UWI
ST. AUGUSTINE
CAMPUS

UNDERGRADUATE
INFORMATION GUIDE

FACULTY OF MEDICAL SCIENCES

REGULATIONS & SYLLABUSES

2012
2013

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MISSION STATEMENT

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

MESSAGE FROM THE DEAN OF THE FACULTY

WELCOME TO THE FACULTY OF MEDICAL SCIENCES AT ST. AUGUSTINE

It gives me great pleasure to extend a warm welcome to all our commencing students for the new academic year 2012/2013.

In particular, I wish to extend a special welcome to the students in the BSc Optometry degree programme, which has been added to the offerings at the Faculty of Medical Sciences from this academic year. In this regard, I wish to thank the Dean and the administrative staff of the former Faculty of Science and Agriculture for their steadfast work and efforts to make this pioneering programme a reality within the UWI family. As with any transition, there may be some challenges to be resolved, but please be assured that the staff of this Faculty is here to assist in any way, and that this programme will grow from strength to strength.

A new academic year heralds a new beginning in many respects. I urge you to use this opportunity to start on a positive note as each one of you must consider yourself proud of your accomplishments in gaining entry into a Faculty where the competition for spaces is extreme. There are many co-curricular activities including sporting and other recreational activities, as well as groups which seek to uplift the community as a whole. Your respective Schools have representative bodies and you should seek to be a part of any activity which gives you a voice in the development of the Faculty and of your chosen profession. As responsible adults and future health care providers in professional programmes, you need to start now to develop and adopt a professional attitude and ethical values. I urge you to respect your teachers and their efforts, to respect the property of the UWI and the Regional Health Authorities and to respect each other, for each one of you is a special person with values, aims and ambitions which we hope to nurture. I also wish that you will keep in mind the individuals, and in many cases, the taxpayers who are providing financial support and making other sacrifices so that you can continue your studies.

Finally, I exhort you to pay attention to your grades so that you can be sure of your unimpeded progress through the Faculty.

Let us all work together to make the academic year 2012/ 2013 productive and successful, a year which would see the accrual of mutual benefits to students and staff of the Faculty.

Once more, Welcome!

PROFESSOR SAMUEL RAMSEWAK
Dean - Faculty of Medical Sciences

STAFF LISTING

Dean's Office

DEAN

Professor Samuel Ramsewak
Tel: 645-2640 Ext: 5025
Email: deanfms@sta.uwi.edu

SENIOR SECRETARY
Mrs. Louise Bovell
Tel: 645-2640 Ext: 5025

DEPUTY DEANS

BASIC HEALTH SCIENCES
Dr. Yuri Clement
Tel: 645-2640 Ext: 5102; 645-9865

CLINICAL SCIENCES
Dr. Ian Sammy
Tel: 645-2640 Ext: 5020/ 5019

GRADUATE STUDIES AND RESEARCH
Prof. Hariharan Seetharaman
Tel: 645-2640 Ext. 2358/ 5009

ASSOCIATE DEANS

UNDERGRADUATE STUDENTS
Dr. Suresh Rao
Tel: 645-2640 Ext: 4602

PUBLIC RELATIONS AND SPECIAL PROJECTS
Dr. E. Monica Davis
Tel: 645-2640 Ext: 4621
Email: adprsp@gmail.com

ADMINISTRATIVE STAFF

ADMINISTRATIVE OFFICER
Ms. Simone Roberts
Tel: 645-2640 Ext: 5023

ADMINISTRATIVE ASSISTANT - STUDENT AFFAIRS
Ms. Miriam St. Louis
Tel: 645-2640 Ext: 5022; 663-6311

SENIOR ADMINISTRATIVE ASSISTANT - EXAMINATIONS
Mrs. Leslie-Ann Romain-Hood
Tel: 645 -2640 Ext: 5232

ADMINISTRATIVE ASSISTANT- DEPUTY DEANS (BASIC HEALTH & CLINICAL SCIENCES)
Ms. Deborah Crichlow
Tel: 645-2640 Ext: 5022; 663-6311

SENIOR ADMINISTRATIVE ASSISTANT - SECRETARIAT & PROJECTS
Ms Evelyn Ferreira
Tel: 645-2640 Ext: 5021

HUMAN RESOURCE SUPERVISOR
Ms. Camille Johnson
Tel: 645-2640 Ext: 5018

Centre for Medical Sciences Education

AG. COORDINATOR
Dr. Bidyadhar Sa
Tel: 645-2640 Ext. 5230

SECRETARY
Ms. Bernadette Abrams
Tel: 645-2640 Ext: 5210

LECTURER/MEDICAL COMMUNICATION
Mrs. Stella Williams
Tel: 645-2640, Ext.5212

LECTURER/EDUCATIONAL TECHNOLOGY
Dr. Jacqueline Wilson
Tel: 645-2640, Ext.5229

LECTURER/MEASUREMENT & EVALUATION
Dr. Bidyadhar Sa
Tel: 645-2640, Ext.5230

B.Sc. Optometry Programme

ACADEMIC STAFF

Dr. Jan Bohringer
MSc (ETHZ Physics), MSc (UWI Agri.), PhD (ETHZ Nat. Sc.), OD NSUCO
Senior Lecturer
Tel: 662-2002 Ext. 82570
Email: jan.bohringer @sta.uwi.edu

Dr. Subash Sharma
BSc (Hons.,Cardiff), MSc (Aston, B'Ham), PhD (Leeds), FCOptom, DCLP
Temporary Lecturer
Tel: 662-2002 Ext. 82267
Email: subash.sharma@sta.uwi.edu

Medical Sciences Library

HEAD
Mrs. Ernesta Greenidge
Tel: 645-2640 Ext: 5206

School of Medicine

Department of Pre-Clinical Sciences

HEAD
Prof. Jonas Addae

ADMINISTRATIVE ASSISTANT
Mrs. Monique Dare-Assing
Tel: 645-2640 Ext: 2776
Fax: 662-1873

ANATOMY UNIT
UNIT COORDINATOR
Dr. Suresh Rao

SECRETARY
Mrs. Candace Charles-Lake
Tel: 645-2640 Ext: 4633
Fax: 662-9148

BIOCHEMISTRY UNIT
UNIT COORDINATOR
Dr. Trevor Alleyne
Tel: 645-2640 Ext: 2776
Fax: 662-1873

CLERICAL ASST
Ms Stephanie Oliver
Tel: 645-2640 Ext: 4643

PHYSIOLOGY UNIT
UNIT COORDINATOR
Prof. Jonas Addae

SECRETARY
Ms. Mary London
Tel: 645-2640 Ext: 4621
Fax: 645-3615

Department of Para-Clinical Sciences

HEAD
Prof. Lexley Pinto-Pereira
Email: hod.paraclin@sta.uwi.edu

ADMINISTRATIVE ASSISTANT
Vacant
Tel: 645-2640 Ext: 2322 / 2323
Fax: 663-3797

PATHOLOGY/MICROBIOLOGY UNIT
UNIT COORDINATOR
Dr. Chalapathi Rao
SECRETARY
Mrs. Petrina Best-Lee Sam
Tel: 645-2640 Ext: 2253
Fax: 663-3797

PUBLIC HEALTH & PRIMARY CARE UNIT
UNIT COORDINATOR
Dr. Rohan Maharaj

SECRETARY ***Mrs. Patricia St. Bernard***
Tel: 645-2640 Ext: 2890
Fax: 663-4737

PHARMACOLOGY UNIT
UNIT COORDINATOR
Dr. Yuri Clement

SECRETARY
Mrs. Lisa Holder-Romain
Tel: 645-2640 Ext: 4605
Fax: 663-8613

Department of Clinical Medical Sciences

HEAD
Prof. Gerard Hutchinson

ADMINISTRATIVE ASSISTANT
Mrs. Denise Williams-Dummett
Tel: 645-2640 Ext: 2940

ADULT MEDICINE
UNIT COORDINATOR
Prof. Terence Seemungal

AG. SECRETARY
Mrs. Natasha Cabrera-Jones
Tel: 645-2640 Ext: 2926
Fax: 663-4332

PSYCHIATRY UNIT
UNIT COORDINATOR
Prof. Gerard Hutchinson

SECRETARY
Ms. Isabelle La Roche
Tel: 645-2640 Ext: 2915
Fax: 662-3968

CHILD HEALTH UNIT
UNIT COORDINATOR
Dr. Jasmine Ramcharan

AG. SECRETARY
Mrs. Elethia Mieres-Francis
Tel: 645-2640 Ext: 3909
Fax: 662-9596

RADIOLOGY UNIT
UNIT COORDINATOR
Dr. Paramanand Maharaj
Tel: 645-2640 Ext: 2185/2159
Fax: 662-7060

Department of Clinical Surgical Sciences

HEAD
Prof. Vijay Naraynsingh

AG. ADMINISTRATIVE ASSISTANT
Mrs. Lisa Ramdass
TEL: 645-2640 EXT: 2960
FAX: 663-4319

SECRETARY
VACANT
TEL: 645-2640 EXT. 2961

SURGERY UNIT
UNIT COORDINATOR
Prof. Vijay Naraynsingh

ANAESTHETICS & INTENSIVE CARE UNIT
UNIT COORDINATOR
Dr. Deryk Chen

SECRETARY
Mrs. Nicole O'Connell-Hinds
Tel: 645-2640 Ext: 2360
Fax: 662-4030

OBSTETRICS & GYNAECOLOGY UNIT
UNIT COORDINATOR
Dr. Bharat Bassaw

CLERICAL ASST
Ms. Sarana Maharaj
Tel: 662-6418
Fax: 662-6418
Email: obsgyn@sta.uwi.edu

School of Advanced Nursing Education

DIRECTOR
Dr. Jacqueline Comerasamy
Tel: 662-5634; 645-2640 Ext. 4759
Email: sane@fms.uwi.tt

ADMINISTRATIVE ASSISTANT
Ms. Maria Brooks
Tel: 663-6684, 645-2640 Ext. 4754
Fax: 662-5634

SECRETARY
Mrs. Candace Simonta-Dyer
Tel: 662-5634; 645-2640 Ext. 3044
Fax: 662-5634

School of Dentistry

DIRECTOR
Dr. Haytham Al-Bayaty
Tel: 645-2640 Ext: 4112
Fax: 645-3823

AG. ADMINISTRATIVE ASSISTANT
Mrs. Kathy Ann Hercules-Wilson
Tel: 645-2640 Ext: 5016

SECRETARY
Mrs. Lu-Ann Caesar
Tel: 645-2640 Ext: 4112

RESTORATIVE DENTISTRY UNIT
UNIT COORDINATOR
Dr. Reisha Rafeek
Tel: 645-2640 Ext: 4025

ORAL AND MAXILLOFACIAL SURGERY UNIT
UNIT COORDINATOR
Dr. Candy Naraynsingh
Tel: 645-2640 Ext: 4129

School of Pharmacy

AG. DIRECTOR
Dr. Sureshwar Pandey
Tel: 645-2640 Ext.5003
Fax: 662-1472
Email: pharmacy@fms.uwi.tt

ADMINISTRATIVE ASSISTANT
Mrs. Patricia Cumberbatch
Tel: 645-2640 Ext: 5017

School of Veterinary Medicine

DIRECTOR
Professor A.A. Adesiyun
Email: vetdir@sta.uwi.edu

SECRETARY
Mrs. Ruth Seerattan
Tel: 645-2640 Ext: 4213; 645-4481
Fax: 645-7428
Email: vetdirsec@sta.uwi.edu

ADMINISTRATIVE ASSISTANT
VACANT
Tel: 645-2640 Ext: 4215; 663-8931
Email: vetaa@sta.uwi.edu

Department of Basic Veterinary Sciences

HEAD
Prof. Andrew Adogwa

SECRETARY
Ms. Alice Young
Tel: 645-2640 Ext: 4250
Email: basic.vetsci@sta.uwi.edu

Department of Clinical Veterinary Sciences

HEAD
Dr. Thotta Ganesh

SECRETARY
Ms. Camille Timothy
Tel: 645-2640 Ext: 4226
Email: clinvetsci@sta.uwi.edu

GENERAL INFORMATION

The Faculty offers six (6) undergraduate degree programmes as follows:

1. Bachelor of Medicine, Bachelor of Surgery (MBBS)/ B.Med.Sci
2. Doctor of Dental Surgery (DDS)
3. Doctor of Veterinary Medicine (DVM)
4. B.Sc. Pharmacy
5. B.Sc. Nursing
6. B.Sc. Optometry

The MBBS, DVM and DDS programmes are accredited by the Caribbean Accreditation Authority for Education in Medicine and Other Health Professions (CAAM-HP).

DRESS CODE AND CONDUCT

Students must at all times conduct and present themselves in a manner in keeping with the nature of the profession for which they are in training, and as directed by the School in which registered. Any student who is not appropriately attired will not be attended to by staff in the Dean's Office, Schools or Departments.

Student ID cards must be displayed at all times, when on UWI/ RHA premises. This includes attending classes, laboratory sessions and clinical rotations. Student ID cards are required to facilitate all transactions in the Faculty/ University.

Food and drink may not be brought into the classrooms/ laboratories or be consumed there. Students should also refrain from chewing gum.

IMMUNISATION AGAINST HEPATITIS B & RABIES

It is expected that all prospective students entering the Faculty of Medical Sciences should have been inoculated against Hepatitis B prior to admission. Students entering the Veterinary Medicine programme are required to receive a Rabies shot prior to admission.

REGISTRATION

Please note that the registration of a student is not complete until the appropriate tuition and other fees have been paid in respect of that student or arrangements acceptable to the Campus Principal have been made with respect to the payment of such fees.

Exemptions

A student who has completed a course and passed an examination from this or another recognised University in a course equivalent to the part or the whole of a course in the MB BS, DDS, DVM, BSc Pharmacy and BSc Nursing degrees may apply through the Director/ Head of Department for exemption. The Director/Head of Department shall examine the syllabus, the time which has elapsed since the course was completed, and in particular whether such course is equivalent in whole or in part to that offered in the particular programme The Director/Head of Department through the Dean shall make one of the following recommendations to the Faculty Board indicating the reasons for such recommendation:

a. that the student be exempted from both the course and the examination
b. that the student be exempted from a part or the whole of the course, but be required to take a part of or the full examination
c. that the application be rejected
   - Exemptions and credit shall not normally be granted to students who have been asked to withdraw from and are re-admitted to the Faculty for whatever reason after a lapse of more than two years.

   - Applicants from the Faculty shall be eligible for exemptions and credit of common courses taken in the Faculty if their quality points score for the course is not less than 2.0 (i.e. 50%)

DEBARMENTS, REPEATS, WITHDRAWALS

a. Where there is dissatisfaction with the work of a student, the Director/Head of a Department may report the matter to the Dean and the Faculty Board which may recommend to the Academic Board (St. Augustine) that the student be debarred from the examination and either repeat the course or be required to withdraw from the Faculty of Medical Sciences.
b. Students required to withdraw from the University for failing to complete the degree programme within the stipulated time or for poor performance as provided for in the Faculty Regulations, may apply for re-entry into the Faculty after at least one year has elapsed since their withdrawal.
c. Students thus re-admitted to the Faculty may, in accordance with its Regulations, be granted exemption from Year 1, Part 1 Introductory courses, subject to there being no change in the content of the courses and provided that no more than five years have elapsed since the date of withdrawal. Year 2 courses, for the purposes of exemption, may be treated in the same way as Year 1 courses.

d. Students whose performance in Year 1 indicates general weakness (e.g. bare passes in all courses) may be required by the Faculty to repeat the year.

e. Students from one Faculty who had been required to withdraw from the University for failing to complete their degree programme within the stipulated period may be immediately admitted to another Faculty. Such students may be granted exemption from Year 1 courses relevant to the new programme subject to (c) above.
f. A student who voluntarily withdraws from the University and who applies for re-admission within five (5) years shall be granted exemption and credit for courses previously passed, subject to the time limit for the maintenance of credit stipulated in the relevant Faculty Regulations. All grades previously obtained shall be used in the determination of the student's GPA. (GPA Regulation #15)

LEAVE OF ABSENCE

a. A student who for good reason wishes to be absent from an academic programme for a semester or more must apply for formal leave of absence to the Campus Academic Board, through the Dean, stating the reason for the application.
b. The length of such leave of absence, if granted, will be subject to approval by the Academic Board of the campus concerned, but will not exceed one (1) academic year in the first instance.
c. Leave of absence will not be granted for more than two (2) consecutive academic years.

REVIEW OF EXAMINATION RESULTS - UWI REGULATION 116:

i. A student who is dissatisfied with the results of his/her examination should report his/her dissatisfaction in writing to the Campus Registrar. Such a report must be made, in the case of the first semester, by the first Friday of the second semester, or within five (5) days of the issuing of grade slips whichever is later. In the case of the second semester, such a report must be made within five (5) weeks of the results being released, and in the case of Supplemental/ Summer School or Re-sit Examinations, within five (5) days of the results being released.

ii. The Campus Registrar shall forward the student's report to the Dean of the Faculty concerned.

iii. The student may request:
   (a) to have the relevant mark sheet reviewed; and/or
   (b) to go through his or her failed script with the Examiner; and/or
   (c) to have his/her script(s) remarked.

FOUNDATION COURSES

All new first-year undergraduates (with the exception of BSc Optometry students) will be required to complete a minimum of nine (9) credits of Foundation Courses. COMS 1001 and COMS 1002 offered in Semesters 1 and 2 will count for a total of six (6) credits. Students are also required to choose one (1) of FOUN 1101 – Caribbean Civilisation or FOUN 1301 – Law, Governance and Society, which are both offered in Semester 1 and Semester 2.

COURSE LISTING

REQUIRED:

Course Code	Course Title	Credits	Semester
COMS1001	Communication Skills for Health Personnel	3	1
COMS1002	Communication Skills for the Health Professions	3	2

CHOOSE 1 OF:

Course Code	Course Title	Credits	Semester
FOUN1101	Caribbean Civilisation	3	1&2
FOUN1301	Law, Governance, Economy and Society	3	1&2

COURSE DESCRIPTIONS

SEMESTER: 1 & 2
COURSE CODE: FOUN 1101
COURSE TITLE: CARIBBEAN CIVILISATION
NUMBER OF CREDITS: 3
COURSE DESCRIPTION:

1. To develop an awareness of the main process of cultural development in Caribbean societies, highlighting the factors, the problematics and the creative output that have fed the emergence of Caribbean identities.
2. To develop a perception of the Caribbean as wider than island nations or linguistic blocs.
3. To stimulate students' interest in, and commitment to Caribbean civilisation and to further their self-definition.

Assessment

Book Report: 40%
Final 2-hour examination: 60%

SEMESTER: 1 & 2
COURSE CODE: FOUN 1301
COURSE TITLE: LAW, GOVERNANCE, ECONOMY AND SOCIETY
NUMBER OF CREDITS: 3
CO-REQUISITES: NONE
COURSE DESCRIPTION: This is a multi-disciplinary course of the Faculty of Social Sciences at St. Augustine. It is designed mainly for non-Social Science students. The course will introduce some of the major institutions in Caribbean society. It exposes the student to both the historical and contemporary aspects of Caribbean society, including Caribbean legal, political and economic systems. In addition, Caribbean culture and Caribbean social problems are discussed.

SEMESTER: 1
COURSE CODE: COMS 1001
COURSE TITLE: COMMUNICATION SKILLS FOR HEALTH PERSONNEL
NUMBER OF CREDITS: 3
COURSE DESCRIPTION: This course uses a skills approach to the practice of effective communication in health settings. Students will be able to function effectively as individuals in public, small group and face-to-face interactions with persons seeking health care. They will also be able to communicate effectively in writing across a range of forms necessary to the health profession.

Assessment

Examination: 50%
Coursework: 50%

SEMESTER: 2
COURSE CODE: COMS 1002
COURSE TITLE: COMMUNICATION SKILLS FOR THE HEALTH PROFESSIONS
NUMBER OF CREDITS: 3
PREREQUISITES:
CO-REQUISITES: COMS 1001
Course Description: This course uses a skills approach to the application of effective communication principles in counselling and conveying messages in health settings. Students will be able to effectively conduct counselling sessions and use clinical instruction methods. They will also be able to use appropriate strategies and technology to convey messages to patients, clients and other professionals.

Assessment

Examination: 50%
Coursework: 50%

SCHOOL OF MEDICINE

Bachelor of Medicine, Bachelor of Surgery (MBBS)/ Bachelor of Medical Sciences (B.Med.Sci.)

1. REGULATIONS

1.1 Qualifications for Admission

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

- Must have 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;

1.2 Entry Requirements

1.2.1 Academic Requirements

- 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, Mathematics, Chemistry, Biology, Physics.

SCHEME A (Effective 2010/2011 academic year)

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

SCHEME B

ii. Passes in Chemistry, Biology and any other subject at N1 (Open Campus).

Other Academic Qualifications Considered

(i) Students currently studying at a UWI campus in the Faculty of Science and Technology seeking to be transferred to the MB BS programme shall only be considered from the Preliminary and/or Introductory level courses in Chemistry, Biology and one other subject (If the third subject is not Physics, then this must have been passed at CSEC (CXC)/ GCE O-Level/BGSE). 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.

(ii) Applicants holding UWI first degrees from the Faculty of Science and Technology with a minimum of lower second class honours, may be considered for entry.

(iii) 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.

(iv) 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.

(v) Applicants with degrees other than in the natural sciences may also be considered provided that they have attained a minimum average grade of 3.0 or equivalent OR at least Grade 3 passes in Biology/Zoology and Chemistry at Units 1&2 CAPE or GCE A-Level equivalent.

(vi) Applicants with first degrees from institutions other than the UWI shall also be considered 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, Chemistry and one other subject
- A minimum grade point average of 3.0 or its equivalent has been obtained

(vii) A triple major Associate degree from an approved Community College with a GPA greater than 3.5 may also be considered.

1.2.2 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. 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.

1.3 Programme of Study

1.3.1 The programme of study for the MB BS degree 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.

1.3.2 MB BS Phase I comprises Phases IA, IB and IC.

1.3.3 Candidates who successfully complete Phase I will be awarded the Bachelor of Medical Sciences Degree (BMedSci).

2. 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.
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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

I. 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.

II. 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.

III. 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.

IV. 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.

V. 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.

3. MB BS PHASE I AND BMEDSCI

(Basic Health Sciences Programme)

3.1 CURRICULUM

(i) Basic Health Sciences courses (Phase I) include Anatomy, Physiology, Biochemistry, Pathology, Pharmacology, Microbiology, Public/Community Health, Behavioural Sciences and Sociology of Health. The courses are organised on an organ system approach and facilitate the integration of basic medical sciences with clinical sciences. Information will be acquired through large group lectures, laboratory demonstrations, Problem Based Learning (PBL) sessions, which emphasise student-centred learning, training in the skills laboratory, as well as through the medium of integrated clinical presentations.

ATTENDANCE AT PBL SESSIONS IS MANDATORY.

(ii) All students will be required to follow and MUST pass examinations for foundation courses in Communication Skills for Health Personnel and Professions (COMS 1001 & COMS 1002, and **EITHER** FOUN 1101 – Caribbean Civilisation **OR** FOUN 1301 – Law, Governance, Economy and Society.

(iii) All Foundation courses must be completed in Phase I of the MBBS programme and no student will be granted a BMedSci degree until all requirements are satisfied.

3.2 EXAMINATIONS

- **Students will only be eligible to appear for examinations if they have been financially cleared by the University.**

- **Any student who writes an examination for which he/she is not registered will not be credited for the course.**

(i) Effective from 2008/2009 viva voce examinations will not be part of the Phase 1 examination process.

(ii) 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.

(iii) Final examinations will be given at the end of each of the courses offered in Phase 1A, 1B and 1C.

(iv) Phase IA & Phase IB final examinations will usually be conducted in December and May.

(v) Final examinations for Phase IC will usually be conducted in December and March each year.

(vi) Successful completion of 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 determines otherwise.

(vii) A student who has trailed a course may be credited by the Board of Examiners with the coursework marks where applicable for a period not exceeding 18 months.

(viii) The Faculty Board of Examiners for Phase 1 will only allow a student who has failed ONE course in Phase 1A or 1B examinations on the first attempt, with a minimum score of 45% and a pass in the continuous assessment, to proceed to Phase IB or 1C, as the case may be.

(ix) A student who fails to achieve a passing grade in more than one Phase IA or IB courses at the second attempt will be required to repeat the failed courses in the following year and sit the respective end-of-semester examinations

(x) The Faculty Board of Examiners for Phase 1C MAY allow a student who has failed ONLY ONE course in the Phase 1C (Year 3) examination on the first attempt with a score of 48% or 49% and a pass in the continuous assessment to proceed to Phase II of the programme.

(xi) A student who has trailed a Phase 1C course to Phase II and failed the resit examination (usually in August) SHALL be required to immediately withdraw from the clinical rotations. Such a student shall proceed to Phase II only after having passed the trailed Phase 1C course.

(xii) A student who fails to achieve the passing grade in more than 2 courses of the Phase IC examination will be required to repeat the failed courses during the whole year and to sit the final examinations held in December and March.

(xiii) A student who repeats/ resits and passes a course following any failed attempt shall be assigned a maximum grade of C for the successful result.

(xiv) 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.

(xv) **Any student who writes an examination for which he/she is not registered will not be credited for the course.**

(xvi) 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.

4. GRADING SCHEME

80 - 100	Distinction
75 – 79	Honours I
70 – 74	Honours II
50 – 69	Pass
< 50	Fail

5. AWARD OF THE BMEDSCI DEGREE

A student is eligible for the award of the BMedSci degree on satisfactory completion of all Phase 1 courses and passing all the relevant examinations. A student becomes eligible for the BMedSci degree with Honours or Distinction, if the following criteria are met:

(a) BMedSci (Honours) – at least two (2) honours/ distinctions in Phase 1A examinations, at least two (2) honours/ distinctions in Phase 1B examinations, and four (4) honours/ distinctions at Phase 1C examinations.

(b) BMedSci (Distinction) - at least two (2) distinctions in Phase 1A examinations, at least two (2) distinctions in Phase 1B examinations, and four (4) distinctions at Phase 1C examinations.

6. MB BS PHASE II
(Clinical/ Clerkship Programme)

6.1 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-proved '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 will be primarily at clinical wards in 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 a caring approach to clinical practice that is essential if both patients and health practitioners are to benefit from the encounter.

6.2 CONDUCT

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. The standards of professional behaviour expected of medical students of the Faculty are set out in the document 'Professional Behaviour and Fitness to Practice: Responsibilities of Medical Students at The University of the West Indies'. Such an approach to their responsibilities in the provision of medical care will ensure that students will be adequately prepared for professional practice.

Students whose conduct falls below the standard expected will be subject to the disciplinary procedures of the University. Further, conduct which is deemed to pose a serious risk to patients, Faculty, fellow students or the general public will lead to dismissal from the Faculty. All disciplinary procedures will be governed by University regulations as laid out in 'The Code of Principles and Responsibilities for Students'.

6.3 ATTENDANCE/ LEAVE OF ABSENCE/SICK LEAVE

Students are required to attend **a minimum of 75%** of all their educational activities in any clerkship. Students who fall below this minimum will be required to repeat the clerkship, or make up for the lost time (at the discretion of the Clerkship Coordinator). The academic year includes two weeks vacation in the month of December. Beyond this, leave of absence will be granted only in exceptional circumstances. **All requests for leave of absence should be made in writing to the Dean's Office**, through the Head of Department in advance. Sick leave is governed by the normal University regulations.

Students are expected to complete Phase II of the MBBS programme no less than two (2) years and no more than five (5) years after successful completion of Phase I Examinations. Students who have not completed their final MBBS examination within this time frame will be asked to withdraw from the Faculty. Students who are asked to withdraw due to the expiry of the maximum time for completion of the programme will not be allowed to re-apply to the Faculty for at least one (1) year. Students who re-apply to the Faculty and are accepted must re-start their programme of study from the Beginning of Year 1, and cannot apply for exemptions from courses already completed during their initial tenure in the Faculty.

Students are required to successfully complete all clerkships in Year 4 prior to proceeding to Year 5. Students who are unsuccessful in any clerkship will be required to repeat all or part of the clerkship or the end of clerkship assessment, on the advice of the clerkship coordinator. Students who fail any clerkship at the third attempt will be required to withdraw from the Faculty.

6.4 AIMS 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. Students' performance will be assessed on factual knowledge, critical thinking skills, clinical performance and aspects of professionalism. Further details of the assessment are provided in the detailed clerkship descriptions found later in the regulations.

6.5 DISCIPLINES

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

In the fifth and final year of the programme, there are additional clerkships in Public Health/ Primary Care, Orthopaedics, Otolaryngology, Ophthalmology and Anaesthetics and Intensive Care.

6.6 EXAMINATIONS

- **Students are required to have successfully completed all clerkships before writing the final MBBS exams.**
- **Students will only be eligible to appear for examinations if they have been financially cleared by the University.**
- **Any student who writes an examination for which he/she is not registered will not be credited for the course.**

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

At the first attempt, students are required to sit all three subjects that make up the final MBBS examination (Medicine & Therapeutics, Surgery, Obstetrics & Gynaecology). Furthermore, repeaters will be required to sit all remaining (failed) subjects at any particular sitting of the repeat examination.

The Phase II examinations are:

MEDC 5320	**Medicine & Therapeutics (Paper 1);** and
MEDC 5321	**Medicine & Therapeutics (Paper 2)** which together comprise MEDC 5322
MEDC5340	**General Surgery**
MEDC5330	**Obstetrics & Gynaecology**

(a) Medicine & Therapeutics

Papers I and II are 3-hour papers that comprise multiple choice questions, single best response questions as well as extended matching questions reflecting eight (8) themes.

The clinical component takes the format of an objective structured clinical examination (OSCE) that comprises stations in Medicine, Child Health, Psychiatry and Community Health. The candidate must obtain a pass in this component in order to pass the examination in Medicine and Therapeutics.

(b) General Surgery

The written examination is a 3-hour long paper with two (2) sections: Section A consists of two (2) parts - Part I contains questions which require a single best answer and Part II contains questions of the extended matching type; Section B contains questions requiring short written responses.

The oral/clinical examinations consist of a series of 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. At each station, the student may be asked to examine or question patients, or questioned about any clinical material or surgical instruments at the table.

(c) Obstetrics and Gynaecology

The written examination is a 3-hour long paper with three (3) sections: Section A consists of multiple choice questions; Section B contains questions of the extended matching type; Section C contains case reports of the structured answer type.

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.

Students who have failed and are repeating any of their final MBBS examinations will be required to complete a period of prescribed remedial clinical work prior to the repeat examination. The nature and duration of this work will be decided by the Head of Department for the relevant specialty, in conjunction with the Deputy Dean, Clinical Sciences. In general, prescribed remedial clerkships will be between 6 to 8 weeks duration in each subject that the student is repeating. Remedial clerkships will expose the student to all aspects of the subject relevant to the final examination. Students who do not satisfactorily complete the prescribed remedial work will not be allowed to sit the repeat examination.

7. AWARD OF THE MB BS DEGREE

A student is eligible for the award of the MB BS degree on satisfactory completion of all Phase 1 courses and Phase 2 clerkships and passing all the relevant examinations. A student becomes eligible for the MB BS degree with Honours or Distinction, if the following criteria are met:

(a) MB BS (Honours) – at least two (2) honours/ distinctions in Phase 1A examinations, at least two (2) honours/ distinctions in Phase 1B examinations, four (4) honours/ distinctions in Phase 1C examinations, and at least two (2) honours/ distinctions in Phase 2 examinations.

(b) MB BS (Distinction) - at least two (2) distinctions in Phase 1A examinations, at least two (2) distinctions in Phase 1B examinations, four (4) distinctions in Phase 1C examinations, and at least two (2) distinctions in Phase 2 examinations.

8. INTERNSHIP

Upon the successful attainment of the MB BS degree, graduates are required to complete an Internship Programme consisting of clinical rotations for a period of twelve (12) months to acquire full registration by the Trinidad and Tobago Medical Board. Interns rotate through the disciplines of Medicine, Surgery, Obstetrics & Gynaecology, Paediatrics for three (3) months each at public hospitals throughout Trinidad and Tobago.

PHASE I COURSE LISTING

LEVEL 1

Course Code	Course Title	Semester
MDSC 1001	Environment and Health	1
MDSC 1002	Basic Para-Clinical Sciences	1
MDSC 1101	Digestion and Metabolism	2
MDSC 1102	Cardiovascular and Renal	2

LEVEL 2

Course Code	Course Title	Semester
MDSC 2001	Respiration	1
MDSC 2002	Neurosciences and Behaviour	1
MDSC 2101	Endocrine and Reproduction	2
MDSC 2102	Muscles, Bones and Joints	2

LEVEL 3

Course Code	Course Title	Semester
MDSC 3311	Applied Paraclinical Sciences I	1
MDSC 3312	Applied Paraclinical Sciences II	1
MDSC 3313	Applied Paraclinical Sciences II	2
MDSC 3314	Integrated Paraclinical Sciences	Yr Long

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
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, diarrhoea and other gastrointestinal infections will be described.

LEVEL: 1
SEMESTER: 2
COURSE CODE: MDSC 1102
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: MDSC 2001
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 assessment may encompass all of the foregoing modalities.

LEVEL: 2
SEMESTER: 1
COURSE CODE: MDSC 2002
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: MDSC 2101
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 hypothalmic – 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: MDSC 2102
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 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 hepato-biliary 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: Year Long
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 include 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
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 Phase I, 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).

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 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 for the relevant system-based portion of the training programme as these items are not provided.

PHASE II COURSE LISTING

LEVEL 4

Course Code	Course Title	Semester
MEDC 4300	Clinical Medicine 1	YEAR LONG
MEDC 4301	Child Health 1	YEAR LONG
MEDC 4302	Community Health 1	YEAR LONG
MEDC 4303	Psychiatry	YEAR LONG
MEDC 4330	Obstetrics & Gynaecology I	YR LONG
MEDC 4340	General Surgery I	YEAR LONG

LEVEL 5

Course Code	Course Title	Semester
MEDC 5300	Clinical Medicine 2	YEAR LONG
MEDC 5301	Child Health 2	YEAR LONG
MEDC 5302	Community Health 2	YEAR LONG
MEDC 5331	Obstetrics & Gynaecology II	YEAR LONG
MEDC 5339	General Surgery II (Neurosurgery and Paediatric Surgery)	YEAR LONG
MEDC 5342	Otorhinolaryngology (E.N.T. Surgery)	YEAR LONG
MEDC 5343	Ophthalmology	YEAR LONG
MEDC 5344	Anaesthesia and Intensive Care	YEAR LONG
MEDC 5341	Orthopaedic Surgery	YEAR LONG

COURSE DESCRIPTIONS

DEPARTMENT OF CLINICAL MEDICAL SCIENCES

COURSE CODE: MEDC 4300, MEDC 5300
COURSE TITLE: CLINICAL MEDICINE CLERKSHIPS (1&2)
COURSE DESCRIPTION: The Year 4 clerkship in Internal Medicine ensures that students gain exposure to General Medicine and the medical subspecialties, through a combination of inpatient and outpatient hospital encounters.

Aims

The aim of the Year 4 Internal Medicine clerkship is to prepare for entry into the final year medicine clerkship. The clerkship will reinforce basic science knowledge while allowing its application to clinical scenarios. Students will develop relevant physical examination skills in the context of the patient's medical history and learn to devise a clinical problem list from these findings. Students will also observe and in some cases perform bedside or investigative skills and procedures.

TEACHING STRATEGIES: The clerkship is conducted through several means - classroom clinical analysis, clinical teaching; assignments based on clinical encounters; use of medical databases and digital learning sources.

Assessment

Formative assessment: During the clerkship, students will be assessed by their tutors/lecturers on a daily basis with regard to their knowledge, clinical skills and professional behaviour.

Summative assessment: The final clerkship examination consists of a clinical examination (OSCE) during the penultimate week of the clerkship, as well as a written examination.

LEVEL: 4 & 5
SEMESTER: YR LONG
COURSE CODE: MEDC 4301, MEDC 5301
COURSE TITLE: CHILD HEALTH CLERKSHIP (1& 2)
PREREQUISITES: SUCCESSFUL COMPLETION OF *ALL* BASIC HEALTH SCIENCES COURSES
COURSE DESCRIPTION: The junior Paediatric clerkship is designed to introduce students to the principles and practice of paediatrics. This is achieved through a combination of clinical experience, tutorials, self directed learning and skills training.

