



**CATHOLIC UNIVERSITY OF
HEALTH AND ALLIED SCIENCES
(CUHAS)**

**PROSPECTUS
For
Academic year 2014/2015**



Catholic University of Health and Allied Sciences

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Catholic University of Health and Allied Sciences

PROSPECTUS 2014/2015

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MEMBERS OF BOARD OF TRUSTEES

His Eminence Polycarp Cardinal Pengo:	Archbishop of Dar es Salaam
Most Rev. Damian Denis Dallu	Archbishop of Songea
Most Rev. Josaphat Lebulu:	Archbishop of Arusha
Most Rev. Paul Ruzoka	Archbishop of Tabora
Most Rev. Jude Thaddeus Ruwai'chi	Archbishop of Mwanza
Rt. Rev. Isaac Amani Masawe	Bishop of Moshi
Rt. Rev. Gabriel Mlole:	Bishop of Mtwara
Rt. Rev. Tarcisius Ngalalekumtwa	Bishop of Iringa
Rt. Rev. Augustine Shayo	Bishop of Zanzibar
Rt. Rev. Agapiti Ndorobo	Bishop of Mahenge
Rt. Rev. Nestorius Timanywa	Bishop of Bukoba
Rt. Rev. John C. Ndimbo	Bishop of Mbinga
Rev. Fr. Piet Cuijpers	Vicar General, SDS

Invited Members

(To be announced)	Vice Chancellor SAUT
Prof. Paschalis G. Rugarabamu	Vice Chancellor CUHAS
Rev. Dr. Philbert Vumilia	Principal, MWUCE
Rev. Dr. Cephas Mгимwa	Principal, RUCO
Rev. Fr. Respicius Rugemalira	Corporate Counsel (SAUT)
Prof. Cassian Magori	Principal, SFUCHAS
Rev. Fr. Bernard Witek SDC	Principal, Jordan University College
Rev. Dr. Jenenalis Asantemungu	Principal, AMUCTA
Rev. Fr. Frowin Mlengule	Principal, SAUT Bukoba Centre
Prof. Donatus Komba	Principal, Songea

MEMBERS OF CUHAS- UNIVERSITY COUNCIL

1. The Rt. Rev. Augustine Shayo Bishop of Zanzibar- Chairman
2. Most Rev. Jude Thaddeus Ruwai'chi Archbishop of Mwanza
3. The Most Rev. Archbishop Paul Ruzoka: Archbishop Tabora

4. (To be announced) Vice-Chancellor, SAUT
5. Fr. Raymond Saba TEC Secretary General
6. Prof. Samwel Y. Maselle MUHAS
7. (To be announced) Director General, BMC
8. Prof. Silvia Shayo Temu Director, Higher Education, MEVT
9. Olvia Gowele Director, Human Resources Development, Ministry of Health and Social welfare DSM
10. Balozi Dr. Pius Y. Ng'wandu Representative of the Laity
11. Prof. Appolinaria Elikana Pereka Appointee CUHAS Senate
12. Dr. Fredrick Kigandye Renowned Medical Doctor
13. Prof. Paschalis G. Rugarabamu Vice Chancellor CUHAS
14. Ms. Olive Luena Female representative of the Laity
15. Fr. Alphonse Raraiya TEC Executive Secretary, Education Department
16. (To be announced) Corporate Counsel CUHAS

In Attendance:

1. Prof. Stephen Mshana CUHAS-Deputy Vice Chancellor (ARC)
2. Rev. Dr. Agapit Mrosso CUHAS-Deputy Vice Chancellor (PFA)
3. Mr. Boniface Kwiyeza CUHAS-Bursar

MEMBERS OF THE CUHAS SENATE

1. Prof. Paschalis G. Rugarabamu Vice Chancellor/ Chairman
2. Prof. Stephen E. Mshana Deputy Vice Chancellor(ARC)/ Vice Chairman
3. Rev. Dr. Agapit Mroso Deputy Vice Chancellor(PFA)
4. Prof. Johannes B. Kataraihya Dean, Weill Bugando School of Medicine
5. Dr. Erasmus. Kamugisha Representing Departments of Anatomy, Physiology, Biochemistry and Behavioural Sciences.
6. Mr. Kaspar Mapunda Dean of Students
7. Prof. Samuel.E. Kalluvya Dean School of Graduate Studies
8. Prof. Gilbert W. Kongola Director Research and Innovations
9. Mr. Gratian R. Tibaijuka Director IAHS
10. Mr. Yanga. Machimu Representing Director Library Services

