I in General Surgery, which is two years.

Eligible candidate will be invited to submit application to the program.

Applications will be reviewed by the Program Director and a consultant in the Department of Orthopaedic Surgery at the Queen Elizabeth Hospital and select candidates will be interviewed.

2) Graduated responsibility is a firm commitment and characteristic of this educational program. The Orthopaedic Department maintains a commitment to provide an environment for individual growth based upon experience as well as emphasizing maximum safe assumption of responsibilities at the earliest possible. This is realized through two parallel approaches, one structural and the other based upon individual assessment.

The structure of resident assignments on specific services and the explicit nature of responsibilities on these rotations will ensure that all residents receive appropriate supervision,
but experience increasing levels of responsibility for patient care. Formaassessment of resident skills by consultants and through in-training examinations is the second approach. This allows the responsibilities of the resident to be adjusted in correlation with the individual’s increasing knowledge base and capabilities.

3) The Academic staff (UWI and non-UWI) is listed in Section G. The will be no increased financial demands on the UWI required to support his program specifically. The DM residents will be employees of the Queen Elizabeth Hospital. No new requirements or support from the library are required.

COURSE OF STUDY

1) Structure
The DM Orthopaedic Surgery residency is a four year program. Residents will be attached primarily to the Orthopaedic Service at the Queen Elizabeth Hospital (Barbados) and will be employed as house officers by the Queen Elizabeth Hospital. The 3rd year of the program is an elective year. With prior approval of the Orthopaedic Program director, the resident may spend all or part of this elective year at approved hospitals outside of Barbados. The resident will be exposed to all aspects of adult and paediatric trauma and non-traumatic musculoskeletal conditions. The assigned consultant will always be primarily responsible for the care of patients. At all levels, the orthopaedic resident will be supervised by consultants. For all surgical procedures there will be pre-operative discussion with a consultant.

Under the supervision of the orthopaedic consultants, residents will participate maximally in:

a) Inpatient surgical and non-surgical management of orthopaedic conditions
b) Orthopaedic out-patient clinics
c) Core Orthopaedic Curriculum conferences
d) Morbidity and mortality conferences
e) CPC presentations
f) Journal Club (once/month)
g) Orthopaedic Department monthly audit

The Core Orthopaedic Curriculum will be covered through a sequence of conferences and Journal Club. These interactive conferences may include didactic presentations, case discussions, exam question reviews, and other topics.

- Core curriculum:
- Adult reconstruction
- Biomechanics and biomaterials
- Ethics
- Foot and ankle
- Musculoskeletal tumors
- Paediatrics
- Physiotherapy modalities
- Prosthetics
- Spine
- Sports medicine
- Trauma
- Upper extremity

DM Orthopaedic Residents will be required to thoroughly prepare and present topics, which are assigned by the Programme Director. These topics will be presented at the Core Orthopaedic Curriculum conferences and the Morbidity and mortality conferences.

3) Outline of course of study and Reading Lists

DM Orthopaedic Surgery, Year 1
- During the first year, residents will be required to attend sessions on Basic Statistics Research Methodology offered by the Faculty of Medical Sciences
- Emphasis during this year will be on basic orthopaedic principles and all aspects of musculoskeletal trauma
- Under the supervision of a consultant, the Resident will be required to participate in a research project related to musculoskeletal trauma and present that research paper at the annual Professor E. R. Walrond Symposium (July, Queen Elizabeth Hospital).
- Resident begins collection and writing up of cases for the Case Book.
- The resident, upon completion of the 1st year will be expected to demonstrate a satisfactory level of knowledge, clinical and technical competence. This will be verified by direct questioning and observation of clinical practice in the following areas:
  - Evaluation of the orthopaedic patient (history, physical examination, investigations)
• Preparation of patients for surgery.
• Development of good oral presentation style and good work ethics.
• Biology of fracture repair
• Biology of soft tissue injuries
• Biomechanics of fractures
• Evaluation and initial treatment of the multiple-trauma patient
• Principles of non-operative fracture management
• Principles of external fixation
• Principles of internal fixation
• Compartment syndrome
• Fat embolism syndrome
• Osteomyelitis: acute, sub-acute and chronic
• Non-unions: evaluation and principles of treatment
• Initial evaluation of the spine-injured patient
• Principles of treatment of fracture complications
• Pathologic fractures: diagnosis and principles of treatment
• Fractures with soft tissue injuries: classifications and principles of treatment
• Pain management following traumatic injury
• Tumours and tumor-like conditions: general principles of tumor management
• Proper evaluation of plain radiographs, and exposure to CT, MRI and nuclear bone scans
• Basic science: bone morphology, metabolic diseases of bone, calcium and phosphorus metabolism, articular cartilage, muscle, nerve, inflammation, immunology and osteoporosis
• Septic arthritis: diagnosis and principles of treatment
• Application of skin and skeletal tractions
• Proper applications of casts
• Dislocations: diagnosis, treatment and complications
• Closed reduction of the following: dislocations of the shoulder, the elbow and hip
• Minor operations: decompression of carpal tunnel, release of a trigger finger, decompression of DeQuervain’s tenosynovitis, excision of a ganglion, surgical debridement and suturing of small wounds in the minor operating theatre
• Closed reduction of fractures
• Bier block: indications, application and complications
• General Paediatric Trauma
  - Considerations in the Poly-Traumatized Child
  - Evaluation of the Paediatric Spine in Trauma - Fractures and Subluxations
• Management of Open Fractures in Children.
• Growth Plate Injuries
• Long Bone Injuries
• Finger Injuries
• Healing and Remodeling of Fractures – Potential For Overgrowth
• Conservative management and fixation of fractures in children
  - Evaluate – Strengths and Weaknesses
  - Traction - Uses and Application
  - Casting / Application of Spicas / Bracing / Splinting
  - K-wires
  - Plates
  - Flexible Nails
  - External Fixators – Longitudinal / Ring
• Residents should commence collection of cases for the case book.
  - Log Books: All residents shall beging and maintain an up-to-date log book of operative procedures that they have participated in.

**DM Orthopaedic Surgery, Year 2**

Emphasis will be on Paediatric Orthopaedics, Adult Reconstruction and Spine. The resident, upon completion of this year will be expected to demonstrate a satisfactory level of knowledge, clinical and technical competence. This will be verified by direct questioning and observation of clinical practice in the following areas:
• Evaluation of the child
• Hip
• Knee
• Foot and ankle
• Limb length inequalities and reduction anomalies
• Specific Anomalies
• Scoliosis
• Gait abnormalities
• Cerebral palsy
• Birth trauma and Erb’s palsy
• Musculoskeletal tumours in children
• Other inc - Leukemias / Lymphomas
• Orthopaedic problems in genetic diseases
• Evaluation and management of -
  Common conditions, Uncommon conditions and Rare conditions
• Spine pathology and surgery
• Spine
• Improvement in surgical skills (trauma).

