

SCHOOL OF MEDICINE

BACHELOR OF MEDICINE, BACHELOR OF SURGERY (MBBS)/ BACHELOR OF MEDICAL SCIENCES (B.MED.SCI.)

REGULATIONS

1. Qualifications for Admission

Applications for entry into the MBBS/ BMedSci programmes will only be considered if applicants have met the following criteria:

- Must have normally attained the age of eighteen (18) years at the commencement of the academic year of entry; satisfied the University's matriculation requirements for entry into a degree programme;

2. Entry Requirements

2.1 Academic Requirements

- (a) Passes in at least five (5) subjects at CXC(CSEC) General Proficiency (Grades I or II and from 1998 Grade III) or GCE O-levels, or approved equivalents, which must include English Language and Mathematics

(b) **SCHEME A (Valid for entry up to 2009/2010 academic year)**

- Passes in two (2) units of Chemistry, Biology or Zoology, and Physics at CAPE or GCE A-level equivalent
- Pass in CSEC (CXC) General Proficiency or GCE O-level Mathematics is also required

(c) **SCHEME B (Valid for entry up to 2009/2010 academic year)**

- Passes in two (2) units of Chemistry, Biology or Zoology, and Mathematics at CAPE or GCE A-level equivalent
- Pass in CSEC (CXC) General Proficiency or GCE O-level Physics is also required

(d) **SCHEME C (Valid for entry up to 2009/2010 academic year)**

- Passes in both units of Chemistry, Physics, and Mathematics at CAPE or GCE A-level equivalent
- Pass in CSEC (CXC) General Proficiency or GCE O-level Biology is also required
- **Note:**
A pass in any other subject at A-level may be substituted for Mathematics or Physics in any of the above schemes, providing that the subject substituted has been passed at the GCE O-level or CSEC (CXC) level.

(e) **SCHEME D (Effective 2010/2011 academic year)**

- Passes in both units of Chemistry, Biology and one (1) other subject at CAPE or GCE A-level equivalent.

- (f) **Students currently studying at UWI in the Faculty of Pure and Applied Sciences (Cave Hill), the Faculty of Pure and Applied Sciences (Mona) or the Faculty of Science and Agriculture (St. Augustine) seeking to be transferred to the MB BS and BMedSci Programmes shall only be considered from the Preliminary and/or Introductory level courses. All such students must complete and submit a Transfer Form by the end of the second week of January in the calendar year of proposed entry.**

- (g) Applicants holding UWI first degrees in the Natural Sciences with a minimum of lower second class honours, may be considered for entry.

- (h) Applicants holding professional degrees in allied health disciplines may also be considered for entry provided that they have attained a minimum average grade of B or grade point of 3.0 in the appropriate science subjects during their degree programme or Grade 3 passes in Biology/Zoology and Chemistry at Units 1&2 CAPE or A-level equivalent.

- (i) Applicants from the Pre-Health Professional programme may also be considered for entry provided that they have attained a minimum average grade of B or grade point average of 3.0 in the appropriate science subjects.

- (j) Applicants holding degrees other than degrees in the natural sciences may also be considered provided that they have attained a minimum average grade of B+ or grade point of 3.3 in the appropriate science subjects during their university programme, or Grade 3 passes in Biology/Zoology and Chemistry at Units 1&2 CAPE or A-Level equivalent.

- (k) Applicants with first degrees from institutions other than the UWI shall also be eligible provided that:
- The programme of study has been accredited by a relevant body or agency and is considered acceptable by the UWI
 - Credits have been obtained in Biology/Zoology and Chemistry
 - A minimum grade point average of 3.0 or its equivalent has been obtained
- (l) A triple major Associate degree from the Barbados Community College with a GPA greater than 3.5 may also be considered.

2.2 NON-ACADEMIC CONSIDERATIONS

- (a) All applicants are required to submit a short 250 - 300 word autobiographical summary outlining the reasons for their career choice.
- (b) An applicant's chances of entry will be enhanced by documented and certified involvement in extracurricular activities in the years prior to his/her application.
- (c) Each activity should be listed on the application form and must be accompanied by original letters of certification from principals, supervisors or employers for each activity.
- (d) Both the duration of involvement and the level of responsibility of the applicant in each activity shall be taken into consideration and certifying documents must state these clearly.
- (e) In considering these activities, the University places emphasis on applicant's voluntary participation in community/social projects although consideration shall also be given to other extracurricular activities, experiences and abilities (such as music, sports, drama, and debating or proficiency in a foreign language).
- (f) Applicants may also be required to attend an interview.

- 3 PROGRAMME OF STUDY**
- 3.1 The programme of study for the MB BS and BMedSci degrees shall last not less than ten (10) semesters and consists of:
- a. MB BS Phase I and BMedSci – Five and a half (5 1/2) semesters
 - b. MB BS Phase II - Four and a half (4 1/2) semesters.

- 3.2 MB BS Phase I and BMedSci comprise Phases IA, IB and IC.
- 3.3 Candidates who successfully complete Phase I will be awarded the Bachelor of Medical Sciences Degree (BMedSci).

4. MB BS PHASE I AND BMEDSCI PROGRAMMES (BASIC HEALTH SCIENCES)

- 4.1 The following disciplines will be covered during the courses: Anatomy, Biochemistry, Physiology, Pharmacology, Pathology, Microbiology, Public/Community Health, Behavioural Sciences and Sociology of Health.
- 4.2 Courses will be presented by the use of a problem-based method, emphasising student-centred learning. PBL attendance is mandatory. All students will follow a course in Skills Training which will focus on interviewing and basic clinical examination techniques, as well as a variety of motor skills.
- 4.3 During the first semester of Year 1, MB BS Phase I and BMedSci, the following courses will be offered on a systemic basis in Problem Based Learning (PBL):
- MDSC1001 (Environment and Health); MDSC1002 (Basic Para-clinical Sciences).
- 4.4 During the second semester MDSC1101 (Digestion & Metabolism); MDSC1102 (Cardiovascular & Renal) will be taught.
- 4.5 During Year 2 Semester 1, students will continue to follow courses MDSC2001 (Respiration) and MDSC2002 (Neurosciences & Behaviour).
- 4.6 During Year 2 Semester 2, students will follow courses in MDSC2101 (Endocrine & Reproduction) and MDSC2102 (Muscles, Bones and Joints).
- 4.7 During Year 3, students will follow MDSC3310 (Applied Paraclinical Sciences I) and MDSC 3310 (Applied Paraclinical Sciences II)
- 4.8 During Year 3 Semester 2, students will follow MDSC 3312 (Applied Paraclinical Sciences III) and MDSC 3313 (Integrated Paraclinical Sciences)