11. Mr. Ismael .M. Khangane Director ICT
12. Mrs. A. D. Pole Ag. Dean AAMSoN
13. Prof. Mary. Jande Dean School of Pharmacy
14. Dr. Sospatro.E. Ngallaba Dean School of Public Health
15. Prof Zablon. E. Masesa Professor of Physiology
16. Rev. Dr. T. Mkamwa DVC Academic Affairs SAUT
17. Sr Dr Hellen Bandiho Appointee Council
18. Mr G. Kisigo Undergraduate students representative
19. Mr. F. Mwanda IAHS Students representative
20. Dr. T. Chaula Postgraduate Students representative
21. Dr. Jeremiah. Seni Representing Departments of Pathology, Microbiology, Pharmacology and Parasitology.
22. Dr. Aldofine. Hokororo Representing Departments of Internal Medicine, Psychiatry Paediatrics and Medical Ethics.
23. Dr. Ramesh Dass Representing Departments of Surgery, Orthopaedics & Trauma, ENT and Anaesthesia.
24. Prof. Balthazary. Gumodoka Representing Departments of Obstetrics & Gynaecology, and Community Health.
25. Mr. Omary. Mejjah Representing IAHS schools of Radiography, Pharmacy, Medical Lab, Nursing, Anaesthesia and AMO.

SENIOR OFFICERS OF THE CUHAS

The Chancellor

Rt. Rev. Tarcisius Ngalalekumtwa, Bishop of Iringa and President of Tanzania Episcopal Conference (TEC)

Vice Chancellor

Prof. Paschalis G. Rugarabamu *DDS (UDSM); MDENT (Dental Public Health) (UDSM); MBA (ESAMI)*

Deputy Vice Chancellor Academics Research and Consultancy

Prof. Stephen E. Mshana, *MD (UDSM); MMed (Microbiology)(Makerere); PhD (SAUT), Fell. Med. Edu (SA)*

Deputy Vice Chancellor Finance, Planning and Administration

Rev. Dr. Agapit Mrosso Licentiate in Dogmatic Theology (Gregorian- Rome), M. Spiritual Theology (Angelicum-Rome), PhD (Gregorian- Rome)

Dean: Weill Bugando School of Medicine

Prof. Johannes B. Kataraihya, *MD (UDSM), MMed (Int. Med)(UDSM), Dipl. Cardiology (Lond)*

Associate Dean: Weill Bugando School of Medicine

Dr. Mange Manyama, *MD (UDSM); MSc (Makerere), PhD (Calgary), Fell. Med. Edu. (SA)*

Dean, School of Pharmacy

Prof. Mary. B. Jande, *B.Pharm (UDSM); M.Sc (Manchester); PhD (Dublin):*

Ag. Dean, Archbishop Anthony Mayala School of Nursing

Anastazia D. Pole *ADNE; MA*

Director: Institute of Allied Health Sciences

Mr Gratian R. Tibaijuka *B. B.Pharmacy (UDSM)*

Dean: School of Graduate Studies

Prof. Samuel E. Kalluvya, *MD (Sofia), MMed (Int. Med.) (UDSM)*

Associate Dean: School of Graduate Studies

Dr. Erasmus Kamugisha, *MD (UDSM); M.Sc. (Makerere), PhD (SAUT)*

Dean: School of Public Health

Dr. Sospatro. E. Ngallaba *MD (UDSM), MSc. Epid (Dublin), MPH (Leeds)*

Director: Research and Innovations

Prof. Gilbert W.M Kongola, *MD (UDSM), M.Sc. (Manchester), PhD (Manchester)*

Associate Director: Research and Innovations

Dr. Domenica Morona *M.Sc. (LSTMH), PhD*

Director: Quality assurance

Prof. Zablon E. Masesa, *MB.ChB (Makerere); PhD (Lond)*

Associate Director: Quality assurance

Dr. Peter Rambau, *MD (UDSM), MMED (Makerere)*

Dean of Students

Mr. Kaspar Mapunda *Dipl Educ (Chan'gombe), B.A. (Polit. Sc. & Publ. Admin.), MA_DS (UDSM)*

Warden:

Mrs. Christine Kabigiza *Dipl. Agr.Nutr. (Ilonga), Dipl. Gender Relat. & Agric (Netherland), B.A. Comm. Devel. (Daystar C.U. Nairobi), MA in Theol.Comm.Devel. (Wartburg Theological Seminary, USA)*

Bursar

Mr. Boniface M. Kwiyeya *ADCA (Mzumbe); CPA (NBAA)*

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University Auditors

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PREAMBLE

On July 1st, 2014, CUHAS entered its third phase of University Leadership, with three new faces at the helm. This new team is building on the strong foundations laid down by the previous two leadership phases. The motto of this phase is **“taking CUHAS to the next level”**.