Primary musculoskeletal tumours
Metastatic bone tumours
• Increased responsibilities
  - Proper management of all of the patients on the service
  - Co-ordination, if necessary of the patient’s care with colleagues in other disciplines
  - Supervision of junior residents and medical students
  - Interaction with relatives, hospital administration and all members of hospital staff
  - Up-to-date surgical log book
  - Compilation of cases for the case book.

DM Orthopaedic Surgery, Year 3

The resident, upon completion of this year will be expected to demonstrate a satisfactory level of knowledge, clinical and technical competence. This will be verified by direct questioning and observation of clinical practice in the following areas:
• Joint arthroplasty
• Arthroscopy and sports medicine
• Implants and biomaterials
• Inflammatory conditions - enthesopathies, rheumatoid arthritis, ankylosing spondylitis

Residents should assist/perform surgeries for the following conditions:
• Disorders of the hallux and lesser toes
• Morton’s neuroma
• Rheumatoid foot
• Reconstruction for chronic lateral ankle instability
• Osteochondral lesions of the talus
• Angular deformities of the lower limbs
• Osteochondritis Dissecans
• Patella instability
• Coxa vara, coxa valga
• Soft tissue and bony tumours
• Peripheral nerve injuries
• Tendon injuries
• Avascular necrosis
• Recurrent dislocations of the shoulder
• Affections of joints requiring arthrodesis
• Acetabular and pelvic fractures

DM Orthopaedic Surgery, Year 4

Resident should be able to perform the following:
- Primary joint replacements – hip and knee
- Arthroscopy – Knee and shoulder
- Adult trauma
- Surgery on common non-traumatic adult conditions
- 150 major cases should be performed in the final year

• Resident should have knowledge of the principles of deformity correction and limb lengthening
• Resident should have detailed knowledge of the surgical approaches to most orthopaedic conditions
• Resident should be able to discuss the management of a patient in a logical and detailed manner tailored to the patient’s specific needs.
• Resident must fulfill all the requirements for eligibility of Part II DM Orthopaedics
• Casebook must be submitted at least six months prior to the Part II DM Orthopaedics
• Resident presents research paper at local and/or international conference
• Preparation for final examination

REGULATIONS AND ASSESSMENT PROCEDURES

All regulations and assessment procedures will be consistent with those provided in the UWI Regulations for Graduate Degrees and Diplomas.

Resident performance will be assessed (by observation, orally or in writing) at the end of each rotation (6 months) and recorded on prescribed forms. A satisfactory standard of in-course assessment is mandatory prior to taking the Part II examination. The resident with an unsatisfactory evaluation in a rotation will be required to repeat the rotation. The resident will be informed in writing of his poor evaluation and the consequences of obtaining two unsatisfactory assessments. Counseling and/or remedial work may be recommended. If poor performance persists, the resident will not be allowed to complete the program and will be required to withdraw. At the six months evaluation, residents will be given the opportunity to discuss their assessments.
DM Orthopaedics Examination – Part 11

Residents will enter the same examination process that is currently in place for orthopaedic DM candidates at the UWI (residents from Jamaican and Trinidad).

The following requirements must be completed before the resident is eligible to take the Part 11 examination:

a) Two research papers
b) Satisfactory performance on all rotations
c) Acceptance of their certified list of operative procedures
d) Acceptance of Case Book

The Part 11 Orthopaedic examination will consist of:

a) Two written papers
b) An oral examination which may include clinical material

DM (PAEDIATRICS)

Entry Requirements

(See general regulations – Doctor of Medicine)

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.

Course of Study

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 – Part 1 (years 1 and 2) and Part 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 issues 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 or case book and a six month elective period.

On acceptance to the programme there will be a six month probation period during July to December of year 1. During this period the candidate’s performance will be assessed at regular intervals. Any candidate who fails the overall assessment during this period of probation will be required to withdraw from the programme.

A minimum of six months of the four years must be spent in the Section of Child Health, Mona, at the University of the West Indies. The remaining time may be spent in an approved unit in Jamaica. Trainees are required to participate in daily seminars and teaching rounds.
An elective period of six months is to be taken during years 3 to 4 after successfully completing the Part 1 examination. This elective period must be approved by the Specialty Board prior to commencement.

**Assessment**
Continuous assessment of the candidate’s performance is carried out by his/her supervisors, who are members of the Specialty Board in Child Health).

If the assessments of the candidate are found to be unsatisfactory the Child Health Specialty Board may recommend one or more of the following:

a) Counseling
b) Remedial work
c) Repeat the unsatisfactorily done rotations
d) Withdrawal from the programme

**Examination**
Trainees will be eligible to sit the Part 1 examination at the end of year 2 having had satisfactory assessments for that period. Continuation in the training programme will be dependent on the recommendation of the Specialty Board based on its continuous assessment and the results of the Part 1 examination.

Candidates will be eligible to sit the Part 2 examination two years after successful completion of the Part 1 examination but not greater than four years after at the next available examination. The candidate must have satisfactorily completed the DM programme. The candidate must submit the following at least six months before the completion of the Part 2 programme.

A research project on Child Health or related area.

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 research project should not exceed 20,000 words and must follow the University’s Guide for the Preparation of Theses, Research Papers and Project Reports.

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

Following submission of the project the examiners may
i) Accept the work
ii) Reject the work, and outline what additional or new work needs to be carried out and when the work should be resubmitted.

**Examination Format**
The Part 1 examination consists of

a) One multiple choice question paper
b) A clinical examination
c) An oral examination.

The Part 2 examination consists of

a) Two written papers, which may include multiple choice questions
b) A clinical examination
c) An oral examination.

The Part 2 examination must be attempted for the first time within one year of the acceptance of the research project.

The candidates are allowed two attempts at the Parts 1 and 2 examinations. Failure after the second attempt will necessitate withdrawal from the programme. The student can not reapply to the programme after they withdrew.
DM (PSYCHIATRY)

Entry Requirements
(See general regulations – Doctor of Medicine)

Course of study
The DM Psychiatry is a four year graduate programme which aims to provide the graduate with the knowledge and skills to function as a consultant equipped for independent practice in hospital-based stand-alone facilities and community mental health. On acceptance to the programme there will be a six month probation period during which the candidate’s performance will be assessed at regular intervals. Any candidate who fails the overall assessment during this period of probation will be required to withdraw from the programme.

The programme is delivered in four parts over a minimum of four years from the date of entry. At least three years of the programme must be spent in the Commonwealth Caribbean. Throughout the programme, candidates must hold recognized posts in accredited hospitals or be on an elective approved by the Board for Graduate Studies and Research through the Faculty Committee for Graduate Studies or ‘equivalent bodies’.