During the senior Paediatric clerkship students will consolidate previously acquired knowledge from the junior Paediatric clerkship. Students will be expected to become more involved in the management of patients under their care, and to be able to discuss in greater detail the assessment and management of children with a variety of common medical conditions. This is achieved through a combination of clinical experience, tutorials, self directed learning and skills training.

Aims
The child health programme aims to equip the student to recognise a normal child from birth to adolescence. In addition, students are taught to obtain a complete medical history, perform a physical examination and arrive at a rational, informed diagnosis. Students will also acquire certain technical skills and become familiar with certain procedures commonly performed on paediatric patients. Students will be taught to understand the social and familial environment of childhood problems. All students must develop a professional and caring attitude toward children in their care.

Teaching Strategies
During this clerkship, students will attend lectures and tutorials on certain topics of particular relevance to paediatric practice Students will also be taught the examination of all systems in a child, as well as examination of the newborn. This will be achieved during the following sessions: teaching on ward rounds, in the clinics, bedside teaching and in the emergency department. There will also be skills training sessions on key life support, procedural and technical skills required in paediatrics. Students will be required to prepare selected topics for seminars that are pertinent to the clinical areas being covered and will have access to online learning resources through myelearning.

Assessment
Formative assessment: During the clerkship students will be assessed on their knowledge, clinical acumen, level of participation and professional behaviour by their clinical tutors and lecturers. Students are expected to clerk and present clinical cases to their tutors/lecturers, for which they will receive a grade. In addition, all students will have a feedback session approximately half way through their junior clerkship to allow improvement in any areas that are deemed weak or inadequate.

Summative assessment: During the final week of the clerkship students will be assessed via an MCQ examination and an OSCE.

COURSE CODE: MEDC 4302, MEDC 5302
COURSE TITLE: COMMUNITY HEALTH/ PRIMARY CARE CLERKSHIPS (1 & 2)
COURSE DESCRIPTION: These clerkships are intended to build on concepts from the behavioural sciences, primary health care, ethics and epidemiology. Issues to be explored include the patient-physician relationship, the importance of communication in the consultation, the ethical dilemmas faced by physicians in practice, the impact of health and illness behaviour on presentation and management of health related problems. Clinical epidemiology will also be stressed throughout this rotation and the practice of evidence based medicine will be encouraged. The clerkships will provide students with exposure to the many challenges faced by family health practitioners in the context of the health care system in Trinidad.

Aims
The rotations will allow the student to formulate a broad definition of health by examining the full social and mental impact of illness on a family. The close affiliation with a family in a family study project will also allow for the recognition of the influence of culture and society on health-related beliefs and practices.

Teaching Strategies
Throughout the clerkships, students will attend a series of sessions covering topics of importance to general practice. These will include lectures, interactive tutorials and student presentations. Students will also have the opportunity to attend a general practice or health centre, where they will participate in the assessment and management of problems commonly seen in family practice. Students will be exposed to communication skills training through a series of simulated scenarios. The student has access to a wide variety of online resources through the myelearning website.

Assessment
Formative assessment: Global assessment - Students will be assessed on attendance, class room participation, professionalism, conduct and values. Presentations/Group work - This comprises presentations made at the end of your clerkship. General Practice Evaluation - Marks will be based on the assessment from the assigned GP. The communication skills component will also be assessed.

Summative assessment: The end of clerkship written examination consists of multiple choice questions (MCQs), short answer questions (SAQs) and extended matching questions (EMQs).

COURSE CODE: MEDC 4303
COURSE TITLE: PSYCHIATRY CLERKSHIP
COURSE DESCRIPTION: A holistic approach to the practice of medicine requires an understanding in the doctor that illness has interacting biological, psychological and sociocultural aspects that influence the course and outcome of any disease. The Psychiatry clerkship orients medical students to the biopsychosocial approach to medicine, and equips them with the knowledge and skills in psychiatry that are essential for effective practice as a medical practitioner.

Aims
The goal of the Psychiatry clerkship is to provide students with the knowledge and clinical experiences that will enable them to recognize the biological, psychological and socio-cultural determinants of psychiatric illnesses and know how they interact. The student should be able to diagnose the common psychiatric disorders encountered in general medical practice, and be conversant with the principles of management and the techniques of treatment in psychiatry.

Teaching Strategies
Students will learn about the common conditions encountered in psychiatry practice and the common approaches to management of these conditions through a series of lectures and tutorials throughout their clerkship, using a case-based approach. During the clerkship, students are engaged in role play of common psychiatric disorders and objective structured clinical assessments. Clinical teaching is conducted on ward rounds in a psychiatric ward of a general hospital, at the psychiatric hospital, and at hospital-based and community-based out patients' clinics. Students are expected to clerk patients and keep a clinical record of the patients they have seen. They will also take calls with the on call psychiatrist when on duty. Students also participate in journal club sessions and post-graduate psychiatry seminars

Assessment
Formative assessment: Students are required to present or submit diagnostic formulations and/or case histories on patients that they have interviewed. These are used for the continuous assessment of, and feedback to students. Students found to be performing unsatisfactorily will be expected to engage in additional clinical work or follow any other course of action deemed suitable by lecturers. Students with incomplete task cards will be required to engage in remedial work, to ensure adequate clinical exposure before a passing grade can be issued for the clerkship.

Summative assessment: The final grade in Psychiatry is determined by the ongoing assessment during the clerkship (including the case write up submitted by the student and the student's attendance, punctuality and deportment). There is also an end of clerkship examination which students must pass to have successfully complete the clerkship. This examination includes an OSCE examination and a written examination.

DEPARTMENT OF CLINICAL SURGICAL SCIENCES

COURSE CODE: MEDC 4330, MEDC 5331
COURSE TITLE: OBSTETRICS & GYNAECOLOGY CLERKSHIPS (1&2)
COURSE DESCRIPTION: The obstetrics and gynaecology clerkships are designed to allow students exposure to the breadth of normal and abnormal obstetric and gynaecological presentations likely to be encountered in medical practice. The junior clerkship allows 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. The senior clerkship develops the students' curiosity, initiative and powers of observation; teaches them to arrange and interpret data and to identify disorders in terms of inter-related areas and/or function.

Aims
To make the student competent to manage as a medical intern in Obstetrics and Gynaecology. These clerkships also serve as a foundation for postgraduate training in Obstetrics and Gynaecology.

Teaching Strategies
Lectures and tutorials are used to cover core topics in the speciality. Clinical teaching is done via bedside encounters, discussions on history-taking, clinical skills and management issues. Both self-directed and small group learning are highly encouraged, as well as peer and self-assessment. On-line tutorials are also used.

Assessment
Formative assessment: Throughout the clerkships, students are assessed on their clinical performance, knowledge and professional behaviour by all tutors/lecturers.

Summative Assessment: The end of clerkship examination consists of written, oral and clinical examinations which are based on the list of core topics given to the students at the beginning of their clerkship.

COURSE CODE: MEDC4340, MEDC5339
COURSE TITLE: GENERAL SURGERY CLERKSHIPS (1&2)
COURSE DESCRIPTION:
The Junior Clerkship
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 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. 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

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

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.

An in-training evaluation will be submitted by each tutor at the end of each rotation for each student. An end of clerkship assessment will take place at the end of both the Year 4 and Year 5 rotations. 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
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
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.

COURSE CODE: MEDC 5342
COURSE TITLE: OTORHINOLARYNGOLOGY (E.N.T. SURGERY) CLERKSHIP
COURSE DESCRIPTION: This clerkship lasts six weeks and exposes students to the spectrum of conditions of the ear, nose and throat that are encountered in normal medical practice. Throughout the period the students are involved in all aspects of Otolaryngology practice.

Aims
The aim of this clerkship is to ensure that the students learn how to obtain a full history, perform a thorough head and neck examination and adequately manage common Ear, Nose & Throat (ENT) disorders.
Teaching Strategies
Students attend lectures covering the major ENT topics and these lectures are also available on the myelearing website. As part of the clinical teaching, students are allowed to clerk and examine patients in the Out-Patient Clinics and discussions are held about their findings and management of the patients. Students also visit the operating theatre to observe a variety of surgical procedures.

Assessment
Formative assessment: Students are assessed on their performance during the clerkship, and are required to keep a log book, which includes attendance at tutorials and clinical sessions as well as performance and/or observation of specific clinical skills.
Summative assessment: At the end of the clerkship students are assessed by means of a written exam and a slide quiz exam

COURSE CODE: MEDC 5343
COURSE TITLE: OPHTHALMOLOGY CLERKSHIP
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.

COURSE CODE: MEDC 5344
COURSE TITLE: ANAESTHESIA, INTENSIVE CARE AND PAIN MANAGEMENT CLERKSHIP
COURSE DESCRIPTION: This clerkship provides an introductory overview of Anaesthesia, Intensive Care & Pain Management

Aims
The anaesthetic and ICU clerkship aims to impart knowledge regarding perioperative and critical care medicine leading to high quality patient care with a humane approach. It also aims to inculcate research and development in the specialty of Anaesthesia, Intensive Care and Pain Management.

Teaching Strategies
Clinically oriented, problem based learning tutorials are held throughout the clerkship. The students are expected to observe and perform several clinical procedures under the supervision of specialist anaesthetists. Clinical exposure is obtained through sessions in the operating theatres, Intensive Care Unit, emergency on-call duty and outpatient clinics. Students are expected to document different cases which they assisted in anaesthesia during the clerkship. Students are also assessed and graded for their BLS and ACLS skills. Students are required to work in teams on case reports which will be presented and graded during the last week of the clerkship.

Assessment
Formative assessment: A final evaluation grade will be assigned for the clerkship which includes considerations for attendance, reliability, factual knowledge, approach to clinical problems and deportment, work sheet, case presentation, CPR skills. An overall quantitative score is given.

Summative assessment: The written paper will include Multiple Choice Questions, Extended Matched Questions and Short Answer Questions. All these together will constitute a quantitative score. A final combined grade of these assessments will be given for the clerkship.

COURSE CODE: MEDC 5341
COURSE TITLE: ORTHOPAEDICS SURGERY CLERKSHIP
COURSE DESCRIPTION: The Orthopaedic surgery clerkship is a one month rotation which takes place during the final year of medical school. During the clerkship students gain clinical exposure through interaction with patients on the ward rounds, operating theatres and in clinics. Students are also exposed to a variety of teaching opportunities throughout the clerkship.

Aims
The goal of this rotation is to give the student a well-rounded, thorough introduction to orthopaedics and the sub-specialties therein.

Teaching Strategies
Lectures are delivered in accordance with the timetable and cover a variety of important topics. Students are required to prepare topics for discussion at tutorial sessions. Students are also expected to attend hospital grand rounds. Clinical teaching is done at the bedside, in clinics and during on call duties. Students are also encouraged to read widely utilizing the recommended texts.

Assessment
Formative assessment: Continuous assessment of students' clinical skills, attendance, professional behavior and participation in the clerkship takes place throughout the clerkship. All tutors are part of this assessment process.

Summative assessment: An end of clerkship examination is held on the last day of the rotation at the Port of Spain General Hospital. It consists of multiple choice questions, extended matching questions, essay type questions and an oral examination.

Students' Prizes

OSCAR FRANCOIS PRIZE
Criterion: Most outstanding performance in Community Health Clerkship
Year of Study: Years 4 & 5

MEPHA PHARMACEUTICAL COMPANY & ULTRA PHARM MARKETING PRIZE
Criterion: Most outstanding student in Surgery
Year of Study: Year 5

DR. FIONA PHELPS PRIZE
Criterion: Most outstanding clinical student in Obstetrics and Gynaecology
Year of Study: Years 4 and 5

DEAN'S AWARD
Criterion: Most outstanding student
Year of Study: Year 5

PROF. ZULAIKA ALI PRIZE
Criterion: Best performance in final MBBS Medicine OSCE
Year of Study: Year 5

PROFESSOR ROLF RICHARDS MEMORIAL PRIZE
(Donated by Medical Associates Hospital)
Criterion: Best clinical student in Final MBBS Medicine and Therapeutics
Year of Study: Year 5

RBC PRIZE
Criterion: Most outstanding student in Community Medicine
Year of Study: Year 5

ASTRA ZENECA & OSCAR FRANCOIS PRIZE
Criterion: Most outstanding final year student in Anaesthetics
Year of Study: Year 5

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 (under review) leading to the degree of Doctor of Dental Surgery and 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 conjunction 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. Students will also undertake a research project over the course of their second year supervised by staff of the School of Dentistry.

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.

REGULATIONS

(i) If a student's entry into year 3 is delayed by two years or more, he/she she is required to repeat the Phase I B Dental course and the respective examination.

(ii) At the beginning of semester 2, Year 1 of the DDS programme students are required to purchase a recommended hand piece kit and other clinical and laboratory instruments that would be the property of the student. These instruments will be useful when they set-up their practice. Students will also be required to purchase software licenses for clinical management software. The complete set of instruments and software licenses will cost approximately US$5,000-6,000. The student is expected to deal with the dealer directly regarding payment. Students who do not purchase the instruments kits and/or software licences will not be allowed to proceed into the preclinical and clinical courses of the D.D.S. programme.

(iii) A student whose attendance falls short of 75% of sessions in Year 3 who fails to meet the course requirements and/or is unsuccessful in the end of course assessments and repeat examinations that year, will be required to repeat year 3.

(iv) A student whose attendance falls short of 75% of sessions in Year 4, who fails to meet the course requirements and/or is unsuccessful in the end of course assessments and repeat examinations that year, would be required to repeat Year 4.

(v) Any student whose attendance falls short of 85% in any clinical rotation will not be eligible to appear for the final examination. Such a student is required to repeat the clinical year. Such a student would be required to repeat the clinical year.

(vi) The clinical training of students from Year 3 to Year 5 is monitored by way of accomplishment of clinical quota and competency in each discipline. If students fail to accomplish the quota required to achieve competency in respective clinical years of the programme, they are not allowed to progress from one clinical year to another or take the final year examination, as the case may be. Such a student would be required to repeat the clinical year.

(vii) Following graduation, there is an extended one-year Phase III programme of pre-licensure Internship in General Dentistry to prepare students for the independent practise of dentistry and eligibility for registration with the Dental Council of Trinidad and Tobago. The Phase III programme is considered as a Vocational Training programme.

(viii) Any intern whose attendance falls short of 85% in any of their clinical rotations or their performance is below the expected levels qualitatively as judged on various parameters will not receive the certificate of completion of the pre-licensure internship in General Dentistry, thus delaying their registration with the Dental Council of Trinidad & Tobago. Such an intern would be required to extend the pre-licensure Internship in General Dentistry as the case may be. This extension is without stipend.

COURSE OF STUDY

The course for the DDS degree lasts not less than ten (10) semesters. An additional 12 months of vocational training is required for those wishing to be registered with the Dental Council of Trinidad and Tobago.

a. Phase I - Four (4) semesters (sharing common courses where applicable with Medicine and Veterinary Medicine for not less than three (3) semesters)
b. Phase II - Six (6) semesters
c. Phase III (Optional) - Twelve months of vocational training for those wishing to be registered with the Dental Council of Trinidad and Tobago.

PHASE I PROGRAMME

Courses will be presented by the use of a problem-based learning (PBL) method, emphasising student-centred learning. PBL attendance is mandatory.

Dental students, along with Medical students will follow a skills training programme, which will focus on interviewing and basic clinical examination techniques, as well as a variety of motor skills. Dental students will be required to pass an OSCE (Objective Structured Clinical Examination) (MDSC 3280) prior to proceeding to Phase II of the curriculum. Dental students are NOT exempt from this examination.

During the first semester of Phase I, the following courses will be offered on a systemic basis via the Problem Based Learning (PBL) method: Environment and Health (MDSC 1001); Basic Para-clinical Sciences (MDSC 1002). During the second semester Digestion & Metabolism (MDSC 1101); Cardiovascular & Renal (MDSC 1102) will be taught. The following disciplines will be covered during the courses: Anatomy, Biochemistry, Physiology, Pharmacology, Pathology, Microbiology, Public/Community Health, Behavioural Sciences and Sociology of Health.

During Year 2 Semester 1, students in the School of Dentistry will take courses in Respiration (MDSC 2001), Neurosciences & Behaviour (MDSC 2002), in addition to Skills Training (MDSC 3280) and part of Oral Biology (DENT 1102). A special programme of units in Basic Dental Sciences will take place on Year 2, Semester 2. Included are units of: Regional Anatomy of the Head and Neck (DENT 2100) and Oral Biology (DENT 1101/DENT 1102), which includes Dental Anatomy, Oral Histology and Embryology,

Oral Physiology and Oral Biochemistry. A laboratory-based unit of instruction in Operative Dental Techniques I (DENT 2103), and Dental Materials Science (DENT 2102), also occurs at this time.

All students will be required to follow and pass examinations in Communication Skills for Health Personnel and Professions and any other ONE Foundation Course approved by the University. No student will be allowed to graduate until (s)he has passed the examinations in these courses.

EXAMINATIONS - GENERAL

(i) A student shall not be allowed to take any one part or section of the final examination in any discipline unless (s)he attended all of the required coursework tests: written, practical or oral examinations.

(ii) All students must be registered for the examinations of the courses. Failure to register will carry an absent/failed penalty. **Any student who writes an examination for which he/she is not registered will not be credited for the course.**

(iii) A student repeating an examination may be credited by the Board of Examiners with the coursework marks where applicable. 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.

(iv) The Board of Examiners may recommend that a student is deferred from final examinations for up to one year if the student fails to meet the competency required in any discipline as assessed by the internal assessments.

(v) The Faculty may require a student who has not passed a Phase examination within one year of completion of that Phase, to withdraw from the Faculty.

(vi) Students MUST complete both PHASES IA and IB in their entirety before proceeding to any part of the Dental PHASE II programme.

PHASE I EXAMINATIONS

(i) MDSC 1001, MDSC 1002, MDSC 1101 and MDSC 1102 will be examined at the end of each respective semester.

(ii) An integrated examination, Phase IB, will be given simultaneously for dental students to cover courses, MDSC 2001, MDSC 2002, DENT 2100, DENT 1101/DENT 1102, DENT2102 (a combined examination of DENT 2103 and DENT 2104).

(iii) Examinations may consist of written papers, which may include essays, multiple choice questions, practicals and/or orals.

(iv) The OSCE (Objective Structured Clinical Examinations) (MDSC 3280) will be held during Semester 2 of Year 3, and will be for dental students only. Results will be recorded as pass or fail only. 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.

(v) In Years 1 and 2 of Phase I, a student who fails to achieve the passing grade in Phase IA or IB examinations at the first attempt will be required to resit the failed examination. The resit examination will be held during the month of August. A student who fails to achieve the passing grade in Phase IA or IB examinations at the second attempt will be required to repeat the whole corresponding year and to present for the examinations held in May.

(vi) Successful completion of Phase IA must be achieved before proceeding to Phase IB, unless the Board of Examiners grants exemption.

(vii) Successful completion of Phase IB must be achieved before proceeding to Phase II, Part I (Year 3).

(viii) No exemption will be granted.

(ix) A student who fails at his/her third attempt will be required to withdraw from the Faculty.

PHASE II PROGRAMME

The requirement for entry to the Phase II - Part I and II programme is the successful completion and passes in all courses at the Phase I programme.

Phase II spans six (6) semesters or three (3) years. Courses in this Phase are as follows:-

- Year 3 - General Medicine (DENT 3210); General Surgery (DENT 3211); Dental Public Health I (DENT 3200); Preventive Dentistry I (DENT 3201); Periodontology I (DENT 3202); Conservative Dentistry I (DENT 3203); Oral Radiology (DENT 3205); Prosthodontics I (DENT 3207); Orthodontics I (DENT 3208) and Paediatric Dentistry I (DENT 3209).
- Year 4 courses are Dental Public Health II (DENT 4200); Preventive Dentistry II (DENT 4201); Oral Pathology (including Oral Microbiology) (DENT 4204); Oral Radiology (Including Dental Therapeutics) (DENT 4205); Oral Medicine (DENT 4300); Oral & Maxillofacial Surgery (DENT 4301); Periodontology II (DENT 4302); Orthodontics II (DENT 4305) and Paediatric Dentistry II (DENT 4306).
- Year 5 courses are - Ethics, Law & Jurisprudence (DENT 5307); Restorative Dentistry (DENT 5320); Child Dental Health (DENT 5330) and Oral Diseases (DENT 5340).

PHASE II EXAMINATIONS

(i) In the Phase II examinations, each candidate must satisfy the examiners in the clinical/practical/oral examinations.

(ii) Phase II examinations are held in two (2) parts, namely Phase II (Part 1) and Phase II (Final). The final examinations (Phase IIB) for the degree will be held at the conclusion of the Phase II Programme. Students shall not be permitted to write the final examination until they have passed the Phase II (Part 1) examination and have satisfactorily completed the Phase II (Final) programme of study.

(iii) The Phase II (Part 1) examinations are held at the end of Year 3, semester 2 and covers units DENT 3210/3211 General Medicine/General Surgery, examined as DENT 3212 Human Diseases.

(iv) Candidates who fail the Phase II (Part 1) Examinations will be allowed to continue the programme and enter the Year 4 of the DDS programme for six months only, during which they must pass the re-sit examination in November/December of the same year. Failure at this stage will require withdrawal from the DDS programme and repeating the entire third year, including all examinations and internal assessments from the following September, as a third and final attempt.

(v) The Phase II (Final) Examinations are held in May/June of the final year and cover the following units: Restorative Dentistry (DENT 5320); Child Dental Health (DENT 5330) and Oral Diseases (DENT 5340). Ethics, Law & Jurisprudence (DENT 5307), while not examinable in May/June, students must pass the continuous assessments for this course.

INTERNSHIP

In the School of Dentistry, upon the successful completion of the DDS degree, graduands are required to follow a Programme in General Dentistry called vocational training (internship) for a period of 12 months as a requirement of certification by the Dental Council of Trinidad and Tobago as being eligible for full registration to practise dentistry in Trinidad and Tobago for nationals of Trinidad and Tobago.

GRADING SCHEME

For students entering the Faculty in 2003 (Class of 2008) and effective up to the Graduating Class of 2011, the following Grading Scheme is to be implemented for courses done in Basic Health Sciences:

GRADE	PERCENTAGES	
Distinction	80%	(A)
Honours I	75%	(B+)
Honours II	70%	(B)
Pass	50%	(C)
Fail	< 50%	(D)

The UWI Grade Point Average (GPA) System will be in effect for **ALL** students entering the Faculty of Medical Sciences from 2007/2008 academic year.

For students entering the Faculty in 2007 and beyond in the Dentistry programe: Grading Scheme and Credits are still under review.

ELIGIBILITY FOR THE DEGREE
(Effective up to the Graduating Class of 2011)

A student is eligible for the award of DDS degree following satisfactory completion of the relevant courses and passing the necessary examinations. A student becomes eligible for the following awards:

a) DDS (Honours) by obtaining seven (7) or more honours grades in the courses examined of which at least four (4) must be from Phase I examinations.

b) DDS (Distinction) by obtaining seven (7) or more distinctions in the courses examined of which at least four (4) must be from Phase I.

COURSE LISTING

PHASE I A
YEAR 1

Course Code	Course Title	Semester
MDSC 1001	Environment and Health	1
MDSC 1002	Basic Paraclinical Sciences	1
COMS 1001	Communication Skills for Health Personnel	1
FOUN 1101	Caribbean Civilisation	
OR		
FOUN 1301	Law, Governance, Economy & Society	1&2
MDSC 1280	Skills Training	YEAR LONG
MDSC 1101	Digestion and Metabolism	2
MDSC 1102	Cardiovascular and Renal	2
COMS 1002	Communication Skills for the Health Professions	2
DENT 1101	Oral Biology I	YEAR LONG

PHASE I B
YEAR 2

Course Code	Course Title	Semester
MDSC 2001	Respiration	1
MDSC 2002	Neurosciences & Behaviour	1
MDSC 2280	Skills Training II	YEAR LONG
DENT 2101	Oral Biology 2	YEAR LONG
DENT 2100	Head & Neck Anatomy	YEAR LONG
DENT 2104	Dental Materials Science	YEAR LONG
DENT 2103	Operative Dental Techniques I	YEAR LONG
DENT 2104	Dental Materials Science	YEAR LONG
DENT 2205	(part) Core Radiology	YEAR LONG
DENT 2206	Dental Local Anaesthesia & Tooth Removal	YEAR LONG

PHASE II Part I
YEAR 3

Course Code	Course Title	Semester
DENT 3200	Dental Public Health I	YEAR LONG
DENT 3201	Preventive Dentistry	YEAR LONG
DENT 3202	Periodontology I +	YEAR LONG
DENT 3203	Conservative Dentistry I +	YEAR LONG
DENT 3205	Oral Radiology +	YEAR LONG
DENT 3207	Prosthodontics I +	YEAR LONG
DENT 3208	Orthodontics I +	YEAR LONG
DENT 3209	Paediatric Dentistry +	YEAR LONG
DENT 3210/ 3211	Human Disease (General Medicine, General Surgery)*	YEAR LONG

+ = Internal Assessment Examinations contribute to the Final Examinations
* = Subject of Professional Examinations in May

PHASE II Part II
YEAR 4

Course Code	Course Title	Semester
DENT 4200	Dental Public Health II	YEAR LONG
DENT 4201	Preventive Dentistry II	YEAR LONG
DENT 4204	Oral Pathology (incl. Oral Microbiology)	YEAR LONG
DENT 4205	Oral Radiology (incl. Dental Therapeutics)	YEAR LONG
DENT 4300	Oral Medicine	YEAR LONG
DENT 4301	Oral & Maxillofacial Surgery	YEAR LONG
DENT 4302	Periodontology II	YEAR LONG
DENT 4303	Prosthodontics II	YEAR LONG
DENT 4304	Conservative Dentistry II	YEAR LONG
DENT 4305	Orthodontics II	YEAR LONG
DENT 4306	Paediatric Dentistry II	YEAR LONG

YEAR 5

Course Code	Course Title	Semester
DENT 5307	Ethics, Law & Jurisprudence	YEAR LONG
DENT 5320	Restorative Dentistry	YEAR LONG
DENT 5330	Child Dental Health	YEAR LONG
DENT 5340	Oral Diseases	YEAR LONG

COURSE DESCRIPTIONS

LEVEL: 2
SEMESTER: 2
COURSE CODE: DENT 2100
COURSE TITLE: HEAD & NECK ANATOMY (45 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: This unit aims to consolidate information taught in the various Phase IA blocks to provide an understanding of the detailed 3-dimensional structure of the head and neck region that is so important to dentists. This Unit of Anatomy conducts the course provides tutorials and practical demonstrations. Teaching is supported within the School of Dentistry using interactive CD-ROM programmed learning.

LEVEL: 1&2
SEMESTER: 1&2
COURSE CODE: DENT 1101 / DENT 2101
COURSE TITLE: ORAL BIOLOGY (217 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Oral Biology includes tooth morphology, oral anatomy & embryology, oral histology, oral physiology and oral biochemistry. The unit offers study of the gross and microscopic structure of all the components that participate in the stomatognathic system. Physiological and biochemical aspects are included. The embryological development of the face and oral cavity, teeth and associated structures are traced from conception. These studies form the basic concepts of normal structure and function that enable deviations representing oral and dental disease to be studied in later units of oral pathology and oral medicine. Understanding growth and the establishment of occlusion through the childhood to the permanent adult dentition is fundamental to future studies of child dental health (paediatric and preventive dentistry) and the correction of malocclusions (orthodontics). The unit involves lectures and laboratory sessions.

LEVEL: 2
SEMESTER: 2
COURSE CODE: DENT 2104
COURSE TITLE: DENTAL MATERIALS SCIENCE (22 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Knowledge of the behaviour and properties of dental material used clinically and in the laboratory enables appropriate choice of materials and their correct handling to give optimal results for an individual patient's care. Basic physical and chemical properties are studied from a structural and colloidal science aspect and the influence these have upon the mechanical handling properties of dental materials in current use.

LEVEL: 2
SEMESTER: 1&2
COURSE CODE: DENT 2103
COURSE TITLE: OPERATIVE DENTAL TECHNIQUES (119 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: This integrated unit provides theoretical, laboratory and clinical experience of the basic principles of restorative dentistry including conservation, periodontology, removable prosthodontics and dental technology. The preparation and restoration of teeth with amalgam and tooth-coloured materials is practiced in both laboratory and clinical settings. The unit gives special attention to the biological aspects involved in the restoration of teeth, with emphasis on preservation of the vital tooth tissue plus prevention and maintenance of the health of the supporting oral tissues. Particular reference is made to the selection of appropriate restorative materials and this cross-references with the DD 102 (Dental Materials Science) unit. Diagnosis and treatment planning in restorative dentistry is introduced in lectures, seminars and clinics. A special sub-unit of operative dentistry for children is included along with an introduction to orthodontics. This unit **must** be successfully completed prior to the commencement of supervised patient management in the clinics.

LEVEL: 2
SEMESTER: 1&2
COURSE CODE: (PART) DENT 2205
COURSE TITLE: CORE RADIOLOGY (22 HOURS)
AS AN ESSENTIAL REQUIREMENT PRIOR TO CLINICAL PRACTICE, ALL STUDENTS MUST UNDERTAKE A CORE UNIT OF TEACHING CONCERNING RADIATION PHYSICS, RADIATION DOSAGES
NUMBER OF CREDITS:
COURSE DESCRIPTION: Radiation safety and diagnostic oral radiographic examination techniques. The unit includes film properties, quality assurance, processing and storage plus film-fault avoidance. Clinical demonstrations are included. An internal assessment must be passed at the end of the unit as a prerequisite to commencing patient clinic rotations.

LEVEL: 2
SEMESTER: 2
COURSE CODE: DENT 2206
COURSE TITLE: DENTAL LOCAL ANAESTHESIA & TOOTH REMOVAL
(APPROX. PERSONAL LEARNING TIME 2 H)
NUMBER OF CREDITS:
COURSE DESCRIPTION: As the vast majority of operative dentistry requires effective pain control, this unit provides a basic introduction to the pharmacology, indications, contra-indications and techniques of dental local anaesthesia. The fundamental principles involved in the forceps removal of teeth are learned in parallel. These units are provided as interactive self-learning programmed teaching material in the form of CD-ROM (local anaesthesia) and written programmed text (tooth removal). Students may purchase their own copies of these programmes for home study. This is supplementary to the programmes being freely available in the School's Computer Assisted Learning (CAL) Laboratory or The Medical Sciences Library. This unit is supported with clinical demonstrations. Passing an internal assessment at the end of the unit is another **prerequisite** to commencing patient clinic rotations.

PHASE II Part I – YEAR 3

Only after having successfully completed the Phase IA and Phase IB examinations, students embark upon the clinical Phase II programme. Part 1 commences in the third year with a four-week period of orientation and introduction to the hospital clinics. Students are made familiar with the clinical procedures, patient appointment system, clinical records, their responsibilities and the regulations governing the treatment of patients under supervision. Acceptable dress codes and professional behaviour demands are emphasised. There is an introductory lecture series on Ethics, Confidentiality and Professionalism. It is during this period that the internal examinations in Dental Local Anaesthesia/Tooth Removal and Core Radiology are taken. Clinic rotations involving patient management commence after successful completion of this clinical introduction period. The clinical dental science units of instruction presented during the third year are as follows:

COURSE DESCRIPTIONS

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: DENT 3201
COURSE TITLE: PREVENTIVE DENTISTRY (2 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: A unit devoted to the concepts, principles and methods of prevention of dental diseases with emphasis on primary preventive measures, especially for children and nursing mothers.

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: DENT 3200
COURSE TITLE: DENTAL PUBLIC HEALTH (3 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: This unit explores the development of appropriate attitudes, awareness and sensitivity to oral health care and service provision as a public health measure. The characteristics and scope of dental public health activities along with the principles of epidemiology and biostatistics in assessing the oral and dental health care needs of a community are discussed. Dental public health research techniques are explained. The application of managerial skills to optimally utilise auxiliary personnel to achieve high quality, evidence-based oral health care is considered.

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: DENT 3202
COURSE TITLE: PERIODONTOLOGY I (30 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: This unit explores the biology and pathology of the periodontal tissues as well as the techniques of disease prevention, diagnosis and management.

LEVEL: 1
SEMESTER: 1&2
COURSE CODE: DENT 3203
COURSE TITLE: CONSERVATIVE DENTISTRY I
(95 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Operative (Conservative) Dentistry involves the restoration of tooth structure and function following the ravages of dental caries (decay), trauma or correction of developmental defects. Topics include preventive aspects and cariology, pulpal injuries and therapy, crown & bridge, root canal therapy (endodontics) and cosmetic dentistry, including the use of veneers. Extra-coronal and intra-coronal restoration of teeth using tooth coloured materials, ceramics and precious or semi-precious metals are studied and practised.

LEVEL:
SEMESTER:
COURSE CODE: DENT 3205
COURSE TITLE: ORAL RADIOLOGY (29 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Studies the use and interpretation of imaging techniques for oral and dental diagnosis. The techniques include the use of X-rays and plain photographic film, Computerised Axial Tomography (CAT), Radioisotope Scanning and Magnetic Resonance Imaging (MRI).

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: DENT 3207
COURSE TITLE: PROSTHODONTICS I (6 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Prosthodontics involves the replacement of missing dental tissues that have been lost due to disease, trauma or developmental causes using removable appliances. The unit includes study of specialist prosthodontic techniques used for facial reconstruction and obturation of residual palatal clefts. This cross-references with aspects of Oral & Maxillofacial Surgery. Each prosthesis must be individually designed for each patient to restore, as far as possible, normal masticatory (chewing) function, facial aesthetics, speech and related psychological functions. The use and fabrication of removable partial and complete dentures is practiced in laboratory and clinical environments.

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: DENT 3208
COURSE TITLE: ORTHODONTICS I (79 HOURS)
COURSE DESCRIPTION: These units study the causes, prevention and management of disturbances of dental occlusion arising from disharmony between jaw size and tooth size/number. Growth pattern studies through childhood to the adult stage are important to understand the prognosis of orthodontic treatment in each patient. There is a strong aesthetic and psychological component to this type of dental treatment. The lecture series covers early interceptive orthodontic treatment, re-alignment of teeth by tilting or rotation methods and consideration of Maxillofacial Surgery referral. The use of removable and fixed appliance techniques is studied. The unit is supported with clinical and laboratory experience.

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: DENT 3209
COURSE TITLE: PAEDIATRIC DENTISTRY I (57 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Paediatric Dentistry considers the differences between the dental treatment of children compared with that of adults. Topics included are common childhood diseases, the management and prevention of dental trauma and rampant dental caries. Preventive techniques such as dietary analysis, fluoride use and fissure sealant therapy are practiced. The dynamic and continuous changes in the dentition and occlusion of children, due to growth and development, are studied. The approach to the behavioural management of the normal and handicapped child dental patient is also examined in detail. The unit is supported with clinical and laboratory experience.

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: DENT 3210/DENT 3211
COURSE TITLE: HUMAN DISEASE (GENERAL MEDICINE/ GENERAL SURGERY) (59 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: General Medicine and Surgery are important aspects to understand for the safe and appropriate management of dental patients who have general systemic disease. This includes awareness of how general medical and surgical conditions affect the choice of treatment or medications that a dental patient may require. Study of general Clinical Pathology and Clinical Microbiology form the basis for future studies of Oral Pathology, Oral Medicine and Oral Surgery as well as providing an understanding of the known mechanisms underlying the systemic diseases studied. Clinical pharmacology is an important component within this unit. Prescribing drugs for dental patients, who are already taking medications for some medical reason, must avoid adverse drug reactions occurring or interference with the patient's background medical management. The consequences of such interactions may be life threatening for the patient and result from incompetent management

of a relatively less important dental related problem. Dentists must also be able to detect signs of undiagnosed medical disease in their patients. This skill must rely upon recognition of such signs from the exposed parts of a dental patient's body that are normally visible during a dental consultation. The unit is delivered using a combination of lectures, seminars, ward rounds and clinical/ laboratory sessions.