The next level envisages to see CUHAS gradually transforming into a Third Generation (3G) University: i.e. being professionally managed to exploit know-

how through education and research, to create value, and to be globally oriented but with local relevancy. This process starts with meeting the Minimum Standards set by the Tanzania Commission for Universities (TCU), benchmarking itself with the best Nationally and Regionally, and above all being relevant to the catchment of about 16 million people in the Lake Zone; by addressing their health and health-related problems in a solution-oriented manner as a flagship institution or a centre of excellence. We wish to do that, with an entrepreneurial approach, by broadening and diversifying our resource bases and reducing over-dependency on students fees as a primary source of income. We hope to achieve that by employing some of the key and basic principles of good governance i.e. (i). The Rule of Law, (ii). Transparency & Accountability, (iii), Professionalism, and (iv). Involvement of Stakeholders, as we carry out our key university functions of Teaching, Research, and Service/Consultancy, with the guidance of our Rolling Strategic Plan.

We realize and cherish the potential that lies within CUHAS staff, both academic and support, but more so the synergistic opportunities that lie within our sister institution Bugando Medical Centre (BMC), the teaching hospital for CUHAS. We envisage to explore and exhaust these internal potentials before we jointly venture out for strategic partnerships, nationally, regionally and globally, for the mutual benefit of our institutions.

We will do that mindful of the Catholic Ownership of the University, by promoting and maintaining the good image of the institution, while offering equal opportunities to all kinds of peaceful people, irrespective of their orientation or inclination.

We wish to assure our students, across the whole range of academic disciplines offered, that we will provide them with the best possible learning environment and support, for them to achieve their current and future goals. CUHAS and us are here to serve you. We wish you the best of success.

Prof. Paschalis G. Rugarabamu
Vice chancellor, CUHAS

INTRODUCTION TO THE UNIVERSITY

Establishment of CUHAS

The declaration made by the Tanzania Episcopal Conference (TEC) in 1994 marks the initial thought to establish a Catholic University of Health and Allied Sciences at Bugando (CUHAS-Bugando). The primary objective of TEC was *“to establish in Tanzania a place which would train skilled and competent human resources in the health sector; a human resource that was vested with moral and ethical values that could advance the frontiers of knowledge and provide quality services to the individual and the community.* However, in 2003, the Catholic University of Health and Allied Sciences - Bugando (CUHAS) was established as a Constituent University College of the St. Augustine University of Tanzania (SAUT) with a vision *“to become an outstanding Tanzanian Catholic University excelling in health care, training and research; while remaining responsive to societal needs.”*

CUHAS therefore replaces the Weill Bugando University College of Health Sciences. The decision to upgrade the University College to a full-fledged university was made by TEC at the 65th Plenary Assembly making it its second university. The University retains its location at Bugando Medical Centre (BMC) in Mwanza. Its location at BMC remains most appropriate because this 870-bed teaching, referral, and consultant hospital also belongs to the Catholic Church, and serves about 1/3rd of country’s population of around 48 million people. It provides space and faculty for clinical training of its students with the six regions of Tanzania around Lake Victoria provide the catchments area.

As the Institution enters the third generation of University Leadership, we are proud to mention some of the tremendous development and growth of the Institution such as the increase in the number of students enrolled from 10 in 2003/2004 academic year to about 1500 in 2014/2015 academic year. Similarly there has been an increase in the number of academic programmes from 1 bachelor degree programme in 2003 to 5 bachelor degree programmes, 6 masters’ programmes and several PhD programmes. in Health related disciplines at the end of 2013/2014 academic year. . The Institute of Allied Health Science runs 3 Diploma programmes (DPS, DDR, and DMLS).

The number of Faculty has also increased significantly from the initial 15 full time faculty in 2003 to 113 full time faculty in 2014

Infrastructure development has also taken place. 2 new class rooms each with a capacity of 250 students have been completed. Renovation of ICT infrastructure has recently been completed, connecting the server room to the national fibre optic cable and increasing the band-width for internet connectivity and provision of wireless hotspots. More recently we have started the construction of modern learning resource centre.

The University has acquired land of 100 acres at Kabuhoro and it is in the final process to acquire another 210 acres at Buswelu. Both locations are within the Mwanza city suburbs. These are envisaged for future expansion of the College and or investments developments.

MISSION AND VISION OF THE CUHAS

Vision of the University

To become an outstanding Tanzanian Catholic University excelling in health care, training and research and responsive to societal needs.