The programme is run under the general supervision of a Director of the Residents Programme, nominated by the Head of the Department and appointed by the Committee for Graduate Studies. The Director will normally be the chair of the Specialty Board in Psychiatry. Each student will be assigned to a supervisor, who is a member of the Specialty Board in Psychiatry. The supervisor will provide academic guidance as to the choice or assignment of rotations, the elective period and direction in the conduct of their research and all other relevant matters.

The Specialty Board in Psychiatry is in overall charge of the programme. The sole and final authority on all matters concerning the programme is the Campus Board for Graduate Studies and Research and the University Senate.

The programme consists of four parts and candidates must be placed in an accredited institution.

Part 1 (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) and in Neurology, Psychology and Psychiatry.

Part 2 (Year 2)
Enter to the second part of the programme will depend on a satisfactory performance in the Part I examination.

During this period, which lasts twelve months, the student works as a psychiatric resident at an approved general hospital. Instruction is given in the Basic Medical Sciences (including Anatomy, Physiology) and 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 3 (Year 3)
Enter to Part 3 of the programme will depend on a satisfactory performance in the Part 2 examination.

During Part 3, the candidate is required to spend six months working in an approved psychiatric hospital 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 Report.

Part 4 (Year 4)
During this year the student continues to work under supervision in an approved psychiatric service.

Institutions accredited for learning
A list of accredited hospitals may be obtained from the Graduate Studies section of the Dean’s Offices. Some are accredited only for the first part of the programme while others are accredited to provide training in the second part of the programme for a specified time. To gain credit for such a period, the candidate must submit a satisfactory assessment report from their supervisor.

All requests for exemption should be made in writing by the student to the Registrar through the Chairman of the Faculty Board for Graduate Studies and Research. The request will then be forwarded to the Board for Graduate Studies and Research through the Campus Committee. Each case will be considered on its own merit.
Assessment
Continuous assessment of the candidate’s performance is carried out by his/her supervisor and recorded every six months. The supervisor will be a member of the Specialty Board for Psychiatry.

In the assessments are found to be unsatisfactory, the Specialty Board may recommend one or more of the following:
1) Counselling/academic warning in writing
2) Remedial work
3) Repeating the unsatisfactory rotations
4) Withdrawal from the programme if poor performance persists.

Case Book / Research Report
All students must submit to the Campus Committee for Graduate Studies through the Director of the Postgraduate programme, at least six months before the final (Part III) examination.

A casebook of all cases seen. These cases should illustrate the range of clinical conditions encountered in the practice of Psychiatry. Of the cases submitted, one (1) must be rare and of unique clinical relevance that may have important educational content suitable for journal publication. Each case report should not exceed 1500 words and should follow the format submitted for journal publication, namely: introduction, case history, discussion and conclusion. Referencing should follow the format of the West Indian Medical Journal. OR

A research project base on cases seen. This should form a distinct contribution to the knowledge of the subject presented. It must be of satisfactory literary standard and should attain standards suitable for publication in a peer reviewed journal. It should not exceed 20,000 words but must not be less than 12,000 words and must follow the University’s Guide for the Preparation of Theses, Research Papers and Project Reports. OR

A formal research on an area of interest.

The cases/research project/project report must done in accordance with the DM Thesis guidelines (UWI).

Students are advised to discuss the preparation of case reports with their Supervisor(s) while the book is in preparation and not wait until it is completed. These cases offer the students the opportunity to study in detail, conditions of their own choice and to express views based on personal investigation and on review of the literature. These case reports could provide the opportunity for the student to put his/her clinical experience in the form of a research project which could be later developed for publication. From these records, the examiners will assess the critical faculties, powers of observation and the level of evaluation of various techniques used in Psychiatry by the students.

Following the submission of the work, the examiners may:
i) Accept the work and permit the student to proceed to the examinations OR

ii) Accept the work with modification, which must be carried out in the time specified and resubmitted OR

iii) Reject the work with recommendations regarding changes, additions, or revisions necessary for acceptance. A date for resubmission will be determined by the examination board in Psychiatry.

The case book, project report or research project should be submitted for assessment at least six months before the date of the Part 3 examination. If the work is found to be unsatisfactory and requires major changes, the student will not be allowed to sit the final examination and a new date will be set. The Part 3 examination must be attempted for the first time within one year of the acceptance of the case book or research project.

The following three (3) requirements must be completed before the Part 3 examination.
1) A satisfactory standard of in-course assessments,
2) A Case log, and
3) A Project Report and/or Case book or Research Project

DM Manual
A campus specific manual is also available with an outline of all activities and programmes.

Examinations
Before admission to any examination, candidates must be certified by their supervisors as having completed the relevant part of the programme.

Examinations are in for parts (Part 1, Part 2, Part 3 and Part 4 and these are normally held once a year in May/June on two campuses.
Failure of an examination

Should any candidate fail the examination of any Part at the first attempt, completion of this part must be within one calendar year of the first attempt. No candidate will be allowed more than two attempts at any one examination. Failure after the second attempt will necessitate withdrawal from the programme. Re-admission of candidates will be in accordance with the University Regulations for Graduate Diplomas and Degrees.

The Part 1 examination is held at the end of year 1. In this examination candidates are assessed on Neurology, Psychiatry and Psychology. The exam comprises:

- A knowledge based examination in Neurology, Psychiatry and Psychology. This consists of a composite multiple choice paper examination (MCQs) and extended matching questions.
- A clinical examination in Neurology
- A clinical examination in Psychiatry consisting of two long cases, four vignettes and/or structured questions.

On successful completion of Part 1, continuation in the training programme will be dependent on the recommendation of the Specialty Board based on its continuous assessment and the results of the Part 1 examination. The candidate must sit the Part 2 examination within 2 years.

The Part 2 Examination is held at the end of the second year. Candidates are evaluated in Basic Sciences (Neuroanatomy and Neurophysiology). This exam consists of:

- Paper 1 – a written paper
- Paper 2 – a composite multiple choice paper examination (MCQs) and extended matching questions (EMQs).

The Part 3 Examination is held at the end of the third year. It constitutes the presentation and examination of the Project Report.

The Part 4 Examination is held at the end of the second year. Candidates are evaluated in Psychiatry. This exam consists of:

- Paper 1 – a written paper and Paper 2 – a composite multiple choice paper examination (MCQs) and extended matching questions (EMQs).
- A clinical examination in consisting of three (3) long cases one of which include a psychological component.
- An oral examination based on standardized vignettes and/or standardized questions.

Requirements to Pass individual parts

A candidate is determined to have completed if they have met the following:

- Part 1 – Pass all parts of examinations.
- Part 2 – Pass all parts of examinations
- Part 3 – Achieve a Pass grade
- Part 4 – Achieve an aggregate of 50% or more and pass at least two of the three long cases.

Award of degree

Students will be considered as having successfully completed the programme when the following four (4) requirements have been met within the prescribed time limits.