PHASE II Part II – Years 4 & 5

During the fourth and fifth years clinical experience in the various patient clinics continues. By the end of the fourth year, the majority of the primary didactic teaching is completed. This includes an advanced laboratory-based unit of advanced restorative dentistry (Operative Dental Techniques II) that includes Crown & Bridge design and construction. The fifth year is devoted to in-depth study of all Clinical Dental Science subjects to develop wider and deeper understanding. This is achieved through topic teaching, case analyses and clinical conundrums using Problem Based Learning (PBL) methodology. It should be realised that **every** patient encountered is in itself a PBL exercise.

*The following subjects are taught as an integrated unit of didactic lectures termed **ORAL DISEASES** (300 hours). The unit is delivered during Year 4 and is supported with clinical experience in the 4th and 5th year clinical rotations through the Oral Surgery, Oral Diagnosis, Oral Medicine & Emergency, Adult and Child Dental Health clinics.

COURSE DESCRIPTIONS

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4200
COURSE TITLE: DENTAL PUBLIC HEALTH II (3 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: This unit explores the development of appropriate attitudes, awareness and sensitivity to oral health care and service provision as a public health measure. The characteristics and scope of dental public health activities along with the principles of epidemiology and biostatistics in assessing the oral and dental health care needs of a community are discussed. Dental public health research techniques are explained. The application of managerial skills to optimally utilise auxiliary personnel to achieve high quality, evidence-based oral health care is considered.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4201
COURSE TITLE: PREVENTIVE DENTISTRY II (3 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: A unit devoted to the concepts, principles and methods of prevention of dental diseases with emphasis on primary preventive measures, especially for children and nursing mothers.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4204
COURSE TITLE: ORAL PATHOLOGY (53 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Oral Pathology is the specialist branch of Dentistry that deals with the mechanisms, identification (chiefly histopathological) and prevention of oral and dental disease processes. The wider systemic effects of the diseases studied are explained. The subject matter includes Oral Microbiology, Dental Therapeutics and Forensic Dentistry.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4205
COURSE TITLE: ORAL RADIOLOGY (11 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Oral Radiology studies the use and interpretation of imaging techniques for oral and dental diagnosis. The techniques include the use of X-rays and plain photographic film, Computerised Axial Tomography (CAT), Radioisotope Scanning and Magnetic Resonance Imaging (MRI).

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4300
COURSE TITLE: ORAL MEDICINE (11 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Oral Medicine is the branch of Dentistry that encompasses, with Oral Pathology, the study of the aetiology, pathogenesis, investigation, diagnosis, prevention and management of orofacial diseases. It is a relatively new speciality of Dentistry that has arisen due to (a) an increasingly ageing population, (b) advances in medical and surgical sciences and (c) lifestyle changes that have led to the emergence of previously unseen diseases. A typical example of the latter is the advent of the human immunodeficiency virus (HIV) that has resulted in an entirely new pattern of orofacial diseases, which places the responsibility for early recognition and competent management directly at the door of every general dental practitioner's office. The realisation that oral health is important in patients with systemic diseases is also growing. That oral health is an integral part of total body health and, therefore, the health of a community, means the role of a modern dental surgeon has changed from an essentially restorative discipline to that of an oral physician.

The implications of systemic diseases, in the presentation and possible special management of dental patients, are fully explored. Lectures are also given by various medical consultants like Oncologists, ENT, Gastroenterology, Hematology, Ophthalmology, Cardiology and Radiology, to give medical dimension to dental diseases in the second semester of year 4 DDS programme.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4301
COURSE TITLE: ORAL & MAXILLOFACIAL SURGERY (36 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Oral & Maxillofacial Surgery studies the surgical management of oral and dental disease including the surgical management of oral cancer and subsequent reconstructive techniques, correction of facial deformity, cleft lip and palate surgery as well as surgery involving the temporomandibular joints and salivary glands. Elements of plastic surgery are included.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4302
COURSE TITLE: PERIODONTOLOGY II (46 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: This unit explores the biology and pathology of the periodontal tissues as well as the techniques of disease prevention, diagnosis and management.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4303
COURSE TITLE: PROSTHODONTICS II (12 LECTURE HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Prosthodontics involves the replacement of missing dental tissues that have been lost due to disease, trauma or developmental causes using removable appliances. The unit includes study of specialist prosthodontic techniques used for facial reconstruction and obturation of residual palatal clefts. This cross-references with aspects of Oral & Maxillofacial Surgery. Each prosthesis must be individually designed for each patient to restore, as far as possible, normal masticatory (chewing) function, facial aesthetics, speech and related psychological functions. The use and fabrication of removable partial and complete dentures is practiced in laboratory and clinical environments.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4304
COURSE TITLE: CONSERVATIVE DENTISTRY II (95 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Operative (Conservative) Dentistry involves the restoration of tooth structure and function following the ravages of dental caries (decay), trauma or correction of developmental defects. Topics include preventive aspects and cariology, pulpal injuries and therapy, crown & bridge, root canal therapy (endodontics) and cosmetic dentistry, including the use of veneers. Extra-coronal and intra-coronal restoration of teeth using tooth coloured materials, ceramics and precious or semi-precious metals are studied and practised.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4305
COURSE TITLE: ORTHODONTICS II (19 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: These units study the causes, prevention and management of disturbances of dental occlusion arising from disharmony between jaw size and tooth size/number. Growth pattern studies through childhood to the adult stage are important to understand the prognosis of orthodontic treatment in each patient. There is a strong aesthetic and psychological component to this type of dental treatment. The lecture series covers early interceptive orthodontic treatment, re-alignment of teeth by tilting or rotation methods and consideration of Maxillofacial Surgery referral. The use of removable and fixed appliance techniques is studied. The unit is supported with clinical and laboratory experience.

LEVEL: 4&5
SEMESTER: 1&2
COURSE CODE: DENT 4306
COURSE TITLE: PAEDIATRIC DENTISTRY II (9 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Paediatric Dentistry considers the differences between the dental treatment of children compared with that of adults. Topics included are common childhood diseases, the management and prevention of dental trauma and rampant dental caries. Preventive techniques such as dietary analysis, fluoride use and fissure sealant therapy are practiced. The dynamic and continuous changes in the dentition and occlusion of children, due to growth and development, are studied. The approach to the behavioural management of the normal and handicapped child dental patient is also examined in detail. The unit is supported with clinical and laboratory experience.

LEVEL: 5
SEMESTER: 2
COURSE CODE: DENT 5307
COURSE TITLE: DENTAL ETHICS, LAW & JURISPRUDENCE IN YEAR 5 (16 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: In Year 5, Ethics considers the manner and habits of man; the rules or principles that govern correct conduct; the science of moral obligation; the system of moral principles and the morality of one's conduct toward others, and specifically the principles governing the professional conduct of dentists in relation to their patients and to society. The rights, duties and responsibilities of dentists and their patients are discussed. The application of the principles of law and justice as they relate to the practice of dentistry is studied along with the statutory Dental Profession Acts of Parliament.

HANDS ON CLINICAL TRAINING
SEMESTER: 1&2
COURSE CODES: DENT 3220, DENT 5330 AND DENT 5340
COURSE TITLE: RESTORATIVE DENTISTRY (1,320 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Beginning from year 3, students are involved in hands-on clinical training in this discipline, which is an amalgamation of various components of Conservative Dentistry, Prosthodontics and Periodontics. They are allocated cases in a graded manner in a closely supervised environment.

SEMESTER: 1&2
COURSE CODE: DENT 5330
COURSE TITLE: CHILD DENTAL HEALTH (797 (HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: This discipline includes Paediatric Dentistry/Orthodontics and Preventive Dentistry/Dental Public Health. Similar to the above discipline, students receive clinical training under close supervision in a graded manner.

SEMESTER: 1&2
COURSE CODE: DENT 5340
COURSE TITLE: EMERGENCY AND ORAL MEDICINE (528HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: The primary rotation in this discipline is in semester 9 and 10. Students learn to provide essentially pain relief by way of invasive and non-invasive methods in diverse clinical scenarios, examine, provide diagnostic pathway and treat various Oral Diseases under the umbrella of the course Oral Disease, which also has other components (see below).

SEMESTER: 1&2
COURSE CODE: DENT 5340
COURSE TITLE: ORAL RADIOLOGY (330 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Students learn the radiographic interpretation of various oral disease in a clinical setting.

SEMESTER: 1&2
COURSE CODE: DENT 5340
COURSE TITLE: ORAL AND MAXILLOFACIAL SURGERY (264 HOURS)
NUMBER OF CREDITS:
COURSE DESCRIPTION: Students get rotation in the above clinic in semesters 9 and 10 observing, and treating a wide range of maxillofacial surgery cases that range from surgical removal of teeth, fractures, cysts, tumours, and oral cancers under strict supervision. They are also exposed ward situation of patients.

DDS FINAL EXAMINATIONS/ASSESSMENT

The final DDS Phase II Part II examinations take place in May/June of the final (5th) Year. Re-sits are held in November/December.

There are THREE SECTIONS:

- **SECTION I - RESTORATIVE DENTISTRY (DENT 5320)**

Comprising DENT 3202, DENT 3203, DENT 3207, DENT 4302, DENT 4303 and DENT 4304

- **SECTION II - CHILD DENTAL HEALTH (DENT 5330)**
  Comprising DENT 4200, DENT 4201, DENT 3208, DENT 3209 DENT 4305 and DENT 4306

- **SECTION III - ORAL DISEASES (DENT 5340)**
  Comprising DENT 4204, DENT 4205, DENT 2206, DENT 4300 and DENT 4301

  Each Section comprises:
  a. Written Paper
  b. Clinical Examination
  c. Viva voce examination

Candidates who do not reach the minimum (50%) pass mark required in **each** of the **written** and **clinical** examinations in each Section, at one and the same sitting, shall **fail that part.**

Candidates are required to re-sit al**l** the components of any one Section failed. For a second attempt, the Internal Assessment mark in the Section(s) failed will be carried forward. For a third attempt, the entire Final Year must be repeated in the Section(s) failed and a new, pass-level, Internal Assessment mark obtained.

WRITTEN PAPERS
Each written paper will consist of FOUR essay or short-answer type questions covering the related course codes. All questions must be attempted. Model answers will be provided to the Examiners indicating how accumulation of marks will be determined. The usual External Examiner scrutiny applies.

CLINICAL EXAMINATIONS

- **SECTION I – RESTORATIVE DENTISTRY (DENT 5320)**
  Candidates will be presented with material relevant to a previously unseen restorative case. Candidates will examine the case, which may consist of study models, radiographs, clinical photographs and other data. Each candidate would then present the case and examined regarding the restorative management of the patient.

- **SECTION II - CHILD DENTAL HEALTH (DENT 5330)**
  Candidates will be required to present to, and discuss with, the examiners TWO child cases for ONE of which they have carried out treatment over a period of time. Case 1 shall be a patient where the provision of a course of **comprehensive** treatment, involving several aspects of Paediatric Dentistry, including Preventive Dentistry, and possibly Orthodontics, has been completed. A written case report on this patient's diagnosis and treatment plan shall be presented to the Examiners for oral discussion. Any alterations to the treatment plan should be accounted for, with reasons.

  The other case will be a previously unseen orthodontic case. Candidates will be given 20 minutes to examine the case, which would consist of study models, a DentoPanTomogram, a lateral cephalometric radiograph and clinical photographs. Each candidate would then be given 10 minutes to present the case and be examined regarding the orthodontic treatment of the patient.

- **SECTION III - ORAL DISEASES (DENT 5340)**
  Candidates will be presented with a previously unseen case, take a full history, perform a clinical examination and formulate a treatment plan. The case will then be discussed with the Examiners.

VIVA VOCE EXAMINATIONS

These will involve a 15-minute discussion with the examiners relating to the subject matter concerned.

INTERNAL ASSESSMENTS

These will be conducted by each of the clinical dental divisions concerned and involve patient, laboratory and theoretical evaluations as well as professionalism, punctuality and clinic attendance. These examinations take place in the summer of the fourth year and the first semester of final year.

Each internal assessment contributes 32% towards the overall final mark in each Section of the Final Examinations. The assessments will be scrutinised by the External Examiner concerned.

In each Section of the Final Examination, the Internal Assessment mark will be derived as follows:

RESTORATIVE DENTISTRY:

- Periodontology 8%
- Conservation/Endodontics 8%
- Prosthodontics 8%
- Crown & Bridge 8%

NB **Ethics & Jurisprudence** is included here. The end of course internal assessment in this subject MUST be passed.

CHILD DENTAL HEALTH:

- Paediatric Dentistry 8%
- Orthodontics 8%
- Preventive Dentistry 8%
- Community Dentistry/ Dental Public Health 8%

ORAL DISEASES:

- Final Examination of the Oral Disease Unit (4th Year) 6%
- Oral Surgery & Dental Radiology examination (5th Year) 6%
- Oral Disease viva voce examination (5th Year) 10%
- Oral Medicine Clinical examination (5th Year) 10%

In order to pass the internal assessment in any Section, candidates must:

(1) Attain at least a 'pass' in EACH of the **clinical** assessments in each discipline of any Section.
AND
(2) achieve an overall grade of 50% in the **combined** clinical and written and/or other marks of each Section. Unsuccessful candidates will be eligible to repeat the failed component/s at the next available sitting of the respective examination/s. This will be scheduled at the discretion of the Unit Head.

Candidates who fail to meet the required 50% pass mark in an Internal Assessment shall not be permitted to enter for any of the Final Examinations. Such candidates will be deferred to the next sitting of Phase II (Final).

Summary of marks allocation for the Final DDS PHASE II, Part 2 Examinations:

Each section carries 250 marks including written, viva voce and clinical examination. However, the final marks are presented out of 100% in each section.

SECTION I
RESTORATIVE DENTISTRY
100%; PASS = 50%

WRITTEN PAPER
(40% of Section I)
Minimum pass = 50%

CLINICAL
(20% of Section I)
Minimum pass = 50%

VIVA VOCE
(8% of Section I)

INTERNAL ASSESSMENTS
(32% of Section I)
Minimum pass = 50% to enter the Final Examinations

SECTION II
CHILD DENTAL HEALTH
100%; PASS 50%

WRITTEN PAPER
(40% of Section II)
Minimum pass = 50%

CLINICAL
(20% of Section II)
Minimum pass = 50%

VIVA VOCE
(8% of Section II)

INTERNAL ASSESSMENTS
(32% of Section II)
Minimum pass = 50% to enter the Final Examinations

SECTION III
ORAL DISEASES
PASS = 50%

WRITTEN PAPER
(40% of Section III)
Minimum pass = 50%
CLINICAL
(20% of Section III)
Minimum pass = 50%

VIVA VOCE
(8% of Section III)

INTERNAL ASSESSMENTS
(32% of Section III)
Minimum pass = 50% to enter the Final Examinations

INTENTION MARKING SCHEME TO BE USED FOR ALL EXAMINATIONS & ASSESSMENTS

This system uses **performance-related NUMERICAL GRADES** to assign a final recorded percentage mark, for each assessment or examination.

Students' Prizes

TRINIDAD DENTAL SUPPLIES MEDALS
Criterion: Best performance in Restorative Dentistry Examination
Year of Study: Year 5

Criterion: Best performance in Child Dental Health Examination
Year of Study: Year 5

Criterion: Best performance in Oral Diseases Examination
Year of Study: Year 5

CERTIFICATES FROM THE SCHOOL
Criterion: Second Best performance in Restorative Dentistry Examination
Year of Study: Year 5

Criterion: Second Best performance in Child Dental Health Examination
Year of Study: Year 5

Criterion: Second Best performance in Oral Diseases Examination
Year of Study: Year 5

Restorative Unit Prize
Criterion: Best performance in Restorative Dentistry Clinical Examination
Year of Study: Year 5

Child Dental Health Unit Prize
Criterion: Best performance in Child Dental Health Clinical Examination
Year of Study: Year 5

Oral Disease Unit Prize
Criterion: Best performance in Oral Diseases Clinical Examination
Year of Study: Year 5

Academic Staff Prize
Criterion: Best Overall Performance in Examinations
Year of Study: Year 5

SCHOOL OF VETERINARY MEDICINE

Doctor of Veterinary Medicine (DVM)

COURSES OF STUDY FOR THE AWARD OF THE DVM DEGREE

The School of Veterinary Medicine (SVM) provides three entry points into the Doctor of Veterinary Medicine Programme, spanning 4, 5 and 6 years and leading to the award of the Doctor of Veterinary Medicine (DVM) degree.

a. The 6-year programme consists of the Pre-Vet year and Years 1, 2, 3, 4 and 5
b. The 5-year programme comprises Years 1, 2, 3, 4 and 5
c. The 4-year programme consists of Years 2, 3, 4 and 5

1. GENERAL

a. Dress Code and Conduct
Students are required to deport themselves in a manner in keeping with the profession of veterinary medicine at all times. All students should be smartly and properly attired. For laboratory sessions, coats must be clean and shoes must fully cover the feet.

b. Attendance and Punctuality
The student should attend all classes regularly and punctually. **Attendance in excess of 75% is mandatory in all courses**.

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c. Smoke-Free Policy
The School of Veterinary Medicine is a smoke-free area.

d. Immunisation
It is a requirement that all students of the School of Veterinary Medicine must be immunized against Hepatitis, Rabies, Tetanus and Yellow Fever.

e. Classrooms and Laboratories
Eating (including chewing gum) and drinking are prohibited in classrooms and laboratories in the School.

2. ADMISSIONS

GENERAL INFORMATION

The University of the West Indies matriculation requirements are that an applicant must have attained passes in at least five (5) subjects at the Caribbean Examination Council's (CXC) Caribbean Secondary Education Certificate (CSEC) examination at the General Proficiency Level (Grade I or II and from 1998 Grade III) or approved equivalents, which must include English Language and Mathematics. Additionally, all applicants for undergraduate programmes of the Faculty of Medical Sciences must have passed Physics at the CSEC examination (General Proficiency Level) or approved equivalent.

The DVM degree programme is generally of five years in length. In addition to the University's and Faculty's requirements applicants should have passed both units of Biology/Zoology, Chemistry and one other two-unit subject at the Caribbean Advanced Proficiency Examinations (CAPE); or approved equivalents e.g. GCE A-levels, German Abitur, French Baccalauréat and International Baccalaureate. The School will also accept applicants who have relevant vocational qualifications, such as an Associate Degree in Natural Sciences.

The SVM will consider applicants for entry into a 4-year (accelerated programme) who are holders of a Bachelor's Degree and who have completed pre-requisite Statistics, Biochemistry and Animal Production/Nutrition courses at the undergraduate level.

The School of Veterinary Medicine offers a special six-year programme to applicants without the relevant CAPE or vocational qualifications. In the first (Pre-Vet) year candidates complete the University of the West Indies Pre-Health Professions Certificate during which the basics, learnt at CAPE, are covered to prepare the students for the five-year course.

As well as the academic requirements, the SVM looks for evidence that the applicant has a passionate interest in veterinary medicine. This evidence will come in the form of work experience, either in a paid or voluntary capacity, gained in farms, stables, veterinary hospitals/practices and animal welfare organizations, among others.

In addition to the relevant qualifications and work experience, candidates also have to show evidence of social awareness, leadership experience, being caring and approachable, ability to communicate with others in a way that is easy to understand and good organisational skills.

All applicants are also required to submit a short (250 – 300 word) autobiographical summary outlining the reasons for their career choice.

2.1 QUALIFICATIONS FOR ADMISSION

A. QUALIFICATIONS FOR ADMISSION TO THE 4-YEAR DVM

1. In order to be eligible for entry to the 4-year DVM programme, an applicant must be the holder of a Bachelor's Degree from a university acceptable to the University of the West Indies with at least a lower second class honours standing or its equivalent

2. In addition to (1) above, an applicant should have successfully completed the following pre-requisites at the first year undergraduate level:

• Statistics	2 credits
• Biochemistry	6 credits
• Animal Production/Nutrition	9 credits

B. QUALIFICATIONS FOR ADMISSION TO THE 5-YEAR DVM

In order to be eligible for entry to the 5-year DVM programme, an applicant must have attained passes in at least five (5) subjects at CSEC (CXC) General Proficiency (Grade I or II and from 1998 Grade III) or approved equivalents, which must include English Language and Mathematics, and Physics (which may alternatively have been passed at High School - Grade 12 with a minimum GPA of 3.0 on a 4-point scale - or any equivalent or higher level examination); and any one of the following:

- UWI first degree from the Faculties of Science and Technology with a minimum of lower second class honours.
- Pure Science Degree from universities other than the UWI:
  i. Provided that the university which granted the degree is recognised by the University of the West Indies as competitive
  ii. Qualification for entry will be based on performance in Biology/Zoology and Chemistry and a minimum cumulative GPA of 2.0 on a 4-point scale or its equivalent is required
  iii. Mathematics and Physics must have been passed at CXC/ 'O' level or equivalent foreign examinations.
- Passes at CAPE Level (I & II) in Chemistry and Biology/Zoology and one other subject, or approved equivalents e.g. GCE A-levels, German Abitur, French Baccalauréat and International Baccalaureate.
- Transfer applicants from the Faculties of Pure and Applied Sciences/Science and Agriculture/ Science and Technology of the UWI, on completion of the Preliminary and/or Introductory years of the programme. Qualification for entry will be based on performance in Biology, Chemistry and one other subject.

- Successful completion of at least one year of a three year Pure Science Degree from a university acceptable to the University of the West Indies. Qualification for entry will be based on performance in Biology, Chemistry and one other subject.

- Successful completion of at least two years of a 4-year Pure Science Degree from a university acceptable to the University of the West Indies; at least two semesters of Level II Biology/Zoology and Chemistry have been successfully completed and a minimum cumulative GPA of 2.5 on a 4-point scale has been obtained.

- The triple major Associate in Science degree, which must include Biology/ Zoology and Chemistry with a minimum cumulative GPA of 2.5 on a 4-point scale from an approved Community College.

- The Associate in Science Degree in General Agriculture from College of Agriculture, Science and Education (CASE), Jamaica with a GPA of 2.5 or greater.

- Persons holding other qualifications which are deemed by the Faculty to be equivalent to the categories above as determined from official transcripts.

C. QUALIFICATIONS FOR ADMISSION TO THE 6-YEAR DVM

Applicants who do not meet the University's normal matriculation requirements may nevertheless be eligible for admission to the 5-year DVM programme subject to successful completion of the 12-month Pre-Veterinary Programme i.e. The Pre-Health Professions Certificate from the University of the West Indies, with a GPA of 3.0 or higher.

2.2 NON-ACADEMIC / CO-CURRICULAR CRITERIA

Applicants are rewarded for involvement in activities that suggest an awareness and concern for animals, their wellness and environment. This would be indicated by involvement usually, but not necessarily in veterinary hospitals/practices, through service clubs or organisations in activities that provide services to companion and/or food producing animals and/or related institutions- particularly those serving the abandoned/neglected.

The application and selection process also incorporates co-curricular criteria. Applicants are rewarded for having been selected (by others) to carry out leadership roles. This would be indicated by the applicant's level of involvement in co-curricular activities; for example, where applicants have been appointed /elected leaders of organisations, captains /vice- captains of teams , chairpersons on committees, directors of organisations, founders of societies, school perfects or house captains. Evidence of interpersonal experiences and communication skills including working in a team as indicated by membership on committees, subcommittees, working groups or task forces that have implemented policies or brought about changes in any area of endeavour is also rewarded. Other criteria rewarded include social awareness and excellence and time management. Points are also awarded for other activities not represented by the above categories.

3. THE SCORING PROCESS FOR APPLICANTS

a. **Academic Criteria**

The assessment chart (Table 1 below) is used to give applicants a score based on their academic grades in the subjects described above and presented for the consideration of the Faculty's Entrance Committee. A maximum of 30 points may be awarded under academic criteria.

TABLE 1:

Holders of Undergraduate and Associate Degrees			Holders of Other Approved Qualifications*				
Grade point Average (GPA)	**Class of Undergraduate Degree (Pre-GPA)**	**SCORE (Points)**	**CAPE (½∑Unit scores)**	**'A' Level**	**FPAS / S Prelim (N1)**	**FPAS / S N2, N3, N4**	**SCORE (Points)**
≥ 3.60	First Class Honours	30	I	A	A^+, A	A^+, A	10
3.50-3.59		29					
3.40-3.49		28	II	B	A^-	A^-, B^+	8
3.30-3.39		27					
	Upper Second Class	26.5	III	C	B^+, B	B, B^-	6
3.20-3.29		26					
3.10-3.19		25	IV	D	B^-	C^+, C	4
3.00-3.09		24					
2.80-2.99		23	V	E	C^+, C, C^-	C^-, D	2
2.60-2.79		21					
2.40-2.59	Lower Second Class	20					

***** *For CAPE subjects, the final score for assessment of applicants' suitability for entry into programmes is derived by adding the scores for each unit of examination and dividing by two.*

Applicants with qualifications that are not listed will be assessed on a case-by-case basis.

b. Non-Academic / Co-curricular criteria

Assessment is according to the 6 sets of criteria set out below. A maximum of 10 points may be awarded under non-academic / co-curricular criteria.

1. Each major area is allocated no more than 2 points.
2. Once a student reaches the 10 points, nothing else is considered.
3. No points are given for CXC or CAPE passes.

TABLE 2:

1. Animal and Veterinary Related Experiences		
Level of Activity	**Duration**	**Point(s)**
Volunteer Service	More than 1 area of service and/or more than 1 year of service	2
	6 months – 1 year service	1
	Less than 6 months service	0
2. Leadership Experience		
Level of Activity	**Duration**	**Point(s)**
Leadership position: Head Girl/Boy; School Prefect	More than 1 area of service and/or more than 1 year of service	2
	6 months – 1 year service	1
	Less than 6 months service	0
Other	1 position	1
3. Interpersonal Experiences & Communication Skills		
Level of Activity	**Narrative**	**Point(s)**
Teamwork	i. Simple Description ii. Further details inclusive of length of time	1 2
School Activities / Formal Presentations	i. Simple Description ii. Further details inclusive of length of time	1 2
Both Areas	Further details inclusive of length of time	2
4. Reward for Excellence		
Level of Activity	**Duration**	**Point(s)**
International / Regional Representation	School, Church, Other	2
National Representation	School, Church, Other	1
Fluency in a Foreign language		1
5. Work Experience		
Level of Activity	**Duration**	**Point(s)**
Job Description	More than 1 area of service and/or more than 1 year of service	
	6 months – 1 year service	1
	Less than 6 months service	0
6. Other Experiences		
Level of Activity	**Duration**	**Point(s)**
Not represented in any other area	More than 1 activity	2
	One (1) activity	1

4. REGISTRATION

4.1. Registration for the Veterinary Medicine programme takes place by semester, i.e. at the beginning of each semester. All students are required to register by the end of the first week for courses in Semester I and by the end of the first week for courses in Semester II or lose their status as students of the University.

However, late registration may be permitted in accordance with the University's general regulations.

5. PROGRAMME OF STUDY

5.1 Courses in Years 1 – 4 will be presented by a mixed/hybrid mode which emphasises student-centred learning and includes the use of the problem-based method, didactic lectures and laboratory sessions.

5.2. Year I Semester I level courses are taken jointly with students from other Schools (Dentistry and Medicine) in the Faculty.

5.3. Students will be required to follow and pass course examinations in Communication Skills for Health Personnel and Professions and any ONE other Foundation Course approved by the University. No student will be allowed to graduate unless the student has passed the examinations in these courses.

6. OUTLINE OF THE PROGRAMME

6.1. The course of instruction for the Doctor of Veterinary Medicine degree shall normally be conducted over 5 years as follows:

YEAR 1

Course Code	**Course Title**	**Semester**
VETM 1001	Veterinary Clinical Skills IA	1
MDSC 1001	Environment and Health	1
MDSC 1002	Basic Para-clinical Sciences	1
VETM 1002	Biochemistry	2
VETM 1003	Animal Production I	2
VETM 1004	Animal Production II	2
VETM 1005	Animal Production III	2
VETM 1006	Biostatistics	2
VETM 1007	Veterinary Clinical Skills IB	2
VETM 1008	Integrated Veterinary Sciences I (PBL)	2

Some aspects of the following disciplines are covered in MDSC 1001 and MDSC 1002:

- Anatomy
- Biochemistry
- Physiology
- Pharmacology
- Pathology
- Microbiology
- Public/Community Health
- Behavioural Sciences; and
- Sociology of Health

YEAR 2

Course Code	Course Title	Semester
VETM 2001	Veterinary Gross Anatomy I	1
VETM 2002	Veterinary Neuroscience	1
VETM 2003	Veterinary Histology & Embryology	1
VETM 2004	Veterinary Physiology/Biochemistry I	1
VETM 2005	Veterinary General Pathology 1	
VETM 2006	Veterinary Clinical Skills IIA	1
VETM 2007	Integrated Veterinary Sciences IIA (PBL)	1
VETM 2008	Veterinary Gross Anatomy II	2
VETM 2009	Veterinary Physiology/Biochemistry II	2
VETM 2010	Veterinary Pharmacology	2
VETM 2011	Veterinary Parasitology I	2
VETM 2012	Veterinary Clinical Skills IIB	2
VETM 2013	Integrated Veterinary Sciences IIB (PBL)	2
VETM 2014	Research Methodology	2
VETM 2015	Research Project I	2

YEAR 3

Course Code	Course Title	Semester
VETM 3001	Veterinary Parasitology II	1
VETM 3002	Veterinary Bacteriology	1
VETM 3003	Veterinary Virology	1
VETM 3004	Veterinary Immunology	1
VETM 3005	Veterinary Systemic Pathology I	1
VETM 3006	Veterinary Clinical Skills IIIA	1
VETM 3007	Integrated Veterinary Sciences IIIA (PBL)	1
VETM 3008	Veterinary Epidemiology	1
VETM 3009	Veterinary Public Health/Zoonoses and Preventive Medicine	1
VETM 3019	Research Project II 1	
VETM 3010	Veterinary Systemic Pathology II	2
VETM 3011	Veterinary Clinical Skills IIIB	2
VETM 3012	Principles of Medicine	2
VETM 3013	Veterinary Toxicology	2
VETM 3014	Principles of Surgery	2
VETM 3015	Avian Diseases	2
VETM 3016	Exotic Animal Health and Management	2
VETM 3017	Food Safety/Hygiene	2
VETM 3018	Integrated Veterinary Sciences IIIB (PBL)	2
VETM 3020	Research Project III	2

YEAR 4

Course Code	Course Title	Semester
VETM 4001	Large Animal Surgery	1
VETM 4002	Large Animal Medicine	1
VETM 4003	Anaesthesiology	1
VETM 4004	Theriogenology I	1
VETM 4005	Diagnostic Imaging	1
VETM 4006	Integrated Veterinary Sciences IVA (PBL)	1
VETM 4007	Clinical Pharmacology	1
VETM 4015	Research Project IV	1
VETM 4008	Theriogenology II	2
VETM 4009	Veterinary Ophthalmology	2
VETM 4010	Small Animal Surgery I	2
VETM 4011	Small Animal Medicine I	2
VETM 4012	Veterinary Clinical Pathology	2
VETM 4013	Veterinary Ethics	2
VETM 4014	Integrated Veterinary Sciences IVB (PBL)	2
VETM 4016	Research Project V (completed over 5 semesters and presented in this semester)	2

6.2. Students are assigned to Clinical Clerkships in the Veterinary Teaching Hospital (VTH) of the School of Veterinary Medicine and at off-campus locations.

The VTH offers extended service (1.e. after 4 p.m.) Mondays – Fridays and Saturdays; and emergency veterinary services outside the normal and extended service hours - Sundays to Saturdays - ending at 8 a.m. on the next regular work day. Clerkship students are rostered as part of the teams providing extended and emergency hours services. It is the responsibility of each student to make suitable accommodation arrangements so that they can participate fully in these learning experiences.

YEAR 5

Course Code	Course Title	Semester
VETM 5001	Elective Clinical Rotation/ Clerkship	YEAR LONG
VETM 5002	Clinical Conference	YEAR LONG
VETM 5003	Equine Medicine & Surgery	YEAR LONG
VETM 5004	Food Animal Medicine & Surgery & Theriogenology I	YEAR LONG
VETM 5005	Food Animal Medicine & Surgery & Theriogenology II	YEAR LONG
VETM 5006	Public Health	YEAR LONG
VETM 5007	Small Animal Medicine II	YEAR LONG
VETM 5008	Small Animal Surgery II	YEAR LONG
VETM 5009	Diagnostic Imaging & Anaesthesiology	YEAR LONG
VETM 5010	Pathology and Diagnostic Laboratory Medicine	YEAR LONG
VETM 5011	Avian & Exotic Medicine	YEAR LONG

7. EXAMINATIONS

7.1. GENERAL

(a) In the School of Veterinary Medicine, there are end-of-semester examinations during Years 1 to 4. Courses in Year 5 are usually examined on a year long basis.

(b) The Grade Point Average (GPA) will be in effect for all students matriculating from the 2011/2012 academic year.
Effective 2011/2012 academic year, candidates entering the DVM programme shall normally be required to maintain a minimum term GPA of 2.5.

(c) During each year of the programme, students will be evaluated in the relevant disciplines during each course as continuous assessment/ coursework examinations and at the end of the semester/ year, except as specifically stated in these Regulations.

(d) Examinations may consist of written papers, which may include essays and multiple choice questions; practicals and/or orals and/or spotters. Coursework can comprise laboratory, field exercises, literature surveys, problem exercises, 'open-book' reports and presentations, portfolios, in-house tests or such other assignments.
Effective 2011/2012 academic year, viva voce examinations will not be part of the end of semester examinations for courses delivered in Years 1 – 4, unless specifically stated in these regulations.

(e) A student shall not be approved by the Examiners in any one part or section of an examination unless the student has attended all of the required coursework tests and written, practical, oral and spotter examinations in that part.
It is an essential requirement for eligibility for the final course examination that students attend a minimum of 75% of classes (lectures and laboratory sessions) in the particular course.

(f) Registration for a course constitutes registration for the examinations in that course. A student is ineligible to take an examination in a course unless the University's records indicate that the student is registered for that course.
Any student who writes an examination for which he/she is not registered will not be credited for such courses.

(g) 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.

(h) 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. This is recorded in the transcript and is included as an additional grade in the semester and term GPA. A failing grade remains on the transcript but is not calculated into the semester GPA and term GPA. (i) The passing grade for each course is C (quality point 2.0 or 50%).

(j) The Board of Examiners may recommend that a student with a term GPA between 2.0 – 2.5 be placed on Academic Probation. A student on Academic Probation has one academic year to achieve the minimum standard for progression (i.e. a term GPA of 2.5). However, during each semester, the student is monitored and must show improvement or they may be asked to withdraw.

(k) A student may be credited with the part(s) of the examination in which the student has satisfied the examiners for a period not exceeding eighteen (18) months.

(l) The Board of Examiners determines whether a student has shown sufficient improvement to be allowed to continue an additional semester on probation or be required to withdraw. The grades a student needs to earn on probation, depends on the term GPA of the student at the beginning of the semester.

(m) The requirement for entry to Years 2, 3, 4 and 5 of the programme is the successful completion and passes in all courses of the respective preceding Year and a term GPA of 2.5 or higher.

(n) Semester examinations will be conducted during the months of December and May of each year.

(o) A student who fails to achieve the passing grade at the first attempt in one (1) or two (2) courses in any year, will be required to repeat the failed examination/s. The repeat examination will be held during the month of August. A student who fails to achieve the passing grade at the second attempt will be required to repeat the Year in the failed course(s) and to present for the examination/s at the next available sitting.

(p) A student who fails in more than two courses in any year of the programme will be required to repeat the Year in the failed courses.

(q) A student who fails at his/her third attempt in a final course examination will normally be required to withdraw from the Faculty.

(r) Students who fail any of the Pass/Fail courses on the first attempt may be allowed by the Board of Examiners to be re-examined before the beginning of

the following academic year. Students who fail any of these courses at thesecond attempt, will be required to repeat the Year in the failed course(s) only, before proceeding to the next Year. A student who fails at his/her third attempt in any one of these examinations will normally be required to withdraw from the Faculty.

(s) *Clinical Skills Courses*
The clinical skills training of students from Year 1 to Year 3 is monitored by way of accomplishment of specific knowledge, aptitudes and skills.

A very important assessment tool is the Clinical Competency Checklist. If students fail to accomplish all competencies required in the respective years of the programme, (as validated by having all items on the checklist signed off by the authorised faculty), they are not allowed pass the relevant Clinical Skills Course and therefore cannot progress from one year to the next.