Mission of the University

Activities of the University will be guided by the following mission statements:

- *To provide skilled and competent human resources in the health sector that is vested with moral and ethical values,*
- *Search, discover and communicate the truth to advance the frontiers of knowledge and*
- *Provide quality services to the community”.*

CUHAS Motto

Discipline, Diligence & Excellence

Core functions

Teaching, Research & Consultancy Services

CUHAS Values

In order to achieve its mission functions and transform the University into a respectable Tanzanian institution, the university management is committed to ensure that the following values will be observed and upheld at all times:

i) Equity and Justice

The CUHAS management through its operations will ensure equal opportunity and exercise social justice and non-discrimination on the basis of gender, race, religion, political affiliation, disability or any other form.

ii) Professional standards, Ethical and Moral norms

The University management, staff and students will uphold the highest professional standards, ethical practices, respect for persons and human dignity.

iii) Academic Excellence

Academic excellence will be a corner stone in all teaching, learning and advancement of frontiers of knowledge as well as by delivery of quality and relevant public services to communities in the country, region and globally.

iv) Academic Freedom

Academic freedom of expression, critical thought and enquiry through openness, transparency and tolerance will be upheld and emphasized.

v) Creativity

The University will work towards enhancing creativity by students and staff by enhancing entrepreneurial skills and capacity to work independently.

vi) Respect For and Abide To the Laws and Constitution of the Country

The University staff and students shall enhance citizenry through abidance to the Tanzanian Constitution and the law of the land.

vii) Foster its Catholic Identity

As a Catholic University it will uphold catholic ideals, attitudes and principles in its teaching research and service.

ACADEMIC PROGRAMMES

The University offers courses and programmes leading to the award of certificates, diplomas, and degrees at both undergraduate and postgraduate levels. It also offers other programmes, consultancy services and seminars to clients who need them.

The following are the academic programmes:

A) CURRENT PROGRAMMES

i. Diploma Programmes

Diploma in Pharmaceutical Sciences	3 years
Diploma in Medical Laboratory Science & Technology	3 years
Diploma in Diagnostic Radiography	3 years

ii. Undergraduate programme

Doctor of Medicine (MD)	5 years
Bachelor of Pharmacy (B.Pharm)	4 years
Bachelor of Science in Nursing Education (B.Sc.NED)	[2, 3, 4] years
Bachelor of Medical Laboratory Sciences	3 years
Bachelor of Science in Nursing (BSc.N)	[3, 4] years

iii. Postgraduate Programmes

Master of Medicine (M. Med) <i>[Internal Medicine, Obstetrics and Gynaecology, Surgery, Paediatrics, Anaesthesia]</i>	3 years
Master of Public Health (MPH)	1 year
Doctor of Philosophy (Ph. D)	3 years

B) PROPOSED PROGRAMMES

Diploma Programmes

i Higher Diploma in Clinical Medicine (AMO)	2 years
Higher Diploma in Ultrasounds	2 years
ii Bachelor of Medical Imaging Sciences (BMIS)	3 years
iii Masters in Paediatric Nursing	3 years
iv Masters in Occupational and Environmental Health	3 years

C) PROPOSED FACULTIES, INSTITUTES, DIRECTORATES, AND CENTRES

FACULTIES/SCHOOLS: Dentistry

CENTRES: Continuing Education

UNITS: Medical Illustration

Students' Admission Criteria

UNDERGRADUATE PROGRAMMES

SCHOOL OF MEDICINE

The School of Medicine offers the following undergraduate degree programmes: Doctor of Medicine (MD), and Bachelor of Medical Laboratory Sciences (BMLS).

Entry Requirements for the MD Course

- (i) Principal PASS at “C” grade or higher in CHEMISTRY, BIOLOGY and PHYSICS, at ADVANCED (“A”) level. Preference will be given to applicants with “B” Passes or above in CHEMISTRY or BIOLOGY, in that order. THOSE without Physics should have Principal pass at B grade or higher in CHEMISTRY or BIOLOGY and a C grade or higher in CHEMISTRY or BIOLOGY
- (ii) Holders of B. Sc. Degrees, from recognized institutions, majoring in BIOLOGY or CHEMISTRY.
- (iii) Equivalent Qualifications: Holders of Diploma in Clinical Medicine with Second Class OR a Credit OR a B average in the Diploma.

Entry Requirement for Bachelor of Medical Laboratory Sciences

Direct entrants:

Two Principal passes at “C” grade or higher in Chemistry, Biology or Physics/ Mathematics

Equivalent Qualification

Holder Diploma/Advanced Diploma in Medical Laboratory Sciences from Institute recognized by NACTE.

SCHOOL OF PHARMACY

The School of Pharmacy offers courses leading to the offer of the Bachelor of Pharmacy degree (B. Pharm).