- 4.9 All students will be required to follow and MUST pass examinations for foundation courses in Communication Skills for Health Personnel and Professions (COMS1001 & COMS1002, and Either FOUN1101– Caribbean Civilisation or FOUN1301 – Law, Governance, Economy and Society, approved by the University.
- 4.10 All Foundations courses must be completed in Phase I of the MBBS programme and no student will be allowed to graduate with a BMedSci degree until all requirements are satisfied.
- 4.11 No student will be allowed to graduate with the BMedSci degree of until (s)he has passed the examinations in these courses.
- 5. EXAMINATIONS**
- 5.0 Grade Point Average (GPA) will be in effect for All students entering the Faculty from 2007/2008 academic year.
- 5.1 Effective from 2008/2009 viva voce examinations will not be part of the examination process.
- 5.2 Effective 2007/2008 academic year, candidates entering the MBBS and BMedSci programmes shall normally be required to maintain a GPA of 2.0 or above.
- 5.3 A student shall not be allowed to present for any one part or section of an examination unless (s)he attended all of the required coursework tests and written practical examinations in that part.
- 5.4 A student repeating an examination may be credited by the Board of Examiners with the coursework marks where applicable for a period not exceeding 18 months.
- 5.5 The Board of Examiners may recommend referral for up to one year where the poor overall performance of the student warrants this action.
- 5.6 A student may be credited with the part(s) of the examination in which (s)he has satisfied the examiners for a period not exceeding eighteen (18) months.
- 5.7 The Faculty may require a student who has not passed a Phase examination after the minimum time for completion of that Phase to withdraw from the Faculty.
- 5.8 Successful completion of a Phase IA or IB as the case may be, must be achieved before proceeding to Phase IB or IC as the case may be, unless the Board of Examiners agrees otherwise.
6. **MB BS PHASE I AND BMEDSCI - ASSESSMENT AND EXAMINATIONS**
- 6.1 The courses that make up the MB BS Phase I and BMedSci Programme are assigned a credit value and are assessed by a combination of coursework, written and practical examinations.
- 6.2 Final examinations will be given at the end of each of the courses offered in Phase 1A: MDSC1001, MDSC1002, MDSC1101 and MDSC1102.
- 6.3 Final examinations will be given at the end of each of the courses offered in Phase IB: MDSC2001, MDSC2002, MDSC2101, and MDSC2102.
- 6.4 Phase IA & Phase IB final examinations will be conducted in December and May.
- 6.5 Final examination will be scheduled at the end of the courses offered in Phase IC: MDSC3310, MDSC3311, MDSC3312, MDSC3313 in December and March each year.
- 6.6 Examinations may consist of written papers, which may include essays, multiple choice questions and practicals.
- 6.7 The OSCE (Objective Structured Clinical Examination) in Skills Training (MDSC3280) will be held during Semester 2 of Year 3.
- 6.8 Students who fail the OSCE on the first attempt may be allowed by the Board of Examiners to resit the examination before the beginning of the following academic year.
- 6.9 A student who fails to achieve the passing grade in a Phase IA or IB or IC course (50%; quality point 2.0) at the first attempt will be required to re-sit the final examination in that course the re-sit examination will be held during the month of August.
- 6.10 A student who fails to achieve a passing grade in all Phase IA or IB courses at the second attempt will be required to repeat the failed courses in the following year and sit the examination respective end-of-semester examination.
- 6.11 A student who fails to achieve the passing grade in the Phase IC examination at the second attempt will be required to repeat the whole year and to sit the final examination held in March.
- 6.12 A student who repeats and passes a course following any failed attempt shall be assigned a maximum grade of C (quality point 2.0) for the successful result.

6.13 A student who fails at his/her third attempt will normally be required by Academic Board, acting on the recommendation of the Board of Examiners, to withdraw from the Faculty.

7. Grading Scheme

7.1 Grading Scheme for MBBS and BMedSci degrees
Effective from 2007/2008 academic year the grading scheme shown in Table below will apply to the MBBS and BMedSci programmes

7.2 Categories of Degree:

Category of Degree	Description	Grade Point Average
Honours Degree with Distinction	Demonstrates an outstanding and comprehensive grasp of the knowledge, skills and competencies required.	3.7 and above
Honours Degree	Demonstrates an excellent grasp of the knowledge, skills and competencies required.	3.3 – 3.6
Pass	Demonstrates a satisfactory grasp of the knowledge, skills and competencies required.	2.0 – 3.2

7.3 A candidate will not be awarded the BMedSci degree with Honours or Distinction unless he/she passes all Phase I examinations at the first attempt.

11. Internship

11.1 In the School of Medicine, upon the successful attainment of the MB BS degree, graduands are required to follow an Internship Programme consisting of clinical rotations for a period of twelve (12) months (effective from Class of 2004) prior to certification by the Medical Council as being eligible for registration to practise medicine.

CURRICULUM

OBJECTIVES OF THE MB BS PROGRAMME

It is expected that on completion of the MB BS programme, the graduates will have attained knowledge, attitudes, and skills as described in the following five areas:

I. Basic Medical Sciences

- obtain basic information on body systems;
- acquire a scientific approach for actions from hypotheses, which lead to self-directed learning, as well as prognosis, diagnosis, and therapy with respect to medical conditions in both sexes;
- process information on normal and abnormal function in molecular, somatic, biological, mental, and social structure and function in deriving diagnosis;
- utilise information technology for information management in medical education.

II. Clinical and therapeutic methods, procedures, and investigations

- demonstrate competence in the management of medical emergencies including first aid and perform simple clinical procedures;
- assess the health status of individuals and groups through observation and data collection from sources including the medical history, clinical examinations, laboratory investigations, and significant others within the dynamics of patients' relationships;
- engage in medical problem-solving process in order to derive a clinical diagnosis;
- prepare and/or implement a plan of patient management and care including appropriate referral.

III. Community Health and Family Medicine

- demonstrate sensitivity and respect for the rights of individuals and groups in a multicultural society;
- maintain effective doctor-patient relationships especially those involving patient education;
- collaborate with individuals and communities in identifying and achieving defined health goals;
- utilise epidemiological data, and cultural determinants of health in appraising the level of wellness, illness and health in a society;
- apply the principles of epidemiology and public health and an awareness of the social impact of illness to the practice of medicine in the community.

IV. Communication Skills

- communicate effectively with patients, families, and other members of the healthcare team;
- prepare clear and concise records, reports, letters of referral and other patient related documents.

V. Professional competence

- knowledge of the healthcare system and ethical/ legal issues, socio-economic conditions that impact on the provision of care;
- critically appraise the published scientific literature;
- keep abreast of social, medical, and technological advances through participation in continuing medical education and research;
- practice medicine within the ambit of professional medical ethics and the law;
- maintain quality assurance initiatives;
- function as a member of the healthcare team.

Specific Objectives

Integrated Basic Medical Sciences

- To acquire a scientific approach to decisions for diagnosis, therapy, and prognosis on health conditions;
- To apply relevant knowledge from the biomedical and behavioural sciences to the care of individuals, families, and groups in the community and hospital settings;
- To utilise informatics in the management of medical information as well as office practice;
- To differentiate normal and abnormal structure and function in biomedical, somatic and mental operations of the human body system, male and female, throughout the life cycle;
- To recognise the progression in the disorder of human function because of the biology of disease.

Communications

- To prepare clear and concise records, reports, letters of referral and other patient-related documents;
- To communicate effectively with patients' families, and other members of the health care team;
- To conduct patient education especially in areas of child health and chronic diseases;
- To enhance the doctor-patient relationship through effective communication skills;
- To engage in referral and consultation with other members of the health care team to the benefit of the patient.

Family and Communication

- To empower individuals, families, and communities to develop self-reliance regarding their own health care;
- To plan and/or engage in health promotion activities aimed at promoting healthy lifestyles in individuals and communities;
- To collaborate with individuals and communities in identifying and achieving defined health goals;
- To prepare a family study report based on activities performed in the Community Health Outreach Programme;
- To apply the principles of public health and epidemiology with an awareness of the social impact of illness on the practice of medicine in the community;
- To demonstrate sensitivity and respect for the rights of individuals and groups;
- To appraise critically the folk tradition's alternative therapies related to the health that exists within a community.

Clinical Methods and Procedures

- To demonstrate competence in the initial management of medical emergencies, especially as a first responder;
- To engage in effective medical problem-solving and clinical diagnosis;
- To assess the health status of individuals and groups through observation and data collection by way of – medical history, clinical examination and laboratory findings;
- To perform simple clinical procedures;
- To prepare to implement a management plan including appropriate referral;
- To involve the patient and family in the plan for care and utilise cultural determinants of health in assessing the health and wellness status of communities;
- To prescribe therapeutic methods on the basis of appropriate investigative procedures;
- To recognise the role of nutrition in maintaining wellness, prescribing diet therapies where they are relevant.

Professional Competence

- To participate in health care research;
- To practise medicine within the ambit of professional medical ethics and the law;
- To keep abreast of social, medical, and technological advances through participation in continuing medical education;
- To critically appraise the published scientific literature;
- To be accountable for professional and personal actions in the care of patients;
- To participate willingly in the training of other health care workers;
- To evaluate the results of treatment procedures and to follow up with appropriate feedback;
- To function harmoniously and constructively as a member of the multi-disciplinary team within the health sector and between the health sector and other sectors of the society;
- To participate in planning, organising, directing and evaluating health care;
- To engage in quality assurance initiatives;
- To prescribe health care with a consciousness of the socio-economic conditions among individuals and communities.