A student whose evaluation is unsatisfactory may be required to undergo a course of remedial training or repeat the Clinical Skills Course.

7.2. REVIEW OF EXAMINATION RESULTS - UWI REGULATION 116:
A student who is dissatisfied with the results of his/her examination should report his/her dissatisfaction in writing to the Campus Registrar. Such a report must be made, in the case of the first semester, by the first Friday of the second semester, or within five (5) days of the issuing of grade slips whichever is later. In the case of the second semester, such a report must be made within five (5) weeks of the results being released, and in the case of Supplemental/Summer School or Re-sit Examinations, within five (5) days of the results being released.

(ii) The Campus Registrar shall forward the student's report to the Dean of the Faculty.

(iii) The student may request:
- (a) to have the relevant mark sheet reviewed; and/or
- (b) to go through his or her failed script with the Examiner; and/or
- (c) to have his/her script(s) remarked.

(iv) Medical Certificates submitted are relevant only to the examination(s) missed and the particular dates therein.

7.3. YEAR I EXAMINATIONS
During Year 1 of the programme:

(i) Veterinary Clinical Skills IA (VETM 1001), MDSC 1001 (Environment and Health) and MDSC 1002 (Basic Para-clinical Sciences) are offered in Year 1, Semester 1.
Veterinary Clinical Skills IA (VETM 1001) is only assessed in-course. Results will be recorded as pass or fail only. Students with a failing grade in this course may be required either to conduct remedial work or repeat the course. Examinations will be given in-course and at the end of the semester to cover courses MDSC 1001 and MDSC 1002.

(ii) During Semester II, Veterinary Clinical Skills IB (VETM 1007) and PBL: Integrated Veterinary Sciences 1 (VETM 1008) are only assessed in-course. Results will be recorded as pass or fail only. Students with a failing grade in either of these courses may be required either to conduct remedial work or repeat the course(s).
Examinations will be given in-course and at the end of the second semester to cover courses Biochemistry (VETM 1002), Biostatistics (VETM 1006), Animal Production I (VETM 1003), Animal Production II (VETM 1004) and Animal Production III (VETM 1005).

(iii) A student who fails to achieve a passing grade in any Year I Examination at the first attempt will be required to repeat the failed examination. The repeat examination will be held during the month of August. A student, who fails to achieve the passing grade at the second attempt, will be required to repeat the year in the failed course(s) and to present for the examination/s at the next available sitting.

(iv) A student who fails at his/her third attempt in the Year 1 examinations will normally be required to withdraw from the Faculty.

7.4. YEAR II EXAMINATIONS
During Year 2 of the programme:

(i) In Semester I, Veterinary Clinical Skills IIA (VETM 2006) and PBL: Integrated Veterinary Sciences IIA (VETM 2007) will be assessed by in-course examinations. Results will be recorded as pass or fail only. Students with a failing grade in any of these courses may be required either to conduct remedial work or repeat the course(s).

(ii) The Semester I examinations will cover the courses Veterinary Gross Anatomy I (VETM 2001), Veterinary Neuroscience (VETM 2002), Veterinary Histology & Embryology (VETM 2003), Veterinary Physiology/Biochemistry I (VETM 2004), and General Pathology (VETM 2005).

(iii) In Semester II, Veterinary Clinical Skills IIB (VETM 2012) and PBL: Integrated Veterinary Sciences IIB (VETM 2013) will be assessed by in-course examinations. VETM 2014 is assessed on the basis of student attendance and participation. Results will be recorded as pass or fail only. Students with a failing grade in any of these courses may be required either to conduct remedial work or repeat the course(s).

(iv) The Semester II examinations will cover the courses Veterinary Gross Anatomy II (VETM 2008), Veterinary Physiology/Biochemistry II (VETM 2009), Veterinary Pharmacology (VETM 2010) and Veterinary Parasitology I (VETM 2011).

7.5. YEAR III EXAMINATIONS

In Year 3 of the programme:

(i) In Semester I, Veterinary Clinical Skills IIIA (VETM 3006) and PBL: Integrated Veterinary Sciences IIIA (VETM 3007) are assessed by in-course examinations. Results will be recorded as pass or fail only. Students with a failing grade in any of these courses may be required either to conduct remedial work or repeat the course(s).

(ii) Semester I examinations are held in December and will cover the following courses:
- Veterinary Bacteriology (VETM 3002)
- Veterinary Virology (VETM 3003)
- Veterinary Immunology (VETM 3004)
- Veterinary Systemic Pathology I (VETM 3005)
- Veterinary Parasitology II (VETM 3001)
- Epidemiology (VETM 3008)
- Veterinary Public Health/Zoonoses/Preventive Medicine (VETM 3009)

(iii) In Semester II, Veterinary Clinical Skills IIIB (VETM 3011) and PBL: Integrated Veterinary Sciences IIIB (VETM 3018) are assessed by in-course examinations. Results will be recorded as pass or fail only. Students with a failing grade in any of these courses may be required either to conduct remedial work or repeat the course(s).

(iv) Semester II examinations are held in May and will cover the following courses:
- Principles of Medicine (VETM 3012)
- Veterinary Toxicology (VETM 3013)
- Principles of Surgery (VETM 3014)
- Avian Diseases (VETM 3015)
- Exotic Animal Health and Management (VETM 3016)
- Food Safety/Hygiene (VETM 3017)
- Veterinary Systemic Pathology II (VETM 3010)

7.6. YEAR IV EXAMINATIONS

In Year 4 of the programme:

(i) In Semester I, PBL: Integrated Veterinary Sciences IVA (VETM 4006) and Clinical Pharmacology (VETM 4007) will be assessed by in-course examinations. Results will be recorded as pass or fail only. Students with a failing grade in any of these courses may be required either to conduct remedial work or repeat the course(s).

(ii) Semester I examinations are held in December and will cover the following courses:
- Large Animal Surgery (VETM 4001)
- Large Animal Medicine (VETM 4002)
- Anaesthesiology (VETM 4003)
- Theriogenology I (VETM 4004)
- Diagnostic Imaging (VETM 4005)

(iii) In Semester II, PBL: Integrated Veterinary Sciences IVB (VETM 4014) and Ethics (VETM 4013) will be assessed by in-course examinations. Results will be recorded as pass or fail only. Students with a failing grade in any of these courses may be required either to conduct remedial work or repeat the course(s).

(iv) Semester II examinations are held in May and will cover the following courses:
- Small Animal Surgery I (VETM 4010)
- Small Animal Medicine I (VETM 4011)
- Ophthalmology (VETM 4009)
- Theriogenology II (VETM 4008)
- Veterinary Clinical Pathology (VETM 4012)
- Research Project I, II, III, IV and V (VETM 4016)*

*Research Project (VETM 2015, VETM 3019, VETM 3020, VETM 4015 and VETM 4016) is conducted over 5 semesters and assessed at the end of Semester II of Year 4. Results will be recorded as pass or fail only. Students with a failing grade in this course may be required either to conduct remedial work or repeat the course. These examinations may include oral components.

(v) A student who having failed to achieve a passing grade in one or two courses in Year IV and is writing resit examinations(s) in the failed course(s) in August may be allowed to commence the Year V Programme pending the outcome of the resit examination(s). A student who fails any of the courses.

(vi) in this (resit) attempt will be required to withdraw from the Year V Programme and repeat Year IV in the failed course(s) only, before proceeding to Year V.

7.7. YEAR V EXAMINATIONS

(i) It is an essential requirement for eligibility for the Year V examination that students shall have completed sixteen (16) weeks of extra mural instruction/hands-on practical training programme, normally outside of the School of Veterinary Medicine after Year II.

(ii) For the Elective Rotation/Clerkship (VETM 5001) and Clinical Conference (VETM 5002) the assessment will be conducted in-course. Results will be recorded as pass or fail only. Students with a failing grade in any of these courses may be required either to conduct remedial work or repeat the failed rotations/clerkships.

(iii) Students who fail any of the above on the first attempt may be allowed by the Board of Examiners to complete the remedial work or repeat the failed rotations/ clerkships before the beginning of the following academic year.

(iv) Year V examinations shall also cover the courses:
- VETM 5003 – Equine Medicine and Surgery
- VETM 5004 – Food Animal Medicine and Surgery, and Theriogenology I
- VETM 5005 – Food Animal Medicine and Surgery, and Theriogenology II
- VETM 5006 – Public Health
- VETM 5007 – Small Animal Medicine II
- VETM 5008 – Small Animal Surgery II
- VETM 5009 – Diagnostic Imaging & Anaesthesiology
- VETM 5010 – Pathology and Diagnostic Laboratory Medicine
- VETM 5011 – Avian and Exotic Medicine

(v) It is an essential requirement for eligibility for the Year 5 examinations that candidates satisfactorily complete all items on the Competency Checklist for each course and have the document signed off by the course tutor/s.

(vi) Students will not be allowed to take the Final Examination in any course if the relevant Competency Checklist is incomplete.

(vii) The assessment format and distribution of marks for each course **EXCEPT** VETM 5010 will be as follows:
a. Written examination at the end of Semester I – 20%.
b. Clerkship/ Rotation assessment comprising rotation scores and oral and/or spotter - 30%; distributed equally between semesters I and II.
c. The Final/Phase Examination worth 50% will include practical, oral and spotter elements only.

(viii) The assessment format and distribution of marks for course VETM 5010 will be as follows:
a. In course assessment comprising written, oral and/or practical examinations – 80%
- Semester I – 40%
- Semester II – 40%

b. The Final examination worth 20% will include practical and oral elements only.

(ix) Students who have failed and are repeating any Year V course will be required to complete a period of prescribed remedial clinical work prior to their repeat examination. The nature and duration of this work will be decided by the Course Coordinator(s), in conjunction with the Head of Department, Clinical Veterinary Sciences. Students who do not satisfactorily complete this remedial work will not be allowed to sit their repeat examination.

(x) Only those students who satisfy the examiners in all parts of the examination will be deemed fit for the award of the DVM degree.

8. GRADING

The Grading Scheme for the DVM degree for students entering the programme in 2011/ 2012 (Class of 2016) shall be as follows:

Letter Grade	Numeric Score	Quality Points
A+	>85	4.3
A	70-85	4.0
A-	67-69	3.7
B+	63-66	3.3
B	60-62	3.0
B-	57-59	2.7
C+	53-56	2.3
C	50-52	2.0
F	<50	0.0

9. ELIGIBILITY FOR A DEGREE

A student is eligible for the award of the DVM degree following satisfactory completion of the relevant courses and passing the necessary examinations. A student becomes eligible for the following awards:

(i) A candidate will be eligible for the award of the DVM with Honours or Distinction provided that he/she passes all pass/fail courses at the **first** attempt.

(ii) A candidate will be eligible for the award of the DVM (Honours) by obtaining a GPA of 3.3 to 3.6.

(iii) A candidate will be eligible for the award of the DVM (Distinction) by obtaining a GPA of greater than 3.6 above.

10. AWARDS

After Senate approves of the Pass List, an appropriate certificate under the Seal of the University shall be awarded to each successful candidate.

COURSE DESCRIPTIONS

LEVEL: 1
SEMESTER: 1
COURSE CODE: MDSC 1001
COURSE TITLE: ENVIRONMENT AND HEALTH
NUMBER OF CREDITS: 9
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
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: 1
COURSE CODE: VETM 1001
COURSE TITLE: VETERINARY CLINICAL SKILLS IA
NUMBER OF CREDITS: 1
The course is aimed at providing students with practical skills necessary for the practice of veterinary medicine and to function efficiently in the clinical rotations and laboratories. At the end of the course the students will be equipped with the basic skills necessary to restrain different species, to perform a complete physical examination on different species, to recognize normal appearance and behaviour in various species and become familiar with normal parameters used in a physical examination, and to perform various diagnostic tests and sampling techniques that are important for the practice of veterinary medicine.

LEVEL: 1
SEMESTER: 2
COURSE CODE: VETM 1002
COURSE TITLE: BIOCHEMISTRY
NUMBER OF CREDITS: 6
In the biochemistry course, students are exposed to the structure and functional significance of carbohydrates, lipids, and proteins. The course undertakes a detailed study of the Amino Acids, Enzymes including their properties, kinetics ,and inhibition: immunoglobulin structure and function; Nucleic acids including their structure & function, DNA replication, genetic code and gene expression & mutation, glycolysis, gluconeogenesis, Cori cycle, glycogenolysis, TCA cycle, biogenetics, electron transport chain, pentose phosphate pathway, lipid metabolism, Amino Acid metabolism, lipoprotein metabolism, integration of metabolism, pyrimidine and purine metabolism, kidney stones and enzymes. The course is taught by PBL a well as didactic lectures and practicals (laboratory sessions) in semesters I and II in year I. Emphasis is placed on the clinical aspects of biochemistry in both the didactic and PBL lectures.

LEVEL: 1
SEMESTER: 2
COURSE CODE: VETM 1003
COURSE TITLE: ANIMAL PRODUCTION I
NUMBER OF CREDITS: 3
Introduction to Animal Nutrition, Animal Breeding and Genetics and Agricultural Economics and farm Management (Agribusiness).

LEVEL: 1
SEMESTER: 2
COURSE CODE: VETM 1004
COURSE TITLE: ANIMAL PRODUCTION II
NUMBER OF CREDITS: 3
Introduction to Pig Production, Poultry Production, Animal Welfare and Aquaculture.

LEVEL: 1
SEMESTER: 2
COURSE CODE: VETM 1005
COURSE TITLE: ANIMAL PRODUCTION III
NUMBER OF CREDITS: 3
Introduction to Animal Production Systems, Ruminant Production Systems, Wildlife and Neo-tropical Animal Production Systems and Equine Management.

LEVEL: 1
SEMESTER: 2
COURSE CODE: VETM 1006
COURSE TITLE: BIOSTATISTICS
NUMBER OF CREDITS: 2
An introduction to statistical concepts which include: sampling attributes – confidence interval, frequency distribution, null hypothesis and test of significance, sample means and standard deviation, sampling from binomial distribution, comparison of two samples.

LEVEL: 1
SEMESTER: 2
COURSE CODE: VETM 1007
COURSE TITLE: VETERINARY CLINICAL SKILLS IB
NUMBER OF CREDITS: 1
The course is aimed at providing students with practical skills necessary for the practice of veterinary medicine and to function efficiently in the clinical rotations and laboratories. At the end of the course the students will be equipped with the basic skills necessary to restrain different species, to perform a complete physical examination on different species, to recognize normal appearance and behaviour in various species and become familiar with normal parameters used in a physical examination, and to perform various diagnostic tests and sampling techniques that are important for the practice of veterinary medicine.

LEVEL: 1
SEMESTER: 2
COURSE CODE: VETM 1008
COURSE TITLE: IINTEGRATED VETERINARY SCIENCES 1 (PBL)
NUMBER OF CREDITS: 3
Problem based learning (PBL) is offered as a self – directed, integrated, educational approach utilizing small group discussions and learning based on learning objectives derived from realistic clinical cases. The clinical cases are developed to encourage detailed, inquisitive, integrated learning of all issues, concepts and principles of the relevant disciples taught in year 1, and as a result, the learning objectives emanating from the clinical cases would not be covered in didactic lectures. PBL also facilitates student development of skills of literature retrieval and critical appraisal of information, while fostering lifelong learning practices.

LEVEL: 2
SEMESTER: 1
COURSE CODE: VETM 2001
COURSE TITLE: VETERINARY GROSS ANATOMY I
NUMBER OF CREDITS: 4
This is the part of the Gross Anatomy course that is taught in semester I. It comprises the modules of the limbs (fore and hind limbs), the pelvis & perineum including the male and female reproductive organs. The students are introduced to anatomical terminology in this course. It is a comparative course of the anatomy of domestic animals based on the equine, the bovine and canine species. The teaching is by didactic lectures, problem-based-learning (PBL) method and practical sessions. The practical sessions involve dissections of embalmed dogs, goat/sheep. The course is evaluated by written and practical examinations. The course is evaluated by continuous assessment examinations which carry 40% and an end of semester examination which carries 60%.

LEVEL: 2
SEMESTER: 1
COURSE CODE: VETM 2002
COURSE TITLE: NEUROSCIENCE
NUMBER OF CREDITS: 3
This is an integrated course of neuroanatomy and neurophysiology. It is based on the structure and function of the mammalian nervous system using the integrated approach with emphasis on the nervous system of domestic animals. The brain of the dog is used as a model for dissection. The course is aimed at providing a good knowledge base for the students' future studies in paraclinical and clinical disciplines. At the end of the course the students should be able to describe the structure of the spinal cord, the brainstorm and the cerebral cortex and cerebellum including the main nuclei, the meninges, the funiculi, and the reticular formation. The students should be able to discuss the limbic system, the motor and sensory tracts, spinal reflexes, Brainstem reflexes, fluid balance in the central nervous system, proprioception, exteroception, trigeminal connections &pathways, visceral pathways, the structure & function of the special senses.

LEVEL: 2
SEMESTER: 1
COURSE CODE: VETM 2003
COURSE TITLE: HISTOLOGY & EMBRYOLOGY
NUMBER OF CREDITS: 4
This subject is aimed at furnishing the veterinary student with the basics of microscopic anatomy within the context of the organ-system framework, relevant to the veterinary undergraduate curricula. Microscopic anatomy as a whole is pivotal to a thorough comprehension of scientific principles necessary for courses that emphasize normal and pathologic pathways in an organism's internal environment. The course is taught by lecture and practical sessions. The embryology component emphasizes embryogenesis as well as morphogenesis of the developing foetus. Basics of pre-and post gastrulation, as well as gastrulation events, are covered. Major congenital defects and principles of teratology are also emphasized.

LEVEL: 2
SEMESTER: 1
COURSE CODE: VETM 2004
COURSE TITLE: VETERINARYP HYSIOLOGY/ BIOCHEMISTRY I
NUMBER OF CREDITS: 3
Veterinary physiology I is offered in semester I as an intensive course, using both PBL and lecture approaches, and focuses on an introduction to the Endocrine System, some muscular physiology, the Cardiovascular System, the Gastrointestinal system, and the Metabolic Hormones. The lectures will cover topics of comparative physiology of the major domestic animals, with emphasis on pathophysiology. While the animals will be studied on the basis of their component systems in lectures, the PBL approach will allow the students to gain applied knowledge relevant to clinical problems that would confront them in later years, while teaching them to integrate the various systems and develop an appreciation of whole-body functions.

LEVEL: 2
SEMESTER: 1
COURSE CODE: VETM 2005
COURSE TITLE: VETERINARY GENERAL PATHOLOGY
NUMBER OF CREDITS: 3
A study of the aetiology of lesions (gross and microscopic), their pathogenesis and their effect on normal cell/tissue/organ function. To enable students to understand the pathological basis of veterinary medicine at the gross and microscopic level, that is, how disease processes affect normal anatomy and physiology to produce lesions and clinical signs. Students are exposed to the gross and histological laboratories, its uses and the health and safety aspects. Students are taught how to describe gross lesions. The course is delivered in modules: introduction, apoptosis, necrosis, pigments, ante- and post mortem changes; disorders of circulation; disorders of growth including neoplasia, acute and chronic inflammation.

LEVEL: 2
SEMESTER: 1
COURSE CODE: VETM 2006
COURSE TITLE: VETERINARY CLINICAL SKILLS IIA
NUMBER OF CREDITS: 1
The course is aimed at providing students with practical skills necessary for the practice of veterinary medicine and to function efficiently in the clinical rotations and laboratories. At the end of the course the students will be equipped with the basic skills necessary to restrain different species, to perform a complete physical examination on different species, to recognize normal appearance and behaviour in various species and become familiar with normal parameters used in a physical examination, and to perform various diagnostic tests and sampling techniques that are important for the practice of veterinary medicine

LEVEL: 2
SEMESTER: 1
COURSE CODE: VETM 2007
COURSE TITLE: INTEGRATED VETERINARY SCIENCES IIA (PBL)
NUMBER OF CREDITS: 3
Problem based learning (PBL) is offered as a self – directed, integrated, educational approach utilizing small group discussions and learning based on learning objectives derived from realistic clinical cases. The clinical cases are developed to encourage detailed, inquisitive, integrated learning of all issues, concepts and principles of the relevant disciples taught in year II and as a result, the learning objectives emanating from the clinical cases would not be covered in didactic lectures. PBL also facilitates student development of skills of literature retrieval and critical appraisal of information, while fostering lifelong learning practices.

LEVEL: 2
SEMESTER: 2
COURSE CODE: VETM 2008
COURSE TITLE: VETERINARY GROSS ANATOMY II
NUMBER OF CREDITS: 4
This is the part of the Gross Anatomy course taught in semester II. It comprises the modules of thorax & abdomen and head and neck, avian anatomy. It is a comparative course in the gross anatomy of domestic animals using the equine, bovine and canine species as models. The course is taught using didactic lectures, practical sessions and problem-based-learning (PBL) methods. The practical sessions involve the dissections of the dog and sheep/goat and prosected specimens of the chicken. Examinations are written and practical sessions. The course is evaluated by continuous assessment examinations which carry 40% and an end of semester examination which carries 60%.

LEVEL: 2
SEMESTER: 2
COURSE CODE: VETM 2009
COURSE TITLE: VETERINARY PHYSIOLOGY/BIOCHEMISTRY II
NUMBER OF CREDITS: 4
Veterinary physiology II like Veterinary physiology I is offered as an intensive course, using both PBL and lecture approaches but is taught in semester II. This course focuses on the Renal System, the Respiratory System, the Reproductive System and the Thermo-regulatory System. The lectures will cover topics of comparative physiology of the major domestic animals, with emphasis on pathophysiology. While the animals will be studied on the basis of their component systems in lectures, the PBL approach will allow the students to gain applied knowledge relevant to clinical problems that would confront them in later years, while teaching them to integrate the various systems and develop an appreciation of whole-body functions.

LEVEL: 2
SEMESTER: 2
COURSE CODE: VETM 2010
COURSE TITLE: VETERINARY PHARMACOLOGY & THERAPEUTICS
NUMBER OF CREDITS: 4
Students will be exposed to core concepts of basic pharmacology including drugs acting on the CNS, the autonomic and somatic nervous systems, cardiovascular system, fluid and electrolyte balance, respiratory system, digestive system, locally on skin mucosa, eyes and ears. The therapy of pain & inflammation and the chemotherapy of microbial, fungal, viral and neoplastic diseases will be emphasized. The pharmacological characteristics of drug groups are stressed. The students will learn core concepts of clinical pharmacology and the skills and attitudes of rational drug use and individualized drug therapy. The course is offered in semesters I and II.

LEVEL: 2
SEMESTER: 2
COURSE CODE: VETM 2011
COURSE TITLE: VETERINARY PARASITOLOGY I
NUMBER OF CREDITS: 3
Two introductory lectures revising animal relationships and the evolution of parasitism. Adaptation of parasites to parasitism and the host-parasite interphase. A detailed consideration of the morphology, taxonomy, life cycles and geographic distribution of the following:

PROTOZOA: ***Mastigophora*** to include: *Trypanosoma, Leishmania, Giardia, Trichomonas, Histomonas. Sarcodina: amoeba, Entamoeba and Neagleria.* ***Coccidia*** to include*: Hepatozoon, Eimeria, Isospora, wenyonella, Cryptosporidum, toxoplasma, Besnoitia, Hammondia,* and *Sarcocystis* only. ***Haemosporidia:*** *Haemoproteus, Leucocytozoon,* and *Plasmodium.* ***Piroplasmida:*** *Babesia* and *Theileria.* ***Rickettsia,*** to include: *Anaplasma, Ehrlichia* and *Eperythrozoon only.* ***Note*** that *Cowdria* is now considered as *Ehrlichia* without change of species status.

HELMITNHS: ***Trematoda****: Digenean trematodes* only. ***Cestoda****: Psudophyllidea: Diphyllobothrium and Spirometra* only. *Cyclophyllidea: Anoplocephalidae, Davaineidae, Dilepididae, Hymenolepidae and Taeniidae.* ***Nematoda****:* to cover representatives of the following orders: *Ascaridida, Rhabditida, Strongylida and Enoplida.*

ENTOMOLOGY*:* To cover the classes *Insecta and Arachnida* only.
Insecta: Diptera – Nematocera*: Culicidae, Simuliidae, Psychodidae* and *Ceratopogonidae.*
Brachycera: *Tabanidae.* ***Cyclorrhapa:*** *Muscidae, Glossinidae, Calliphoridae, Sarcophagidae, Oestridae* and *Cuterebridae.* ***Siphonaptera****:* Fleas, to cover dog and cat fleas only. ***Hemiptera:*** Bed and Kissing bugs ***Arachnida****:* to cover the families*: Ixodidae, Sarcoptidae, Demodicidae,* and *Psoroptidae* only.

LEVEL: 2
SEMESTER: 2
COURSE CODE: VETM 2012
COURSE TITLE: VETERINARY CLINICAL SKILLS IIB
NUMBER OF CREDITS: 1
The course is aimed at providing students with practical skills necessary for the practice of veterinary medicine and to function efficiently in the clinical rotations and laboratories. At the end of the course the students will be equipped with the basic skills necessary to restrain different species, to perform a complete physical examination on different species, to recognize normal appearance and behaviour in various species and become familiar with normal parameters used in a physical examination, and to perform various diagnostic tests and sampling techniques that are important for the practice of veterinary medicine.

LEVEL: 2
SEMESTER: 2
COURSE CODE: VETM 2013
COURSE TITLE: INTEGRATED VETERINARY SCIENCES IIB (PBL)
NUMBER OF CREDITS: 3
Problem based learning (PBL) is offered as a self – directed, integrated, educational approach utilizing small group discussions and learning based on learning objectives derived from realistic clinical cases. The clinical cases are developed to encourage detailed, inquisitive, integrated learning of all issues, concepts and principles of the relevant disciples taught in year 11, and as a result, the learning objectives emanating from the clinical cases would not be covered in didactic lectures. PBL also facilitates student development of skills of literature retrieval and critical appraisal of information, while fostering lifelong learning practices.

LEVEL: 2
SEMESTER: 2
COURSE CODE: VETM 2014
COURSE TITLE: RESEARCH METHODOLOGY
NUMBER OF CREDITS: 1
This is a preparatory course for the Research Project courses and covers the basic principles of research protocols and problems, scientific methods and experimentation, experimental error and improving experimental accuracy.

LEVEL: 2
SEMESTER: 2
COURSE CODE: VETM 2015
COURSE TITLE: RESEARCH PROJECT I
NUMBER OF CREDITS: 3
The objective of this course is to provide the student with the basic skills and knowledge required in planning, executing, information retrieval, and writing up a scientific investigation under the supervision of a member of academic staff which starts in Semester II of Year 2. The evaluation of the course is based on both oral and written presentation of the project at the end of Year 4.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3001
COURSE TITLE: VETERINARY PARASITOLOGY II
NUMBER OF CREDITS: 2
This course is designed to cover the clinical aspects of veterinary parasitology with emphasis on the parasites which occur in different organ systems of different animal species. At the end of the course students should be able to: know the different parasite groups and species found in different animals and their predilection sites, understand the pathogenesis and pathobiology of different parasites, know the epidemiology and thee different mechanisms of the host-parasite interphase, know the different methods of parasite management in a tropical setting.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3002
COURSE TITLE: VETERINARY BACTERIOLOGY
NUMBER OF CREDITS: 3
The goal of the course is to provide the bases on which students would be able to solve problems related to bacterial and fungal infections in veterinary medicine, and to take appropriate measures for their diagnosis, treatment and control. The course consists of four sections as follows: A brief introduction to the features of bacterial structure and function that are relevant to their ability to cause disease – cell wall, capsule, pill; DNA and its transfer by transduction, conjugation, and transformation; basic features of plasmids; a major section in which genera of important bacterial pathogens were discussed, with emphasis on bacterial virulence factors and their roles in disease; a brief section on fungi, the diseases they cause in animals, and their appearance in tissues; a brief section on antimicrobial agents, emphasizing the mechanisms of action of the major classes, the bases for determining susceptibility , and the problems of resistance. Lectures are supplemented by laboratory sessions that reinforce the material. Emphasis in the laboratory exercises are on specimen submission, understanding basic procedures for examination of samples, recognizing bacteria with features which allow them to be easily recognized by direct examination.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3003
COURSE TITLE: VETERINARY VIROLOGY
NUMBER OF CREDITS: 3
This course is taught in three separate modules. Module 1 covers basic and general principles of virology. It includes topics such as: characteristics of viruses, their taxonomic criteria, cultivation, replication and assay. This module also goes on to cover epidemiology, prevention and treatment of viral infections, viral oncogenesis and vaccines used to control them. Module 2 covers all the families of RNA viruses and their diseases. Families of DNA viruses, other viruses (separate from the grouping above) and prions are covered in Module 3 of the course. It should be noted here that only families with genera that are important in Veterinary medicine would be emphasized.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3004
COURSE TITLE: VETERINARY IMMUNOLOGY
NUMBER OF CREDITS: 3
The course covers definitions of terms commonly used in immunology as well as the following: cells of the innate immune system, tissues and organs of the immune system, antigens and antigenecity, innate immunity, complement and its role in acquired response, MHC, T & B cells in acquired immunity, immunoglobulin structure & function and immunological methods. The principles involved in the following are also covered: protein electrophoresis agglutination, immuno-precipitation, immuno-electrophoresis, immuno-diffusion, and fluorescent anti body test. The students are also exposed to the introduction to vaccine preparation. The course is delivered by didactic lectures as well as PBL and includes laboratory practicals.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3005
COURSE TITLE: VETERINARY SYSTEMIC PATHOLOGY I
NUMBER OF CREDI TS: 3
The course covers the integument, musculoskeletal, gastrointestinal, liver, endocrine and haematopoetic/ lymphatic systems. The course is a systematic study of the aetiology, pathogenesis, gross and microscopic lesions of important veterinary diseases of domestic animals. Whilst this course focuses primarily on gross lesions and its pathophysiological link with aetiology, the link between pathological (gross and microscopical) lesions and clinical signs is also highlighted. Microscopical lesions are discussed to enhance the understanding of diseases, where it is necessary for diagnosis and where pathognomonic lesions are useful for diagnosis of important diseases, such as Rabies. Didactic lectures are enhanced by PBL cases, electronic images, fixed specimens and weekly labs of current case material submitted to the SVM Pathology Diagnostic Service.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3006
COURSE TITLE: VETERINARY CLINICAL SKILLS IIIA
NUMBER OF CREDITS: 1
The course is aimed at providing students with practical skills necessary for the practice of veterinary medicine and to function efficiently in the clinical rotations and laboratories. At the end of the course the students will be equipped with the basic skills necessary to restrain different species, to perform a complete physical examination on different species, to recognize normal appearance and behaviour in various species and become familiar with normal parameters used in a physical examination, and to perform various diagnostic tests and sampling techniques that are important for the practice of veterinary medicine.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3007
COURSE TITLE: INTEGRATED VETERINARY SCIENCES IIIA (PBL)
NUMBER OF CREDITS: 3
Problem based learning (PBL) is offered as a self – directed, integrated, educational approach utilizing small group discussions and learning based on learning objectives derived from realistic clinical cases. The clinical cases are developed to encourage detailed, inquisitive, integrated learning of all issues, concepts and principles of the relevant disciples taught in year III and as a result, the learning objectives emanating from the clinical cases would not be covered in didactic lectures. PBL also facilitates student development of skills of literature retrieval and critical appraisal of information, while fostering lifelong learning practices.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3019
COURSE TITLE: RESEARCH PROJECT II
NUMBER OF CREDITS: 3
The objective of this course is to provide the student with the basic skills and knowledge required in planning, executing, information retrieval, and writing up a scientific investigation under the supervision of a member of academic staff. The evaluation of the course is based on both oral and written presentation of the project at the end of Year 4.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3008
COURSE TITLE: VETERINARY EPIDEMIOLOGY
NUMBER OF CREDITS: 3
Emphasis on the basic principles of veterinary epidemiology comprising general concepts and application of epidemiology, the use of statistical methods in the analysis of data and the design of experimental studies concerning the health and disease of man and animals.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3009
COURSE TITLE: VETERINARY PUBLIC HEALTH/ZOONOSES/PREVENTIVE MEDICINE
NUMBER OF CREDITS: 3
Veterinary Public Health highlights the application of professional veterinary skills, knowledge and resources for the protection, and improvement of human health. Emphasis on performance of animal-related, biomedical and generalist functions. Focus is placed on basic epidemiology, prevention and control of specific bacterial, viral, mycotic and parasitic zoonoses with emphasis on those significant in the West Indies. Emerging zoonoses will be highlighted. Planning, implementation and evaluation of herd health programmes, disease prevention, control and eradication measures with particular emphasis on those relevant to Trinidad & Tobago and the West Indies are stressed. General approaches to promotion of animal health and productivity will be emphasized.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3010
COURSE TITLE: VETERINARY SYSTEMIC PATHOLOGY II
NUMBER OF CREDITS: 3
The course covers the cardiovascular, respiratory, urinary, reproductive, nervous and specials senses. This course is a systematic study of the aetiology, pathogenesis, gross and microscopic lesions of important veterinary diseases of domestic animals. Whilst this course focuses primarily on gross lesions and its pathophysiological link with aetiology, the link between pathological (gross and microscopical) lesions and clinical signs is also highlighted. Microscopical lesions are discussed to enhance the understanding of diseases, where it is necessary for diagnosis and where pathognomonic lesions are useful for diagnosis of important diseases, such as Rabies. Didactic lectures are enhanced by PBL cases, electronic images, fixed specimens and weekly labs of current case material submitted to the SVM Pathology Diagnostic Service.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3011
COURSE TITLE: VETERINARY CLINICAL SKILLS IIIB
NUMBER OF CREDITS: 1
The course is aimed at providing students with practical skills necessary for the practice of veterinary medicine and to function efficiently in the clinical rotations and laboratories. At the end of the course the students will be equipped with the basic skills necessary to restrain different species, to perform a complete physical examination on different species, to recognize normal appearance and behaviour in various species and become familiar with normal parameters used in a physical examination, and to perform various diagnostic tests and sampling techniques that are important for the practice of veterinary medicine

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3012
COURSE TITLE: PRINCIPLES OF MEDICINE
NUMBER OF CREDITS: 3
At the end of the course, the student should: become familiar with methods for obtaining and assessing clinical information, including techniques for physical laboratory or ancillary examination, specifically how to: obtain relevant and accurate history through precise, objective, and systematic questions, assess the information obtained from history for accuracy/reliability, clarify inconsistencies and uncertainties, organize information obtained in a medical record, carry out a systematic& complete physical evaluation of the animal, summaries and organize the information obtained from history and physical examination to develop a problem list**,** understand the concept of the pathogenic processes in reconstructing ease from observable clinical signs, and apply this concept and associated reasoning skills to evaluate the problem list and develop a reasonable diagnostic hypothesis, develop a diagnostic plan from all the available information, and discussion of the plan with the client / owner, understand how to select and apply (interpret) relevant additional ancillary (laboratory) diagnostic tests and procedures to further advance the diagnostic process, obtain an overview of the manifestation of disease in different body systems.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3013
COURSE TITLE: VETERINARY TOXICOLOGY
NUMBER OF CREDITS: 2
The course aims at producing a graduate who will have developed competence in the art of diagnosis and the science of treatment in cases of poisoning involving drugs, noxious industrial chemicals, household and agricultural products, and poisons of plant animal origin. At the end of the course students will be able to: identify the major classes of poisons that affect the Reproductive, Nervous, Hepatobiliary, Renal, Cardiovascular, Gastrointestinal and Respiratory Systems; discuss the principles of toxicokinetics and toxicodynamics and describe how they may be utilized in the diagnosis and treatment of toxicoses; and identify important sources of toxicants.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3014
COURSE TITLE: PRINCIPLES OF SURGERY
NUMBER OF CREDITS: 4
Lectures on surgical instruments, suture materials and patterns and pre- surgical management of small and large animals are presented. There will be discussions on system – by – system approach to the techniques of clinical diagnosis of diseases of domestic animals.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3015
COURSE TITLE: AVIAN DISEASES
NUMBER OF CREDITS: 3
The aetiology, pathogenesis, epidemiology, clinical signs, relevant pathology and treatment of poultry (and other species) diseases will be covered. The course will emphasize gross pathology; microscopic pathology will be discussed only for diseases where it is considered critical for diagnostic purposes. Students will learn how to examine birds, reach a diagnosis plus recommend treatment, control and preventive measures. Health maintenance will be emphasized. The course consists of three modules: Poultry husbandry, Flock health maintenance.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3016
COURSE TITLE: EXOTIC ANIMAL HEALTH AND MANAGEMENT
NUMBER OF CREDITS: 3
Students are introduced to the biology, management, health and diseases of wildlife/exotics, pocket-pets and fish. The course consists of three modules: Principles of Zoo and Wildlife/Exotics Management and Diseases of Wildlife, Diseases and treatment of Pocket-pets and Principles of Fish Management and Diseases of Fish. The aim of the course is to introduce students to: principles of managing wild animals in captivity, the common disease conditions associated with non-domestic animals and preventive medicine and its application to zoo and wild animals. The common diseases of the following animals: guinea pigs, rabbits and hamsters. Emphasis will be placed upon the veterinary care of these species, including husbandry, preventive medicine, recognition and clinical management of common diseases. The students should be able to recognize signs of ill health and they should also be able to advise on the treatment and principles of disease control, including preventive measures and health monitoring (quality control).Aquaculture and to introduce the student to common problems and diseases, their diagnosis and control. Emphasis will be placed upon tropical farmed fish species and aquarium fish.