Entry Requirements for Bachelor of Pharmacy (B. Pharm) Course

Direct Entry (Form Six)

Principal PASS at “C” grade or higher in CHEMISTRY, BIOLOGY and PHYSICS, at ADVANCED (“A”) level. Preference will be given to applicants with “B” Passes or above in CHEMISTRY or BIOLOGY, in that order. THOSE without Physics should have Principal pass at “B” grade or higher in CHEMISTRY or BIOLOGY and a “C” grade or higher in CHEMISTRY or BIOLOGY

Equivalent qualifications:

- (i) Holders of B.Sc. Degrees, from recognized institutions majoring in BIOLOGY or CHEMISTRY.
- (ii) Holder of a Diploma in Pharmacy from a recognized and accredited Institution with an average of “B” in the Diploma

ARCHBISHOP ANTHONY MAYALA SCHOOL OF NURSING

The Archbishop Anthony Mayala School of Nursing offers the Bachelor of Science in Nursing Education (B.Sc. NED) under the following categories:

- A 2- year programme for those with Advanced Diploma in Nursing Education
- A 3- year Programme for those with Diploma in Nursing
- A 4- year programme for those who are direct form six leavers.

Entry Requirements for the Bachelor of Science in Nursing Education (4 yrs course)

Holder of form-six certificate with THREE Advanced level passes in Physics, Chemistry and Biology; at least TWO passes at “C” or higher

Entry Requirements for the Bachelor of Science in Nursing Education (3 yrs course)

Equivalent Qualification:

Holder of Diploma in nursing as recognized by NACTE.

Entry Requirements for the Bachelor of Science in Nursing Education (2 yrs course)

Equivalent Qualification:

Holder of Advanced Diploma in Nursing Education as recognized by NACTE.

The Archbishop Anthony Mayala School of Nursing also offers the Bachelor of Science in Nursing (B.Sc. N) under the following categories:

- (i) B.Sc. in Nursing (4 years programme);
- (ii) B.Sc in Nursing (3 years post basic)

Entry Requirements for the Bachelor of Science in Nursing (4 yrs course)

A Holder of form six certificate with TWO advanced level passes at “C” grade or above in CHEMISTRY, BIOLOGY or PHYSICS in that order of preference

Entry Requirements for the Bachelor of Science in Nursing (3 yrs course)

A Holder of Diploma in Nursing as recognized by NACTE

POSTGRADUATE PROGRAMMES

The School of Medicine is currently offering MMED programmes in the clinical disciplines of Internal Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics and Anaesthesiology. The School also offers MPH programme as well as PhD programmes in various specialties.

Entry Requirement for the MMED Programmes

Minimum Entry requirement

- i) A holder of **MD degree or its equivalent** from a recognized institution of higher learning
- ii) Must have scored (during the undergraduate final examinations) a grade of B or Higher in the specialty he/she wants to specialize.
- iii) Must have successfully completed internship and obtained a grade of **B or Higher** in the specialty he/she wants to study.
- iv) Must have completed at least **one year working experience** as a medical practitioner in a recognized hospital.

Entry Requirement for the MPH Programmes

- i) Holders of MD degree or its equivalent with a pass of B grade or above in Community Medicine and at least one year of working experience.
- ii) Holders of B. Sc. Nursing degree with a pass of B grade or above in Community Medicine and at least one year of working experience.
- iii) Holders of first degree in health related disciplines (Health officers, Environmental health, Pharmacy or Laboratory sciences) provided they passed with a lower second and have at least one year of working experience
- iv) Holders of Master Degree in health related disciplines with at least one year of working experience.

Requirement for the PhD Programmes Registration

- (i) The prospective candidate must demonstrate the capacity to carry out research independently and ability to pursue the proposed study programme.
- (ii) A candidate for admission for a PhD must be a holder of a relevant Master Degree (MSc, or MMED) of CUHAS-Bugando or any other recognized institution of higher learning within or outside Tanzania.

INSTITUTE OF ALLIED HEALTH SCIENCES (IAHS)

The following diploma courses are offered by the Institute of Allied Health Sciences:

- Diploma in Medical Laboratory Sciences (DMLS)
- Diploma in Diagnostic Radiology (DDR)
- Diploma in Pharmaceutical Sciences (DPS)

Entry Requirements for Diploma Programmes (DMLS, DDR, DPS)

- i) A holder of form VI certificate ('A' Level) with one principal and two subsidiaries in the science subjects of Biology, Chemistry, Physics or Mathematics

OR

- ii) A holder of form IV certificate ('O' Level) of Secondary school Education OR equivalent with three credits Biology, Chemistry, Physics or Mathematics

Equivalent qualification requirement:

1. Laboratory Assistant/Pharmaceutical Assistant/Radiographic Assistant from recognized institution with at least two years of experience in clinical Laboratory Practice /Pharmacy practice/Radiographic practice provided the applicant has two passes in science subjects **in** ordinary level secondary education.