1) Satisfactory performance of all rotations
2) Acceptance of their certified case log
3) Acceptance of the Case Book or Research Project
**DM (SURGERY - GENERAL)**

**Entry Requirements**
(See general regulations – Doctor of Medicine)

Criteria for registration should be obtained from the relevant medical council.

Six months of supervised post-internship experience in the practice of surgery or in accident & emergency medicine at an approved hospital is desirable but such experience is not required.

**Course of Study**
The programme consists of two parts and the course of study is a minimum of five years. The programme takes place either at the University Hospital of the West Indies or at institutions in the contributing territories recognized by the University for this purpose.

Teaching and training in teaching methods and research methodology/epidemiology are integral components of the programme

**Part I - Two years**
During this period, students will be assigned to three monthly rotations in General Surgery and the surgical subspecialties. A rotation in critical care medicine may be taken through the Section of Anaesthesia & Intensive Care.

A maximum of three months may be spent in the Basic Medical Sciences Department (Sections of Anatomy, Biochemistry or Physiology), the Department of Pathology, or in an approved research project provided that prior approval has been obtained from the Specialty Board in Surgery.

Provided that the in-course assessments are satisfactory, the Part I examination is taken at the end of two years.

**Part II – Three years**
During this period, students are assigned to general surgery rotations with increasing levels of responsibility.

Up to one year’s elective may be spent at institutions in or outside of the Caribbean provided that prior approval is obtained from the Specialty Board in Surgery. Such approval must be obtained at least six months prior to the commencement of the elective period. The elective period is limited to the penultimate year only.

During the final year, the student is normally appointed to the post of Chief Resident. The final year of the Part II programme must be spent at the University Hospital of the West Indies or at institutions in the contributing territories recognized by the University for this purpose.

**Course Supervision**
The Specialty Board in Surgery is in overall charge of the programme. The programme will be under the general supervision of a Programme Director, nominated by the Head of Department and appointed by the Specialty Board in Surgery. Each student will be assigned to a supervisor who will advise the student as to choice or assignment of rotations, the elective period, direction in the conduct of their research and all other relevant matters.

**Exemption**
(Should be read in conjunction with the General Regulations.)

Students who have obtained, by examination, the Part II FRCS, the Associate FRCS or Full Fellowship of any one of the Royal Colleges of Surgeons may apply for exemption from the Part I DM examination. Such exemption may be granted at the discretion of the Specialty Board in Surgery, after assessment of the student’s performance in the programme.

**Assessment**
Student performance will be assessed (by observation, orally or in writing) at the end of each rotation and will be recorded on prescribed forms. A satisfactory standard of in-course assessments is mandatory prior to taking the Part I and Part II examination.

Those with unsatisfactory records will be encouraged to improve and a warning letter issued; counselling and/or remedial work may be recommended. An unsatisfactory performance in a rotation may require that it is repeated. If poor performance persists, the student will not be allowed to complete the programme and will be required to withdraw.

Entry to Part II is dependent on satisfactory completion of the Part I.

The following three requirements must be met before the Part II examination:

1. Reach a satisfactory standard in on-going assessments.
2. Submit a list of all operations where the candidate was the primary surgeon or assistant surgeon as certified by their supervisors.
3. Case book or Project Report
All DM Surgery candidates must submit to the Specialty Board or the Director of the Postgraduate programme at least six months before the final (Part II) Examination ONE of the following:

a) A casebook of twenty (20) cases. These cases should cover the range of pathology seen in the practice of general surgery. Of the cases submitted, five (5) may be rare cases of unique clinical relevance that may have important educational content suitable for journal publication. The book should not exceed 300 pages. OR

b) A project report or research thesis. This option should have been previously agreed on at the commencement of the Part II programme by the Specialty Board and the project carried out under the guidance of a supervisor appointed by the school for Graduate Studies on the recommendation of the Specialty Board in Surgery.

The format of the casebook/project report should conform to the University regulations dealing with the preparation of projects and dissertations. It should not exceed 20,000 words but must not be less than 15,000 words. The cases/project report must be typewritten and printed on one side only of good quality white bond paper (usually 20lb. weight) 8 ½” x 11” (Standard Letter Size), with left hand margin of 2”. The top, bottom and right hand margins should not be less than 1”. The same grade of paper should be used throughout the thesis. Case reports should follow the format of case reports submitted for journal publication, namely: introduction, case history, discussion and conclusion. References should follow the format of the West Indian Medical Journal.

Students are advised to discuss the preparation of the casebook/project report with their Consultant(s) and/or Supervisor(s) during the preparation of the book instead of at completion. The writing of the casebook offers the student the opportunity of choosing cases of unique clinical relevance and to express an opinion, based on careful evaluation of the current literature. The case reports should be of high quality suitable for publication in a peer reviewed journal.

Following submission of the work, the examiners may:

1) Accept the work allowing the student to proceed to the examination OR

2) Reject the work, with recommendations regarding changes, additions, or revisions necessary for acceptance. The examiners will indicate a deadline for re-submission of the work.

The casebook/project report should be submitted for assessment at least six (6) months before the date of the final examination. If the work is found to be unsatisfactory and requires major revision the student will not be allowed to sit the final examination and a new date will be set.

**Syllabus**

A detailed syllabus for the course is available from the Department of Surgery.

**Examinations**

Before admission to any examination, candidates must be certified by their supervisors as having completed all relevant parts of the programme.

There are two examinations, one each at the end of the Part I and Part II.

Candidates will be eligible to sit the Part I examination two years but not greater than three years after entry into the programme.

The Part I examination consists of two sections:

**Section A: Principles of Surgery**

**Section B: Basic Pathology, Anatomy, Physiology**

(including Biochemistry)

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

There will be a written paper, which may include multiple choice questions and an oral examination in each subject.

The candidate must pass Section A and at least two parts of Section B to qualify for entry to Part II of the programme.

Continuation in the training programme will be dependent on the recommendation of the Specialty Board based on its continuous assessment and the results of the Part I examination.

Candidates will be eligible to sit the Part II examination three years but not greater than four years after successful completion of the Part I examination.

The Part II examination consists of:

a) Written papers which may include multiple choice questions.

b) An oral examination which may include clinical material and must be taken within one calendar year of the acceptance of the project or casebook.
No student will be allowed more than two attempts at any one examination. Failure after the second attempt will necessitate withdrawal from the programme. The student may not reapply to the programme after withdrawal.

**Completion of the Programme**

Students will be considered as having completed the programme and eligible for the award of the DM degree when the following FOUR requirements have been met:

1. Satisfactory performance of all rotations
2. Acceptance of the certified list of operative procedures
3. Acceptance of the Case Book or Research Project
4. Satisfactory performance in the Part I and II examinations

**DIPLOMA IN HEALTH SERVICES MANAGEMENT**

**Introduction**

The Programme is aimed at middle and senior health care managers within Barbados and other health systems. It is designed to enable participants to better understand the change management needs of health systems, the role of leadership in the change process, and provides a range of relevant practical skills and capacities to enable them to better plan and deliver the change agenda.