LEVEL: 3
SEMESTER: 1
COURSE CODE: VETM 3017
COURSE TITLE: FOOD SAFETY/ HYGIENE
NUMBER OF CREDITS: 2
Principles and practices of meat, fish and milk hygiene and emphasis on the sanitary production, processing, storage and distribution of meat, fish, milk and related products; quality control through proper and adequate inspection; and the study and surveillance of meat and milk-borne diseases.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3018
COURSE TITLE: INTEGRATED VETERINARY SCIENCES IIIB (PBL)
NUMBER OF CREDITS: 3
Problem based learning (PBL) is offered as a self – directed, integrated, educational approach utilizing small group discussions and learning based on learning objectives derived from realistic clinical cases. The clinical cases are developed to encourage detailed, inquisitive, integrated learning of all issues, concepts and principles of the relevant disciples taught in year III and as a result, the learning objectives emanating from the clinical cases would not be covered in didactic lectures. PBL also facilitates student development of skills of literature retrieval and critical appraisal of information, while fostering lifelong learning practices.

LEVEL: 3
SEMESTER: 2
COURSE CODE: VETM 3020
COURSE TITLE: RESEARCH PROJECT III
NUMBER OF CREDITS: 3
The objective of this course is to provide the student with the basic skills and knowledge required in planning, executing, information retrieval, and writing up a scientific investigation under the supervision of a member of academic staff. The evaluation of the course is based on both oral and written presentation of the project at the end of Year 4.

LEVEL: 4
SEMESTER: 1
COURSE CODE: VETM 4001
COURSE TITLE: LARGE ANIMAL SURGERY
NUMBER OF CREDITS: 4
Different surgical conditions, techniques for correction and post – surgical management of bovine, ovine, caprine, porcine, and equine species will be taught using didactic and PBL methods. Emphasis on bovine and equine lameness, their aetiology, clinical signs, management and prevention will be stressed.

LEVEL: 4
SEMESTER: 1
COURSE CODE: VETM 4002
COURSE TITLE: LARGE ANIMAL MEDICINE
NUMBER OF CREDITS: 6
This course takes a systematic approach to the study of large animal medicine. To provide structure, the essential features of the course will be presented in three distinct sections or modules viz: 1. Equine medicine, 2. Food animal medicine (bovine, small ruminants and swine medicine) and 3. International medicine (exotics and emerging diseases). At the end of the course students would be able to describe the incidence, predisposing factors, aetiology, pathogenesis, clinical signs, diagnosis, treatment, prevention and control of bacterial, viral, mycotic, parasitic, nutritional and metabolic diseases of equine and food producing animals.

LEVEL: 4
SEMESTER: 1
COURSE CODE: VETM 4003
COURSE TITLE: ANAESTHESIOLOGY
NUMBER OF CREDITS: 3
Types and effects of anaesthetic agents. General principles and practical applications of local and general anaesthesia in domestic animals and non-domestic animals.

LEVEL: 4
SEMESTER: 1
COURSE CODE: VETM 4004
COURSE TITLE: THERIOGENOLOGY I
NUMBER OF CREDITS: 2
Techniques for reproductive examination and pregnancy diagnosis. Description of major infectious and non-infectious causes of abortion and pregnancy wastage, evaluation and enhancement of reproductive performance. Diagnosis and treatment of problems associated with gestation and the peri-parturient period. Physiology of normal parturition and diagnosis and obstetrical management of abnormal parturition. Therapeutic options for induction of parturition and abortion. Diagnosis and therapeutic approach to male and female sub-fertility. Breeding soundness evaluation of the male and reproductive conditions of the male relevant to male fertility. The application of assisted reproductive technologies eg. Artificial insemination, embryo transfer and estrous synchronization.

LEVEL: 4
SEMESTER: 1
COURSE CODE: VETM 4005
COURSE TITLE: DIAGNOSTIC IMAGING
NUMBER OF CREDITS: 4
The theory and principles of the x- ray, x- machines, radiographic procedures and interpretations, film storage, handling, processing and radiation safety. Introduction to MRI and CT.

LEVEL: 4
SEMESTER: 1
COURSE CODE: VETM 4006
COURSE TITLE: INTEGRATED VETERINARY SCIENCES IVA (PBL)
NUMBER OF CREDITS: 3
Problem based learning (PBL) is offered as a self – directed, integrated, educational approach utilizing small group discussions and learning based on learning objectives derived from realistic clinical cases. The clinical cases are developed to encourage detailed, inquisitive, integrated learning of all issues, concepts and principles of the relevant disciples taught in year IV and as a result, the learning objectives emanating from the clinical cases would not be covered in didactic lectures. PBL also facilitates student development of skills of literature retrieval and critical appraisal of information, while fostering lifelong learning practices.

LEVEL: 4
SEMESTER: 1
COURSE CODE: VETM 4007
COURSE TITLE: CLINICAL VETERINARY PHARMACOLOGY
NUMBER OF CREDITS: 1
This course concentrates on principles of therapeutic decision making with emphasis on selection of appropriate drug, the risks and benefits of drug treatment, monitoring the course of therapy in an individual patient, and the economic impact of therapeutic decisions. The course will cover the diversity of species in which drugs are used for clinical purposes and the emphasis on various classes of drugs make veterinary pharmacology a complex subject. Anatomical and physiological features influence the pharmacokinetic behaviour of a drug in a particular animal and the dosage required. The fundamental goal of veterinary clinical pharmacology is to optimize therapy for a particular patient (individual, herd, flock, etc.) based on pathophysiology and pharmacology.

LEVEL: 4
SEMESTER: 1
COURSE CODE: VETM 4015
COURSE TITLE: RESEARCH PROJECT IV
NUMBER OF CREDITS: 3
The objective of this course is to provide the student with the basic skills and knowledge required in planning, executing, information retrieval, and writing up a scientific investigation under the supervision of a member of academic staff. The evaluation of the course is based on both oral and written presentation of the project.

LEVEL: 4
SEMESTER: 2
COURSE CODE: VETM 4008
COURSE TITLE: THERIOGENOLOGY II
NUMBER OF CREDITS: 2
Techniques for reproductive examination and pregnancy diagnosis. Description of major infectious and non-infectious causes of abortion and pregnancy wastage, evaluation and enhancement of reproductive performance. Diagnosis and treatment of problems associated with gestation and the peri-parturient period. Physiology of normal parturition and diagnosis and obstetrical management of abnormal parturition. Therapeutic options for induction of parturition and abortion. Diagnosis and therapeutic approach to male and female sub-fertility. Breeding soundness evaluation of the male and reproductive conditions of the male relevant to male fertility. The application of assisted reproductive technologies eg. Artificial insemination, embryo transfer and estrous synchronization.

LEVEL: 4
SEMESTER: 2
COURSE CODE: VETM 4009
COURSE TITLE: VETERINARY OPHTHALMOLOGY
NUMBER OF CREDITS: 2
The course uses the dog's eye as a model. Major variations in other species are highlighted. The course covers the review of the basic anatomy and physiology of the different parts of the eye and the major diseases/ abnormalities affecting the different parts of the eye. At the end of the course, students should be able to recognize, diagnose and treat or manage major diseases of the eye. The course is delivered using didactic lectures and PBL exercises.

LEVEL: 4
SEMESTER: 2
COURSE CODE: VETM 4010
COURSE TITLE: SMALL ANIMAL SURGERY I
NUMBER OF CREDITS: 3
This course is delivered by didactic lectures and PBL exercises. The students are taught various surgical conditions, techniques of repair and post surgical management of canine, feline and other pets.

LEVEL: 4
SEMESTER: 1 & 2
COURSE CODE: VETM 4011
COURSE TITLE: SMALL ANIMAL MEDICINE I
NUMBER OF CREDITS: 6

Small Animal Medicine is delivered in a series of didactic lectures, PBL problems and practical (clinical rotation) and externship programme designed to provide the student with clear understanding of diagnostic approaches, clinical examination, recognition of clinical signs, and management of the common diseases that affect small animals (cats and dogs, primarily), particularly in the Caribbean region. The course is made up of five elements: **Principles of Medicine**- delivered primarily by didactic lectures supplemented by PBL sessions, and intended to acquaint the students with methods for looking at disease at the systems level, methods of eliciting and analyzing clinical signs, to arrive at logical conclusions, **Ophthalmology** – primarily delivered by lectures and practical demonstrations, and provides detailed description of common medical and surgical problems of the eye, **Small Animal Medicine** – primarily by didactic lectures and PBL – and intended to provide detailed clinical descriptions of common diseases of dogs and cats, **Clinical Rotations** – provides practical training in diagnosis and management of common diseases of dogs and cats, and **Externship** (seeing-practice) programme. At the end of the lecture courses, the student should have comprehensive theoretical knowledge of:

- How to obtain clinical information towards making diagnosis;
- How to recognize clinical signs of common diseases and other medical problems of cats and dogs;
- Differential diagnosis and approaches to ruling out or confirming diagnosis;
- Management of common disease conditions.

At the end of the clinical course, the student should demonstrate competence in obtaining clinical history and conducting routine and specialized clinical examination, performing diagnostic evaluations, necessary diagnostic tests, and in recommending appropriate therapy, undertaking independent evaluation of selected clinical cases and presenting the findings to an audience, nursing and handling sick patients, acting in a professional manner towards colleagues, clients and other contacts.

LEVEL: 4
SEMESTER: 2
COURSE CODE: VETM 4012
COURSE TITLE: VETERINARY CLINICAL PATHOLOGY
NUMBER OF CREDITS: 3

The course consists of 60 contact hours divided into 24 hours for lectures and 36 hours for laboratory exercises. The objectives are to: interpret abnormalities in red blood cell parameters, identify common haemoparasites, use knowledge of granulocyte kinetics to interpret the leukogram, identify and classify neoplastic disorders of the haemopoietic system, use biochemical data to evaluate organ function and haemostasis, interpret cytological data.

LEVEL: 4
SEMESTER: 2
COURSE CODE: VETM 4013
COURSE TITLE: ETHICS
NUMBER OF CREDITS: 1

Students are sensitized to the ethical dimensions of clinical practice and decision-making and encouraged to develop their skills in ethical analysis and the application of such analysis to clinical situations. Emphasis is placed on knowledge and understanding of some specific guidelines relevant to veterinary medical practice, including those issued by the AVMA.

LEVEL: 4
SEMESTER: 2
COURSE CODE: VETM 4014
COURSE TITLE: INTEGRATED VETERINARY SCIENCES IVB (PBL)
NUMBER OF CREDITS: 3

Problem based learning (PBL) is offered as a self – directed, integrated, educational approach utilizing small group discussions and learning based on learning objectives derived from realistic clinical cases. The clinical cases are developed to encourage detailed, inquisitive, integrated learning of all issues, concepts and principles of the relevant disciples taught in year IV and as a result, the learning objectives emanating from the clinical cases would not be covered in didactic lectures. PBL also facilitates student development of skills of literature retrieval and critical appraisal of information, while fostering lifelong learning practices.

LEVEL: 4
SEMESTER: 2
COURSE CODE: VETM 4016
COURSE TITLE: RESEARCH PROJECT V
NUMBER OF CREDITS: 3

The objective of this course is to provide the student with the basic skills and knowledge required in planning, executing, information retrieval, and writing up a scientific investigation under the supervision of a member of academic staff. The evaluation of the course is based on both oral and written presentation of the project.

LEVEL: 5
SEMESTER: 1
COURSE CODE: VETM 5002
COURSE TITLE: CLINICAL CONFERENCE
NUMBER OF CREDITS: 1

Oral presentation of selected cases by final year students each week. A student is expected to follow the case to be presented from the beginning to the end under the supervision of an academic staff member.

LEVEL: 5
SEMESTER: 1
COURSE CODE: VETM 5003
COURSE TITLE: EQUINE MEDICINE AND SURGERY
NUMBER OF CREDITS: 4
Application of basic medical knowledge to the diagnosis, treatment, prevention and control of diseases in the Equine.

LEVEL: 5
SEMESTER: 1
COURSE CODE: VETM 5004
COURSE TITLE: FOOD ANIMAL MEDICINE, SURGERY AND THERIOGENOLOGY I
NUMBER OF CREDITS: 6
To provide the relevant teaching, training and clinical exposure for students to develop the competencies required for an entry level veterinary surgeon to serve the small ruminant and swine industries. The emphasis would be on animal health and production management; diagnosis, clinical management, prevention and control of diseases and animal welfare.

LEVEL: 5
SEMESTER: 2
COURSE CODE: VETM 5005
COURSE TITLE: FOOD ANIMAL MEDICINE, SURGERY AND THERIOGENOLOGY II
NUMBER OF CREDITS: 4
To provide the relevant teaching, training and clinical exposure for students to develop the competencies required for an entry level veterinary surgeon to serve the large ruminant industries. The emphasis would be on animal health and production management; diagnosis, clinical management, prevention and control of diseases and animal welfare.

LEVEL: 5
SEMESTER: 2
COURSE CODE: VETM 5006
COURSE TITLE: PUBLIC HEALTH
NUMBER OF CREDITS: 3
Application of basic medical knowledge to the diagnosis, prevention and control of diseases and the security of the food chain as it relates to animals and animal-related products.

LEVEL: 5
SEMESTER: 2
COURSE CODE: VETM 5007
COURSE TITLE: SMALL ANIMAL MEDICINE II
NUMBER OF CREDITS: 6
Application of basic medical knowledge to the diagnosis, treatment, prevention and control of diseases in small/ companion animals. Clinical training and exposure of the students to develop competencies required for an entry level small animal practitioner

LEVEL: 5
SEMESTER: 2
COURSE CODE: VETM 5008
COURSE TITLE: SMALL ANIMAL SURGERY II
NUMBER OF CREDITS: 6
Application of surgical knowledge to the diagnosis, treatment, prevention and control of diseases in small/ companion animals. Clinical training and exposure of the students to develop competencies required for an entry level small animal practitioner.

LEVEL: 5
SEMESTER: 2
COURSE CODE: VETM 5009
COURSE TITLE: DIAGNOSTIC IMAGING & ANAESTHESIOLOGY
NUMBER OF CREDITS: 3
Application of basic knowledge on radiology and imaging for the diagnosis of diseases in small/ companion animals. Clinical training to develop competencies on taking and interpreting radiographs for an entry level small animal practitioner. Training and exposure on the techniques of Ultrasonography for the clinical patients. To apply the knowledge of anaesthesiology for various surgical procedures.

LEVEL: 5
SEMESTER: 2
COURSE CODE: VETM 5010
COURSE TITLE: PATHOLOGY AND DIAGNOSTIC LABORATORY MEDICINE
NUMBER OF CREDITS: 4
Students work with the Pathologists on a wide range of activities relating to links between pathology, clinical medicine and veterinary medicine. Both domesticated and non-domesticated species are covered. Students will also gain experience and a clinical perspective of the diagnostic process by exposure to the various laboratory-based diagnostic techniques required to arrive at a correct diagnosis.

LEVEL: 5
SEMESTER: 2
COURSE CODE: VETM 5011
COURSE TITLE: AVIAN AND EXOTIC MEDICINE
NUMBER OF CREDITS: 6
Application of basic medical knowledge to the diagnosis, treatment, prevention and control of diseases and improvement of livestock production in avian and exotic species.

Students' Prizes

ACADEMIC STAFF PRIZE
Criterion: Best overall performance in examinations
Year of Study: Year 2

ACADEMIC STAFF PRIZE
Criterion: Best overall performance in examinations
Year of Study: Year 3

GARNETT LALLA-MAHARAJ AWARD
Criterion: Academic performance, personality/ congeniality, willingness to assist other students and participation in class/ school events
Year of Study: Year 3

ACADEMIC STAFF PRIZE
Criterion: Best overall performance in examinations
Year of Study: Year 4

ACADEMIC STAFF PRIZE
Criterion: Best overall student research project
Year of Study: Year 4

GENTLE VET AWARD
Criterion: Student who best exemplifies devotion and compassion in the care of animals during the clinical years – deliberated on by clinical staff and Year 5 students
Year of Study: Year 5

ACADEMIC STAFF PRIZE
Criterion: Best student in Small Animal Medicine
Year of Study: Year 5

HELEN TAYLOR AWARD
Criterion: Best student in Surgery
Year of Study: Year 5

SPONSORED PRIZE
Criterion: Best student in Poultry Studies
Year of Study: Year 5

SPONSORED PRIZE
Criterion: Best student in Swine Medicine
Year of Study: Year 5

SPONSORED PRIZE
Criterion: Best student in large Animal Medicine
Year of Study: Year 5

DUPONT AWARD
Criterion: Best student in Public Health
Year of Study: Year 5

SPONSORED PRIZE
Criterion: Best Overall Performance in Examinations
Year of Study: Years 4 & 5

ONTARIO VETERINARY COLLEGE, CLASS OF 1970 ANNUAL PRIZE (OVC WELFARERS)
Criterion: Most improved student in clinical years
Year of Study: Years 4 & 5

ROOP BISSOON AWARD
Criterion: Most improved student
Year of Study: Years 1 - 5

ROOP BISSOON AWARD
Criterion: Best overall performance in examinations
Year of Study: Year 5

SCHOOL OF PHARMACY

B.Sc. Pharmacy

1. INTRODUCTION

Curriculum Goals: -

(a) General

To provide sound education and training, both theoretical and practical, in the basic health sciences, the Pharmaceutical Sciences, Clinical Pharmacy and Pharmacy Practice so that the graduates not only have current knowledge of their subject, but also are disciplined to become lifelong learners to the benefit of patients and the future development of Pharmacy.

(b) Outcome expectations and professional competencies

Professional competencies that should be achieved through the curriculum in pharmacy include the ability to:

a) Evaluate drug orders or prescriptions, compound, package and dispense drugs in appropriate dosage forms;
b) Manage systems for storage, preparation, and dispensing of medicines, and supervise technical personnel who may be involved in such processes;
c) Manage and administer a pharmacy and pharmacy practice;
d) Apply computer skills and technological advancements to practice;
e) Communicate and collaborate with health care professionals and patients regarding rational drug therapy, wellness and health promotion;
f) Design, implement, monitor, evaluate, and modify or recommend modifications in drug therapy in consultation with the physician to ensure effective, safe and economical patient care;

g) Identify, assess and solve medication-related problems, and provide a clinical judgment as to the continuing effectiveness of individualised therapeutic plans and intended therapeutic outcomes;
h) Evaluate patients and order medications and/ or laboratory tests in accordance with established standards or practice;
i) Evaluate patient problems and triage patients for other health professionals as appropriate;
j) Monitor and counsel patients regarding the purposes, uses and effects of their medications and related therapy;
k) Recommend appropriate non-drug therapies (including lifestyle modifications) in the provision of patient care;
l) Recommend, counsel and monitor patient use of non-prescription drugs;
m) Retrieve, evaluate and manage professional information and literature;
n) Use clinical data to optimise therapeutic drug regimens;
o) Evaluate and document interventions and pharmaceutical care outcomes.

Programme Description
Core Areas of the Curriculum
The curriculum in pharmacy provides the student with a core of knowledge, skills, abilities, attitudes and values that, in composite, relate to the professional competencies and outcome expectations, and it includes the following areas:

· Basic health sciences, including anatomy, physiology, general pathology, pathophysiology, microbiology, immunology, biochemistry and biostatistics.

· Pharmaceutical sciences, including pharmaceutical chemistry, medicinal chemistry, pharmacology, toxicology and pharmaceutics, which encompasses physical and chemical principles of dosage forms and drug delivery systems, biopharmaceutics and pharmacokinetics;

· Behavioural, social and administrative pharmacy sciences, including pharmacoeconomics, practice management, communications applicable to pharmacy, the history of pharmacy, ethical foundations to practice, social and behavioural applications and laws pertaining to practice;

· Pharmacy practice, including prescription processing, compounding and preparation of dosage forms, drug distribution and drug administration, epidemiology, paediatrics, geriatrics, gerontology, nutrition, health promotion and disease prevention, physical assessment, clinical pharmacokinetics, patient evaluation and ordering medications, pharmacotherapeutics, disease-state management, outcomes documentation, self care/non-prescription drugs, and drug information and literature evaluation;

· Professional experience, including a variety of practice experiences acquired throughout the curriculum as a continuum, progressing from the Introductory Pharmacy Practice experiences to the Advanced Pharmacy Practice experiences, which include outreach clinical clerkship at Institutional and Community Sites.

2. REGULATIONS (FOR FULL-TIME STUDENTS)

2.1 Entry Requirements

2.1.1 The minimum requirements for admission to the BSc Pharmacy programme are the candidates' performance and attainment in Chemistry plus one other from Biology, Zoology, Physics or Mathematics in the Caribbean Advanced Proficiency Examination (CAPE) / GCE A' level equivalent.

2.1.2. If a candidate has not passed Physics at the CAPE /GCE A' level examinations, he/she is required to have passed this subject at the CXC / GCE Ordinary level or equivalent examinations.

2.1.3 Passes in the above subjects taken in preliminary and/ or introductory examinations in the Faculty of Agriculture and Natural Sciences, UWI or equivalent examinations in institutions recognised by the UWI, are acceptable.

2.1.4 Programme for part time (diploma holders) students
Registered Pharmacists holding a diploma/ certificate/ associate degree in Pharmacy may be eligible to join the degree programme and will follow a part-time programme of studies.

2.1.5 Course of Study
The duration for the full time programme is not less than eight (8) semesters and that for the part-time programme not less than six (6) semesters.

2.2 Exemption

2.2.1 A student who holds a diploma/ certificate/ associate degree in pharmacy and passed an examination from this or other recognised university in a course equivalent to the part or whole of a course in the pharmacy degree courses may apply through the Head of the School for exemptions. The Director of the School shall examine the syllabus, nature and duration of, and student's grading in the examination in that course, the time that has elapsed since it had been completed, and in particular whether such a course is equivalent in whole or in part to that offered in the University of the West Indies. The Director of the School, through the Dean, shall make one of the following recommendations to the Faculty Board, indicating reasons for such recommendations:
(a) That the student be exempted from both the course and the examination

(b) That the student be exempted from a part or the whole of the course, but be required to take a part of or the full examination.
(c) That the application be rejected.

2.2.2 Exemptions shall not be granted automatically to students who have been asked to withdraw from and/or have been re-admitted to the Faculty.

2.3 Debarments, Repeats, Withdrawals

2.3.1 Where there is dissatisfaction with the work of a student, the Director of the School may report the matter to the Dean and the Faculty Board, which may recommend to the Academic Board (St. Augustine) that the student be debarred from the examination and either repeat the course or be required to withdraw from the Faculty of Medical Sciences.

2.3.2 Students required to withdraw from the University for failing to complete the degree programme within the stipulated time or for poor performance as provided for in the Faculty Regulations may be re-admitted to the Faculty after **at least one year** has elapsed since their withdrawal.

2.3.3 Any behaviour that is in violation of any rules or regulations of the School of Pharmacy, Faculty of Medical Sciences, can lead to the dismissal of the student from the School.

2.3.1 Language and Communication Proficiency/ UWI Foundation Courses

2.3.2 All students will be required to follow and pass a course on Communication Skills for Health Personnel.

2.3.3 All students will be required to complete a module on Computer Operations and Information Management in order to fully utilize the information services and learning resource materials at the Medical Sciences Library.

2.3.4 All students will be required to complete the required foundation courses as set out by the University of the West Indies.

2.5 Attendance

2.5.1 Attendance in excess of 75% is mandatory in all courses. Students are required to inform the office of the Director, School of Pharmacy within one week of any absence from any part of the course. Late excuses will not be accepted.

2.6 Examinations

2.6.1 A student shall not be approved by the Examiners in any one part or section of an examination unless she/he has attended all of the required coursework tests and written, practical and oral examinations in that part.

2.6.2 All students must register for examinations on the completion of the courses. Failure to register will carry an absent/fail penalty.

2.6.3 Examinations may consist of written papers, which may include essays, multiple choice, practical and/or orals.

2.6.4 Examinations will be held at the end of each course completed during a semester or academic year.

2.6.5 The continuous assessment for all courses from Years 1-4 except Pharmacy Practice IV (PHAR 4201), PHAR 4103 and PHAR 4104 will carry a value of 40% and the final examination will carry a value of 60%.

2.6.6 The continuous assessment for Pharmacy Practice IV (PHAR 4201/4202) will carry a value of 30%, the written paper 30%, Objective Structured Clinical Exams (OSCE) 30% and the oral exam 10%.

2.6.7 The assessment for Pharmacy Seminars (PHAR 4103) will consist of 100% coursework.

2.6.8 The continuous assessment for Research Project (PHAR 4104) will carry a value of 20%, the written presentation 40% and the oral presentation 40%.

2.6.9 Coursework assessment marks will be used for examinations in one academic year only. For students repeating courses, new coursework marks must be generated.

2.6.10 The requirement for a pass in each course shall be 50%.

2.6.11 A student who fails the examination in the first attempt will be required to repeat the failed examination at the next available sitting. No student will be allowed to advance if she/ he has failed in two or more courses.

2.6.12 A student who fails in the third attempt will be required to withdraw from the School.

2.6.13 No student will be eligible to proceed to the final year unless she/he has passed all the previous courses.

2.6.14 For the classification of the degree awarded as first class honours, upper second-class honours

and lower second-class honours, the cumulative GPA (Year 2, Year 3 and Year 4) is taken into consideration. The student becomes eligible for the award of an honours degree by maintaining a minimum B average in Years 2, 3 and 4 and passing all courses at the first attempt.

2.7 Grading Scheme

2.7.1 Each course will be awarded grades and grade points on the basis of the marks obtained as follows: -

Grade	Percent marks	Grade Points
A+	86-100	4.3
A	70-85	4.0
A-	67-69	3.7
B+	63-66	3.3
B	60-62	3.0
B-	57-59	2.7
C+	53-56	2.3
C	50-52	2.0
F	< 50	0.0

2.8 Award of Degree

2.8.1 A student is eligible for the award of a BSc Pharmacy Degree on the attainment of 123 credits. The classes of degree will be awarded as indicated below:

GPA	Class of Degree
≥ 3.6	First Class Honours
3.0 - 3.5	Upper Second Class Honours
2.0 – 2.9	Lower Second Class Honours
<2	Pass

2.8.2 Grade points are determined by multiplying the course credits by the quality points for a course, including failed courses.

2.8.3 **Grade Point Average (GPA)** is the average obtained by dividing the total grade points earned by the total credit hours (quality hours or course credits) for which the student has registered for any stated period of time.

3. THE NEW CURRICULUM (YEARS 1-4)

YEAR 1
SEMESTER I

Course Code	Course Title	Credits
PHAR 1201	Pharmacy Practice I (Orientation to Profession of Pharmacy, Introduction to Dosage Forms)	3
PHAR 1202	Pharmaceutical Chemistry	3
PHAR 1203	Integrated Basic Health Sciences (Anatomy, Physiology, Biochemistry, Community Health)	6
COMS 1001	Communication Skills for Health Personnel I	3

FOUNDATION COURSE

Course Code	Course Title	Credits
FOUN 1101	Caribbean Civilisation	
OR		
FOUN 1301	Law, Governance, Economy & Society*	3

SEMESTER II

Course Code	Course Title	Credits
PHAR 1201	Pharmacy Practice I (Pharmacy calculations)	2
PHAR 1202	Pharmaceutical Chemistry	3
PHAR 1203	Integrated Basic Health Sciences	6
COMS 1002	Communication Skills for Health Professionals II	3

YEAR 2
SEMESTER I

Course Code	Course Title	Credits
PHAR 2105	Microbiology, Immunology and General Pathology	3
PHAR 2201	Pharmacy Practice II (Compounding Lab)	2
PHAR 2202	Medicinal Chemistry	3
PHAR 2212	Pharmaceutics I (Dosage Form Design)	4
PHAR 2209	Pharmacology	3

SEMESTER II

Course Code	Course Title	Credits
PHAR 2106	Pharmaceutical Analysis	3
PHAR 2201	Pharmacy Practice II Laboratory (IV Admixture)	2
PHAR 2213	Pharmaceutics II (Biopharmaceutics)	4
HAR 2202	Medicinal Chemistry	3
PHAR 2209	Pharmacology	3

YEAR 3
SEMESTER I

Course Code	Course Title	Credits
PHAR 3104	Pharmacy Law & Ethics	2
PHAR 3105	Biostatistics & Research Methodology	3
PHAR 3106	Complementary/ Alternative Medicine, Non-Prescription Drugs	3
PHAR 3205	Applied Therapeutics I	6
PHAR 3203	Pharmacokinetics (Basic & Clinical)	3

SEMESTER II

Course Code	Course Title	Credits
PHAR 3201	Pharmacy Practice III (Prescription dispensing; site visits; Drug Information / Literature Evaluation)	5
PHAR 3206	Applied Therapeutics II	6
PHAR 3203	Pharmacokinetics (Basic & Clinical)	3

YEAR 4
SEMESTER I

Course Code	Course Title	Credits
PHAR 4102	Pharmacy Administration	4
PHAR 4103	Pharmacy Seminars	2
PHAR 4201	Pharmacy Practice IV (Patient Counselling, Clinical Skills Lab, Introduction to Clerkship rotations)	8

ELECTIVES (any two)**

Course Code	Course Title	Credits
PHAR 4104	Research Project	2
PHAR 4105	Community Pharmacy Practice Management	2
PHAR 4106	Institutional Pharmacy Practice Management	2
PHAR 4107	Clinical Toxicology	2
PHAR 4108	Pharmacoeconomics	2

SEMESTER II

Course Code	Course Title	Credits
PHAR 4201	Pharmacy Practice IV (Clinical Rotations)	12

* Foundation courses, FOUN 1101 or FOUN 1301 may be taken at anytime during years 1 to year 3
** No elective will be offered unless there are at least ten students registered for it

4. CURRICULUM FOR NON-DEGREE PHARMACISTS TO UPGRADE TO B.SC. PHARMACY

MIXED-MODE PROGRAMME
This is a part-time programme, which builds on the student's knowledge of the pharmacy profession as would have been gained by prior training and work experience. The programme will extend over a minimum of six (6) semesters or a maximum of twelve (12) semesters. A total of ninety-four (94) credits will be required for the award of a B.Sc. Pharmacy degree.

Technology
Students are to ensure that their personal computer has sufficient capability to use the university's electronic course management system and other online communication tools including web-conferencing for classroom and project activities.

MODULE 1
SEMESTER I

Course Code	Course Title	Credits
PHAR 1401	Integrated Basic Health Sciences (Anatomy, Physiology, Biochemistry, Community Health)	6
PHAR 2401	Microbiology, Immunology and General Pathology	3
PHAR 2402	Medicinal Chemistry I	3
PHAR 2403	Pharmacology I	3
COMS 1001	Communication Skills for Health Personnel I	3

FOUNDATION COURSE

Course Code	Course Title	Credits
FOUN 1101	Caribbean Civilisation *OR	
FOUN 1301	Law, Governance, Economy & Society	3

SEMESTER II

Course Code	Course Title	Credits
PHAR 1402	Integrated Basic Health Sciences II (Anatomy, Physiology, Biochemistry, Community Health)	6
PHAR 2404	Medicinal Chemistry II	3
PHAR 2405	Pharmacology II	3
COMS 1002	Communication Skills for Health Professionals II	3

MODULE 2
SEMESTER I

Course Code	Course Title	Credits
PHAR 2407	Complementary/Alternative Medicine, NPD	3
PHAR 3403	Biostatistics & Research Methodology	3
PHAR 3401	Applied Therapeutics I	6
PHAR 3402	Pharmacokinetics I (Basic)	3
PHAR 4401	Pharmacy Seminars	2

SEMESTER II

Course Code	Course Title	Credits
PHAR 2409	Pharmacy Practice I: Sterile Products Lab/TPN	2
PHAR 2408	Biopharmaceutics	4
PHAR 3404	Applied Therapeutics II	6
PHAR 3405	Pharmacokinetics II (Clinical)	3
PHAR 3406	Pharmacy Practice II: Drug Information / Lit Evaluation	2

MODULE 3
SEMESTER I

Course Code	Course Title	Credits
PHAR 4402	Pharmacy Administration	4
PHAR 4407	Pharmacy Practice III (Clinical Skills, Patient Counselling, Introduction to Clerkship)	4

ELECTIVES (any two)**

Course Code	Course Title	Credits
PHAR 4403	Research Project	2
PHAR 4404	Institutional Pharmacy Practice Management	2
PHAR 4405	Clinical Toxicology	2
PHAR 4406	Pharmacoeconomics	2

SEMESTER III

Course Code	Course Title	Credits
PHAR 4408	Clerkship I – General Inpatient Medicine 4	
PHAR 4409	Clerkship II – Ambulatory care	4
PHAR 4410	Clerkship III – Specialty medicine	4

* Foundation courses FOUN 1101 or FOUN 1301 may be taken at anytime during Module 1 to Module 2

** No elective will be offered unless there are at least ten students registered for it

5. TEACHING, LEARNING AND ASSESSMENT STRATEGIES

The hybrid system of teaching and learning instituted in the Faculty of Medical Sciences emphasises problem-based learning (PBL) and requires students to adopt a philosophy of self-directed study: students are self-motivated to acquire their own learning, and it facilitates the students' achievement of the learning outcomes. In addition to PBL, learning settings will also include lectures, laboratories, clerkships for pharmacy practice, research projects, seminars, case-studies, poster presentations, numerical and non-numerical problem-solving and computer-aided learning packages.

Knowledge and understanding:

The strategy is to delineate a framework of knowledge and understanding of materials appropriate to the aim of the course. This is achieved through lectures, assigned reading of textbooks and reviews of journal articles, computer-aided learning materials, and practical laboratory exercises.

Assessment will be by written examinations incorporating objective questions and structured essay questions, reports of literature surveys and other coursework. Lectures are used throughout all levels. In later stages of the programme, there will be increased emphasis on personal information retrieval and use of available electronic information.

Skills:

Communication and presentation skills:

The strategy is to provide the student with opportunities to develop written and oral communication skills and general presentation skills. This is achieved via written laboratory reports, essays, seminars, case study presentations and video recorded role-playing. An oral defence will also be included. Communication skills are developed at the early stages of the curriculum and applied progressively to more complex situations in later stages, including basic counselling skills and lengthy and structured written work.

Numeric skills:

Numeric skills are developed and reinforced from the first year through tutorials, worked examples of calculations, statistical exercises, numerical treatment of data derived from laboratory exercises and simulated data. Assessment will incorporate numerical problem solving.

IT skills:

The strategy is to develop the student's IT skills from year 1 by means of introductory lectures and incorporation of computer exercises. Assessment is by coursework activities including use of statistical packages, presentation of projects and other reports. Familiarity with computer-assisted learning materials is necessary at early stages of the course, and more sophisticated information retrieval and management are introduced at later stages.

Teamwork and interpersonal skills:

The PBL system followed from Year 1 onwards provides opportunity to develop interpersonal and group skills. In addition, case study presentations and practical laboratory work in groups will reinforce these skills.

Higher order cognitive skills:

Application of theory is an intrinsic aspect at all stages and is reflected in laboratory exercises and non-laboratory based coursework activities and research projects. These are assessed by objective, short answer and essay type questions. The skills are developed gradually through simple systems in early stages to more complex situations in optimisation methods, case studies and the planning of pharmaceutical care.