STUDENTS ADMISSION REQUIREMENTS

For those who qualify and are selected

- a) Payment of a Non-Refundable registration fee to be determined by the University from time to time.
- b) Proof of ability to pay the Annual Fees set by the University. This may be through certified sponsorship or other written proof.
- c) Compliance with any other conditions that the University may deem appropriate.

STUDENTS ADMISSION PROCEDURES

All candidates must complete the prescribed Registration forms, to which should be attached the required supporting documents, within the time specified by the University Announcement.

Financial Information

FINANCIAL INFORMATION

Fees and other financial obligations are the sole responsibility of the student and/or the sponsor or guardian. The fees are payable in full at the beginning of each academic year or in two instalments; at the beginning of each semester. **Failure of payment of Fees by the end of week two of the second semester will attract a penalty of 100,000/= Tshs.** All moneys payable to the University shall be paid directly into the University account presently with CRDB. No student will be allowed to carry forward part of the fee into the following academic year. Fees may be revised from time to time without prior notice. New fee structures will apply for new intake as well as for continuing students. Fees paid will not be refunded after the first four weeks of the academic year. **Any excess/extra fees paid will be carried forward to the next year.**

It is envisaged that student can take advantage of scholarships offered by the Ministry of Education and Vocational Training, loans from the Higher Education Student Loan Board (HSLB) and Scholarships from The Ministry of Health and Social Welfare for postgraduate and students in the Institute of Allied Health Sciences.

The following fees will be applicable for the 2014/2015 academic year:

FEE STRUCTURE FOR NATIONALS UNDERGRADUATE PROGRAMMES (MD, B.PHARM, B.Sc. NED, AND BMLS, B.Sc.N)

Fees Payable to the University

<i>Figures in TSh '000</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
Tuition	4,150	4,010	4,010	4,010	4,010
Exam fee	150	150	150	150	150
Admission/Administrative fee	0	0	0	0	0
Sustainability Fund	30	30	30	30	30
TCU Quality Assurance Fee	20	20	20	20	20
Registration	10	10	10	10	10
ID card	5	0	0	0	0
Medical	200	200	200	200	200
Equipment/ Special Faculty Requirement	150	150	150	150	150
Caution Money	50	0	0	0	0
Accommodation	480	480	480	480	480
Total Cost to University	5,245	5,050	5,050	5,050	5,050

NB: The University has limited accommodation. Accommodation will be charged as follows: 1,500,000/= per year for a single room, 480,000/= per year for each of two students sharing a room, and 360,000/= per year for each of three students sharing a room.

Moneys Payable to the Student (MD, B. Pharm, B.Sc. NED, BMLS, BSc. Nurs) Courses

The amounts listed below are indicative moneys payable to the student to meet costs for meals, stationery, textbooks, field work and special faculty requirements.

CUHAS will not handle student's personal money. Any extra money included in the fees will be assumed to be prepayments for the subsequent year. All moneys meant for personal use should be paid directly to the student.

(A) Money payable to students doing MD Course

<i>Student Cost (figures in Tsh. '000</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
Student Union	20	20	20	20	20
Stationery	100	100	100	100	100
Books	300	300	300	300	300
Elective &Field	0	0	0	560	0
Fieldwork	0	280	280	280	0
Meals	750	750	750	750	750
<i>Total Cost to Student</i>	1170	1450	1450	2010	1170
GRAND TOTAL					
	6,415	6,500	6,500	7,060	6,220

(B) Money payable to students doing BMLS Course

<i>Student Cost (figures in Tsh. '000</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Student Union	20	20	20
Stationery	100	100	100
Books	300	300	300
Elective &Field	0	0	560
Fieldwork	0	0	280
Meals	750	750	750
<i>Total Cost to Student</i>	1450	1450	2010
GRAND TOTAL			
	6,450	6,320	7,060

(C) Money payable to students doing B. Pharm Course

<i>Student Cost (figures in Tsh. '000</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>
Student Union	20	20	20	20
Stationery	100	100	100	100
Books	300	300	300	300
Elective &Field	0	0	0	560
Fieldwork	0	280	280	0
Meals	750	750	750	750
<i>Total Cost to Student</i>	1170	1450	1450	1730
GRAND TOTAL				
	6,415	6,500	6,500	6780

(D) Money payable to students doing BSc. NED/ BSc. Nursing

BSc. NED Conversion programme

<i>Student Cost (figures in Tsh. '000)</i>	<i>Year 1</i>	<i>Year 2</i>
Student Union	20	20
Stationery	100	100
Books	300	300
Elective &Field	0	0
Fieldwork	280	280
Meals	750	750
<i>Total Cost to Student</i>	1450	1450
GRAND TOTAL	6,695	6,500