**Entry Requirements**

Criteria for admission to this programme include: relevant professional qualifications at the graduate or post graduate level, and to have been in a post relevant to Health Care for a minimum of 3 years post graduation. Alternatively, many candidates who are likely to have associate degrees and Diplomas or professional qualifications, can apply provided that they have a proven record of (documented) relevant experience of at least 10 years in a Senior Health Care position.

**Course of Study and Duration**

The Diploma in Health Service Management is a 21-credit programme run full-time over a period of six months with classes being held during the day. Candidates will need to arrange day-release to attend classes.

**Assessment**

Evaluation will be by end of module assessments, small practical projects, feedback from other participants, and presentation of the major work related assignment.

**LIST OF COURSES**

- PBHE 6400  Health Management I
- PBHE 6410  Health Management II
- PBHE 6420  Health Management III
- PBHE 6430  Health Management IV
- PBHE 6050  Health Economics
- PBHE 6920  Field Placement/ Practicum
- PBHE 6145  Work-related Assignment

All course descriptions given in the COURSE DESCRIPTIONS section at the end of this Guide.
MASTER IN PUBLIC HEALTH (MPH) WITH OPTIONAL SPECIALISATION IN HEALTH SERVICES MANAGEMENT

Introduction
These degrees offer the intellectual tools, knowledge and skills base necessary for the development and management of public health programmes, interventions and plans that address population health needs.

Areas covered will range from epidemiology, both methods and particular conditions (communicable and non-communicable diseases), to biostatistics, health promotion and health education, health services management, and research methodologies, amongst others.

Objectives of the MPH
At the end of the training participants will:

Have demonstrated understanding of the concepts of physical, social and mental health and an understanding of preventive and promotional efforts applicable to community health care.

Be able to explain the interaction of environmental factors — social, biological, physical and their effect on health and disease.

Appreciate the value of the team approach in the planning and implementation of health programmes.

Be able to explain the determinants and implications of population growth and the measures, including family planning and family life education, available for dealing with ensuring problems.

Be familiar with available community resources and how they may be used to promote individual and community health.

Be able to recognize the problems posed by increasing cost/wastage of human and material resources; be knowledgeable about economic aspects of health care and the uneven distribution of health manpower and their role in affecting change.

Be able to identify community health problems, apply epidemiological methods in the collection, processing and use of data for their diagnosis and implement and evaluate community services related to health.

Have carried out a study to demonstrate the use of research methods in responding to public health issues.

Be able to organize and administer activities and be involved in training other members of the health team;

Have demonstrated by their behavior that they are committed to the philosophy and objectives of the programme.

Objectives of the MPH in Health Services Management (MPH/HSM)
At the end of the training participants will:

• Demonstrate knowledge and understanding of the principles and practices of public health

• Have demonstrated understanding of the concepts of physical, social and mental health and an understanding of preventive and promotional efforts applicable to community health care.

• Value and apply relevant theories and models of management in the health care industry and in relation to different client groups.

• Do critical programme appraisal and assess the needs of individuals and communities/institutions they serve.

• Demonstrate an understanding of the concepts of empowerment, community organization and development and social actions relating to health education and health promotion and apply them to their work and practice.

• Critically evaluate policies and their implications for the provision of health services and for health in general.

• Conduct health systems research using a variety of approaches.

• Develop health communication strategies and resources.

• Identify resources for health communication, health education and health promotion

• Have carried out a study to demonstrate the use of research methods in responding to public health issues.

• Be able to organize and administer activities and be involved in training other members of the health team;

• Have demonstrated by their behavior that they are committed to the philosophy and objectives of the programme.

Entry Requirements
The course is open to Graduates with at least a first degree from an approved university, OR Medical Officers who are registered medical practitioners, dental surgeons, or veterinary surgeons, with at least 3 years professional experience preferably in Public Health after successfully completing the final examination in their discipline, OR a person who holds a professional or technical qualification of special relevance to the course and who in the opinion of the University has had at least five (5) years of relevant practical experience.
Students who are enrolled in the Diploma in Health Services Management

Students of the Postgraduate DipHSM, and who had successfully completed all required courses and research projects, will be given the opportunity to extend their matriculation for the Master of Public Health in Health Services Management (MPH/HSM).

If so decided, and upon acceptance of their extension, the credits granted by the DipHSM (21 credits) will be accepted by the MPH/HSM programme, and hence they will only need to complete another 19 credits by taking up the Basic/Core courses of the MPH, plus any other relevant Advanced Elective Course up to complete the 40 credits required for the MPH/HSM. This regulation will only apply during the Academic term of the enrollment, which includes the part-time (two year) possibility. Note that in the MPH one of the Basic/Core courses is related to Health Services Management. In this instance, and in order to avoid redundancies, this course will not be in offered for those coming from the DipHSM, and so they will have to choose another course from the list of available Advanced Elective Courses.

The decision to enroll in the MPH/HSM, following the DipHSM, needs to be taken before or as soon as the grades/results are provided. Once the applicant is accepted into the MPH/HSM, the granting of the Diploma is held until the final results of the MPH/HSM are known. If the student is successful in the MPH/HSM, (s)he will be granted the Masters degree. This is to avoid the granting of two (2) degrees when only one has been completed. In the event that a DipHSM successful candidate is unable to complete in full the MPH/HSM, for whatever reason, (s)he will be granted her/his corresponding Graduate DiploMA.

Any MPH student who is not able, or is unsuccessful only in the research project, or does not wish to pursue it, but has in the opinion of the MPH Faculty good grades in ALL courses attended, will be granted either the Diploma in Public Health, or the Diploma in Health Services Management, depending which stream they have chosen.

Duration

These taught Masters are offered over twelve months and includes both classroom and field activities. Students can opt to complete the programme with a fulltime course load in one year. Part-time students can complete the number of required courses over a two year period but are expected to complete the degree in no longer than three years. All classes are held during the day.

The MPH consists of 40 credits including a research project which is a requirement for granting a MPH degree. The Candidates who have been granted permission to transfer from the DipHSM and who would therefore have successfully completed the Work-related Assignment will not be required to undertake the Research Project.

Assessment

Formal assessment is by written examination, consisting of short answer and essay questions at the end of each course/semester, and for the MPH, the required substantial project.