PHASE I PROGRAMME

BASIC HEALTH SCIENCES

Basic Health Sciences courses include Anatomy, Physiology, Biochemistry, Pathology, Pharmacology and Community Health as far as they can all be integrated into a holistic programme. In Anatomy, gross anatomy, radiological and surface anatomy, and neuroanatomy are incorporated. The courses are delivered through blocks or modules (coded as MDSC1001 and MDSC1002; MDSC1101 and MDSC1102; MDSC2001 and MDSC2002; MDSC2101 and MDSC2102; MDSC 3310 and MDSC 3311; MDSC 3312 and MDSC 3313) over five (5) semesters. Information will be acquired through large group lectures, laboratory demonstrations, Problem Based Learning sessions, students' self-directed study, training in the skills laboratory, as well as through the medium of integrated clinical presentations. The courses are arranged on an organ system approach and facilitate the integration of basic medical sciences with clinical sciences.

COURSE LISTING

Level	Semester	Course Code	Course Title
1	1	MDSC1001	Environment and Health
		MDSC1002	Basic Para-Clinical Sciences
2	2	MDSC1101	Digestion and Metabolism
		MDSC1102	Cardiovascular and Renal
	1	MDSC2001	Respiration
		MDSC2002	Neurosciences and Behaviour
3	2	MDSC2101	Endocrine and Reproduction
		MDSC2102	Muscles, Bones and Joints
	1	MDSC 3310	Applied Paraclinical Sciences I
		MDSC 3311	Applied Paraclinical Sciences II
		MDSC 3312	Applied Paraclinical Sciences III
	2	MDSC 3313	Integrated Paraclinical Sciences

COURSE DESCRIPTIONS

LEVEL: 1

SEMESTER: 1

COURSE CODE: MDSC 1001

COURSE TITLE: ENVIRONMENT AND HEALTH

NUMBER OF CREDITS: 9

PREREQUISITES: NONE

CO-REQUISITES: NONE

COURSE DESCRIPTION: This foundation course is a prerequisite to all the other courses in the Basic Health Sciences Course; it is designed to meet the requirements of basic knowledge of the Basic Health Sciences curriculum. The eukaryotic cells that form multicellular animals and plants are complex interdependent entities, which live in communities and exhibit varying degrees of specialisation. The elaboration of multicellular organisms has selective advantages by affording an increase in size and the range of specialisation for movement, sensory detection, homeostatic control, communication, and social organisation. These innovations enable eukaryotic organisms to compete, propagate, and survive in more complex ways in diverse environments. Students will be required to cover the study of eukaryotic cells, the anatomy of various cell types, tissues, and organs, and the biochemistry, physiology, pathology, and pharmacology of normal and disease states. Of importance, is that students appraise the ways in which organisms cope with changes in the external environment and preserve constancy of the internal environment. Concepts of health, illness and disease, and epidemiology will be highlighted.

LEVEL: 1

SEMESTER: 1

COURSE CODE: MDSC 1002

COURSE TITLE: BASIC PARA-CLINICAL SCIENCES

NUMBER OF CREDITS: 6

PREREQUISITES: NONE

CO-REQUISITES: NONE

COURSE DESCRIPTION: During this course, students will be required to describe the structure and function of the haematopoietic and immune systems. The morphological and physiological changes in cells and tissues in response to disease will be covered. The structure and pathogenic mechanisms of microbes associated human and animal disease will be delivered.

The students will be required to describe the approaches to the laboratory diagnosis of disease. The Health Field concepts with biological, environmental and social determinants of health will be highlighted. In addition, the health care delivery system will be appraised with an emphasis on ethical issues and the role of the caregiver.

LEVEL: 1

SEMESTER: 2

COURSE CODE: MDSC 1101 VETM 1103

COURSE TITLE: DIGESTION AND METABOLISM

NUMBER OF CREDITS: 7

PREREQUISITES: NONE

CO-REQUISITES: NONE

COURSE DESCRIPTION: The purpose of this course is to enable students to acquire knowledge and develop in-depth understanding in the areas of Nutrition, Metabolism, Public Health medicine and Pharmacology.

- In Nutrition, students cover the essentials of good nutrition and the metabolic requirements at all stages of the life cycle, the role of various components of the diet and their effects on blood chemistry and nutrition related diseases in the Caribbean. The assessment of nutritional status, nutritional elements, important for the formation of healthy dentition and environmental factors that impact on nutrition, as well as the concepts of malnutrition including obesity are covered.
- In Digestion and Absorption, the basic science concepts related to the Anatomy, Histology, Embryology, Physiology and Biochemistry of mastication, deglutition and digestion; the basic electrical and mechanical properties of smooth muscle in the wall of the gastrointestinal GI tract, the coordination of motor patterns of the oesophagus, stomach and the intestines, including the reflexes which govern vomiting and defaecation will be incorporated as well as the disturbances of the above patterns, e.g. those that can occur after surgery. New concepts on the role of gut hormones on GI function will be included.
- In Metabolism, protein, fat, carbohydrate and mineral metabolism (including the role of the liver in these processes) will be discussed.
- The theme in the Public Health component of this course is "Digestion through the Ages. The student will be introduced to the clinical application of the knowledge gained in Anatomy, Physiology and Biochemistry to nutritional issues in pregnancy, child health, adolescence and the elderly. Emphasis in the elderly will focus on chronic diseases such as coronary artery diseases, hypertension and diabetes.
- In Pharmacology, the use of drug therapy in acid related disorders, parasite infestation, drug therapy of constipation, vomiting, diarrhea and other gastrointestinal infections will be described.

LEVEL: 1
SEMESTER: 2
COURSE CODE: MDSC1102 VETM 1104
COURSE TITLE: CARDIOVASCULAR AND RENAL
NUMBER OF CREDITS: 11
PREREQUISITES: NONE
CO-REQUISITES: NONE

COURSE DESCRIPTION: This course covers the gross anatomy, histology and embryology of the heart. It also covers the embryology, gross and microscopic anatomy of the blood vessels, the lymphatics, the kidney and the urinary tract. The mechanisms and regulation of cardiac and renal functions, blood pressure, and lipid transport, the body fluid compartments and acid-base balance and risk factors for cardiac disease are also incorporated into the course. The thoracic cavity and the mediastinum will also be studied.

The course includes laboratory sessions on the above areas, including cardiovascular evaluation by ECG recording and autonomic control of the cardiovascular system. The separation of blood lipids using chromatography and the determination of cholesterol and ATP synthesis and action are also incorporated into the practical sessions. The biochemistry of lipids and lipoproteins will also be covered in this course.

Skills training sessions on history taking and physical examination of the cardiovascular and the renal systems will also be conducted during the course.

LEVEL: 2
SEMESTER: 1
COURSE CODE: MDSC2001
COURSE TITLE: RESPIRATION
NUMBER OF CREDITS: 7
PREREQUISITES:
CO-REQUISITES:

COURSE DESCRIPTION: This course on human respiration, is of five weeks duration. Although there is a stronger emphasis on Physiology, through its concepts and principles, the other pre-clinical disciplines of Anatomy and Biochemistry play an important role in this integrated course. Public Health and Primary Care concerns, including respiratory insults occasioned both by domestic and industrial factors, their impact on the human respiratory system and current management strategies will also be addressed. The disciplines of Pathology & Microbiology and Pharmacology are included insofar as they facilitate holistic learning.

The course is delivered predominantly through Problem Based Learning (PBL) sessions, but also comprises core lectures and laboratory exercises. End of course and end assessment may encompass all of the foregoing modalities.