Synthesis and evaluation skills are developed at later stages subsequent to the acquisition of basic and specialised knowledge.

Problem-solving exercises are included in course activities and are assessed by mathematical, statistical and non-numerical questions and also by evaluation of research projects, case presentations and laboratory reports.

Subject-specific skills:

The curriculum develops a range of practical laboratory-based skills related to physical, chemical and biological measurements. It also develops a range of professional skills related to pharmacy practice areas.

Students must be able to evaluate patient data, scientific literature and pharmaceutical products in order to provide safe and effective products and to optimise drug utilisation for therapeutic and diagnostic purposes. Students should be responsible for basic prescription compounding functions, be able to safely prepare and handle parenteral products and demonstrate understanding of considerations necessary to assure pharmaceutical product quality; monitor the safety and efficacy of therapeutic plans; prevent or resolve medication-related problems; respond to information requests; collaborate with physicians, other health care professionals and patients to formulate a

pharmaceutical care plan; determine an appropriate drug delivery system for the patient; determine medication doses and dosage schedules; implement a pharmaceutical care plan; and provide counselling related to proper use of medications and devices.

COURSE DESCRIPTIONS

MM – MIXED MODE COURSE CODES (SUBJECT TO CHANGE))
SEMESTERS AND YEARS LISTED ARE FOR FULL-TIME PROGRAMME ONLY

YEAR I COURSES

COURSE TITLE: PHARMACY PRACTICE I
COURSE CODE: PHAR 1201
SEMESTER: 1 & 2
COURSE CREDITS: 5
Orientation to the Profession of Pharmacy, Introduction to Dosage Forms (Semester 1, 3 credits)
This course introduces the student to the profession of pharmacy. It covers the development of pharmacy since the emergence of scientific medicine through the current pharmaceutical care era. It includes the position of pharmacy in the delivery of health care by exploring major issues such as societal, political, philosophical, economic, legal and ethical issues affecting the practice of the profession. It emphasizes the requirements, responsibilities and attitudes that are essential for success as a professional and examines the various career pathways and roles of the pharmacists.

Pharmacy Calculations (Semester 2, 2 credits)
This course deals with various types of calculations required for compounding and dispensing of medications, including conversions of different units of measurement, interpretation of prescription orders and accurate dosage calculations.

COURSE TITLE: PHARMACEUTICAL CHEMISTRY
COURSE CODE: PHAR 1202
SEMESTER: 1 & 2
COURSE CREDITS: 6
This course covers the study of organic, inorganic and physical chemistry of chemicals to provide an understanding of chemical structures, physicochemical properties and behaviour of drugs at the molecular level. The course also includes the study of various classes of compounds like alkanes, alkyl halides, alkenes, cyclic aliphatic, aromatic and heterocyclic compounds; stereochemistry and its applications to the activities of pharmaceuticals; chemical reactions of various functional groups; concepts of acidity and alkalinity, solubility, partition coefficient and chemical kinetics; and the use of different classes of inorganic compounds in pharmaceutical/ medicinal applications, including radionucleides. Laboratory experiments are designed to illustrate the applications of these concepts in the analysis of drugs and pharmaceuticals.

COURSE TITLE: INTEGRATED BASIC HEALTH SCIENCES (MM – INTEGRATED BASIC HEALTH SCIENCES I & II)
COURSE CODE: PHAR 1203 (MM: PHAR 1401 & 1402)
SEMESTER: 1 & 2
COURSE CREDITS: 12 (MM: 6 per course)
The study of Basic Health Sciences, including anatomy, physiology and biochemistry, is important for building a strong foundation of knowledge of natural drugs and their actions within the body, and also for further understanding of pathophysiology of diseases involving various organ systems in the body.

These basic medical sciences are taught in an integrated approach, covering various topics such as cells and cell biology; tissues and organ systems like cardiovascular, central and peripheral nervous systems; digestion and metabolism; cardiovascular and renal; respiration; endocrines and reproduction; and muscles, bones and joints. The course also includes community health aspects involving public health, primary care and epidemiology of diseases related to various organ systems.

YEAR II COURSES

COURSE TITLE: PHARMACY PRACTICE II (COMPOUNDING, STERILE PRODUCT PREPARATION)
(MM – PHARMACY PRACTICE I)
COURSE CODE: PHAR 2201 (MM: PHAR 2409)
SEMESTER: 1 & 2
COURSE CREDITS: 4 (MM: 2)
Compounding Skills (Semester 1, 2 credits)
The student receives instructions on the art and science of compounding products that are used for (self) treatment to cure or alleviate specific (dermatological, ophthalmic etc.) conditions as well as for physician-prescribed medicaments. Techniques used in compounding are emphasised to ensure that good manufacturing practices are achieved. Storage and handling, aseptic techniques and preparation, equipment, labelling, expiration dating, documentation and patient counselling are discussed, among other topics.

***Sterile Product Preparation (Semester 2, 2 Credits)* – (MM: PHAR 2409)**
The sterile products laboratory module introduces the students to sterile preparations and intravenous admixtures. Emphasis is placed on the sterile environment, aseptic techniques, effective use of a laminar flow hood, manipulations of the various injectable packages/ needles/ syringes, dose calculations, incompatibilities, safe compounding/ dispensing/ administration, quality assurance, the preparation of Parenteral Nutrition and the safe preparation and handling of cytotoxic agents. Students learn the role and responsibilities of the clinical pharmacist in parenteral nutrition prescription and cytotoxic agents prescriptions.

COURSE TITLE: MEDICINAL CHEMISTRY
(MM – MEDICINAL CHEMISTRY I & II)
COURSE CODE: PHAR 2202 (MM: PHAR 2402 & 2404)
SEMESTER: 1 & 2
COURSE CREDITS: 6 (MM: 3 per course)

This course has been designed to assist the students in understanding the structure, Structure-Activity-Relationships (SAR), physicochemical and structural basis of drug action; drug sources; mechanisms of drug action; drug design and drug selectivity; drug incompatibility; drug interactions of commonly used drugs affecting autonomic, cardiovascular, central and peripheral nervous, gastrointestinal, blood and renal systems; and also the drugs used to prevent or treat various bacterial, viral, protozoal and fungal infections and cancer.

The course also describes how the physical features of the drug such as pK_a and partition coefficient, and the chemical features such as conformational and configurational features, contribute to drug activity and affect its administration, distribution, metabolism and excretion.

COURSE TITLE: PHARMACEUTICS I & II
INCLUDES (DOSAGES FORM DESIGN, BIOPHARMACEUTICS, NEW DRUG DELIVERY SYSTEMS AND DEVICES)
(MM – PHARMACEUTICS)
COURSE CODE: PHAR 2212 & PHAR 2213
(MM: PHAR 2408)
SEMESTER: 1 & 2
COURSE CREDITS: 8 (4 per course) (MM:4)

Dosage Form Design (semester 1, 4 credits)

An introduction to the technologic and scientific principles underlying the preparation of dosage forms and drug delivery systems. Students should develop an understanding of the inter-relationship between physical pharmacy principles, biopharmaceutics and dosage form design, including modifying the release pattern of a drug from its dosage form/device (sustained-release, controlled-release and site specific drug delivery systems) and the clinical applications in patient care. Product examples and the applications of each type of dosage form are emphasised to give the beginner an orientation to pharmacy practices.

Biopharmaceutics, New Drug Delivery Systems and Devices (Semester 2, 4 Credits) – (MM: PHAR 2408)

Biopharmaceutics provides an understanding of the relationship between physical, chemical and biological principles as they apply to drug absorption, distribution, metabolism, excretion and factors that influence the bioavailability of orally administered drugs.

COURSE TITLE: PHARMACOLOGY
(MM – PHARMACOLOGY I & II)
COURSE CODE: PHAR 2209 (MM: PHAR 2403 & 2405)
SEMESTER: 1 & 2
COURSE CREDITS: 6 (MM - 3 per course)

This course has been designed to assist the students in learning about the most often used medications to treat patients. It will provide a framework for more in-depth study of pharmacology and support the student in learning the names, mechanisms/actions, uses, and side effects of commonly used drugs affecting autonomic, cardiovascular, central and peripheral nervous, gastrointestinal, blood and renal systems, and also of the drugs used to prevent or treat various bacterial, viral, protozoal and fungal infections and cancer.

COURSE TITLE: MICROBIOLOGY, IMMUNOLOGY AND GENERAL PATHOLOGY
COURSE CODE: PHAR 2105 (MM: PHAR 2401)
SEMESTER: 1
COURSE CREDITS: 3

Microbiology: Students are expected to develop knowledge and understanding of the pharmaceutical aspects of microbiology, the nature and use of antibiotics and other antimicrobial agents, and the types and use of antiseptics, disinfectants and preservatives. The course includes a study of microorganisms and the clinical infections they cause; theoretical and practical aspects of active and passive immunisation against infectious diseases; classification or range of antimicrobial agents; sterilisation methods preventing contamination of pharmaceutical products; and understanding the need for a well-developed strategy for controlling infectious diseases.

Immunology: Incorporates an overview of the immune system (organisation of the immune system, innate and acquired immunity, antibodies, including generation of diversity, structure and function relationships, T-cells – structure, function and effects mechanisms); Major histocompatibility antigens, antigen processing and presentation; Overview of cytokines; Immunopathology, including immunodeficiency, hypersensitivity, autoimmunity, transplantation and immunosuppressive modality; and immunisation.

General pathology: Basic pathophysiological and morphological changes that are associated with some common pathological states like cell injury, acute and chronic inflammation, cell growth, oedema, haemorrhage, thrombosis, wound healing, mechanisms of carcinogenesis and characteristics of neoplasms are covered.

COURSE TITLE: PHARMACEUTICAL ANALYSIS
COURSE CODE: PHAR 2106
SEMESTER: 2
COURSE CREDITS: 3
This course involves the practical application of modern analytical techniques such as spectroscopy and chromatography to the identification and quantisation of drugs and pharmaceutical products.

YEAR III COURSES

COURSE TITLE: PHARMACY PRACTICE III
(MM – PHARMACY PRACTICE II)
PRESCRIPTION DISPENSING AND SITE VISITS (FT only);
DRUG INFORMATION /
LITERATURE EVALUATION (FT & MM)
COURSE CODE: PHAR 3201 (MM: PHAR 3406)
SEMESTER: 1 & 2
COURSE CREDITS: 5 (MM: 2)
The course simulates actual pharmacy practice with a problem solving approach. It is intended as a transition between the didactic course work and later externship and clerkship experiences. It cultivates in the student an ability to utilise professional knowledge to analyse and solve problems that occur in the domains of community and institutional practice. In this process, the student learns to communicate effectively with patients, peers and other health professionals, and exhibits confidence during these interactions.

Drug Information and Literature Evaluation *(Semester 2, 2 credits) – (MM: PHAR 3406)*
Pharmacy Practice seeks to acquaint the student with various information resources, and knowledge to appropriately utilise these references in responding to drug information requests. The course will review the primary, secondary and tertiary literature, indexing and abstracting systems, the systemic search strategy, and the principles of literature evaluation - ultimately, the approach for preparing, communicating and documenting the exact information needed for responding to a drug information request in an acceptable and timely manner. Additionally, it is intended that the student would become familiar with electronic databases and the Internet.

COURSE TITLE: APPLIED THERAPEUTICS I & II
COURSE CODE: PHAR 3205 & 3206
(MM: PHAR 3401 & 3404)
SEMESTER: 1 & 2
COURSE CREDITS: 6 PER COURSE
Study of this course involves a description of the basic pathophysiology and clinical manifestations of disease states; how the pharmacological actions of drugs and their pharmacokinetic properties are utilised in the clinical setting to produce therapeutic effect; to explain the toxicities, interactions and contraindications to these drugs; to acquire the skill required to ensure the most effective and efficient use of drugs as therapeutic tools from a knowledge of the desired therapeutic objectives and feasible therapeutic alternatives, by selecting and individualising a drug treatment regimen and by designing a patient monitoring plan to achieve the stated therapeutic goals. It provides opportunities for a student to select, interpret and integrate patient, drug and disease information in order to prevent, detect and resolve drug-related problems.

COURSE TITLE: PHARMACOKINETICS (BASIC & CLINICAL)
(MM – PHARMACOKINETICS I & II)
COURSE CODE: PHAR 3203 (MM: PHAR 3402 & 3405)
SEMESTER: 1 & 2
COURSE CREDITS: 6 (MM: 3 per course)
This course aims to provide a basic understanding of the time-course of drugs and metabolites in the body, including the quantitative aspects of drug absorption, distribution, metabolism and excretion. Compartmental and non-compartmental treatment of kinetic data, parameter calculations and the applications of these concepts in estimation of loading and maintenance doses will be employed.

Clinical Pharmacokinetics: This course aims to provide an understanding of the potential clinical applications of the principles of pharmacokinetics through presentation and solution of common clinical problems. The student must integrate information from pharmacokinetics, biopharmaceutics and therapeutics to decide how to maximize a patient's drug therapy while minimising untoward effects. The student learns about therapeutic drug level monitoring, how to summarise the influence of other drugs, diseases and patient factors on pharmacokinetic parameter values and make pharmacokinetic-based dosage alterations.

COURSE TITLE: PHARMACY LAW & ETHICS
COURSE CODE: PHAR 3104
SEMESTER: 1
COURSE CREDITS: 2
Students will demonstrate communication skills in the use of legal writing and terminology. They would be able to relate a number of Acts and Regulations to the ethico-legal practice of Pharmacy from WHO and a number of Pharmacy Associations, Boards and Councils. Students in Trinidad and Tobago will pay special attention to the Food and Drugs Regulations, The Pharmacy Board Act, The Antibiotic Ordinance, The Dangerous Drugs Act, The Narcotic Ordinance, the conditions for registration and removal of a Pharmacist, and the Code of Ethics adopted by the Pharmacy Board.

COURSE TITLE: BIOSTATISTICS & RESEARCH METHODOLOGY
COURSE CODE: PHAR 3105 (MM: PHAR 3403)
SEMESTER: 1
COURSE CREDITS: 3
The Biostatistical module of this course is intended to introduce students to elementary statistical concepts and commonly used analytical tools while providing the rationale underlying their use. More specifically, the course will enable students to understand basic probability concepts and use them; familiarise themselves with statistical reasoning and skills; draw inferences using statistical logic; and use statistical packages for data management and processing. The research methodology module is intended to expose students to basic research designs and principles applicable to medical health fields.

COURSE TITLE: COMPLEMENTARY/ALTERNATIVE MEDICINE & NON-PRESCRIPTION DRUGS
COURSE CODE: PHAR 3106 (MM: PHAR 2407)
SEMESTER: 1
COURSE CREDITS: 3
The social and scientific foundations of complementary and alternative medicine (CAM) leading to an evidence-based approach are covered in this course. The course covers the safety of complementary and alternative medicine products and practices (herbal products, homeopathy, acupuncture, etc.); common aspects of traditional healing systems across cultures; and overviews of CAM systems, such as ayurvedic medicine, herbal medicine, homeopathy, naturopathic medicine, nutritional biotherapy and traditional Chinese medicine.

Non-Prescription Drugs: This course describes the intention to use non-prescription/Over-The- Counter (OTC) drugs by the prerogative of the lay public to alleviate symptoms of a disease with or without the advice of a physician. Scenarios are used to expound when patient selection of an OTC is appropriate or referral to a physician for consultation is deemed to be in the patient's interest. The Physiology, Pharmacology, Adverse Drug reactions and Patient Counselling with respect to OTCs are covered.

YEAR IV COURSES

COURSE TITLE: PHARMACY PRACTICE IV
(MM - PHARMACY PRACTICE III and CLERKSHIPS I-III)
COURSE CODE: PHAR 4201 (MM: PHAR 4407, 4408, 4409, 4410)
SEMESTER: 1 & 2
COURSE CREDITS: 2 (MM: 4 per course)
Clinical Skills Lab (Semester 1, 1 credit) – (MM: PHAR 4407)
Students are taught history-taking and near-patient testing relevant to providing pharmaceutical care and optimal patient management. Focus is placed on the methods of interviewing a patient, assessing organ systems, interpreting signs and symptoms, performing diagnostic/monitoring tests and conducting life support functions.

Patient Counselling (Semester 1, 1 credit) – (MM: PHAR 4407)
Students will be able to practice basic counselling techniques in skills sessions with their peers through role-play and with simulated and real patients seeking pharmaceutical care. They will be able to practice these skills having been provided with information on the counselling process, behaviour in groups and the ethics of counselling.

Introduction to Clerkship (Semester 1, 6 credits) – (MM: PHAR 4407, 2 credits)
Full-time students would be introduced to pharmacy practice in institutional and community pharmacy settings. Part-time students will apply management principles and pharmaceutical care approaches to current practice and expand patient care services. All students will be expected to develop an appreciation of the role of pharmaceutical policy, inventory management and quality assurance in distribution of medicines to patients. They are expected to apply knowledge and skills of communication, professional laws, ethics, counselling, drug therapy monitoring, drug information, research, patient interviewing and judgment to provision of Pharmaceutical Care and the pharmacist's clinical role in the health care delivery systems.

Clinical Clerkships (Semester 2, 12 credits) – (MM: PHAR 4408, 4409, 4410)
This course will be delivered as experiential rotations in ambulatory and inpatient settings, as well as community pharmacy. The purpose of the clerkship is to ensure that the integration of classroom knowledge gained in the foundation years is transferred effectively to 'hands-on' clinical skills in institutional and ambulatory settings. Students will work alongside experienced practitioners at all levels of health care to develop skills in identifying and resolving drug-related problems, therapeutic monitoring, drug information services, inventory management and patient care.

COURSE TITLE: PHARMACY ADMINISTRATION
COURSE CODE: PHAR 4102 (MM: PHAR 4402)
SEMESTER: 1
COURSE CREDITS: 4
An introduction to pharmacy practice environment and professional issues that includes the application of marketing principles of products, pricing and promotion; the use of inventory control concepts to manage inventory and work effectively; how to manage technical personnel with proper human resources management and efficient work delegation and work flow pattern; application of the principles of planning, organising, communicating, coordinating and controlling to evaluate and propose changes in the operations of pharmaceutical care practice in community, hospital, long-term managed care or other setting; the use of financial statements and financial analysis to diagnose financial and management problems and prepare a budget for a pharmacy; understanding the basic concepts of risk management and rational decisions regarding insurance; applying principles of strategic

planning to develop a course of action for any pharmacy; and applying principles of business planning to implement pharmaceutical care services, and evaluate success of service.

COURSE TITLE: PHARMACY SEMINARS
COURSE CODE: PHAR 4103 (MM: PHAR 4401)
SEMESTER: 1
COURSE CREDITS: 2
Students in groups of five will select a topic of general interest in pharmacy practice, in consultation with the pharmacy practice staff and preceptors, and present it to an audience consisting of students and faculty, including preceptors. Topics may be selected from contemporary issues such as health economics, pharmacoeconomics, pharmacoepidemiology, generic drugs and drug regulatory aspects, contemporary pharmacy practice in the country vis a vis practice in other countries, and related areas which may have some impact on the pharmacy profession and clinical cases they have come across during their experiential rotation. Each group will present two seminars. The presentations will be assessed by faculty and peers.

PHARMACY ELECTIVES

COURSE TITLE: RESEARCH PROJECT
COURSE CODE: PHAR 4104 (MM: PHAR 4403)
SEMESTER: 1
COURSE CREDITS: 2
The research project aims to provide a basic level of training in systematic investigation of a topic of interest to the student. It provides an opportunity to learn about research methods, gain skill in writing a research proposal in an appropriate format, skill in literature survey and to collect the relevant research papers, design the experiment or questionnaire giving due consideration to principles of selection of subjects, inclusion/exclusion criteria, sample size and statistical consideration, collection of data, organising it and representing it in the form of tables or graphs, apply statistical methods wherever required, transform the data into useful information, discuss the results and draw a conclusion from the whole exercise. Students get an opportunity to report their findings in an appropriate format and style, present orally to an audience and defend their findings.

COURSE TITLE: COMMUNITY PHARMACY PRACTICE MANAGEMENT
COURSE CODE: PHAR 4105
SEMESTER: 1
COURSE CREDITS: 2
This course explores selected topics in the organisation and operation of a retail pharmacy. Topics include organising and financing a pharmacy, examining the economic and political environment, marketing pharmaceutical services, assessing automation and computerising the pharmacy and other current issues. The goal is to provide the knowledge and managerial skills to succeed in a competitive marketplace. The community practice of pharmacy also entails the clinical responsibility for the safe and appropriate use of drugs, and the control of the patient's overall medication profile within the framework of Pharmaceutical Care.

COURSE TITLE: INSTITUTIONAL PHARMACY PRACTICE MANAGEMENT
COURSE CODE: PHAR 4106 (MM: PHAR 4404)
SEMESTER: 1
COURSE CREDITS: 2
The student is introduced to hospital pharmacy management and to the services frequently associated with hospital pharmacy. The director of the pharmacy coordinates the services and activities of the pharmacy department with other departments. The pharmacy is responsible for the procurement, storage, compounding, manufacturing, packaging, dispensing, distribution and monitoring of medications through drug therapy management for hospitalised and ambulatory patients by legally qualified and professionally competent pharmacists. The hospital practice of pharmacy also includes clinical responsibility for the safe and appropriate use of drugs and control of the patient's overall drug regimen within the framework of Pharmaceutical Care.

COURSE TITLE: CLINICAL TOXICOLOGY
COURSE CODE: PHAR 4107 (MM: PHAR 4405)
SEMESTER: 1
COURSE CREDITS: 2
Students will be able to recall the basic principles of toxicology and the molecular mechanisms in toxicity. Students will be able to relate the acute poisoning, toxicities of drugs, noxious industrial chemicals, household and agricultural products, drugs of abuse and environmental toxicology to relevant mechanisms.

COURSE TITLE: PHARMACOECONOMICS
COURSE CODE: PHAR 4108 (MM: PHAR 4406)
SEMESTER: 1
COURSE CREDITS: 2
Pharmacoeconomics attempts to identify, measure, evaluate and improve the effectiveness of health care and to control the cost of inappropriate care. Emphasis is placed on greater accountability of providers, who must accept responsibility for meeting society's goal of high quality care at an affordable price. The student must understand that care includes both the direct medical costs and benefits associated with therapeutic options and the indirect or out of pocket costs borne by patients, their families and employers**.**

SCHOOL OF ADVANCED NURSING EDUCATION

B.Sc. Nursing (BSc.N Post RN)

Admissions

Applicants for admission to this programme of study will be required to satisfy the minimum standards for entry to the BSc Nursing degree programme, as set forth by the University Regulations governing matriculation as follows:

1. General Entry Requirements

1.1 Five (5) G.C.E./ C.X.C. O' Levels of which two (2) must be A' Level or equivalent

1.2 **OR** Four (4) G.C.E. of which three (3) must be at least A' Level or equivalent

2. Special Requirements:

2.1 Completion of the basic or general qualification in Nursing: Certificate, Diploma or Associate Degree with minimum passing grade of B or its approved equivalent. In addition to the above special requirement (1.) the applicant must be a registered nurse. Entry qualifications of applicants, when assessed by the admissions team, must be equivalent to a minimum of (30) credits

2.2 Candidates with Certificates, Diplomas, or Associate Degrees with a grade lower than the approved grade, upon recommendation from the selected committee or equivalent authority, if approved for entry, will be required to write a challenge examination

2.3 Candidates may be given provisional acceptance only when they do not possess the specific requirement. However, they will be advised to obtain it while awaiting entry. A Remedial programme of integrated science will be offered to all candidates during or before entry into the programme. Additionally, such applicants can access the necessary requirement at the Pre Health Professional Programme of the School of Continuing Studies.

2.4 Candidates with additional post-basic qualification in nursing from programmes offered by The UWI or other recognised tertiary institutions may be considered for admission on a preferential basis, but must have obtained a minimum grade of B in major course components of their post-basic training.

2.5 Provisional acceptance may be offered in the case of other entry requirements subject to the approval of an Advisory Committee that would assess and recommend the pre-requisite courses of study to be pursued prior to admission.

2.6 Final selection of candidates will be based on an interview by a specially selected panel.

3. Registration

3.1 Registration for courses takes place during the first week of each academic year. Late registration may be permitted in accordance with the University's general regulations.

3.2 Students must be registered for examinations according to the University guidelines for examinations.

4. Courses of Study

The course for the BSc degree lasts not less than three (3) semesters, nor lasts less than one (1) academic year. The programme consists of the following components:

(a) Foundation courses
(b) Computer Literacy
(c) Research
(d) Education
(e) Management
(f) Clinical Nursing
(g) Basic Sciences

With a concentration on major concepts such as: Nursing Administration, Nursing Education, School Nursing and Clinical areas of Specialisation i.e. Oncology.

5. Exemptions

5.1 A student who has completed a course and passed an examination from this or another recognised University or from a recognised tertiary institution, after application and approval by an Advisory Committee of the School of Advanced Nursing, in a course equivalent to the part or the whole of a course in the BSc Nursing degree courses, may apply through the Director of the School for exemption. The Director shall examine the syllabus, nature and duration of, and the student's grading in the examination in that course, the time, which has elapsed since it had been completed, and in particular whether such course is equivalent in whole or in part to that offered in The University of the West Indies. The Director, through the Dean, shall make one of the following recommendations to the Faculty Board indicating the reasons for such recommendation:

a. that the student be exempted from both the course and the examination;
b. that the student be exempted from a part or the whole of the course, but be required to take a part of, or the full examination
c. that credits already accumulated be transferred to the present course.

5.2 Exemptions shall not be granted automatically to students who have been asked to withdraw from and/or have been re-admitted to the Faculty.

6. Debarments, Repeats, Withdrawals

6.1 Where there is dissatisfaction with a student's performance, the Director of the School may report the matter through the Dean to the Faculty Board, which may recommend to the Academic Board that the student be debarred from the examination, and either repeat the course or be required to withdraw from the programme.

7. University Required Courses

7.1 All students will be required to follow and complete satisfactorily the courses in Communication Skills for Health Personnel (COMS1001 and COMS1002) and one other Foundation Course of The University of the West Indies.

8. Examinations

8.1 Examinations will be held at the end of each Semester. A student, who fails in the examinations of any course, will be governed totally by the rules and regulations set out for examinations of nursing students.

8.2 Examinations shall consist of written papers, coursework, and/or objective testing, projects, and orals. The latter is at the discretion of the examiners. In addition, evaluation of Nursing Clinicals may be included in examinations conducted on outreach programmes, and clerkships in relevant settings.

8.3 The continuous assessment for all courses except Nursing Clinicals will carry a value of 40% and the examinations will carry a value of 60%.

8.4 The continuous assessment in Nursing Clinicals, will carry a value of 40%, the final exams will carry a value of 50% and oral exams 10%. A student who fails to satisfy the examiners in any course offered during a semester will be allowed to write a supplemental examination at the end of the academic year in which the course was taken, if the student has made at least 35% in the course. Supplemental examinations in the nursing programme will not be given to the students with marks less than 35%.

8.5 A student who fails the supplemental examinations will be required to repeat the courses failed. A supplemental examination will be considered as a second attempt.

8.6 A student who fails two (2) or more courses within a semester will not be eligible to write a supplemental examination and must repeat these courses in the following year.

8.7 A student who fails two (2) or more courses offered in two (2) successive semesters may be required to withdraw from the degree programme.

8.8 A student who fails in a third attempt will be required to withdraw from the programme.

8.9 A satisfactory level of performance evaluation, as defined in the above Regulations, must be achieved within each year of completion of the course of study for that year. A student who fails to meet this condition in two (2) successive years will normally be required to withdraw from the Faculty.

8.10 Students must attend the courses of study in the order prescribed in the Regulations. They will not be eligible to enter for final examinations for the BSc.N degree unless they have **passed all the courses preceding the final examinations.**

8.11 A student shall not be approved by the examiners in any one part or section of an examination unless he/she attended all of the written, practical and oral examinations in that part.

8.12 A student may be credited with those part(s) or sections of the examination in which he/she has satisfied the examiners for a period approved by the Faculty Board.

8.13 A student who has failed any part(s) or sections of the examinations shall be required, on the second attempt or re-entry, to produce satisfactory evidence that he/she has undertaken a prescribed course of study in the subject.

8.14 The Board of Examiners may recommend referral for up to one (1) year in the first instance, a further period to be approved by the Faculty Board where the poor overall performance of the student warrants this action.

9. Grading Scheme for BSc Nursing Degree

Each course will be awarded grades with an assigned grade point, on the basis of the overall course marks as follows:

LETTER GRADE	GRADE POINT
A+	4.3
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
F	

9.1 A student is eligible for the award of the BSc.N upon completion of the relevant courses, that is following the course of study outlined, and passing the necessary examinations. It is an essential requirement for eligibility for the final examinations that students shall have completed all the nursing practice components of the programme. Students are required to have maintained a minimum grade of C in the components of training associated with nursing.

9.2 A student is eligible for the award of the BSc Nursing Degree upon completion of the relevant courses that is, following the course of study outlined above and passing the necessary examinations. It is an essential requirement for eligibility for the final examination that students shall have completed all the extramural instructions within the Nursing Practicum for a period of 8 weeks. Students are required to have maintained a minimum level of 50% in the components of training associated with Nursing Studies and Nursing Practicum.

9.3 A student becomes eligible for the award of an Honours degree by maintaining a minimum B average and passing at least 30 credits in Level II and Level III courses at the first attempt. In the One-Year Programme and passing at least 60 credits in Level II and Level III courses at the first attempt in the Two-Year Programme.

10 Award of Degree

10.1 The degree will only be awarded on the attainment of the stipulated 110 credits to students having entered the programme with a minimum of 30 credits of basic RN qualifications.

10.2 The degree will be awarded with honours according to the overall quality points and GPA as follows:

QUALITY POINTS	PERCENTAGE	GRADE
4.3	86-100	A+
4.0	70-85	A
3.7	67-69	A-
3.3	63-66	B+
3.0	60-62	B
2.7	57-59	B-
2.3	53-56	C+
2.0	50-52	C
1.7	47-49	C-
1.3	43-46	D+
1.0	40-42	D
0.0	Under 40	F-

First Class Honours:	GPA 3.60 and above
Second Class Honours:	
Upper Second Class:	GPA 3.00 - 3.59
Lower Second Class:	GPA 2.00 - 2.99
Pass:	GPA 1.00 - 1.99

Curriculum Objectives

I. To synthesise knowledge from the sciences essential to the professional practice of nursing.
II. To utilise nursing theories to guide the practice of nursing.
III. To use the problem-solving approach to manage patient care.
IV. To exercise critical thinking and professional judgement in decision-making.
V. To investigate nursing and healthcare problems using scientific methods.
VI. To demonstrate competence in Advanced Nursing practice.
VII. To use databases and digital information resources to predict trends in nursing and plan accordingly.
VIII. To participate in strategic planning, policy formulation and programme planning which impact on nursing and health.
IX. To demonstrate competence in planning, implementing and evaluating, health promotion interventions, health management, and education programmes.
X. To direct the management of resources in the nursing sector.
XI. To demonstrate leadership capabilities in resource mobilisation to advance the practice of nursing to achieve health gains.
XII. To provide essential knowledge, skills and attitudes for those wanting to become nursing educators responsible for managing education programmes for nurses.

XIII. To collaborate with the community and multi-disciplined teams of healthcare professionals in developing health promotion programmes.
XIV. To observe ethical, moral, and legal obligations inherent in nursing and health care practices.
XV. To engender within the professional and personal interactions in nursing, the value systems and socioeconomic conditions of individuals and groups from diverse cultural backgrounds.
XVI. To provide the quality of education that would lead graduates to postgraduate programmes in nursing including nursing education.

Teaching Methods
The hybrid system of teaching and teaming instituted at Mt. Hope emphasises Problem Based Learning (PBL) and requires students to adopt a philosophy of self-directed study. In addition to PBL, learning settings also include lectures, science and skills laboratories, practicum, outreach, research projects, case methods, case presentations, portfolio maintenance, and seminars. Distance teaching over the UWIDEC teleconferencing system is also possible. In this mode, nurses can synchronously attend courses with their counterparts in other campuses, or given the course material, students can study by means of electronic links with the tutors, the library resources and one another.

Where it is expedient and cost effective, nurses can share classroom sessions on common courses with students of other Schools of the Faculty of Medical Sciences. In addition, students will be required to undergo close supervision by their tutors and preceptors in different health care settings. The Code of Ethics of Nurses in general and the stipulations of the various Nursing Boards and Associations in the Caribbean will be stressed throughout the training.

Course of Study
The BScN is structured in course modules allowing for the accumulation of credits toward the degree; it is designed to facilitate articulation of students from Certificate and Diploma programmes which have been in existence. Along with the University Required Courses, the degree programme comprises a core curriculum in three (3) study areas: Education and School Nursing and Administration.

Introduction to Clinical Practicums
The Nursing Practicums of the BSc Nursing degree programme are scheduled in the last semester of the nursing curriculum. The rotation is designed to allow the students to develop new skills in Nursing Practice and improve on previously acquired ones by working alongside experienced practitioners of all levels of health care. It incorporates the team approach of nursing practice, faculty members and health care practitioners in the community, schools, hospitals, nursing schools, health care centres and other patient care facilities, toward the enhancement of knowledge in nursing education, school nursing and administration.

Purpose
The purpose of the rotation is to ensure that the integration of knowledge gained in the first two (2) years is transferred effectively to 'hands-on' clinical skills in the various nursing practice sites. Policies and Procedures will be provided by the School of Advanced Nursing Education.