LIST OF COURSES

for the Master in Public Health

Basic Courses (21 CREDITS required by all students)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>PBHE 6000</td>
<td>Health Education I</td>
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<tr>
<td>PBHE 6001</td>
<td>Introduction to Public Health</td>
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<tr>
<td>PBHE 6100</td>
<td>Biostatistics</td>
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<td>PBHE 6200</td>
<td>Epidemiology I</td>
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<tr>
<td>PBHE 6210</td>
<td>Epidemiology II</td>
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<tr>
<td>PBHE 6300</td>
<td>Family Health I</td>
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<tr>
<td>PBHE 6400</td>
<td>Health Management I</td>
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<td>PBHE 6500</td>
<td>Primary Health Care</td>
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<td>PBHE 6600</td>
<td>Environmental Health</td>
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<tr>
<td>PBHE 6900</td>
<td>Research Methodology</td>
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Advanced Courses (required by general MPH students)

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>PBHE 6010</td>
<td>Health Education II</td>
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<tr>
<td>PBHE 6050</td>
<td>Health Economics</td>
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<tr>
<td>PBHE 6410</td>
<td>Health Management II</td>
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<td>PBHE 6420</td>
<td>Health Management III</td>
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<tr>
<td>PBHE 6800</td>
<td>Disaster Management</td>
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<tr>
<td>PBHE 6910</td>
<td>Qualitative Research Processes</td>
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<td>PBHE 6990</td>
<td>Research Project</td>
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Advanced Courses (required by MPH/HSM students)

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PBHE 6050</td>
<td>Health Economics</td>
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<tr>
<td>PBHE 6410</td>
<td>Health Management II</td>
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<tr>
<td>PBHE 6420</td>
<td>Health Management III</td>
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<tr>
<td>PBHE 6430</td>
<td>Health Management IV</td>
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<tr>
<td>PBHE 6920</td>
<td>Field Placement/ Practicum</td>
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<tr>
<td>PBHE 6990</td>
<td>Research Project</td>
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</tbody>
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(Note: MPH/HSM Candidates who have been granted permission to transfer from the DipHSM and who would therefore have successfully completed the Work-related Assignment will not be required to undertake the Research Project.)
Advanced Elective Courses (MPH/HSM students select to make up balance of 40 credits) - Note that not all electives are offered every year.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PBHE 6030</td>
<td>Issues in Health Ed. &amp; Health Prom</td>
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<tr>
<td>PBHE 6220</td>
<td>Chronic Diseases Epidemiology</td>
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<tr>
<td>PBHE 6230</td>
<td>Infectious Epidemiology</td>
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<tr>
<td>PBHE 6350</td>
<td>Communication</td>
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<tr>
<td>PBHE 6700</td>
<td>Community Mental Health</td>
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<tr>
<td>PBHE 6810</td>
<td>Occupational Health</td>
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</tbody>
</table>
COURSE DESCRIPTIONS

COURSE CODE: EPDM 7000
TITLE: MPhil Epidemiology - Thesis
Description
Students produce a thesis of approximately 50,000 words under the supervision of a member of Faculty.
Assessment
Pass/Fail

COURSE CODE: EPDM 8000
TITLE: PhD Epidemiology - Thesis
Description
Students produce a thesis of approximately 80,000 words under the supervision of a member of Faculty.
Assessment
Pass/Fail

COURSE CODE: GRSM001 (common to all MPhil students)
TITLE: MPhil Research Seminar 1
CREDITS: 0
Description
This is the first of two research seminars to be presented by the MPhil student.
Assessment
Pass/Fail

COURSE CODE: GRSM002 (common to all MPhil students)
TITLE: MPhil Research Seminar 2
CREDITS: 0
Description
This is the second of two research seminars to be presented by the MPhil student.
Assessment
Pass/Fail

COURSE CODE: GRSM003 (common to all MPhil students)
TITLE: MPhil Research Seminar 3
CREDITS: 0
Description
This is the last of three research seminars to be presented by the MPhil student.
Assessment
Pass/Fail

COURSE CODE: IMMU 7000
TITLE: MPhil Immunology Thesis
Description
Students produce a thesis of approximately 50,000 words under the supervision of a member of Faculty.
Assessment
Pass/Fail

COURSE CODE: GRSM8001 (common to all PhD students)
TITLE: PhD Research Seminar 1
CREDITS: 0
Description
This course is the first of three research seminars to be presented by the PhD student.
Assessment
Pass/Fail

COURSE CODE: GRSM8002 (common to all PhD students)
TITLE: PhD Research Seminar 2
CREDITS: 0
Description
This is the second of three research seminars to be presented by the PhD student.
Assessment
Pass/Fail

COURSE CODE: GRSM8003 (common to all PhD students)
TITLE: PhD Research Seminar 3
CREDITS: 0
Description
This is the last of three research seminars to be presented by the PhD student.
Assessment
Pass/Fail
COURSE CODE: IMMU 000
TITLE: PhD Immunology Thesis
Description
Students produce a thesis of approximately 80,000 words under the supervision of a member of Faculty.
Assessment
Pass/Fail

COURSE CODE: MDFA 000
TITLE: Family Medicine - Diploma
Description
Students will complete 12 modules during the Diploma programme. These modules will be delivered by distance education methods with the help of a study manual. This will be in print format and/or on compact disc. Students will need to read the manuals, and complete the included exercises and assignments. The student is expected to have a job in a Family Practice setting (in a polyclinic or privately). In addition the student will have to attend both Family Practice and Specialist clinic sessions.
Assessment
Pass/Fail

COURSE CODE: MEDC 6642
TITLE: Family Medicine MSc
Description
After completing the Diploma programme, students will complete 4 modules and a research project for the MSc programme. These modules will be delivered by distance education methods with the help of a study manual. This will be in print format and/or on compact disc. Students will need to read the manuals, and complete the included exercises and assignments. The student is expected to have a job in a Family Practice setting (in a polyclinic or privately). In addition the student will have to attend both Family Practice and Specialist clinic sessions.
Assessment
Pass/Fail

COURSE CODE: MEDC 6990
TITLE: Essential Health Research Skills
Description
This course will provide the basic skills and tools to enable students to develop and write a research proposal. The overall goal for this course is for students to understand and undertake the several steps involved in the process of researching, and writing a protocol for conducting a study in the area of health research using quantitative methods.
Assessment
Pass/Fail

COURSE CODE: MEDC 7000
TITLE: DM Accident & Emergency Medicine
Description
This programme is in two parts.
The Part I DM examination is designed to test the knowledge attitudes and skills of residents at the end of their second year of the DM programme. They must be able to apply basic science knowledge to clinical scenarios and show a proficiency in communication skills.
Candidates will be eligible to sit the Part II examination at least two years but not more than three years after successful completion of the Part I examination.
Assessment
Pass/Fail
COURSE CODE: DM 7010
TITLE: Internal Medicine

Description
The first Part is of one year’s duration. Provided the in-course assessments are satisfactory, the Part I examination is taken at the end of the first year. Admission to the second part depends on a satisfactory assessments and performance in Part I Examination. The second part is of one year’s duration. At the end of this year, provided the in-course assessments are satisfactory, the Part II Examination will be taken. Entry to the third part of the course will depend on a satisfactory performance in this examination.