LEVEL: 2
SEMESTER: 1
COURSE CODE: MDSC2002
COURSE TITLE: NEUROSCIENCES AND BEHAVIOUR
NUMBER OF CREDITS: 11
PREREQUISITES:
CO-REQUISITES:

COURSE DESCRIPTION: Processes within the Central Nervous System (CNS) all work together to facilitate perception, memory, and man's ability to learn, in addition to the control of vegetative functions and the coordination of muscle activity as man interacts with others and the environment. Dysfunction in the CNS accounts for many abnormal states, both psychiatric and neurological. This course endeavours to facilitate learning on how the nervous system functions, and the rationale for treatment of its dysfunction. The development, structure, and function of the CNS will be covered. The way in which heredity and environment affect development or mal-development of the individual and the family will also be appraised. Attention will be given to various neural pathways involved in autonomic activity, the regulation of various biological rhythms, and sensory perceptions. The use of knowledge of functional localisation in the CNS to establish pathological states will be explored. The concept of cerebral circulation and the control of cerebral blood flow in normal and disease states will be described along with the ways in which neoplasms and the infective and toxic agents affect nervous tissue.

LEVEL: 2
SEMESTER: 2
COURSE CODE: MDSC2101
COURSE TITLE: ENDOCRINE AND REPRODUCTION
NUMBER OF CREDITS: 8
PREREQUISITES:
CO-REQUISITES:

COURSE DESCRIPTION: This course highlights the homeostatic control of the human body by the endocrine system, which is composed of ductless glands distributed in a variety of tissues throughout the body. The secretory products (hormones) of these glands are generally transported by the blood's vascular system to remote sites of action. Students will be introduced to the anatomy of the hypothalamic – pituitary axis and the histology of the various endocrine glands, the mechanism of action of hormones and the regulation of metabolism and other biochemical and physiological processes by hormones and the concept of receptors in signal reception and transduction, and their mode of action. In addition, the role of hormones in negative and positive feedback control of human reproductive systems will illustrate the inextricable link between the gonads (testes and ovaries), and the hypothalamic – pituitary axis. The relationship between the endocrine and nervous system will also be discussed and various pathologies involving defects in receptors or at various post-receptor points in the cell-signalling pathway will also be presented.

LEVEL: 2

SEMESTER: 2

COURSE CODE: MDSC2102

COURSE TITLE: MUSCLES, BONES, AND JOINTS

NUMBER OF CREDITS: 10

PREREQUISITES:

CO-REQUISITES:

COURSE DESCRIPTION: This course is of seven (7) weeks duration. Students will be exposed to the integrated teaching of three pre-clinical disciplines- Anatomy, Biochemistry and Physiology, which will enable them to acquire knowledge and understanding of the functional morphology of the human loco-motor apparatus.

Emphasis will be given to the study of gross and microscopic anatomy and the embryology of muscles, bones and joints comprising the musculo-skeletal system. An interpretation of radiological images of bones and joints, the functional tests of the principle muscles, the physiological and molecular basis of muscle contraction and the energy sources used in the functioning of various types of muscle cells, the effect of hormones, vitamins and other factors on muscles, bones and joints are among important objectives for this course.

The most common lesions of bones, joints and muscles, the principles of myography, the drugs that act primarily on bones, skeletal muscles and neuromuscular junctions and their clinical and applied aspects are also included with the objectives in Pathology and Pharmacology, since they facilitate learning in a holistic manner. The course is delivered through PBL sessions and large group exercises, including lectures, labs and basic science demonstrations.

LEVEL: 3

SEMESTER: 1

COURSE CODE: MDSC 3310

COURSE TITLE: APPLIED PARACLINICAL SCIENCES I

NUMBER OF CREDITS: ?

PREREQUISITES:

CO-REQUISITES:

COURSE DESCRIPTION: Cardio-respiratory; Haematology; Virology.

LEVEL: 3

SEMESTER: 1

COURSE CODE: MDSC 3311

COURSE TITLE: APPLIED PARACLINICAL SCIENCES I

NUMBER OF CREDITS: 5

PREREQUISITES:

CO-REQUISITES:

COURSE DESCRIPTION: The seven (7) week course covers the aetiology, patho-physiology/pathogenesis, clinical features, laboratory diagnosis, treatment and management and prevention and primary care of diseases of Cardio-Vascular and Respiratory systems. In addition the course also covers specified areas of Haematology, Immunology and other disciplines of para-clinical sciences.

LEVEL: 3

SEMESTER: 1

COURSE CODE: MDSC 3312

COURSE TITLE: APPLIED PARACLINICAL SCIENCES II

NUMBER OF CREDITS: 5

COURSE DESCRIPTION: The seven (7) week course covers the aetiology, patho-physiology/pathogenesis, clinical features, laboratory diagnosis, treatment and management and prevention and primary care of diseases of gastrointestinal and hepatobiliary system (including pancreas and diabetes Mellitus) and genito-urinary Systems. In addition the course also covers specified areas of haematology, immunology, and other disciplines of para-clinical sciences.

LEVEL: 3

SEMESTER: 2

COURSE CODE: MDSC 3313

COURSE TITLE: APPLIED PARACLINICAL SCIENCES III

NUMBER OF CREDITS: 4

COURSE DESCRIPTION: The seven (7) week course covers the aetiology, patho-physiology/pathogenesis, clinical features, laboratory diagnosis, treatment and management and prevention and primary care of diseases of the endocrine organs, nervous system, musculo-skeletal system, haemato-oncology and the integument. In addition the course also covers specified areas of Immunology and other disciplines of para-clinical sciences.

LEVEL: 3

SEMESTER: 2

COURSE CODE: MDSC 3314

COURSE TITLE: INTEGRATED PARACLINICAL SCIENCES

NUMBER OF CREDITS: 6

COURSE DESCRIPTION: A unique course that spans across the two semesters of twenty-one weeks duration. The course is basically composed of three components, which includes clerkships in all the sub-disciplines of pathology/microbiology, pharmacology seminars and skills training. Rotating clerkships and pharmacology seminars reinforce the various areas of applied para-clinical sciences by providing more hands on approach using clinical and laboratory facilities and also spreads across the organ systems. The skills training component of the course seeks to adequately prepare students to practice the art and science of clinical medicine. Though the component is examined in the third year, the training begins in year 1 and continues through Year 2 with the conduct of specific exercises like history taking, physical examination and other skills. The skills programme runs parallel to the clerkships in year 3 and provides meaningful integration of clinical skills with various areas of para-clinical sciences. Skills training programme along with clerkships facilitate and empower the students with the basic clinical skills and knowledge of laboratory medicine in their pursuit of clinical medicine programme.

SKILLS LAB (195 hrs)

Level : 1, 2, & 3

Semester: 1&2

Description: The objective of the current skills training programme for medical and dental students is: To introduce medical science students to clinical methods such that they may be adequately prepared to move from the Preclinical setting (Phase I) into the clinical clerkships (Phase II) with essential competencies.

The skills referred to include:

The HPI model (History Physical Examination & Investigation)

- relevant motoric skills
- suturing
- urinary bladder catheterisation
- digital rectal examination
- blood pressure measurement
- intramuscular injection
- intravenous infusion
- basic life support
- interpretive skills
- radiology

The skills training programme, which runs parallel to the PBL blocks in the School of Basic Health Sciences, employs several modes of instruction, including standard medical equipment, models, mannequins, simulated and real patients, which are all invaluable adjuncts to teaching and learning during the basic science phase. Year 1 students are taught and given to practice broad-based skills, while Years 2 and 3 are given a system-based approach (vide infra).

SKILLS TRAINING PROGRAMME

YEAR 1

SKILL	History Taking Basic Life Support Suturing
RESOURCE	Simulated patients Anaesthetic equipment Arm models

YEAR 2

SKILL	Physical Examination
RESOURCE	Simulated and real patients

YEAR 3

SKILL	Integration of the history, physical examination and the use investigations to arrive at a clinical diagnosis
RESOURCE	Same as for Year 2 As above/OSCE Relevant models

Basic relevant Radiology is taught during each system-based block.