COURSE LISTING (One-Year Programme)

FOUNDATION COURSES

YEAR 1

Course Code	Course Title	Credits	Semester
COMS 1001	Communication Skills for Health Personnel	3	1
AND			
COMS 1002	Communication Skills for Health Professions	3	2
FOUN 1101	Caribbean Civilisation	3	1&2
OR			
FOUN 1301	Law, Governance, Economy & Society	3	1&2

CORE COURSES AND ELECTIVES

YEAR 1
SEMESTER 1

Course Code	Course Title	Credits
NURS 2502	Clinical Epidemiology & Biostatistics	3
NURS 1500	Nursing Informatics	3
NURS 1201	Pathophysiology/Immunology & Genetics I	3
NURS 1100	Integrated Basic Health Sciences for Nurses I	5

SEMESTER 2

Course Code	Course Title	Credits
NURS 1200	Primary Health Care & Health Promotion & Health Assessment	4
NURS 2201	Pathophysiology/ Immunology & Genetics II	3
NURS 2100	Integrated Basic Health Sciences for Nurses II	5
NURS 2501	Nursing Leadership & Management	3
NURS 2302	Introduction to Nursing Research	3

SEMESTER 3

Course Code	Course Title	Credits
NURS 3300	School Nurse Practicum	6
NURS 2400	Nursing Seminar	3
NURS 3100	Nursing Pharmacotherapeutics	3
NURS 3301	Nursing Educator Practicum	6
NURS 3500	High Risk Population (Elective)	3
NURS 3302	Nursing Administrator Practicum	6

COURSE LISTING (Two-Year Programme)

FOUNDATION COURSES

YEAR 1

Course Code	Course Title	Credits	Semester
COMS 1001	Communication Skills for Health Personnel	3	1
AND			
COMS 1002	Communication Skills for Health Professions	3	2
FOUN 1101	Caribbean Civilisation	3	1&2
OR			
FOUN 1301	Law, Governance, Economy & Society	3	1&2

CORE COURSES AND ELECTIVES

YEAR 1

SEMESTER 1

Course Code	Course Title	Credits
NURS 2502	Clinical Epidemiology & Biostatistics	4
NURS 1500	Nursing Informatics	3
NURS 1201	Pathophysiology/ Immunology & Genetics I	3
NURS 1100	Integrated Basic Health Sciences for Nurses I	5

SEMESTER 2

Course Code	Course Title	Credits
NURS 1202	Health Assessment	3
NURS 2201	Pathophysiology/ Immunology & Genetics II	3
NURS 2100	Integrated Basic Health Sciences for Nurses II	5
NURS 1203	Primary Health Care & Health Promotion	4
NURS 3100	Nursing Pharmacotherapeutics	3

SEMESTER 3

Course Code	Course Title	Credits
NURS 2300	Nursing Research Project I	3

YEAR 2

SEMESTER 1

Course Code	Course Title	Credits
NURS 2301	Nursing Research Project II	3
NURS 2510	Classroom Teaching, Assessment & Evaluation	3
NURS 2511	Ethical, Legal & Moral Aspects of Nursing & Health Care	3
NURS 2512	Educational Psychology & Counselling	3
NURS 2513	Theories in Education	3

SEMESTER 2

Course Code	Course Title	Credits
NURS 2501	Nursing Leadership & Management	3
NURS 3510	Curriculum Methods & Strategies	3
NURS 3511	Nursing & Health Education	3
NURS 3200	Nursing Sciences	3
NURS 3310	Health Policy	3

SEMESTER 3

Course Code	Course Title	Credits
NURS 2400	Nursing Seminar	3
NURS 3301	Nurse Educator Practicum	6
NURS 3302	Nursing Administrator Practicum	6
NURS 3500	High Risk Population (Elective)	3

BSc. Nursing (Oncology)

COURSE LISTING (Two-Year Programme)

SEMESTER 1

Course Code	Course Title	Credits
NURS 1100	Integrated Basic Health Sciences for Nurses I	5
NURS 1201	Pathophysiology/Immunology & Genetics I	3
NURS 1500	Nursing Informatics	3
NURS 2502	Clinical Epidemiology & Biostatistics	3
NURS 2511	Ethical, Legal & Moral Aspects of Nursing & Health Care	3
NURS 2514	Advanced Therapeutic Communication with Patients & Families	3
NURS 2515	Critical Appraisal and Evidence-Based Practice	4
NURS 2600	Concepts and Theories in Oncology Nursing I	3
NURS 3100	Nursing Pharmacotherapeutics	3

SEMESTER 2

Course Code	Course Title	Credits
NURS 1202	Health Assessment	3
NURS 1203	Primary Health Care and Health Promotion	3
NURS 2100	Integrated Basic Health Sciences for Nurses II	5
NURS 2201	Pathophysiology/ Immunology & Genetics II	3
NURS 2601	Concepts & Theories in Oncology Nursing II	3
NURS 2610	Introduction to Palliative Care in Nursing	3

NURS 2611	Oncology Health Assessment	3
NURS 3400	Guided Nursing Practice (Clinical Course)	6
NURS 2400	Nursing Seminar	3

SEMESTER 3

Course Code	Course Title	Credits
NURS 2302	Introduction to Nursing Research	3
NURS 3512	Cancer Care for Children and Adolescents	3
NURS 2501	Nursing Leadership & Management	3
NURS 3515	Cancer of the Prostate (Elective)	3

COURSE DESCRIPTIONS

LEVEL: 2
SEMESTER: 1
COURSE CODE: NURS 2502
COURSE TITLE: CLINICAL EPIDEMIOLOGY & BIOSTATISTICS
NUMBER OF CREDITS: 3
PREREQUISITE(S): CURRENT RN
COURSE DESCRIPTION:
Epidemiology: This will provide students with the ability to develop a systematic understanding of how the evidence-based for patient care is developed and assessed.
Biostatistics: This course focuses on health statistics as a basis for epidemiological methods used by health care managers to assess health trends and situations, and monitoring of the process of the various interventions. The objective of this course is to introduce students to the role of statistics in health science, health care delivery, the study of human population, and management on uncertainty.
ASSESSMENT:
Coursework: 40%
Final Exam: 60%

LEVEL: 1
SEMESTER: 1
COURSE CODE: NURS 1500
COURSE TITLE: NURSING INFORMATICS
NUMBER OF CREDITS: 3
PREREQUISITE(S): COMPUTER LITERACY
COURSE DESCRIPTION: The course introduces nurses to the roles of computer information and communication technologies in the delivery of efficient health care (in relation to patients, problems and procedures) and for research. Students will acquire technical competence in health information management as they collect, retrieve and manipulate health data, for use in communication, planning and decision-making. A thorough exploration of the need for nursing information standards and systems will be encouraged.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 1
SEMESTER: 1
COURSE CODE: NURS 1201
COURSE TITLE: PATHOPHYSIOLOGY/ IMMUNOLOGY & GENETICS I
NUMBER OF CREDITS: 3
PREREQUISITE(S): CURRENT RN
COURSE DESCRIPTION: This is an online course which focuses on general concepts, principles and processes of pathophysiology, immunology and genetics. It creates an understanding of altered body processes as occurs in some common disease conditions from the cellular to the systemic level.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 1
SEMESTER: 1
COURSE CODE: NURS 1100
COURSE TITLE: INTEGRATED BASIC HEALTH SCIENCES FOR NURSES I
NUMBER OF CREDITS: 5
PREREQUISITE(S): CURRENT RN
COURSE DESCRIPTION: This course is the first of two courses which develops on prior knowledge of anatomy and physiology. Students are facilitated to acquire in-depth knowledge and understanding of the principles of genetics, fluid, electrolyte and acid-base balance. In addition, the cell and tissue biology module provides a foundation for the discussion of the structure and function in the immune and nervous systems.
ASSESSMENT:
Coursework: 40%
Final Exam: 60%

LEVEL: 1
SEMESTER: 2
COURSE CODE: NURS 1200
COURSE TITLE: PRIMARY HEALTH CARE, HEALTH PROMOTION AND HEALTH ASSESSMENT
NUMBER OF CREDITS: 4
PREREQUISITE(S): NURS 1201; NURS 2201, (MAY BE TAKEN CONCURRENTLY), NURS 1100; NURS 2100 (MAY BE TAKEN CONCURRENTLY)
COURSE DESCRIPTION: Public Health and Health Promotion is a rapidly expanding field. This course will allow the utilization of the nursing process to facilitate health promotion for individuals of all ages and families. Students will have experiences in day care centers, schools, health centers, senior citizen centers and with health fairs.
Assessment:
Coursework 40%
Final Exam: 60%

LEVEL: 1
SEMESTER: 2
COURSE CODE: NURS 1203
COURSE TITLE: PRIMARY HEALTH CARE & HEALTH PROMOTION
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1201; NURS 2201 OR EQUIVALENT. (MAY BE TAKEN CONCURRENTLY); NURS 1100; NURS 2100 OR EQUIVALENT (MAY BE TAKEN CONCURRENTLY); NURS 1202
COURSE DESCRIPTION: This course introduces nurses to the concept and operationalisation of Health Promotion as a new approach to addressing the determinants of health in realising the goals of Primary Health Care. The module is aimed at enhancing participant's understanding of PHC as well as analysis and theoretical application of the foundational health behaviour change models and theories that have influenced the development of health promotion concepts, models and theorists. Students should gain an understanding of the role of nurses in PHC and the operationalisation of the health promotion strategies in addressing identified health issues impacting on individuals, families and communities.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 2
SEMESTER: 2
COURSE CODE: NURS 2201
COURSE TITLE: PATHOPHYSIOLOGY/IMMUNOLOGY & GENETICS II
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1201
COURSE DESCRIPTION: The course follows part one online and builds on pathophysiological concepts, principles and processes introduced in NURS 1201. It utilizes a scientific and systematic approach in the analysis of disease processes affecting different body systems. This course is intense and requires the student to commit to the outlined course of study as found online.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 2
SEMESTER: 2
COURSE CODE: NURS 2100
COURSE TITLE: INTEGRATED BASIC HEALTH SCIENCES FOR NURSES II
NUMBER OF CREDITS: 5
PREREQUISITE: NURS 1100
COURSE DESCRIPTION: This course is the second of two courses in which the structural, biochemical and functional properties of the endocrine, cardiovascular, respiratory, renal, reproductive, digestive and musculoskeletal systems of the human body are studied, developing on prior knowledge of anatomy and physiology.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL:
SEMESTER: 2
COURSE CODE: NURS 1202
COURSE TITLE: HEALTH ASSESSMENT
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1201, NURS 2201, NURS 1100, NURS 2100, BASIC HEALTH ASSESSMENT SKILLS
COURSE DESCRIPTION: This course is designed to provide the nursing student with advanced knowledge and health **assessment** skills utilising the nursing process. Focus is on acquiring, analysing, and refining of health **assessment** data as a basis for the development of an accurate nursing and medical problem list. Common normal variations and abnormalities characteristic of different developmental, cultural and ethnic groups are considered throughout the course. The laboratory portion of the course allows the students to practice advanced **assessment** skills using simulators and peers as clients in the laboratory, and patients/clients in hospital/clinics and schools.
Assessment:
Coursework: 50%
Final Exam 50%

LEVEL: 2
SEMESTER: 1, 2 & 3
COURSE CODE: NURS 2300 & 2301
COURSE TITLE: NURSING RESEARCH PROJECT I & II
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 2500& NURS 1500
COURSE DESCRIPTION: These courses will provide opportunities, intended to assist the student to appreciate research as a nursing function in the practice of professional nursing. Research design, data collection techniques and the critique of nursing research literature will be emphasised as applicable to the beginning professional practitioner of nursing. The student will identify a clinical nursing problem, formulate a research proposal, and systematically carry out the proposal through the stages of data collection and analysis. Expansion of theoretical basis of research methodology with emphasis on analysing, criticising and interpreting nursing research. Development and implementation of a research proposal focusing on a nursing problem.
Assessment:
Coursework: 100%

LEVEL: 2
SEMESTER: 3
COURSE CODE: NURS 2302
COURSE TITLE: INTRODUCTION TO NURSING RESEARCH
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1500, NURS 2502
COURSE DESCRIPTION: This course will provide the student with a detailed description of the research process and its utility to applied nursing. Specific focus would be on the ability to critiquing articles while providing practice in reading research articles, understanding research reports, and applying the components of the research process to the formulation of a research proposal, integrating scientific knowledge with practice to make informed judgements and valid clinical decisions that are evidenced based.
Assessment:
Coursework: 40%
Final exam: 60%

LEVEL: 2
SEMESTER: 1
COURSE CODE: NURS 2510
COURSE TITLE: CLASSROOM TEACHING, ASSESSMENT & EVALUATION
NUMBER OF CREDITS: 3
COURSE DESCRIPTION: The course will introduce students to classroom concepts and skills. The content will include assessment literacy, designs and develop to be integrated into the learning process. Effective testing and evaluation will be also linked to the learning outcomes.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 2
SEMESTER: 1
COURSE CODE: NURS 2511
COURSE TITLE: ETHICAL, LEGAL & MORAL ASPECTS OF NURSING & HEALTH CARE
NUMBER OF CREDITS: 3
COURSE DESCRIPTION: This course is intended to expose the students to the various ethical-legal conceptualisations of nursing ethics, providing an opportunity to participate in the contextual dialogue/analysis in order to arrive at appropriate decisions in their professional practice. The ethical component of this course provides for an in-depth understanding and appreciation of the contextual nature of nursing. Students will explore concepts relating to the socialisation of the nurse, the moral significance of nursing, the relevance of moral theory to nursing and the impact of ethics on health policy. The course also provides a framework for ethical analysis and decision-making. The legal component will provide an understanding of law as it relates to nursing practice – its regulation, legal liability of the nurse and the rights of the client.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 2
SEMESTER: 1
COURSE CODE: NURS 2512
COURSE TITLE: EDUCATIONAL PSYCHOLOGY & COUNSELLING
NUMBER OF CREDITS: 3
COURSE DESCRIPTION: The course will focus on the psychological principles of education and human development across the lifespan. Understanding the social, cognitive, moral and emotional theories that define and shape the experience of the development and how these inform teaching and counselling practices is an essential component of effective teaching and counselling. Throughout this course, the emphasis will be on the application and relevance of the theoretical principles to a classroom and counselling settings. To facilitate this, the case-study approach will be utilised, as Problem Based Learning (PBL) will be the main instructional strategy that will give students an opportunity to analyse and think about situations that they are likely to encounter in their professional roles.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 2
SEMESTER: 1
COURSE CODE: NURS 2513
COURSE TITLE: THEORIES IN EDUCATION
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1200
COURSE DESCRIPTION: This course provides students with a broad understanding of how people learn. It gives an insight into current behavioural and cognitive theories and explores their implications for learning and instruction in a variety of educational settings. The distinctions between the ways in which children and adults learn are explored. Theories/concepts covered include cognitive theories, motivational theories, adult learning theories, multiple intelligences, engagement theory and learning styles. Heavy emphasis will be placed on class discussion of selected readings and related issues.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 3
SEMESTER: 2 & 3
COURSE CODE: NURS 3100
COURSE TITLE: NURSING PHARMACOTHERAPEUTICS
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1100, NURS 1201, NURS 2100, NURS 2201
COURSE DESCRIPTION: The course provides knowledge of the pharmacological management of selected health care problems. The use of alternative treatment regimen will be explored and the roles and responsibilities of the nurse in the treatment of individuals and groups will be emphasised. The focus will also be on the movement and action of drugs through the body.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 2
SEMESTER: 2 & 3
COURSE CODE: NURS 2501
COURSE TITLE: NURSING LEADERSHIP & MANAGEMENT
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1500
COURSE DESCRIPTION: The course explores organisational, leadership and motivational theories as they apply to nursing/health care administration and prepares the learner to apply principles of leadership to the management and coordination of care for groups of patients, to better understand and manage the health care environment and its resources, and to supervise the care delivered by those with less education and experience.
Upon completion of the course the learner will be able to apply principles of leadership and management in nursing and in the health care delivery system.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 3
SEMESTER: 3 & 6
COURSE CODE: NURS 3300
COURSE TITLE: SCHOOL NURSE PRACTICUM
NUMBER OF CREDITS: 6
PREREQUISITES: Consent of Instructor; Successful completion of all University Required Courses and Core Curriculum. Students are required to have maintained a minimum LEVEL of 50% in the components of training associated with Nursing Studies and Nursing Practicum.
COURSE DESCRIPTION: The course is designed to prepare participants to lead the process and give direction to the co-ordinated school health Programme. Participants will develop new and advanced skills in identifying the strengths and weaknesses of the School's policies and programmes for promoting health and safety; and developing interventions for improving students' health and safety.
Assessment:
Coursework: 100%

LEVEL: 2
SEMESTER: 2
COURSE CODE: NURS 3510
COURSE TITLE: CURRICULUM METHODS & STRATEGIES
NUMBER OF CREDITS: 3
COURSE DESCRIPTION: This course is intended to introduce the student to traditional and contemporary considerations for effective curriculum planning and design as applied to endeavors in community settings. This exploratory and research opportunity is made available to students to enhance their knowledge and abilities in working with diverse populations across the life span in a variety of circumstances toward specified health related issues or initiatives. This course includes learning theory, human development and learning styles as considerations for design and planning of educational interventions in community settings. In keeping with community based service roles, this course supports linkages with established institutions or agencies in community settings. The diverse roles filled by community health educators and accompanying impacts on curriculum planning are explored. Concepts of curriculum development will allow students to become aware of the psychosocial issues involved in the curriculum process. Given the existing thrust in lifelong learning, the students will be able to match curriculum methods and strategies to the needs of various audiences of students.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 3
SEMESTER: 2
COURSE CODE: NURS 3511
COURSE TITLE: NURSING & HEALTH EDUCATION
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1200
COURSE DESCRIPTION: This course is designed to prepare the participant to apply the principles and practices of Health Education and Health Promotion to maintain the well being of the Toddler, School Age Child, Adolescent, Adults and Elders. It also prepares the participant to work with teaching staff, parents and with the community. It incorporates Child Health Screening and Surveillance, Health Education and Health Promotion, Immunisation, Adolescent Health, Environmental Health, Children with special needs, Accident Prevention and Safety and Family Life Education.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 2
SEMESTER: 2
COURSE CODE: NURS 3200
COURSE TITLE: NURSING SCIENCES
NUMBER OF CREDITS: 3
COURSE DESCRIPTION: The course introduces students to the study of philosophy, knowledge and theory and socio-cultural factors that have influenced the development of nursing as a profession. The many changes in society that have impacted on the earlier conceptualisations of nursing will be explored and specific application will be made to nursing in Trinidad and Tobago and the Caribbean region. The course addresses the eclectic knowledge base of nursing and the types of theory that can enhance its development with particular emphasis on Evidenced Based Nursing.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 3
SEMESTER: 2
COURSE CODE: NURS 3310
COURSE TITLE: HEALTH POLICY
NUMBER OF CREDITS: 3
COURSE DESCRIPTION: This course introduces the student to the components and functions of health care systems. The main focus will be on the Trinidad and Tobago health care system, but approaches to health care in other countries will be discussed. Health care systems will be critically examined. Attention will be given to the roles of the health care systems. Basic concepts of economics with elements of budgeting and cost accounting will be explored to provide students with an awareness of cost-effectiveness in the provision of health care and the containment of resources within a health care delivery system.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL: 2
SEMESTER: 2 & 3
COURSE CODE: NURS 2400
COURSE TITLE: NURSING SEMINAR
NUMBER OF CREDITS: 3
PREREQUISITES: CONSENT OF INSTRUCTOR
COURSE DESCRIPTION: The course of study examines the strategies used in management of a variety of health problems identified through examination and treatment of individuals and groups. Primary health care and health promotion strategies including education and counselling will be implemented and evaluated. The course will use a case study approach of problems experienced by individual and aggregates at various stages of the life cycle. Emphasis will be placed on PBL where critical thinking problem solving skills will be enhanced.
Assessment:
Coursework: 40%
Final Project: 60%

LEVEL: 3
SEMESTER: 3
COURSE CODE: NURS 3301
COURSE TITLE: NURSING EDUCATOR PRACTICUM
NUMBER OF CREDITS: 6
PREREQUISITES: Consent of Instructor; successful completion of all University required courses and core curriculum. Students are required to have maintained a minimum level of 50% in the components of training associated with Nursing Studies and Nursing Practicum.
COURSE DESCRIPTION: The course is designed to allow participants to increase their confidence, develop new and advanced skills and competence in their area of specialisation through the application of theoretical and research based knowledge to practice.
Assessment:
Coursework: 100%

LEVEL: 3
SEMESTER: 3
COURSE CODE: NURS 3302
COURSE TITLE: NURSE ADMINISTRATOR PRACTICUM
NUMBER OF CREDITS: 6
PREREQUISITES: Successful completion of all University required courses and core curriculum. Students are required to have maintained a minimum level of 50% in the components of training associated with Nursing Studies and Nursing Practicum.
COURSE DESCRIPTION: This practicum experience is designed for students to integrate theory in a reality context of the administrator's role. Opportunities will be provided to participate in all phases of the executive role in different administrative settings. Case studies will be utilised where possible, and relevant searches will be used to study current practices in routine administration, use of research and technology, and other emerging trends. The role of key stakeholders including Government, Industry and Industrial Unions in health care systems will be investigated.
Assessment:
Coursework: 100%

LEVEL: 3
SEMESTER: 3
COURSE CODE: NURS 3500
COURSE TITLE: HIGH RISK POPULATIONS
NUMBER OF CREDITS: 3
PREREQUISITES: Successful completion of all University required courses and core curriculum. Students are required to have maintained a minimum level of 50% in the components of training associated with Nursing Studies and Nursing Practicum.
COURSE DESCRIPTION: This course will review common high risk health illnesses of the adult and provide a review of systems. Learning experiences that apply theoretical and clinical concepts of the complex needs for the high risk adult with multi-system alterations in health will be provided. Leadership, management and caregiver roles of the professional nurse with clients and their families in selected areas of nursing practice will be emphasised.
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL:
SEMESTER: 3
COURSE CODE: NURS 3515
COURSE TITLE: CANCER OF THE PROSTATE (ELECTIVE)
NUMBER OF CREDITS: 3
PREREQUISITES: NURS 1100, NURS 2100, NURS 1201, NURS 2201, NURS 2611, NURS 2515
COURSE DESCRIPTION: This course will cover the use of epidemiological method to study prostate cancer in populations. Students will examine primary health care and health promotion strategies using the management through examination and treatment of individuals with prostate cancer. The course will use a case study approach, emphasising leadership, management and care giver roles of the professional nurse with clients and their families.
Assessment:
Coursework: 100%

LEVEL:
SEMESTER: 1
COURSE CODE: NURS 2600
COURSE TITLE: CONCEPTS AND THEORIES IN ONCOLOGY NURSING
NUMBER OF CREDITS: 3
PREREQUISITES: NURS 1100; NURS 2100; NURS 1201; NURS 2201
COURSE DESCRIPTION: In this course students will apply and integrate knowledge and skills from the biological, physical, psychological and social sciences with Nursing Science and concepts of caring. Pre-developed health care problems will help students learn to more effectively assist individuals, families and communities with health promotion and maintenance, cancer prevention and recovery from cancer, using Interventions that are caring in nature and evidence-based where possible. The course objectives are set up within conceptual categories and important explicitly-stated education behaviours are listed under each concept/theme.
Assessment:
Coursework: 100%

LEVEL:
SEMESTER: 1
COURSE CODE: NURS 2514
COURSE TITLE: ADVANCED THERAPEUTIC COMMUNCIATION WITH PATIENTS AND FAMILIES
NUMBER OF CREDITS: 3
PREREQUISITES: COMS 1001, COMS 1002
COURSE DESCRIPTION: The development of therapeutic communication skills that address the specific needs of patients and families with complex, cancer related issues is the focus of this course. Skills relevant to the role of the Oncology Nurse in various health care settings are developed.
Assessment:
Coursework: 100%

LEVEL:
SEMESTER: 1
COURSE CODE: NURS 2515
COURSE TITLE: CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE
NUMBER OF CREDITS: 4
PREREQUISITES: NURS 2302, NURS 2502
COURSE DESCRIPTION: This course provides a review of research methods, and an introduction to in depth critical appraisal (or assessment) of research evidence from the health sciences literature. The basic principles of research for both quantitative and qualitative research designs will be reviewed. Student will refine important research skills such as how to write an answerable clinical research question, how to efficiently search for evidence (i.e. literature to answer their questions) and how to critically appraise the strengths and weaknesses of a particular piece of evidence (research article).
Assessment:
Coursework: 40%
Final Exam: 60%

LEVEL:
SEMESTER: 2
COURSE CODE: NURS 2610
COURSE TITLE: INTRODUCTION TO PALLIATIVE CARE IN NURSING
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1100; NURS 2100; NURS 1201; NURS 2201; NURS 1202; NURS 2514; NURS 3100
COURSE DESCRIPTION: This course is designed for health care professionals and those working in fields related to cancer and/or palliative care. Individuals who care for patients with life-threatening illnesses can face particularly pressing and difficult moral choices. This course provides them with an opportunity to gain a deeper and more systematic understanding of these issues, and to explore the moral problems they may face in their work. The course aims to increase the students understanding of the philosophical basis of good practice, and to enhance their ability to think systematically about the ethically challenging decisions that they may face in the course of their work. Lectures will cover the pharmacology of analgesics, pain management, pathophysiology of nausea and vomiting, and other issues of management of dying patients. The roles of spirituality, ethics, and social work in palliative care are explored. Care of the geriatric patient with an end of life condition is reviewed. Several lectures are devoted to psychological and psychiatric issues for both patients and families.
Assessment:
Coursework: 100%

LEVEL:
SEMESTER: 2
COURSE CODE: NURS 2611
COURSE TITLE: ONCOLOGY HEALTH ASSESSMENT
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1202; NURS 1203
COURSE DESCRIPTION: This is a clinically oriented course, focusing on the acquisition of knowledge and skills in patient assessment relevant to the role of the nurse in an oncology setting. It will provide an opportunity for students to gain knowledge and skills in focused, problem-oriented assessment related to common concerns in the oncology population. Focused patient assessment involves the assessment of a specific patient need or concern (e.g. ventilation, cognition, mobility) unique to a specific patient in a defined setting/situation (e.g. hospital, home, clinic, telephone)
Assessment:
Coursework: 50%
Final Exam: 50%

LEVEL:
SEMESTER: 2
COURSE CODE: NURS 3400
COURSE TITLE: GUIDED NURSING PRACTICE (CLINICAL COURSE)
NUMBER OF CREDITS: 3
PREREQUISITE(S): NURS 1100, NURS 2100, NURS 1201, NURS 2201, NURS 2611; NURS 2514
COURSE DESCRIPTION: This clinical course promotes the integration of theory and concepts of cancer nursing with nursing practice in a variety of cancer care settings. Clinical practice provides the opportunity for students to pursue personal learning objectives, examine issues, concepts related various cancer nursing roles and settings and develop increasing skills and autonomy. Previous and/ or concurrent problem-based learning courses promote the integration of critical thinking and clinical reasoning with practice.
Assessment:
Coursework: 100%

LEVEL:
SEMESTER: 5
COURSE CODE: NURS 3512
COURSE TITLE: CANCER CARE FOR CHILDREN AND YOUNG PEOPLE (ELECTIVE)
NUMBER OF CREDITS: 3
PREREQUISITES: NURS 1100, NURS 2100, NURS 1201, NURS 2201, NURS 2611, NURS 2515
COURSE DESCRIPTION: The course will cover the use of epidemiologic methods to study prostate cancer in populations. Students will examine primary health care and health promotions strategies used in the management through examination and treatment of individuals with prostate cancer. The course will use a case study approach emphasizing leadership, management and caregiver roles of the professional nurse with clients and their families
Assessment:
Coursework: 100%

OFFICE OF THE DEAN

B.Sc. Optometry

QUALIFICATIONS FOR ADMISSION INTO THE FACULTY

1. In order to be admitted into the four-year BSc Optometry degree programme, candidates must satisfy the University requirements for matriculation (see the UWI General Regulations for Students) AND have passed the CSEC General Proficiency Level examination at Grades I, II or, since 1998, Grade III (or equivalent qualifications) in Mathematics, English Language and three additional subjects. IN ADDITION, candidates must satisfy the following minimum qualifications listed below:

   (a) Passes in both Units (Grade II or above) of Chemistry, Physics and one (1) other subject at CAPE or GCE A-level or approved equivalent

   OR

   (c) An appropriate Associate Degree or equivalent certification with a minimum GPA of 3.0 (or equivalent) from a recognised tertiary level institution

   OR

   (c) Any other appropriate qualifications and experience which are acceptable to the University.

COURSE LISTING

LEVEL I
SEMESTER 1

Course Code	Course Title	Credits
OPTM 1011	Human Anatomy & Physiology	4
OPTM 1012	General Pathology & Microbiology	4
OPTM 1062	Introductory Biochemistry (YEAR LONG)	6
OPTM 1031	Introduction to the Optometry Profession	2
OPTM 1032	Introduction to Clinical Optometry	2
OPTM 1061	Learning and Key Skills Development	3
OPTM 1041	Pure Optics	3

SEMESTER 2

Course Code	Course Title	Credits
OPTM 1071	Anatomy of the Eye & Related Structures	3
OPTM 1072	Physiology of the Eye& Related Structures	3
OPTM 1042	Visual Optics	3
OPTM 1051	Vision I	3
OPTM 1052	Perception I	3

LEVEL II
SEMESTER 1

Course Code	Course Title	Credits
OPTM 2021	General Pharmacology	3
OPTM 2042	Ocular Pathology & Immunology	3
OPTM 2072	Ophthalmic Lenses & Dispensing	3
OPTM 2051	Physiology of Vision & Perception II	3
OPTM 2092	Clinical Methodology & Statistics	3
OPTM 2011	Clinical Optometry/ Communication Skills (YEAR LONG)	6

SEMESTER 2

Course Code	Course Title	Credits
OPTM 2022	Ocular Pharmacology	3
OPTM 2061	Assessment of Binocular Vision	3
OPTM 2082	Contact Lens Practice I	3
OPTM 2102	Low Vision and Ageing	3
OPTM 2031	Visual Ocular Assessment & Techniques	3

LEVEL III
SEMESTER 1

Course Code	Course Title	Credits
OPTM 3011	Ocular and Systemic Disease I	3
OPTM 3061	Lens Practice II	3
OPTM 3041	Visual Ergonomics	3
OPTM 3051	Binocular Vision and Orthoptics	3
OPTM 3021	General Clinical Practice (YEAR LONG)	6
OPTM 3031	Advanced Clinical Practice (YEAR LONG)	6

SEMESTER 2

Course Code	Course Title	Credits
OPTM 3012	Ocular and Systemic Disease II	3
OPTM 3072	Law and Optometric Management	3
OPTM 3082	Research Project	6

LEVEL IV

Course Code	Course Title	Credits
OPTM4041	Skills Training (YEAR LONG)	6

COURSE DESCRIPTIONS

LEVEL: 1
SEMESTER: 1
COURSE CODE: OPTM 1011
COURSE TITLE: HUMAN ANATOMY AND PHYSIOLOGY
NUMBER OF CREDITS: 4
COURSE DESCRIPTION: Gross anatomy. Histology of tissues. Cellular functions. Respiration and body temperature control. Gastrointestinal activity. Nerves and muscular physiology and neuromuscular transmission. Body fluid control and kidney. The cardiovascular system and blood. Anatomy and physiology of the endocrine system. Brain, neuroanatomy and neurophysiology Principles of neurotransmission. Sensory receptors. Anatomy and physiology of the autonomic nervous system.
PracticaL: A course of laboratory practical work consistent with the outline syllabus
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 1
COURSE CODE: OPTM 1012
COURSE TITLE: GENERAL PATHOLOGY AND MICROBIOLOGY
NUMBER OF CREDITS: 4
PREREQUISITES:
COURSE DESCRIPTION: GENERAL PATHOLOGY of the human body and body systems. **MICROBIOLOGY:** Overview of the microbial world. Structure and function of microbes and their nutritional and physiological requirements. The role of the human commensal microflora. Introduction to microbial diseases. Introduction to bacterial genetics and gene transfer. Sterilization and disinfections.
Practical: A course of laboratory practical work consistent with the outline syllabus

Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 1
COURSE CODE: OPTM 1031
COURSE TITLE: INTRODUCTION TO THE OPTOMETRY PROFESSION
UMBER OF CREDITS: 2
PREREQUISITES
COURSE DESCRIPTION: Understanding Optometry as a health care profession. Relationship of the profession to others in the eye care field including Ophthalmology, opticianry. Opportunities available to the Optometrist as a professional. Attitudes needed for the study and practice of optometry. A general knowledge the legal status, standards of practice, professional conduct and associations. Introduction to Optometric terms, instrumentations and literatures. Optometry in America, Asia, Africa, Australia, Europe and the Caribbean.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	40%

LEVEL: 1
SEMESTER: 1
COURSE CODE: OPTM 1032
COURSE TITLE: INTRODUCTION TO CLINICAL OPTOMETRY
NUMBER OF CREDITS: 2
PREREQUISITES:
COURSE DESCRIPTION: Retinoscopy and Subjective Refraction Retinoscopy. Astigmatism. Retinoscopy on patient. Distance visual acuity measurements. Subjective monocular refraction: best vision sphere. Interpupillary distance. Jackson crossed-cylinder. Fan and Block. Clinical Accommodation. Development of refractive errors. Auto refractors. Refractive Surgeries. Direct and Indirect Ophthalmoscopy. Spherical ametopia
Practical Clinical Sessions: Lab orientation. Direct Ophthalmoscopy. Model eye retinoscopy. Retinoscopy, visual acuity and mean sphere subjective. Interpupillary distance. Retinoscopy, visual acuity, mean sphere and Jackson cross-cyl. Retinoscopy, visual acuity, mean sphere and Fan & Block. Accommodation. Putting it all together.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 1
COURSE CODE: OPTM 1041
COURSE TITLE: PURE OPTICS
NUMBER OF CREDITS: 3
PREREQUISITES:
COURSE DESCRIPTION: The nature and propagation of light. Laws of reflection and refraction. Diffraction and interference. Power, vergence and the Dioptre. Effectivity. Image formation. Reflection and refraction. The prism. The thin lens and cardinal points. Thick lens theory.
Practical Classes: Ray tracing to investigate reflection at plane and curved surfaces. Ray tracing to investigate refraction. Optical bench methods for finding the focal length of thin positive and negative lenses. Newton's Rings. Astigmatic imaging. Principal points of a thick lens. Telephoto Lens Systems. Variation of focal length of a lens system with separation of the components.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 1
COURSE CODE: OPTM 1061
COURSE TITLE: LEARNING AND KEY SKILLS DEVELOPMENT
NUMBER OF CREDITS: 3
PREREQUISITES:
COURSE DESCRIPTION: Learning and Communication Skills. Use of learning resources. Basic communication skills for academic work and optometric practice. Communication with patients. Basic numeracy. Functions and graphs. Algebraic manipulation of equations. Trigonometry and geometry. Applications of mathematics in optometry. Presentation of data in tables and graphs. Information Technology: Computer literacy; Microsoft Office Applications; Word, Excel.
Practicals /Tutorials: Special Laboratory and Tutorial Classes
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical/Tutorial Coursework:	20%

LEVEL: 1
SEMESTER: 1&2
COURSE CODE: OPTM 1062
COURSE TITLE: INTRODUCTORY BIOCHEMISTRY
NUMBER OF CREDITS: 6
PREREQUISITES:
COURSE DESCRIPTION: Introduction, aims and relevance. Definitions and basic structural and functional features of lipids, amino acids, proteins, carbohydrates, nucleotides, nucleic acids. Enzymes including essential functions, factors affecting their activity and regulation. Carbohydrate metabolism: glycolysis (definition, physiological role, overall pathway, fates of pyruvate & lactate); glycogen storage and mobilisation, including hormonal control; gluconeogenesis. Citric acid (Krebs') cycle: its location, physiological function and relation to other pathways, and its overall pathway; electron transport chain & generation of ATP. Fat metabolism: adipose tissue storage including hormonal control, fatty acid oxidative metabolism and synthesis. Gene expression including transcription and translation; mechanisms of hormone action including signal transduction systems; visual signal transduction (the visual cycle). Overview of drug metabolism. Overview of integration of metabolism.
Practical: A course of laboratory practical work consistent with the syllabus outline.
Assessment

One 3 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 2
COURSE CODE: OPTM 1071
COURSE TITLE: ANATOMY OF THE EYE & RELATED STRUCTURES
NUMBER OF CREDITS: 3
PREREQUISITES:
COURSE DESCRIPTION: Introduction to ocular anatomy and physiology. Ocular surface (cornea, sclera, conjunctiva), Vascular structures (choroid, ciliary body, iris). Aqueous humour (formation, flow and drainage). Crystalline lens. Control of pupil and accommodation. Neural structures (retina, optic nerve).
Practical: A course of laboratory practical work consistent with the outline syllabus
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 2
COURSE CODE: OPTM 1072
COURSE TITLE: PHYSIOLOGY OF THE EYE & RELATED STRUCTURES
NUMBER OF CREDITS: 3
PREREQUISITES:
COURSE DESCRIPTION: Ocular adnexa (eyelids, lacrimal apparatus). Bones of the skull (including orbit). Extraocular muscles. Cranial nerves. Visual pathways. Embryology of the eye.
Practical: A course of laboratory practical work consistent with the outline syllabus
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 2
COURSE CODE: OPTM 1042
COURSE TITLE: VISUAL OPTICS
NUMBER OF CREDITS: 3
PREREQUISITES:

COURSE DESCRIPTION: Simplified and reduced eyes. Myopia, hypermetropia and astigmatism. Axial and refractive ametropias. Retinal image size. Aniseikonia, spectacle and relative spectacle magnification. Ocular aberrations. Instruments and techniques in eye examination. Low vision aids. Introduction to viscimeter. Accommodation-convergence. Aphakes and pseudophakes. Resolution in the eye. Optical and retinal/neural considerations. Application of thick lens theory to moderate to high power prescriptions. Visual ergonomics: illumination studies.

Practical Classes: Field of view with direct and indirect ophthalmoscopes. Accommodation, ametropia and back vertex distance.

Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 2
COURSE CODE: OPTM 1051
COURSE TITLE: VISION
NUMBER OF CREDITS: 3
PREREQUISITES:

COURSE DESCRIPTION: Overview of eye and vision. Evolution of eye. Rods and cones. Spectral sensitivity. Colour vision. Retinal physiology. Visual pathway. LGN and visual cortex. Visual acuity. Contrast sensitivity. Electrophysiology. The limits of vision - detection and discrimination. Visual processing - receptive fields, channels and streams. Spatial and Temporal integration.

Practical: A course of laboratory practical work consistent with the outline syllabus

Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 1
SEMESTER: 2
COURSE CODE: OPTM 1052
COURSE TITLE: PERCEPTION
NUMBER OF CREDITS: 3
PREREQUISITES:

COURSE DESCRIPTION: Methods for studying--visual perception - an introduction. Illusions. Visual psychophysics -stimuli, responses and procedures. Binocular vision - fusion, rivalry and sensitivity. Binocular vision - disparity, stereopsis and space perception. Colour perception - normal and abnormal. Visual search and attention.