The third part is of two years duration. It may include a period not exceeding one year, in the penultimate year only, spent as an elective, providing that approval has been obtained from the Faculty Committee for Graduate Studies and the Board for Graduate Studies and Research beforehand. Such approval must be obtained at least six months prior to the commencement of the elective period. The elective year may be spent in a hospital, which can provide the candidate with experience not readily available in the hospital to which he/she is employed.

Assessment
Pass/Fail

COURSE CODE: MEDC 7030
TITLE: DM Anaesthesia

Description
This programme has 3 parts. The first Part is of one year’s duration. Provided the in-course assessments are satisfactory, the Part I examination is taken at the end of the first year. Admission to the second part depends on a satisfactory assessments and performance in Part I Examination. The second part is of one year’s duration. At the end of this year, provided the in-course assessments are satisfactory, the Part II Examination will be taken. Entry to the third part of the course will depend on a satisfactory performance in this examination. The third part is of two years duration.

Assessment
Pass/Fail

COURSE CODE: MEDC 020
TITLE: DM Family Medicine

Description
The DM in Family Medicine is a four year programme which consists of three parts.

Part 1 will last 2 years, and on successful completion students are permitted to advance to while Part 2 which is of 1 year’s duration. Students will complete 12 modules during the first 2 years and 4 modules during the third year. The student is required to keep a portfolio containing all assignments and activities. Students advance to Part 3 on successful completion of Part 2.

Part 3 is of one year’s duration spent in an approved training area and includes the preparation of either: a project report; or a case book of twenty cases with commentaries.

Assessment
Pass/Fail

COURSE CODE: MEDC 00
TITLE: DM Psychiatry

Description
This programme consists of 4 parts. In the first part the students work as a psychiatric resident at an approved general hospital. Instruction is given in the Basic Medical Sciences (including Anatomy, Physiology) and in Neurology, Psychology and Psychiatry. Entry to the second part of the programme will depend on a satisfactory performance in the Part 1 examination. Part 2 lasts twelve months and instruction is given in the Basic Medical Sciences (including Anatomy, Physiology) and in Neurology, Psychology and Psychiatry. Entry to Part 3 of the programme will depend on a satisfactory performance in the Part 2 examination. At the end of the time period, students may submit a Case Book or Report. In Part 4, the student continues to work under supervision in an approved psychiatric service.

Assessment
Pass/Fail
COURSE CODE: MEDC 7050
TITLE: DM Paediatrics

Description
The DM Paediatrics programme is a four year graduate course with two parts to the course – Part 1 (years 1 and 2) and Part 2 (years 3 and 4). During the first two years of training, 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 issues 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 or case book and a six month elective period.

Assessment
Pass/Fail

COURSE CODE: MEDC 7060
TITLE: DM Surgery

Description
The programme consists of two parts. Teaching and training in teaching methods and research methodology/epidemiology are integral components of the programme. During the first part, are assigned to three monthly rotations in General Surgery and the surgical subspecialties. Provided that the in-course assessments are satisfactory, the Part I examination is taken at the end of two years. During part 2 students are assigned to general surgery rotations with increasing levels of responsibility.

Assessment
Pass/Fail

COURSE CODE: MEDC 7080
TITLE: DM Obstetrics & Gynaecology

Description
The course of study will be a minimum of four years from the date of entry and is divided into two parts. The first part is of one year’s duration and admission to the second part depends upon a satisfactory performance in the Part I Examination at the end of this period. The second part is of three years duration and may include a period of six months in a related discipline or in an approved research project provided that approval has been obtained from the Specialty Board beforehand.

Assessment
Pass/Fail

COURSE CODE: MEDC 7100
TITLE: MPhil Medical Microbiology Thesis

Description
Students produce a thesis of approximately 50,000 words under the supervision of a member of Faculty.

Assessment
Pass/Fail
COURSE CODE: MEDC 8100  
TITLE: PhD Medical Microbiology Thesis  
**Description**  
Students produce a thesis of approximately 80,000 words under the supervision of a member of Faculty.  

**Assessment**  
Pass/Fail

COURSE CODE: PBHE 6000  
TITLE: Health Education I  
CREDITS: 3  
**Description**  
This course 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.  

**Assessment**  
40% Coursework, 60% Final Examination

COURSE CODE: PBHE 6001  
TITLE: Introduction to Public Health  
CREDITS: 1  
**Description**  
This course covers: Why and what is PH? Discuss justification for existence of public or population health. The iceberg phenomena. The common denominator or reference in Public Health is the community. Public Health entails determining; what are the community needs (what, who, where, when, why)? Which services meet those needs? Who needs those services? Who will deliver the services, when, how often, at what cost and whose cost? What proportion of the community must be covered for the service to be effective (preventive)? Who will deliver the services and at what level of training and with what technology? How costly, safe, risky, effective, beneficial is the service? What is the support structure for service delivery; administrative organisation: policy, assessment, analysis, planning, implementation, monitoring, evaluation enforcement; resources (personnel, money, materials, technology and time)? Community approach: What level of community participation, involvement, and empowerment is needed for the service to be successful?  

**Assessment**  
Pass/Fail based on satisfactory attendance

COURSE CODE: PBHE 6010  
TITLE: Health Education II  
CREDITS: 2  
**Description**  
This course 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.  

**Assessment**  
TBA

COURSE CODE: PBHE 6030  
TITLE: Issues in Health Education and Health Promotion  
CREDITS: 2  
**Description**  
In this course students examine 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.  

**Assessment**  
TBA

COURSE CODE: PBHE 6050  
TITLE: Health Economics  
CREDITS: 3  
**Description**  
This course serves as a basic introduction to key concepts and methodology to understand the application of health economics in the management of health services. Health Economics I and II; Commissioning and contracting for health gain; Managing fixed assets; Financial management  

**Assessment**  
TBA
COURSE CODE: PBHE 6100
TITLE: Biostatistics
CREDITS: 3

Description
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.

Assessment
40% Coursework, 60% Final Examination

COURSE CODE: PBHE 6210
TITLE: Epidemiology II
CREDITS: 2

Description
This course 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.

Assessment
100% Final Examination

COURSE CODE: PBHE 6145
TITLE: Work-related Assignment
CREDITS: 8

Description
A major part of the diploma will be a supervised workplace-based assignment, during which the student will be required to demonstrate the capacity to apply the knowledge, concepts and practices acquired throughout the programme. Commitment to this process will be required as part of the application and admission process to the programme, certified by the prospective students employing organisation and by the individuals immediate manager. The assignment will be agreed with the employer and the student will be supervised for the duration of the assignment period by a University appointed mentor/supervisor.