BSc NED 3 & 4 year programme

<i>Student Cost (figures in Tsh. '000)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>
Student Union	20	20	20	20
Stationery	100	100	100	100
Books	300	300	300	300
Elective &Field	0	0	0	0
Fieldwork	0	280	560	0
Meals	750	750	750	750
<i>Total Cost to Student</i>	1170	1450	1730	1170
GRAND TOTAL	6,415	6,500	6,780	6,620

BSc. Nurs 3 year programme

<i>Student Cost (figures in Tsh. '000)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Student Union	20	20	20
Stationery	100	100	100
Books	300	300	300
Elective &Field	0	0	0
Fieldwork	0	280	560
Meals	750	750	750
<i>Total Cost to Student</i>	1170	1450	1730
GRAND TOTAL	6,415	6,500	6,780

BSc. Nurs 4 year programme

<i>Student Cost (figures in Tsh. '000)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>
Student Union	20	20	20	20
Stationery	100	100	100	100
Books	300	300	300	300

Student Cost (figures in Tsh. '000)	Year 1	Year 2	Year 3	Year 4
Elective &Field	0	0	0	0
Fieldwork	0	0	280	280
Meals	750	750	750	750
Total Cost to Student	1170	1170	1450	1450
GRAND TOTAL				
	6,415	6,220	6,500	6,500

FEE STRUCTURE FOR FOREIGN UNDERGRADUATE PROGRAMMES (MD, B.PHARM, B.SC. NED, BMLS, BSC.NURS)

Fees Payable to the University

Figures in US\$	Year 1	Year 2	Year 3	Year 4	Year 5
Tuition	4,650	4,650	4,650	4,650	4,650
Exam fee	250	250	250	250	250
Admission/Administrative fee	75	0	0	0	0
Sustainability Fund	35	35	35	35	35
Registration	25	25	25	25	25
ID card	10	0	0	0	0
Medical	350	350	350	350	350
Caution Money	100	0	0	0	0
Equipment/ Special Faculty Requirement	300	300	300	300	300
Accommodation	600	600	600	600	600
Total Cost to University	6,395	6,210	6,210	6,210	6,210

Moneys Payable to the Student MD course

Figures in US\$	Year 1	Year 2	Year 3	Year 4	Year 5
Student Union	40	40	40	40	40
Stationery	200	200	200	200	200
Books	500	500	500	500	500
Elective &Field	0	0	0	1000	0
Fieldwork	0	700	700	0	0
Meals	1,250	1,250	1,250	1,250	1,250
Total Cost to Student	1,990	2,690	2,690	2,990	1,990

Total Costs

Figures in US\$	Year 1	Year 2	Year 3	Year 4	Year 5
Money payable to the University	6,395	6,210	6,210	6,210	6,210
Money payable to Students	1,990	2,690	2,690	2,990	1,990
GRAND TOTAL	8,385	8,900	8,900	9,200	8,200

FEE STRUCTURE FOR POSTGRADUATE PROGRAMMES

MMED Fee Structure (National)

Fees Payable to the University

Figures in TSh '000	Year 1	Year 2	Year 3
Tuition	5,200	5,200	5,200
Exam fee	150	150	150
Admission/Administrative	0	0	0
Sustainability	30	30	30
TCU Quality Assurance Fee	20	20	20
Registration	25	25	25
ID card	10	0	0
Medical	0	0	0
Caution Money	50	0	0
Accommodation	1,200	1,200	1,200
Equipment/Special Faculty Requirement	200	200	200
Total Cost to University	6,885	6,825	6,825

NB: The University has a limited number of two bedroom and three bedroom flats that can be shared between postgraduate students. The flats will be charged as follows: a two bedroom flat will be charged at 2,400,000/= per year and a three bedroom flat will be charged at 3,600,000/= per year.

Moneys Payable to the Student

Student Cost(Figures in TSh '000)	Year 1	Year 2	Year 3
Student Union	20	20	20
Stationery	150	150	150
Books	400	400	400
Research	0	2000	0
Dissertation	0	250	0
Fieldwork	0	0	0
Meals/ Stipend	2,700	2,700	2,700
Total Cost to Student	3,270	5,520	3,270

Total Costs

<i>Total Cost (in TSh '000)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Money Payable to University	6,885	6,825	6,825
Money Payable to Students	3,270	5,520	3,270
GRAND TOTAL	10,155	12,345	10,095

MMED Fee Structure (Foreign)

Fees Payable to the University

<i>Figures in US\$</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Tuition	5,500	5,500	5,500
Exam fee	250	250	250
Administrative fee	100	0	0
Registration	40	40	40
Sustainability	40	40	40
ID card	10	0	0
Medical	320	320	320
Caution Money	100	0	0
Equipment/ Special Faculty Requirement	325	325	325
Accommodation	1,200	1,200	1,200
Total Cost to University	7,885	7,675	7,675