The skills training programme culminates in assessment by way of the Objective Structured Clinical Evaluation (OSCE), which Phase I students must pass prior to proceeding to Phase II. Students will not be allowed to begin Phase II unless they are successful in the OSCE, even if they have passed the Phase I theory examinations.

Skills training is at present also available for Years 4 and 5. Fourth (4th) year students may, in groups, arrange simulated patient encounters in the Skills lab, for the purpose of honouring their history taking skills on the wards. In Year 5, training in Advanced Life Support is given, using resuscitation models and equipment during the Anaesthetic clerkship.

General Information

1. Students interfacing with simulated and real patients, who are professionals in training, will be expected to adhere to an appropriate dress code.
No student will be allowed to enter the Skills lab dressed in caps, shorts, jeans, T-shirts, sandals, slippers, sneakers etc. Students are required to wear lab coats over acceptable "street" clothing.
2. Students are expected to arrive at the Skills lab at least five minutes before the scheduled start of each session, in order to register with the Skills lab secretary before the session. This is necessary for the smooth operation of the several classes being held at the same time.
3. Students must bring to the Skills Laboratory their own stethoscope and penlight Skills lab for the relevant system-based portion of the training programme as these items are not provided by the Skills lab.
4. A short manual on basic history taking will be given to each student at the first Skills lab session in Year 1. (This manual is complimentary but if lost or misplaced can be replaced for a small fee.)
5. Guidelines for the Skills training programme will be provided to all first year medical and dental students at a nominal cost, and will contain detailed information on the areas to be assessed throughout the programme.
6. A Clinical Skills training Manual is also available at the UWI Bookshop, on the main campus.

PHASE II CLINICAL/CLERKSHIP PROGRAMME (YEARS 4 & 5)

INTRODUCTION

On successful completion of the Phase I programme, students proceed to Phase II. This part of the undergraduate programme is based on the well-proven 'clerkship' system, which lasts two (2) calendar years during which groups of students rotate through different clerkships.

The first clinical year involves students as members of clinical service teams in the disciplines of Medicine & Therapeutics; General Surgery; Child Health; Obstetrics & Gynaecology; Psychiatry and Public Health. The second clinical year involves additional experience in the disciplines encountered in the first year and provides exposure to other clinical disciplines - Primary Care, Orthopaedics, Otolaryngology, Ophthalmology and Anaesthetics and Intensive Care.

These attachments, with the exception of Child Health and Obstetrics & Gynaecology, will be primarily to clinical wards at local and regional hospitals and health clinics. In the clerkship rotations of the two clinical years, students continue to develop the clinical skills to which they were exposed in the Skills Laboratory and improve their abilities in the clinical reasoning process. Additionally, this exposure is expected to achieve integration of the clinical features of diseases with an understanding of the underlying disorders of normal structure and function and the use and interpretation of laboratory and radiological data in rejecting or confirming clinical hypotheses.

In the Clerkships, students are exposed further to the factors which inform a rational, cost-effective and humane use of the vast armamentarium of therapeutic measures and substances, which are available for the amelioration and cure of disease conditions.

For most of the students, the first exposure to patients in various stages of illness and disease and the impact of such conditions, for both patients and students may be disconcerting and traumatic. It is important, therefore, that the early contacts with patients should be structured and guided in a way that sensitises the students to the needs of patients and their relatives and inculcates that caring approach to clinical practice that is essential if both patients and health practitioners are to benefit from the encounter.

It is expected that clinical clerks will display in their attitudes, mode of attire, behaviour in a public setting, and interrelationship with the patients and all categories of staff on the wards to which they are assigned, the highest standards of deportment and medical ethics. Such an approach to their responsibilities in the provision of medical care will ensure that the students will derive the maximum benefit from this period of clinical tutelage.

OBJECTIVES OF THE CLINICAL CLERKSHIPS

In Phase II, the courses aim to consolidate the basic concepts of history taking and presentation, together with the development of the necessary skills in eliciting and interpreting abnormal physical signs in the various organ systems.

Students will be expected to develop proficiency in the techniques of physical examination of the major organ system and to differentiate normal from abnormal physical signs and their interpretation.

HOLIDAYS

During the fourth year, students will be entitled to two (2) weeks Vacation Leave. Such leave, however, will be taken at the discretion of the Tutor or Consultant to whom they are assigned.

DISCIPLINES

In the fourth year, the course consists of eight (8) week clerkships in the following disciplines: Medicine, Surgery, Paediatrics, Obstetrics & Gynaecology, Psychiatry and Public Health.

In the fifth (5th) and final year of the programme, there are additional clerkships in Primary Care Orthopaedics, Otolaryngology, Ophthalmology and Anaesthetics, and Intensive Care.

DEPARTMENT OF CLINICAL MEDICAL SCIENCES

COURSE LISTING

Level	Semester	Course Code	Course Title
4&5	Yr Long	MEDC4300	Clinical Medicine 1
		MEDC5300	Clinical Medicine 2
		MEDC4301	Child Health 1
		MEDC5301	Child Health 2
		MEDC4302	Community Health 1
		MEDC5302	Community Health 2
4	Yr Long	MEDC4303	Psychiatry
4	Yr Long	Junior	Clerkship Rotations
5	Yr Long	Senior	Clerkship Rotations

Phase II Examinations

MEDC5320 Medicine & Therapeutics (Paper 1)

MEDC5321 Medicine & Therapeutics (Paper 2)

COURSE DESCRIPTIONS

LEVEL: 4 & 5

SEMESTER: YEAR LONG

COURSE CODE: MEDC4300, MEDC5300

COURSE TITLE: CLINICAL MEDICINE CLERKSHIPS (1&2)

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: The core cases to be covered during the clerkship in Medicine include those from the following areas:-

- Cardiovascular Disease
- Gastroenterology
- Neurology
- Respiratory Diseases
- Genito-Urinary Diseases
- Endocrine and Metabolic Diseases
- Haematology and Immunology
- Musculo-Skeletal System/Rheumatology
- Aging
- Diseases of the Aged/Aging
- Infectious Diseases/HIV

During these clerkship, students are involved in the management of patients assigned to them. Clinical exposure will be obtained through attendance at ward rounds, out-patient clinics, operating-room sessions and emergency duty assignments, as rostered.

Assessment

Continuous evaluation takes place during the clerkship, and an end of clerkship evaluation, which may include a research project, is carried out.

FOURTH YEAR

1. Students will be assessed on a continuous basis on the following criteria:
 - Attendance
 - Professional Attitude and Department
 - Clinical /Technical Skills
 - Factual Knowledge
 - Initiative and Involvement
 - Empathy
2. A COSCE (a modified OSCE and written examination) will be administered during the final week of each Adult Medicine clerkship.
3. Students are expected to keep a Portfolio of ward and clinic experiences. These will be reviewed periodically to ascertain quality of the clinical experience.
4. From the Class of 2007 onwards, continuous assessment will contribute 20% towards the final examination.

FIFTH YEAR

As per the fourth year

EXCEPT:

A mock OSCE will be held circa one month prior to the final MB BS Examinations in May-June and November-December.

PASS/FAIL FOR CLERKSHIP:

Grades A, B, C secure a pass. Students with lower grades may be required either to conduct remedial work or repeat the clerkship.

FINAL EXAMINATION:

Paper I is a 3-hour paper and comprises of a Multiple Choice component with 100 single best response questions as well as 40 Extended Matching Questions reflecting eight (8) themes.

Paper II is a 3-hour long paper with 25 Short Answer Questions.

The clinical component takes the format of an objective, structured clinical examination that comprises stations in Adult Medicine, Child Health, Psychiatry and Community Health – usually a combined total of twenty-one to twenty-five each of seven minutes duration. The candidate must obtain a pass in this component in order to pass the examination in Medicine and Therapeutics. Borderline candidates and Honours/Distinction candidates will be further tested in a multidisciplinary ORAL examination.