Assessment
100% Coursework

COURSE CODE: PBHE 6220
TITLE: Chronic Diseases Epidemiology
CREDITS: 2

Description
This course provides insight into Chronic Non-Communicable Diseases (CNCDs) and their trends and importance. Causative and known risk factors associated with CNCDs are discussed; and approaches for chronic non-communicable disease reduction and control are critically examined. Following a general overview of chronic non-communicable diseases there is subsequent focus on hypertension and heart diseases, diabetes mellitus, cancer, tobacco and alcohol-related diseases. The issue of adult disabilities is also broached. The increasing prevalence of these diseases, and the public health implications and challenges, are discussed within the context of the epidemiological transition.

Assessment
TBA

COURSE CODE: PBHE 6200
TITLE: Epidemiology I
CREDITS: 2

Description
This course 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, measures of disease frequency, investigation of outbreaks, disease surveillance, aspects of community health analysis, rates and ratios, introductory demography.

Assessment
100% Final Examination

COURSE CODE: PBHE 6230
TITLE: Infectious Epidemiology
CREDITS: 2

Description
This course describes and outlines principles of prevention and control of communicable 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. It delineates approaches for chronic non-communicable disease reduction and control.

Assessment
TBA
COURSE CODE: PBHE 6300
TITLE: Family Health I
CREDITS: 2

Description
This course aims to assist students to gain more in-depth knowledge of Maternal and Child Health/Family Health: the concepts, content, approach to practice, especially in Caribbean situations, which will enable them to develop and demonstrate attitudes and skills necessary in providing more efficient and effective care for the family”.

Assessment
TBA

COURSE CODE: PBHE 6350
TITLE: Communication
CREDITS: 2

Description
This course 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.

Assessment
TBA

COURSE CODE: PBHE 6410
TITLE: Health Management II
CREDITS: 3

Description
This course deals with systems reforms and modernization both at international and local levels: International developments in health management, financing and reform; Health Sector reform in Barbados; Management of Challenges; Change Management; Quality of Health Services.

Assessment
TBA

COURSE CODE: PBHE 6420
TITLE: Health Management III
CREDITS: 3

Description
This course will focus on resources to manage, particularly human resources, which form the biggest and most valuable asset of the health sector. It covers Human Resources Management; Managing Teams; Managing Self; Leadership; Performance Management.

Assessment
100% Coursework

COURSE CODE: PBHE 6430
TITLE: Health Management IV
CREDITS: 3

Description
This course has to do primarily with communication; with information, IT systems and intelligence. It includes: Managing information and IT Systems; Managing communications; Managing across boundaries; Evidence-based Health Care.

Assessment
75% Coursework; 25% Final Examination
COURSE CODE: PBHE 00  
TITLE: Primary Health Care  
CREDITS: 2  

Description  
This course reviews and discusses Alma Ata, from a health sector perspective. It 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.

Assessment  
TBA

COURSE CODE: PBHE 6600  
TITLE: Environmental Health  
CREDITS: 2  

Description  
This course 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 is included.

Assessment  
100% Final Examination

COURSE CODE: PBHE 00  
TITLE: Disaster Management  
CREDITS: 2  

Description  
This course 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.

Assessment  
TBA

COURSE CODE: PBHE 6800  
TITLE: Disaster Management  
CREDITS: 2  

Description  
This course 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.

Assessment  
TBA

COURSE CODE: PBHE 6600  
TITLE: Environmental Health  
CREDITS: 2  

Description  
This course 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 is included.

Assessment  
100% Final Examination

COURSE CODE: PBHE 6800  
TITLE: Disaster Management  
CREDITS: 2  

Description  
This course 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.

Assessment  
TBA

COURSE CODE: PBHE 6600  
TITLE: Environmental Health  
CREDITS: 2  

Description  
This course 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 is included.

Assessment  
100% Final Examination

COURSE CODE: PBHE 6900  
TITLE: Research Methodology  
CREDITS: 2  

Description  
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 Promotion track must have a Health Promotion slant and include qualitative methods.

Assessment  
100% Coursework

COURSE CODE: PBHE 6700  
TITLE: Community Mental Health  
CREDITS: 2  

Description  
This course covers the concepts and principles related to mental health, the organization and the delivery of relevant services and the 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.

Assessment  
TBA

COURSE CODE: PBHE 6800  
TITLE: Disaster Management  
CREDITS: 2  

Description  
This course 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.

Assessment  
TBA

COURSE CODE: PBHE 6600  
TITLE: Environmental Health  
CREDITS: 2  

Description  
This course 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 is included.

Assessment  
100% Final Examination

COURSE CODE: PBHE 6800  
TITLE: Disaster Management  
CREDITS: 2  

Description  
This course 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.

Assessment  
TBA

COURSE CODE: PBHE 6600  
TITLE: Environmental Health  
CREDITS: 2  

Description  
This course 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 is included.

Assessment  
100% Final Examination

COURSE CODE: PBHE 6800  
TITLE: Disaster Management  
CREDITS: 2  

Description  
This course 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.

Assessment  
TBA

COURSE CODE: PBHE 6600  
TITLE: Environmental Health  
CREDITS: 2  

Description  
This course 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 is included.

Assessment  
100% Final Examination

COURSE CODE: PBHE 6800  
TITLE: Disaster Management  
CREDITS: 2  

Description  
This course 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.

Assessment  
TBA
COURSE CODE: PBHE 6910  
TITLE: Qualitative Research Processes  
CREDITS: 2

Description
This course 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.

Assessment
100% Coursework

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COURSE CODE: PBHE 6920  
TITLE: Field Placement/ Practicum  
CREDITS: 3

Description
In this course participants undertake an internship in an assigned organization determined by the opportunity available in such organization to offer Management training. Interns are expected to engage in activities to demonstrate competence in a minimum of three of the graduate competencies targeted in the training. This will culminate with presentations by students in which field experiences will be shared with a panel of examiners.

Assessment
100% Coursework

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COURSE CODE: PBHE 6990  
TITLE: Research Project  
CREDITS: 4

Description
The final project is a written submission authored entirely by the candidate and based on his/her work, but related to the topics covered at the course.

Students should, in their choice of reports, aim to demonstrate some of the breadth of their training as well as their ability to produce a concise, but informative written report demonstrating the nature and quality of their work in the Health Service, particularly that related to public health, epidemiology, health promotion and education, or to the management of health services.

The project may take the form of a structured scientific paper (for which the appropriate format should be used), or a report of a major work concerning assessment, planning, impact, evaluation, or audit. Scientific papers can be based on original, primary research, or it could be based on secondary research such as an overview or systematic review of an aspect of health care (meta-analysis of treatment, effectiveness of interventions, economical analyses). Planning projects can include aspects and reports based on health needs assessments, health impact assessments of services or interventions, amongst others.

Assessment
100% Coursework

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Below are the new courses referred to in your amendment document

COURSE CODE: XXX  
TITLE: Behavioural Science  
CREDITS: X

Description
TBA

Assessment
TBA

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COURSE CODE: XXX  
TITLE: Biological basis of disease  
CREDITS: X

Description
TBA

Assessment
TBA