Practical: Peripheral visual acuity; Psychophysical methods; Contrast sensitivity function; Illusions; Binocular vision; Contrast; Attention; Colour Vision.

Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 1 & 2
COURSE CODE: OPTM 2011
COURSE TITLE: CLINICAL OPTOMETRY AND COMMUNICATION SKILLS
NUMBER OF CREDITS: 6
PRE-REQUISITES: OPTM 1031 AND OPTM 1032
CO-REQUISITES: NONE

COURSE DESCRIPTION: Introduction to Phoropters. Binocular Balancing. Case History. Pupil Assessment. Differential Diagnosis (distance/near vision blur, sudden visual loss, diplopia, headache). Near VA. Presbyopia & Near Refraction. Examining the Elderly Patient. Professional communication skills. The patient-oriented interview. Listening skills. Non-verbal communication. Delivering bad news. Building patient rapport. Building patient compliance. Patient education Staff communications. Clinical diagnosis and Bayes theorem. Prescribing and counseling.

Practical Clinical Sessions: Direct ophthalmoscopy refresher. Using a Phoropter. Binocular Balancing. Case History taking. Pupil Assessment. Case histories, refraction and ophthalmoscopy. Clinical assessments. Then: Alternate between full and complete examination of volunteer patients in the Eye Clinic and practicing basic optometric techniques. Case history using a variety of 'mock' patients. Volunteer patient examinations to concentrate on case history taking and communication skills. Videotape of full eye examination for subsequent critical appraisal of communication skills.

Assessment

One 2 hr. examination at end of module:	60%
Clinical Assessment at the end of Semester 1:	20%
Clinical Assessment at the end of Semester 2:	20%

LEVEL: 2
SEMESTER: 1
COURSE CODE: OPTM 2021
COURSE TITLE: GENERAL PHARMACOLOGY
NUMBER OF CREDITS: 3
PRE-REQUISITES: OPTM 1071 AND OPTM 1072
CO-REQUISITES: NONE
COURSE DESCRIPTION: General principles of pharmacology and Toxicity, Autocoid agents and antagonist, Drugs affecting the respiratory system, Gastrointestinal agents, Antimicrobial agents, Antiviral and Antinoeplastic agents. Immunopharmacological agents, Anti-inflammatory agents, General and Local Anesthetics, major drugs acting on the endocrine system, major drugs acting on the kidney, Toxicology, drugs use and metabolism in pregnancy and breast feeding. Autonomic pharmacology. Selected examples of pathology in the cardiovascular and central nervous systems. General pharmaceutical term, drug nomenclature and related prescription writing.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 1
COURSE CODE: OPTM 2042
COURSE TITLE: OCULAR PATHOLOGY AND IMMUNOLOGY
NUMBER OF CREDITS: 3
PRE-REQUISITES: OPTM 1071 AND OPTM 1072
CO-REQUISITES: NONE
COURSE DESCRIPTION: Ocular Pathology: This course brings the student to the facts regarding diseases of the eye, including congenital acquired deformities. The lectures are presented in good details to give the student a well-rounded understanding of the basic causes, symptoms and signs, pathology, prognosis, treatment and prevention of the eye diseases the Optometrist is likely to meet. Included under the course diffuse diseases of the eye-and sequelae; diseases and bnormalities of the external eye and. adnexa, conjunctiva, cornea, sclera, uveal tract, lens, vitreous, glaucoma, orbit, trauma and ocular emergencies. Primary open angle glaucoma; aetiology of cataract; microbial conjunctivitis, diabetic eye disease; arteriosclerotic/hypertensive retinopathy, age-related maculopathy, anterior uveitis, wet and dry eyes, abnormal eye movements; the differential diagnosis of red eye.
Immunology: Antigens, antibodies, T-cells, B-cells, cytokines, hypersensitivity, tolerance, transplantation and graft rejections (mechanism) autoimmunity, Tumor immunology and Immunological tests.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 1
COURSE CODE: OPTM 2051
COURSE TITLE: PHYSIOLOGY OF VISION AND PERCEPTION II
NUMBER OF CREDITS: 3
RE-REQUISITES: OPTM 1051 AND OPTM 1052
CO – REQUISITES: NONE
COURSE DESCRIPTION: Methods for studying visual perception - an introduction. Visual psychophysics - stimuli, responses and procedures. The limits of vision - detection and discrimination. Binocular vision - fusion, rivalry and sensitivity. Binocular vision - disparity, stereopsis and space perception. Visual processing - receptive fields, channels and streams. Colour perception - normal and abnormal. Visual search and attention. Visual ergonomics: Visual tasks and standards.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 1
COURSE CODE: OPTM 2072
COURSE TITLE: OPHTHALMIC LENSES AND DISPENSING
NUMBER OF CREDITS: 3
PRE-REQUISITES: OPTM 1041 AND OPTM 1042
CO-REQUISITES: NONE
COURSE DESCRIPTION: Bifocal, trifocal and multifocal lenses. Review of thick lens theory as applied to moderate to high power prescriptions. Best form lens theory. Near vision effectivity in spherical and astigmatic prescriptions. Trial case lenses. Aspheric lenses. Tints and coatings. Frame materials.
Assessment

One 2 hr. examination at end of module:	60%
Practical Coursework:	40%

LEVEL: 2
SEMESTER: 1
COURSE CODE: OPTM 2092
COURSE TITLE: CLINICAL METHODOLOGY AND STATISTICS
NUMBER OF CREDITS: 3
PRE-REQUISITES: NONE
CO-REQUISITES : NONE
COURSE DESCRIPTION: Defining basic concepts. Description: Data, graphs and summary statistics. Probability and distribution - basic principles. Estimation of population means and proportions - confidence intervals, normal and T-distributions. Differences - introduction to hypothesis tests. Associations - correlation and regression. Clinical measurement - measurement error; precision and reliability. Basic epidemiology - indices, study types, odds and risks, randomized controlled trials. Detecting disease - normal or abnormal? Clinical screening - sensitivity, specificity, ROC analysis. Monitoring disease - detecting change.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 2
COURSE CODE: OPTM 2022
COURSE TITLE: OCULAR PHARMACOLOGY
NUMBER OF CREDITS: 3
PRE-REQUISITES: OPTM 1071 AND OPTM 1072
CO-REQUISITES: NONE
COURSE DESCRIPTION: Pharmacology of the major classes of ocular drugs. Processes of general pathology. Diagnostic stains, drugs used in diagnostics and therapeutics. Ocular drugs and contact lens solutions used in primary optometric care. The laws pertaining to the supply and use of ocular drugs.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 2
COURSE CODE: OPTM 2031
COURSE TITLE: VISUAL AND OCULAR ASSESSMENT-TECHNIQUES AND INSTRUMENTATION
NUMBER OF CREDITS: 3
PRE-REQUISITES: 1031 AND OPTM 1032
CO- REQUISITES: NONE
COURSE DESCRIPTION: Slit lamp biomicroscopy, conjunctivitis and uveitis, differential diagnosis of the red eye, wet and dry eyes, contrast sensitivity, glare testing, potential vision tests, age-related cataract, tonometry (contact and non-contact), visual field examination, gonioscopy, primary open-angle glaucoma, Direct and indirect ophthalmoscopy, Fundus Camera, , Visual Field Analyzers, Retinoscopy, Lensometry, Phoropter / Trial lens set. New imaging technology, diabetic eye disease, arteriosclerotic/hypertensive retinopathy, photostress recovery time, age-related maculopathy, clinical colour vision, VEP/ERG, congenital and juvenile ocular disease and abnormality.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 2
COURSE CODE: OPTM 2061
COURSE TITLE: ASSESSMENT OF BINOCULAR
NUMBER OF CREDITS: 3
PREREQUISITES: OPTM 1051 AND OPTM 1052
CO- REQUISITES: NONE
COURSE DESCRIPTION: Spatial localization. Development of binocular vision. The vergence system. Classification of ocular deviations. Measurement of heterophoria. The AC/A ratio. Measurement of convergence. Fixation disparity. The Mallett units. Prism adaptation. Ocular motility; Stereoscopic Vision; Clinical Assessment of Stereopsis; Anisometropia & Aniseikonia; Heterophoria: Investigation and Evaluation; Horizontal Deviations; Vertical Deviations; Accommodation Anomalies; Treatment Theories; Management of Heterophoria.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 2
COURSE CODE: OPTM 2082
COURSE TITLE: CONTACT LENS PRACTICE I
NUMBER OF CREDITS: 3
PREREQUISITES: OPTM 1041 AND OPTM 1042
CO-REQUISITES: NONE
COURSE DESCRIPTION: The principles involved in correcting the eye with a contact lens are considered in relation to factors like lens power magnification, accommodative effort, effects on binocular vision. Thick lens theory is used to illustrate how contact lenses are used to correct both spherical and astigmatic corrections. The back surface geometry of modern contact lens designs in considered in order to illustrate the fitting relationship between the contact lens and the cornea. The short and long term consequences of contact lens wear on the anatomy and physiology of the anterior eye are considered. Practical classes are conducted in contact lens fitting principles.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 2
SEMESTER: 2
COURSE CODE: OPTM 2102
COURSE TITLE: LOW VISION AND AGEING
NUMBER OF CREDITS: 3
PREREQUISITES: OPTM 1031 AND OPTM 1032
CO-REQUISITES: NONE
COURSE DESCRIPTION: Physiology and pathological changes with ageing, ocular and vision changes in the normal and in the visually handicapped patient. Physiological aspects of ageing and low vision. Clinical assessment of low vision. Prescribing low vision aids. Low vision prescribing in private practice. The multidisciplinary nature of low vision rehabilitation.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 3
SEMESTER: 1
COURSE CODE: OPTM 3011
COURSE TITLE: OCULAR & SYSTEMIC DISEASE I
NUMBER OF CREDITS: 3
PREREQUISITES: OPTM 1011, OPTM 1012, OPTM 1071, OPTM 1072, OPTM 2021, OPTM 2022, OPTM 2031, OPTM 2042
CO-REQUISITES: NONE
COURSE DESCRIPTION: Disease. Diabetic Eye Disease. Disorders of the crystalline lens. The glaucoma. Macular disease. Vitreoretinal disease. Retinal vascular disease. Disorders of the lacrimal system. Disorders of the conjunctiva. Disorders of the cornea. Disorders of the sclera and espisclera.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: OPTM 3021
COURSE TITLE: GENERAL CLINICAL PRACTICE
NUMBER OF CREDITS: 6
PREREQUISITES: OPTM 2031
CO-REQUISITES: NONE
COURSE DESCRIPTION: Particular attention is paid to patient/practitioner interaction, clinical decision-making, differential diagnosis, case analysis and difficulties in prescribing and counseling.
Assessment

General Clinical and Dispensing Station Examinations:	60%
Submission of Case Records/ Log books:	20%
Two (2) Clinical Diagnosis and Recognition Coursework Examinations:	20%

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: OPTM 3031
COURSE TITLE: ADVANCED CLINICAL PRACTICE
NUMBER OF CREDITS: 6
PREREQUISITES: OPTM 1012, OPTM 2031, OPTM 2042, OPTM 2061, OPTM 2082
CO-REQUISITES: NONE
COURSE DESCRIPTION: Binocular Vision and Orthoptics. The description, classification and evaluation of binocular vision anomalies. Taking a good case history. Communication and clinical approaches with children. The practical management of heterophoria and strabismus. Contact Lens Practice. Prospective contact lens patients will be assessed for suitability. Suitable patients will be fitted with the most appropriate type of lenses. Existing wearers will be given full after-care checks. Visual Impairment. Full case records will be taken. Ocular Pathology. Experience of ocular abnormality and pathology gained from patient material provided for the hospital visits.
Assessment

Clinical Assessment Station Examinations and case record submissions in binocular vision:	30%
Clinical Assessment Station Examinations and case record submission in contact lens practice:	30 %

LEVEL: 3
SEMESTER: 1
COURSE CODE: OPTM 3041
COURSE TITLE: VISUAL ERGONOMICS
NUMBER OF CREDITS: 3
PRE-REQUISITES: OPTM 1012, OPTM 2031, OPTM 2042, OPTM 2051, OPTM 2082
CO-REQUISITES: NONE
COURSE DESCRIPTION: Illumination Studies: Photometric definitions and units. Light sources and measurement. Illumination of the optometric examination. Interior lighting design.. Industrial, commercial, domestic and street lighting. Directional effects of lighting. Luminaries. The Munsell colour system, Colour coding
Visual Tasks and Standards: Effect of variation in characteristics of the visual task and environment on visual efficiency. Visual task analysis. Principles of screening for diseases. Visual screening of children. Industrial vision screening. Visual assessment for employment. Vision and driving. Visual standards for industry, public service military and police operations.
Ocular Hazards and their Control: Prevalance of accidents involving the eye. Quantifying visual impairment. Effects of visible, ultra-violet and infra-red radiation on the eye. Eye protection and safety equipment. OSHA Act (T&T). Protection of Eyes Regulations.
Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 3
SEMESTER: 1
COURSE CODE: OPTM 3051
COURSE TITLE: BINOCULAR VISION & ORTHOPTICS
NUMBER OF CREDITS: 3
REREQUISITES: OPTM 2061
CO-REQUISITES: NONE
COURSE DESCRIPTION: The development of normal binocular vision and the consequences of its abnormal development. The nature, investigation and management of motor and sensory adaptations to squint. Classification and management of concomitant strabismus and its optometric management. Introduction to nystagmus and neuro-ophthalmology. Pediatric optometry: managing the child patient, children's tests.

Mode of Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 3
SEMESTER: 1
COURSE CODE: OPTM 3061
COURSE TITLE: CONTACT LENS PRACTICE II
NUMBER OF CREDITS: 3
PRE-REQUISITES: OPTM 2082
CO-REQUISITES: NONE
COURSE DESCRIPTION: The process of assessing the suitability of any prospective patient for contact lenses is considered with reference to the possible anatomical and physiological changes induced by contact lens wear. The procedures adopted in fitting lenses along with techniques required for adequate aftercare are covered. The different lens types, materials and designs are compared, particularly in relation to the advantage or disadvantage of the wearer. The short- and long-term consequences of contact lens wear are considered, with particular emphasis on the ocular response to the wearing of the various lens types. The added complication of RGP, toric, bifocal and multifocal contact lenses is also covered.

Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 3
SEMESTER: 2
COURSE CODE: OPTM 3012
COURSE TITLE: OCULAR & SYSTEMIC DISEASE II
NUMBER OF CREDITS: 3
PRE-REQUISITES: OPTM 1011, OPTM 1012, OPTM 1071, OPTM 1072, OPTM 2021, OPTM 2022, OPTM 2031, OPTM 2042
CO-REQUISITES: NONE
COURSE DESCRIPTION: Disorders of the eyelids and eyelashes. Uvea and uveitis. Neuro-ophthalmology. Orbital disease. Ocular oncology. Ocular trauma. Anterior Chamber, Angle structure and Abnormal IOP. Peripheral fundus/Vitreous, Optic Nerve disorders. Systemic disease and the eye. Red eye. Genetic eye disease. Congenital and inherited ocular disease. Clinical Application.

Assessment

One 2 hr. examination at end of module:	60%
Two in course exams:	20%
Practical Coursework:	20%

LEVEL: 3
SEMESTER: 2
COURSE CODE: OPTM 3072
COURSE TITLE: LAW & OPTOMETRIC MANAGEMENT
NUMBER OF CREDITS: 3
PRE-REQUISITES: NONE
CO-REQUISITES: NONE
COURSE DESCRIPTION: An overview of the development of the profession of optometry and the current state of the optical market. An introduction to setting up a practice and the key elements in running a successful business including a business plan, marketing strategy, effective communication and basic accounting. An introduction to Trinidad and Tobago law, particularly the laws of contract, tort and negligence and the way they impact optometrists. A detailed look at Opticians Act and other legislation regulating the profession, the professional bodies and professional standards and the rules regarding disciplinary action. Optometry within the National Health Service/ Regional Health Authorities and the current and future roles of Optometry in provision of health care. The course will also include details on referral and case record keeping, employment law vocational vision standards and safety spectacle requirements. Visual ergonomics: Ocular hazards and control.

Assessment

One 2 hr. examination at end of module:	80%
Two in course exams:	20%

LEVEL: 3
SEMESTER: 1&2
COURSE CODE: OPTM 3082
COURSE TITLE: RESEARCH PROJECT
NUMBER OF CREDITS: 6
PRE-REQUISITES: NONE
CO-REQUISITES: NONE
COURSE DESCRIPTION: Initial lectures will explain to the students what is required of them in this module. These lectures will clarify the required format for the research report/dissertation; cover basic research methodology and outline suitable routes for information retrieval. Students will then either be allotted or asked to choose from research projects/dissertation titles forwarded by individual members of staff. Once members of staff have been allocated students, they will convey information relevant to the students' needs by use of seminar or personal tuition or directed reading. Students should collate and study works relevant to their own research area throughout the semester. Students involved in research projects should carry out pilot experiments to ensure project viability. In the case of Research Projects, students will be introduced to experimental techniques and analysis of the data obtained. Findings will be compiled in an appropriate scientific style including Abstract, Introduction, Methods, Results and Discussion. For dissertations, a comprehensive literature survey will be conducted. A summary and critical analysis of previous research in the relevant subject area will be undertaken.

Assessment
5000 – 10,000 word research report or dissertation to be submitted no later than week 12 of Semester 2: 100%

LEVEL: 4
SEMESTER: YEAR LONG
COURSE CODE: OPTM 4041

Objectives
Year 4 shall consist of twelve (12) continuous months of clinical work aimed at honing in the skills, developing the professionalism and enabling the pre-registrant to be fully seized of ethics required of the Optometrist.

Learning Outcomes
Upon completion of the Pre-registration Year, the student will be fully seized of the professional and ethical aspects of the optometry profession and shall have the scientific and clinical competence to deal with all primary eye care problems that are legally under the purview of the optometry profession in the Caribbean region and in addition will have the capacity to be trained to function anywhere in the international/ global environment.

Clinical Experience
Clinical experience will be obtained via three methods:
(i) Walk-in clinic of the Optometry Department at health centres
(ii) Eye clinics in the public hospital environment
(iii) Occasional private eye clinics where adequate supervision is guaranteed

Areas of Expertise to be Enhanced
- Refraction
- Binocular vision and Orthoptics
- Low vision
- Contact lens
- Ocular Pharmacology
- Investigative Techniques
- Cycloplegics
- Ocular and Systemic related pathology
- Observation of surgical procedures
- Case records
- Dispensing
- Occupational Health and Safety
- Jurisprudence and ethical considerations
- Business practice
- Communications

Other Work
In addition to the clinical work there shall be special lectures aimed at assisting the student in preparing for registration examinations.

Assessment
Continuous Assessment: 50%
- Competency based continuous workplace assessments in all areas of expertise: 20%
- Log book: 10%
- Monthly quizzes: 20%

Final Assessment: 50%
The final examination shall consist of four sections, all of which must be passed:
i. Clinical Science, the profession, law and communications (2 three hour papers)
ii. Diagnosis and Management (1 three hour paper)
iii. Skills Testing. Candidates will be required to demonstrate their skills at a number of stations
iv. Patient examination in a clinical setting. The candidate will do a full examination of eight (8) patients and must pass a minimum of seven (7) out of the 8 full patient examinations.

MEDICAL SCIENCES LIBRARY

RULES FOR LIBRARY USERS

1. **HOURS**

SEMESTER

Mondays to Thursdays	8:30 a.m. - 10:00 p.m.
Fridays	8:30 a.m. - 8.00 p.m.
Saturdays	8.30 a.m. - 5.00 p.m.

VACATION PERIODS

Mondays to Fridays	8:30 a.m. - 5:00 p.m.
Saturdays	8:30 a.m. - 12:30 p.m.

Vacation hours will apply to the first week of each academic year.

MEMBERSHIP

University of the West Indies

2. The Library is open to registered graduate and undergraduate students and staff of all campuses of The University of the West Indies.

Non-University of the West Indies

3. a) Visiting research workers, faculty and students of other universities and tertiary level institutions may be granted reading and reference privileges on recommendation of a faculty member and at the discretion of the Librarian.*
   b) Other non-university persons over the age of 16 may be granted reading and reference privileges. This is, however, subject to a review by the Librarian on duty and is dependent on the specific need of the particular person.
   c) A fee may be charged for long periods of use or repeated use as outlined in Information Bulletin No. 9 (Rev.).

LOANS

General

4. No book, periodical or other library material may be removed from the Library unless it has been legitimately charged out at the Loans Desk and the date label stamped by the member of staff on duty. A user is responsible for any book or other item borrowed in his/her name. This responsibility ends only when the loan is officially cancelled. Failure to comply with this rule will be treated as a major and deliberate offence.

5. Users' identification cards are not transferable. It is a major offence to lend or borrow identification cards. Persons contravening this rule may have their library privileges withdrawn or may be referred to the Principal for further action.

6. Certain publications may not be removed from the Library. These include reference books, items in Special Collections, works of special value and other designated Not for Loan Items. All such material will be clearly marked.

7. Loans may extend for varying periods depending on the extent of demand for each item. All material loaned will be subject to recall by the Librarian at any time. No loans may be renewed for more than seven (7) days. In cases where a book issued on loan is requested by another user it may be recalled after it has been on loan for a minimum of seven (7) days. A new date due is assigned and fines are charged for non-return of the item after the new date.

Undergraduates

8. Undergraduate students of the Faculty of Medical Sciences may have on loan up to twelve (12) Items at a time including serials. This figure includes overall entitlement between the Main and Medical Sciences Library.

Graduates

9. Graduate students of the University may have on loan up to fourteen (14) items (including serials). Graduate Research Assistants/Teaching Assistants (non Graduate students)

10. Research Assistants may have on loan up to fourteen (14) items (including serials).

Academic, Senior Administrative and Professional Staff

11. Academic Senior Administrative and Professional Staff of the Faculty of Medical Sciences including part-time and Honorary Lecturers may have on loan up to nineteen (19) items including serials. In case of special need, additional items may be loaned at the discretion of the Librarian. All loans are subject to recall by the Librarian at any time.

Other persons

12. Other persons permitted to borrow library material may not borrow serials and may borrow books in accordance with the Patron Category assigned.

Departments

13. Library materials may be loaned for extended periods to Departments of the University under certain conditions and at the discretion of the Librarian.

Reserve books

14. All persons to whom the Library is open under Rule 2 may borrow, in addition to the books permitted above, two (2) books reserved for overnight use only. At the discretion of the Librarian, use may be restricted to In Library only. These may be borrowed before the specified times posted at the loans desk and must be returned by half an hour after opening time on the next working day.

Serials

15. Periodicals and other serials (excluding certain titles and newspapers, which are not for loan) may be issued on loan for a period of seven (7) days to graduate students and to members of the academic and research staff only. These loans shall NOT be renewable. The most recently received issue of a periodical may not be borrowed except at the discretion of the Librarian.

Overdues

16. The Librarian is empowered to levy a fine upon all users who fail to return library material within the prescribed period. The fine for late return of items is one dollar ($1.00) for each day the loan is overdue. This fine will apply to normal loans and items recalled to satisfy other borrowers' requests. The fine for late return of items in the Reserve Collection will be one dollar ($1.00) per hour or any part thereof, per item. The maximum for each overdue item in all categories is five hundred ($500.00) dollars, after which further disciplinary action may be taken.

17. After a third overdue notice is dispatched, all borrowing privileges will be automatically suspended. Items which are not returned after due notice will be presumed lost and treated accordingly.

18. When, after due notice, a fine or replacement cost has not been paid, the Librarian is authorised to request the Bursar to arrange for the amount of the fine/replacement cost to be recovered by the University.

19. The names of all those students who are not in good standing with the Library, i.e., those who after due notice, have failed to return overdue publications or to pay for items lost or other outstanding fines, will be submitted to the Principal once per year for further action.

20. The Librarian shall have power to remit or reduce fines in any case at his/her discretion.

21. All users are required to return promptly to the Library all items on loan on completion of his/her period of study or termination of employment.

Conduct

22. (a) The Library is provided exclusively for the purpose of academic study and research. Any conduct inconsistent with this purpose or detrimental to its pursuit by others shall constitute a breach of these rules.
    (b) All library users must be prepared to present the appropriate identification cards entitling them to use the Library and/or its special collections at any time when asked to do so by a member of the Library or Security staff.
    (c) Silence shall be observed in the Library.
    (d) No bags, briefcases, handbags, parcels or other receptacles exceeding 15 inches (10' x 6' x 4') or 30 cm (20cm x 15 cm x 10 cm) may be brought inside the Library. (See attached specimen.). Such bags, briefcases, handbags etc. may be left in the lockers (rental) provided in the Amphitheatre area. The University accepts no responsibility for the loss or damage of any articles so left.
    (e) Laptop computers on battery power may be used in the Library.
    (f) Pagers must be used with discretion and cellular phones may only be used as designated.
    (g) Chairs and tables and other library equipment, fittings and furniture may not be marked, defaced or disarranged. Users may not place their feet on chairs or tables.
    (h) Food or drink may not be brought into the Library's service areas or there consumed.
    (i) The Library has been designated a smoke-free area and smoking is strictly forbidden.
    (j) Books, periodicals, etc., taken from shelves and used in the Library should be left on the tables after use and NOT replaced on the shelves.
    (k) All users leaving the Library must show all books, folders, periodicals, papers, etc., in their possession whether these belong to the University or not. Users may also be required to open for inspection any receptacle carried out of the Library.
    (l) All members of the Library and security staff are empowered to require users to comply with these rules.
    (m) The Librarian shall at all times have authority to maintain good order in the Library and may exclude from it or suspend from its use any user who breaks these rules. The Librarian may report to the appropriate University authority any person responsible for serious or persistent breach of these rules. Such conduct by any member of the University community shall be considered a breach of University discipline.

Theft, Mutilation and Loss

23. Loss or damage to library material on loan to a user should be reported immediately. The user must pay the cost of replacing a lost or seriously damaged book or other item, in addition to any fine which may have been incurred prior to reporting the loss or damage. Replacement costs will include library processing costs up to thirty-five dollars ($35.00)per item. Where damage to library material is reported, the user may be subject to a fine appropriate to the extent of the damage. When such damage is not reported but discovered this may be treated as a major offence.

24 The following will be considered a major offence against the University:
   (i) the illegal removal of library materials,
   (ii) any attempt to obtain library materials or to gain access to library facilities by false pretences or forgery,
   (iii) the intentional misplacement of books in the Library,
   (iv) the wilful mutilation or defacement of library material. Any University person who commits such offences may be reported to the appropriate University authority for disciplinary action, which may include suspension or expulsion. Non-University persons who commit such offences may be subject to legal action.

25. Any breach of these rules by a user may render him/her liable to a fine not exceeding five hundred dollars (TT$500.00) at the discretion of the Librarian.

26. The Librarian may institute such operating rules and procedures in addition to the above as may be deemed necessary and appropriate for good library economy and service.

*NB: (a) 'Librarian' means the Campus Librarian or anyone delegated by her/him.
(b) Major offences are specified in 'The Charter of Principles and Responsibilities'.

APPENDIX 1 – UNIVERSITY REGULATIONS ON PLAGIARISM

Application of these Regulations

1 These Regulations apply to the presentation of work by a student for evaluation, whether or not for credit, but do not apply to invigilated written examinations.

Definition of plagiarism

2 In these Regulations, "plagiarism" means the unacknowledged and unjustified use of the words, ideas or creations of another, including unjustified unacknowledged quotation and unjustified unattributed borrowing;

"Level 1 plagiarism" means plagiarism which does not meet the definition of Level 2 plagiarism;

"Level 2 plagiarism" means plagiarism undertaken with the intention of passing off as original work by the plagiariser work done by another person or persons.

3 What may otherwise meet the definition of plagiarism may be justified for the purposes of Regulation 2 where the particular unacknowledged use of the words, ideas and creations of another is by the standards of the relevant academic discipline a function of part or all of the object of the work for evaluation whether or not for credit, for example:

a. The unacknowledged use is required for conformity with presentation standards;
b. The task set or undertaken is one of translation of the work of another into a different language or format;
c. The task set or undertaken requires producing a result by teamwork for joint credit regardless of the level of individual contribution;
d. The task set or undertaken requires extensive adaptation of models within a time period of such brevity as to exclude extensive attribution;
e. The task set or undertaken requires the use of an artificial language, such as is the case with computer programming, where the use of unoriginal verbal formulae is essential.

4 It is not a justification under Regulations 2 and 3 for the unacknowledged use of the words, ideas and creations of another that the user enjoys the right of use of those words, ideas and creations as a matter of intellectual property.

Other definitions

5 In these Regulations,
"Chairman" means the Chairman of the relevant Campus Committee on Examinations;
"Examination Regulations" means the Examination and other forms of Assessment Regulations for First Degrees Associate Degrees Diplomas and Certificates of the University;
"set of facts" means a fact or combination of facts.

Evidence of plagiarism

6 In order to constitute evidence of plagiarism under these Regulations, there shall be identified as a minimum the passage or passages in the student's work which are considered to have been plagiarised and the passage or passages from which the passages in the student's work are considered to have been taken.

Student Statement on Plagiarism

7 When a student submits for examination work under Regulation 1, the student shall sign a statement, in such form as the Campus Registrar may prescribe, that as far as possible the work submitted is free of plagiarism including unattributed quotation or paraphrase of the work of another except where justified under Regulation 3.

8 Quotation or paraphrase is attributed for the purpose of Regulation 7 if the writer has indicated using conventions appropriate to the discipline that the work is not the writer's own.

9 The University is not prohibited from proceeding with a charge of plagiarism where there is no statement as prescribed under Regulation 7.

Electronic vetting for plagiarism

10 The results of any electronic vetting although capable, where the requirements of Regulation 7 are satisfied, of constituting evidence under these Regulations, are not thereby conclusive of any question as to whether or not plagiarism exists.

Level 1 plagiarism

11 In work submitted for examination where the Examiner is satisfied that Level 1 plagiarism has been committed, he/she shall penalise the student by reducing the mark which would have otherwise been awarded taking into account any relevant Faculty regulations.

Level 2 plagiarism

12 Where an examiner has evidence of Level 2 plagiarism in the material being examined, that examiner shall report it to the Head of Department or the Dean and may at any time provide the Registrar with a copy of that report. In cases where the examiner and the Dean are one and the same, the report shall be referred to the Head of the Department and also to the Campus Registrar.

13 Where any other person who in the course of duty sees material being examined which he or she believes is evidence of Level 2 plagiarism that other person may report it to the Head of Department or the Dean and may at any time report it to the Campus Registrar who shall take such action as may be appropriate.

14 Where a Dean or Head of Department receives a report either under Regulation 12 or 13, the Dean or Head of Department, as the case may be, shall

a. where in concurrence with the report's identification of evidence of Level 2 plagiarism, report the matter to the Campus Registrar; or
b. where not concurring in the identification of evidence of plagiarism, reply to the examiner declining to proceed further on the report; or
c. where concluding that there is evidence of Level 1 plagiarism, reply to the examiner indicating that conclusion and the Examiner shall proceed as under Regulation 11.

15 Where a report is made to the Campus Registrar under Regulation 14a or 16, the Campus Registrar shall lay a charge and refer the matter to the Campus Committee on Examinations.

16 Where the Campus Registrar receives a report alleging Level 2 plagiarism from the Examiner or any other person except the Dean or Head of Department, the Campus Registrar shall refer the matter to a senior academic to determine whether there is sufficient evidence to ground a charge of plagiarism and where such evidence is found, the Campus Registrar shall proceed as under Regulation 15.

17 Where the matter has been referred to the Campus Committee on Examinations pursuant to Regulation 15, the proceedings under these Regulations prevail, over any other disciplinary proceedings within the University initiated against the student based on the same facts and, without prejudice to Regulation 21, any other such disciplinary proceedings shall be stayed, subject to being reopened.

18 If the Campus Committee on Examinations is satisfied, after holding a hearing, that the student has committed Level 2 plagiarism, it shall in making a determination on the severity of the penalty take into consideration:

a. the circumstances of the particular case;
b. the seniority of the student; and
c. whether this is the first or a repeated incidence of Level 2 plagiarism.

19 Where the Campus Committee is of the view that the appropriate penalty for an offence of Level 2 plagiarism is for the student to be:

(i) awarded a fail mark;
(ii) excluded from some or all further examinations of the University for such period as it may determine;
(iii) be dismissed from the University,

it shall make such recommendation to the Academic Board.

Clearance on a charge of Level 2 plagiarism

20 A determination of the Campus Committee on Examinations that Level 2 plagiarism has not been found will be reported to the Campus Registrar who shall refer it to the Examiner and notify the student. Where the Committee has not identified Level 2 but has identified Level 1, it shall be reported to the Campus Registrar who shall refer it to the examiner.

Level 2 plagiarism: Appeal to the Senate

21 A student may appeal to the Senate from any decision against him or her on a charge of plagiarism made by Academic Board.

Delegation by Dean or Head of Department

22 The Dean or Head of Department, as the case may be, may generally or in a particular instance delegate that officer's functions under these Regulations.

Conflict of interest disqualification

23 Any person who has at any time been an examiner of work or been involved in procedures for laying charges in relation to which an issue of plagiarism is being considered under these Regulations shall withdraw from performing any functions under these Regulations other than those of supervisor and examiner.

PLAGIARISM DECLARATION

THE UNIVERSITY OF THE WEST INDIES

The Office of the Board for Undergraduate Studies

INDIVIDUAL PLAGIARISM DECLARATION

STUDENT ID:

COURSE TITLE:

COURSE CODE:

TITLE OF ASSIGNMENT:

This declaration is being made in accordance with the **University Regulations on Plagiarism (First Degrees, Diplomas and Certificates**) and must be attached to all work, submitted by a student to be assessed in partial or complete fulfilment of the course requirement(s), other than work submitted in an invigilated examination.

STATEMENT

1. I have read the Plagiarism Regulations as set out in the Faculty or Open Campus Student Handbook and on University websites related to the submission of coursework for assessment.

2. I declare that I understand that plagiarism is a serious academic offence for which the University may impose severe penalties.

3. I declare that the submitted work indicated above is my own work, except where duly acknowledged and referenced and does not contain any plagiarized material.

4. I also declare that this work has not been previously submitted for credit either in its entirety or in part within the UWI or elsewhere. Where work was previously submitted, permission has been granted by my Supervisor/Lecturer/Instructor as reflected by the attached Accountability Statement.

5. I understand that I may be required to submit the work In electronic form and accept that the University may subject the work to a computer-based similarity detention service.

NAME _____

SIGNATURE _____

DATE _____

GROUP PLAGIARISM DECLARATION

COURSE TITLE:

COURSE CODE:

TITLE OF ASSIGNMENT:

When submitting a group assignment for assessment each member of the group will be required to sign the following declaration of ownership which will appear on the coursework submission sheet.

We the undersigned declare that:

1. We have read the Plagiarism Regulations as set out in the Faculty or Open Campus Student Handbook and on University websites related to the submission of coursework for assessment.

2. We declare that I understand that plagiarism is a serious academic offence for which the University may impose severe penalties.

3. The submitted work indicated above is our own work, except where duly acknowledged and referenced.

4. This work has not been previously submitted for credit either in its entirety or in part within the UWI or elsewhere. Where work was previously submitted, permission has been granted by our Supervisor/Lecturer/Instructor as reflected by the attached Accountability Statement.

5. We understand that we may be required to submit the work In electronic form and accept that the University may check the originality of the work using a computer-based similarity detention service.

NAME _____

SIGNATURE _____

NAME _____

SIGNATURE _____

NAME _____

SIGNATURE _____

DATE _____

ADDITIONAL ACCOUNTABILITY STATEMENT WHERE WORK HAS BEEN PREVIOUSLY SUBMITTED

1. I/We have set out in an attached statement the details regarding the circumstances under which this paper or parts thereof has been previously submitted.

2. I/We have received written permission from my Supervisor/Lecturer/Instructor regarding the submission of this paper and I have attached a copy of that written permission to this statement.

3. I/We hereby declare that the submission of this paper is in keeping with the permission granted.

NAME _____

SIGNATURE _____

DATE _____