* See item 4 above re: continuous assessment.

LEVEL: 4 & 5

SEMESTER: YR LONG

COURSE CODE: MEDC4301, MEDC55301

COURSE TITLE: CHILD HEALTH CLERKSHIP

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: The overall objectives of the child health programme are to equip the student to recognise a normal child from birth to adolescence, obtain a complete medical history, perform a physical examination, arrive at a rational, informed diagnosis, acquire certain technical skills, become familiar with certain procedures, understand the social and familial environment of childhood problems, and develop a professional and caring attitude.

The Curriculum

The curriculum comprises the following:

- A. An eight-week clerkship, Year 1 (i.e. Year 4). This includes bedside teaching, tutorials, seminars, case presentations, attendance on emergency service and outpatient clinics. The main components of the clerkship are:
 1. An introduction to child health including history taking and complete physical examination in which differences peculiar to Paediatrics are highlighted.
 2. Rotations through various services at the Children's Hospital, EWMSC, Neonatal Unit, Mount Hope Women's Hospital, the Community Paediatric Clinics and Radiology.
- B. A six-week clerkship, Year 2 (i.e. Year 5). This is designed to strengthen clinical skills and further develop basic paediatric knowledge.

LEVEL: 4 & 5

SEMESTER: YR LONG

COURSE CODE: MEDC4302, MEDC5302

COURSE TITLE: COMMUNITY HEALTH/

PRIMARY CARE CLERKSHIPS

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: The fourth year Community Health Clerkship is concerned with the practical study of the health care delivery system and social services of Trinidad & Tobago. Students will be exposed to the approach and methodology of problem-oriented operational research.

In the fifth year, clerkship students will apply practically all that they have learnt about the family, community care, rehabilitation of patients and the role of the practicing physician in family and community health care and promotion.

Students will be expected to study, analyse and present scientific papers and reports of a publishable standard for medical journals, thus preparing them for a continuous professional education.

In the fourth year, Community Health Clerkship Rotation students will learn about the health care delivery system of Trinidad & Tobago and the health protection and health promotion activities, based in the community. Applying the knowledge acquired in the Community Health subjects during the pre-clinical course, they are expected to study in a practical way, and to understand and analyse health structures, systems and their functions. The interactions and interrelations of health related activities would be studied in the context of the concept of Primary Health Care in relation to the particular environment of the Caribbean region. Students will observe the ways in which health care organisation impacts on access and utilisation and influence the perception of patients and their attitudes to the health services.

The clerkship is intended to encourage the students to function as a team. It intends as well to develop their ability to collect relevant information through observation and practical participation in health activities, in the health services, and community. It is also expected that during the Clerkship, students will develop the ability to analyse and critically assess this information and present it in the form of written reports or orally at seminars for group discussion.

The students, who should by now be skilled and motivated in self-directed learning, will actively participate in the definition, planning and organisation of the Clerkship. This will enable them to take a larger responsibility for the educational process and enhance their ability for self-organisation of the learning activities.

Places of Work and Sub-grouping of Students

The Clerkship work will be carried out at health centres, maternal and child health, family planning clinics and various departments of central Ministry of Health and their sub-units, as well as private/non-governmental organisations. Students will be expected to undertake visits to the community, to families and to schools, and to work with environmental health personnel and acquire knowledge of the role and functions of the National Surveillance Unit.

For particular studies or activities, the students will form sub-groups of 2 to 3 students.

Seminars

Groups of 2 to 3 students will be assigned to prepare and present, for seminar discussion, a topic related either to the health care delivery system of Trinidad & Tobago, or an important health problem in the Caribbean. The students are encouraged to select a topic of their own choice. A member of staff of Community Health, Ministry of Health or CAREC will serve as a resource person. However, all students of the group are expected to prepare for the seminar and take an active part in the discussions.

Written Reports

As the Clerkship is based on self-directed and self-organised learning, it is a requirement that the individual students each prepare and submit a written report on their activities, on the collected information, and on the analysis made. Such a report should include recommendations related to particular components of the blocks.

End of Clerkship Examination

The examination will cover all activities of the clerkship, practical as well as theoretical, of the various blocks.

Assessment

The students' performance will be evaluated on the basis of continuous assessment of their work during the clerkship in relation to the major learning objectives and activities of the clerkships and a final examination. It will include:

- a. knowledge as shown in the PBL tutorial and seminar discussions;
- b. aptitude in application of concepts in practice as expressed in the reports, PBL and seminar discussions;
- c. ability to collect, analyse and present relevant information in verbal and written report form (reports, seminar presentations);
- d. attitude to work, self-discipline and team spirit, (attendance, timely presentation of reports, group reports);
- e. end of clerkship examination.

The final assessment mark will be cumulative of the following:

- | | |
|--|-----|
| 1. The average of the reports | 20% |
| 2. Seminar presentation | 20% |
| 3. Contribution and participation in the PBL and Seminar discussions | 20% |
| 4. End of clerkship examination | 20% |
| 5. Attitude to work and diligence | 20% |

Where appropriate, the students will be asked to assess the seminar presenters and the group performance, drawing conclusions and making recommendations for improvement.

Evaluation of the Clerkship Programme

At the end of the Clerkship the students will evaluate all aspects of the Clerkship in accordance with a questionnaire prepared by the Department of Medical Sciences Education, and their views and recommendations will be discussed with the Community Health; Department Staff, which will be taken into account in the continuous review of the clerkship programme.

LEVEL: 4

SEMESTER: YR LONG

COURSE CODE: MEDC4303

COURSE TITLE: PSYCHIATRY CLERKSHIP

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

CO-REQUISITES:

COURSE DESCRIPTION: The Psychiatry undergraduate clerkship is geared toward providing the student with a general understanding of psychiatry as it relates to medical practice as a whole; it hopes to encourage some students to choose psychiatry as a speciality. For the majority who do not, it seeks to sensitise them to the relevance of psychiatric problems in their practice.

THE JUNIOR CLERKSHIP ROTATION

Level: 4

Semester: Yr Long

Description: During this period the student will be expected to develop a strong foundation in General Surgery. A progression of topics is introduced during the eight weeks, which are divided into two blocks of four weeks each at the Port-of-Spain and San Fernando General hospitals. Students will be assigned in groups, to specific wards. They will begin to assume limited clinical responsibility for the care of patients.

The first block introduces the following subjects:

- Pre-operative preparation; operative etiquette; post-operative care
- Fluid and electrolyte balance
- Body surface lesions
- Wound care; principles of wound healing
- Abdominal wall and groin hernias
- Surgical infections

During the second block, the student is introduced to:

- The acute abdomen—diagnosis and management
- Surgical pathology of malignant lesions; diagnosis and management

Seminars will be conducted on common urological problems on a weekly basis. Topics will include haematuria, renal calculi and urinary retention.

During the junior rotation, weekly sessions on Accident and Emergency Medicine will also be conducted. Tutorials will include problem-based learning sessions and clinical skills training on:

- Trauma resuscitation
- Management of the head injured
- Early management of burns
- Abdominal trauma
- Shock; haemorrhage and transfusion
- Basic life support; basic airway management; basic cardiac resuscitation

During both clinical years, the student will be required to keep a surgical case book of the cases in whose management (s)he has participated. (S)he will also need to get documentation of a series of procedures listed in the log book. The individual entries will have to be signed off by the tutor(s). An end of clerkship assessment is done by written and/or oral examination.

THE SENIOR CLERKSHIP ROTATION

Level: 5

Semester: Yr Long

Description: The final year includes a number of rotations in disciplines encountered in the junior year as well as exposure to the major sub-specialties. The new rotations include Anaesthetics and Intensive Care, Orthopaedics, Ophthalmology, Otorhinolaryngology and Paediatric Surgery.

In addition, attendance at clinico-pathological presentations and conferences is meant to facilitate a deeper, more comprehensive understanding of the relationship of pathological processes to the symptoms and signs of disease states.

The fifth year programme is intended to:

1. Consolidate and refine the objectives outlined in Year 4 of problem-solving in a clinical setting.
2. Create a deeper understanding of the patho-physiology of disease and facilitate a comprehensive knowledge of Pathology/Microbiology, Immunology and their relationship to symptoms and physical signs, in continuation of the process begun in Year 4.
3. Promote an understanding of the epidemiology and pathogenesis of disease processes, and how these may interact with the patient, his/her relatives and the community.
4. Foster the acquisition of the skills necessary for predicting, recognising and hopefully preventing the progression of a disease process and its complications.
5. Develop a more comprehensive insight into the relevance of investigations of disease processes, and the use of possibly predicting the outcome of a disease process. It is imperative that students become fully aware of the value and limitations of clinical and laboratory investigations in obtaining an overview and understanding of a disease process and its final outcome.
6. Induce knowledge of the pharmacological basis for the treatment and management of disease. Students will be taught the therapeutic interventions considered necessary in the treatment of disease. Students will also be expected to acquire a working knowledge of the essential drugs used in the management of the major disease processes and the therapeutic models of intervention. They will be expected to know and understand such concepts as absorption - bioavailability, distribution, selective uptake and methods of degradation and routes of elimination of drugs and their metabolites etc.
7. Emphasise an awareness of the interdependence of the various disciplines in Clinical Medicine on each other, and their close relationships. Students should be able to recognise that the development of divisions such as Medicine, Surgery etc., is purely arbitrary and hence, must learn early to recognise the interdependence of disciplines (departments) on each other in achieving optimum management of the patient as a whole person.
8. Enable the student to recognise and understand the impact of the disease on the patient physically, psychologically and economically, and to be able to advise the patient and his/her relatives about the prognosis and final outcome of a particular disease process and how it may modify the patient's ability to function both now and in the future.

Assessment

End of clerkship assessments will follow a format similar to that indicated for the fourth year.

PHASE II EXAMINATIONS MB,BS FINAL EXAMINATIONS/ ASSESSMENT

The final Phase II examinations in Medicine & Therapeutics take place in May/June of Year 5. The next available sittings are held in November/December.

MEDC5320 Medicine & Therapeutics (Paper 1)

MEDC5321 Medicine & Therapeutics (Paper 2)

FINAL EXAMINATION:

Paper I is a 3-hour paper and comprises a Multiple Choice component with 100 single best response questions as well as 40 Extended Matching Questions reflecting eight (8) themes.

Paper II is a 3-hour long paper with 25 Short Answer Questions.

The clinical component takes the format of an objective, structured clinical examination (OSCE) that comprises stations in Adult Medicine, Child Health, Psychiatry and Community Health – usually a combined total of twenty-one to twenty-five each of seven minutes duration. The candidate must obtain a pass in this component in order to pass the examination in Medicine and Therapeutics.

Candidates are required to re-sit **entire examination of subjects failed at a 2nd or 3rd attempts.**

DEPARTMENT OF CLINICAL SURGICAL SCIENCES

The following courses will be covered during the clinical rotations in the Department

Level	Semester	Course Code	Course Title
4&5	Yr Long	MEDC4330	Obstetrics and Gynaecology I
		MEDC5331	Obstetrics and Gynaecology II
4&5	Yr Long	MEDC4340	General Surgery I,
		MEDC5339	General Surgery II, (Neurosurgery and Paediatric Surgery)
4&5	Yr Long	MEDC5341	Orthopaedic Surgery
	5	Yr Long	MEDC5342
5	Yr Long	MEDC5343	Ophthalmology
	5	Yr Long	MEDC5344

In Obstetrics, the physiology of normal pregnancy, antenatal care and basic nutritional requirements, the management of the normal puerperium and lactation are given priority. The mechanism of normal parturition is taught with emphasis on pain relief and the use of pharmacological agents in retarding or accelerating labour. Students are allowed to gain practical experience by performing a number of deliveries and are given the opportunity to develop manual skills, e.g. by suturing episiotomies and assisting at operative deliveries. They are also introduced to obstetric problems that are common in the Caribbean, such as the hypertensive disorders of pregnancy, diabetes, anaemia, etc.

In Gynaecology, much attention is focused on the science and techniques of conception control and the importance of these entities in a comprehensive maternal and child care programme. The key role of screening programmes in controlling cervical cancer and the problems of early pregnancy are highlighted.

Assessment

Students are evaluated chiefly on their application to work on the wards. Written course-work is assigned twice during the clerkship, corrected with criticisms, and the achievement data are fed back to the students. This technique is used simply as a device to support learning. A terminal assessment is performed by written and/or clinical examination.

COURSE DESCRIPTIONS

LEVEL: 4&5

SEMESTER: YR LONG

COURSE CODE: MEDC4330, MEDC5331

COURSE TITLE: OBSTETRICS & GYNAECOLOGY

CLERKSHIPS (1&2)

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: The chief aims of this initial period of training in human reproduction and family planning are:

- To allow students to establish an effective relationship with patients in order to gather data from them and,
- To develop their clinical skills to an extent over-riding reliance on elaborate biochemical and biophysical investigations.

These aims are accomplished by:

1. Teaching the evaluation of a clinical condition from the history and physical findings
2. Employing case presentation as the preferred method of teaching
3. Bedside discussions/tutorials and clinical teaching sessions, and
4. Clerkship rotations through the labour, antenatal and gynaecological wards, in order to gain effective communication and rapport with women in physical or mental stress.

LEVEL: 4&5

SEMESTER: YR LONG

COURSE CODE: MEDC4340, MEDC5339

COURSE TITLE: GENERAL SURGERY CLERKSHIPS (1&2)

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: The general surgery rotations comprise an eight-week clerkship in each year. The clerkships take place at the Port-of-Spain and San Fernando General Hospitals and at the Eric Williams Medical Sciences Complex. Students are assigned to individual firms for participation in ward rounds, operating theatre sessions, outpatient clinics and emergency duty.

Assessment

An in-training evaluation will be submitted by each tutor at the end of each rotation for each student. A clerkship assessment will take place at the end of the rotation. This may involve an MCQ, an Objective Structured Clinical Examination (OSCE) and/or an oral examination. This assessment may be used in determining the student's eligibility to write the final examination and to achieve a passing grade. A student whose evaluation is unsatisfactory may be required to undergo a course of remedial training.

NEUROSURGERY

Level: 4&5

Description: The teaching in this specialty begins in the junior clinical year and continues in the final year. The student is exposed to bedside teaching, small group tutorials and formal lectures in Neurological Surgery.

Assessment

The student will receive ongoing assessment based on performances during the tutorials. Some questions on the specialty will be included in the end of clerkship examination.

PAEDIATRIC SURGERY

Level: 5

Description: This course is introduced during the final year clerkships. The student is expected to attend weekly outpatient clinical sessions at the Eric Williams Medical Sciences Complex and take part in case presentations and discussions. Attendance at weekly grand rounds on the surgical wards is encouraged. An overview of the specialty is included in the annual lecture series.

The aim of this course is to build on the knowledge of general surgery and paediatrics acquired during the fourth year rotation. The student is helped to understand the pathophysiology, diagnosis and principles of management of common and important surgical conditions that occur in infants and older children. Several areas of overlap exist within the programmes in paediatric medicine, general surgery and some of the other surgical sub-specialties.

At the end of the clerkship, the student will be expected to be able to identify, describe and discuss the pathophysiology and management of common paediatric surgical conditions such as:

- Masses, cysts and fistulae of the head and neck
- Benign body surface tumours
- Hernias, hydrocoeles and undescended testes
- The acute scrotum
- Non-acute and acute abdominal pain
- Congenital abnormalities of the genito-urinary system.

In addition, the student will be expected to demonstrate a detailed knowledge of the following topics peculiar to the specialty:

- Neonatal surgical conditions
- Congenital pyloric stenosis
- Meckel's diverticulum
- Intussusception
- Hirschsprung's disease
- Solid tumours of infancy and later childhood

Assessment

A clerkship assessment will be incorporated in the end of clerkship assessment in general surgery during the fifth year. This will include some questions in the MCQ, OSCE, essays and oral assessments.

LEVEL: 5

SEMESTER: YR LONG

COURSE CODE: MEDC5342

COURSE TITLE: OTORHINOLARYNGOLOGY

(E.N.T. SURGERY) CLERKSHIP

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: The aim of this rotation is to familiarise the student with common disorders of the Ear, Nose and Throat. Students will be assigned to the operating theatre and the out-patient clinic to observe details of management of common conditions that occur in the specialty. They will be rostered on call to assist in the management of E.N.T. emergencies. This is a six (6) week programme concurrent with ophthalmology.

Students will also be exposed to indirect laryngoscopy and posterior rhinoscopy.

Assessment

A Clerkship assessment will take place at the end of the rotation. This will consist of an MCQ and/or an Objective Structured Clinical Examination (OSCE).

LEVEL: 5

SEMESTER: YR LONG

COURSE CODE: MEDC 5343

COURSE TITLE: OPHTHALMOLOGY CLERKSHIP

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: The purpose of this rotation is to familiarise the student with the diagnosis and treatment of common disorders of the eye. The student will be taught to measure visual acuity, the use of charts to test visual acuity and how to use the ophthalmoscope. This is a six (6) week programme concurrent with otorhinolamagology.

LEVEL: 5

SEMESTER: YR LONG

COURSE CODE: MEDC5344

COURSE TITLE: ANAESTHESIA AND INTENSIVE CARE CLERKSHIP (4 WEEKS)

NUMBER OF CREDITS:

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: This rotation is geared to provide a thorough grounding in the fundamentals of anaesthesia and intensive care. Students will be assigned to outpatient clinics, operating room sessions and emergency duty in accordance with the roster. Students are expected to administer at least four (4) anaesthetics during the clerkship. Lectures take place at the Eric Williams Medical Sciences Complex weekly.

LEVEL: 5
SEMESTER: YR LONG
COURSE CODE: MEDC5341
COURSE TITLE: ORTHOPAEDICS SURGERY CLERKSHIP
(4 WEEKS)

NUMBER OF CREDITS: CREDITS

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL BASIC HEALTH SCIENCES COURSES

COURSE DESCRIPTION: During this clerkship students are involved in the management of patients assigned to them. Clinical exposure will be obtained through attendance at ward rounds, Out-patient clinics, operating-room sessions and emergency duty assignments, as rostered.

Assessment

Continuous evaluation takes place during the clerkship and an end of clerkship evaluation, which may include a research project, is carried out.

PHASE II EXAMINATIONS

MBBS FINAL EXAMINATIONS/ ASSESSMENT

The final Phase II examinations in General Surgery and Obstetrics & Gynaecology take place in May/June of Year 5. The next available sittings are held in November/December.

MEDC5340 General Surgery
MEDC5330 Obstetrics & Gynaecology

FINAL EXAMINATION:

MEDC5340 General Surgery Part II consists of a Written Paper and Oral/Clinical Examinations

The Written Examination is a 3-hour long paper with two (2) Sections:

Section A consists of Two (2) Parts:

- Part I contains 90 questions which require a Single Best Answer.
- Part II contains 25 questions of the Extended Matching Type.

Section B contains 5 questions requiring short written responses.

The Oral/Clinical Examinations:

The Oral/Clinical Examinations consists of eight (8) Stations which include a variety of Clinical Cases, Clinical Pictures and Surgical Instruments. The student will be taken to each Station by a Group of Examiners. The Student will spend 5 minutes at each Station, during which he/she may be asked to examine or question patients, or questioned about any clinical material or surgical instruments at the table. All tables carry equal marks.

MEDC5330 Obstetrics and Gynaecology Part II consists of a Written Paper and Oral/Clinical Examinations

The Written Examination is a 3-hour long paper with three (3) Sections:

- Section A contains 60 multiple choice questions which require a Single Best Answer.
- Section B contains 30 questions of the Extended Matching Type.
- Section C contains 4 case reports of the Structured Answer Type.

The Oral/Clinical Examinations

The Clinical Exam consists of a Clinical Case. The Student has 20 minutes with the patient followed by 20 minutes with the Examiners. The Oral Exam consists of 20 minutes with the examiners.

Candidates are required to re-sit **entire examination of subjects failed at 2nd or 3rd attempts.**

MEDICINE STUDENTS PRIZES

Janssen-Cilag Prize

Criterion: Best overall performance in the OSCE
(Objective Structured Clinical Examination)
Year of Study: Year 3

Professor Rolf Richards Memorial Prize

(Donated by Medical Associates Hospital)
Criterion: Best Clinical Student in
Medicine and Therapeutics
Year of Study: Final MB BS Examinations

Dr. Fiona Phelps Prize

Criterion: Most outstanding Clinical Student
in Obstetrics and Gynaecology
Year of Study: Years 4 and 5

Dr. Chapman Boyd Prize

Criterion: Most outstanding in Community Health
Year of Study: Year 5

Astra Zeneca Prize

Criterion: Most outstanding in Anaesthesia
Year of Study: Year 5

Mepha Pharmaceutical Company Prizes

Criterion: Most outstanding student in Surgery
Year of Study: Year 5

Mepha Pharmaceutical Company Prizes

Criterion: Most outstanding student in Orthopaedics
Year of Study: Year 5

Prof. Zulaika Ali Prize

Criterion: Most outstanding student in the OSCE
section on the Final MB BS examination in
Medicine and Therapeutics
Year of Study: Year 5

Dr. Mortimer Moxey Prize

Criterion: Best Community Health Student
Year of Study: Year 5

Dr. Angela Johnson Prize

Criterion: Best Public Health student
Year of Study: Year 5

Other Prizes/Awards

Prizes/awards are also offered to students in the Pre-clinical programme

SCHOOL OF DENTISTRY DOCTOR OF DENTAL SURGERY (DDS)

(Governed by the Faculty 1999 Regulations) INTRODUCTION

The basic aim of the DDS programme is to produce modern competent dentists who understand the oral health needs and sensitivities of the Caribbean and who can practice globally. The undergraduate programme comprises about 220 credits leading to the degree of Doctor of Dental Surgery consists of five years of study divided into two Phases. Phase I is devoted to the study of the basic medical and dental sciences and spans the first two years (4 semesters). Of these, three (3) semesters are taught in co-operation with the School of Medicine as a common programme for dental, medical and veterinary students, and utilises a Problem Based Learning (PBL) methodology. Subjects included in this part of the programme are Anatomy, Physiology, Biochemistry, Pharmacology, General Pathology and Microbiology, Community Health, Behavioural Sciences, Sociology of Health, Epidemiology and Biostatistics. Students undertake a module of Skills Training, which focuses on interviewing and clinical examination techniques.

In addition, there are hours of dedicated dental instruction in Oral Biology and 10 clinical orientation sessions in the School's Dental Clinics that form an introduction to the Clinical Dentistry. In addition, a series of lectures termed 'Introduction to Dentistry' are given in Year 1 and introduces various disciplines of dentistry to students. Year 2, semester 2 (semester 4) is devoted to specialist dental topics including Regional Head and Neck Anatomy, Dental Materials Science, Oral Biology, Core Radiology and a laboratory-based unit of instruction in basic Operative Dental Techniques. This laboratory experience equips students with the clinical skills and acumen necessary to commence treatment of patients from the beginning of the third year and Phase II of the DDS programme in a graded manner. The three clinical years leading to graduation involve supervised patient management in all spheres of dentistry, and study of the causes, management and prevention of oral and dental diseases. Various disciplines in the DDS programme are taught in horizontal and vertical integration. Accordingly, the teaching of several topics and disciplines are spread over the period of the programme. These disciplines are ultimately merged with their parent disciplines for the university examinations that are conducted at appropriate junctures. Modifications in the programme might be introduced from time-to-time, if deemed necessary.