Moneys Payable to the Student

<i>Student Cost (US \$)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Student Union	35	20	20
Stationery	240	150	150
Books	750	400	400
Research	1,750	0	0
Dissertation	450	0	0
Fieldwork	0	0	0
Meals/ Stipend	4,500	4,500	4,500
Total Cost to Student	7,725	5,070	5,070

Total Costs

Total Cost (US \$)	Year 1	Year 2	Year 3
Money payable to University	7,885	7,675	7,675
Money payable to students	7,725	5,070	5,070
GRAND TOTAL	15,610	12,745	12,745

MPH Fee Structure (National)

Fees Payable to the University

Figures in TSh '000	Year 1
Tuition	7,050
Exam fee	150
Admission/Administrative	0
Sustainability	30
TCU Quality Assurance Fee	20
Registration	25
ID card	10
Medical	0
Caution Money	50
Accommodation	1200
Equipment/Special Faculty Requirement	200
Total Cost to University	8,735

NB: The University has a limited number of two bedroom and three bedroom flats that can be shared between postgraduate students. The flats will be charged as follows: a two bedroom flat will be charged at 2,400,000/= per year and a three bedroom flat will be charged at 3,600,000/= per year.

Moneys Payable to the Student

B. Student Cost(Figures in TSh '000)	Year 1
Student Union	20
Stationery	150
Books	400
Research	1000
Dissertation	250
Fieldwork	0
Meals/ Stipend	2,700
Total Cost to Student	4,520

Total Costs

<i>Total Cost (in TSh '000)</i>	<i>Year 1</i>
Money Payable to University	8,735
Money Payable to Students	4,520
GRAND TOTAL	13,255

MPH Fee Structure (Foreign)

Fees Payable to the University

<i>Figures in US \$</i>	<i>Year 1</i>
Tuition	6500
Exam fee	150
Admission/Administrative	75
Sustainability	30
Registration	25
ID card	10
Medical	0
Caution Money	50
Accommodation	1,200
<i>Total Cost to University</i>	8,040

Moneys Payable to the Student

<i>B. Student Cost(Figures in US \$)</i>	<i>Year 1</i>
Student Union	20
Stationery	150
Books	400
Research	1000
Dissertation	250
Fieldwork	0
Meals/ Stipend	2,700
<i>Total Cost to Student</i>	4,520

Total Costs

<i>Total Cost (US \$)</i>	<i>Year 1</i>
Money Payable to University	8,040
Money Payable to Students	4,520

Total Cost (US \$)	Year 1
GRAND TOTAL	12,560

PhD Fee Structure

Fees Payable to the University

Figures in US\$	Year 1	Year 2	Year 3
Tuition	6,250	6,250	6,250
Exam fee	250	250	250
Administrative fee	100	0	0
Registration	40	40	40
Sustainability	40	40	40
ID card	10	0	0
Medical	320	320	320
Caution Money	100	0	0
Equipment/ Special Faculty Requirement	325	325	325
Accommodation	1,200	1,200	1,200
Total Cost to University	8,635	8,425	8,425

Moneys Payable to the Student

Student Cost (US \$)	Year 1	Year 2	Year 3
Student Union	35	35	35
Stationery	240	240	240
Books	750	750	750
Research	10,000	10,000	10,000
Dissertation	450	450	450
Fieldwork	0	0	0
Meals/ Stipend	4,500	4,500	4,500
Total Cost to Student	15,975	15,975	15,975

Total Costs

Total Cost (US \$)	Year 1	Year 2	Year 3
Money payable to University	8,635	8,425	8,425
Money payable to students	15,975	15,975	15,975
GRAND TOTAL	24,610	24,400	24,400

IAHS Fee Structure

FEE STRUCTURE FOR NATIONALS DIPLOMA PROGRAMMES- IAHS (DDR, DMLS& DPS)

Fees Payable to the University

DDR, DMLS & DPS			
<i>Figures in TSh '000</i>	Year 1	Year 2	Year 3
Tuition	1,400	1,400	1,400
Exam fee	50	50	50
Admission Administrative fee	0	0	0
Sustainability Fund	30	30	30
TCU Quality Assurance Fee	20	20	20
Registration	10	10	10
ID card	5	0	0
Medical	200	200	200
Equipment/ Special Faculty Requirement	150	150	150
Caution Money	50	0	0
Total Cost to University	1,915	1,860	1,860

Moneys Payable to the Student

<i>Figures in TSh '000</i>	Year 1	Year 2	Year 3³
Student Union	20	20	20
Stationery	50	50	50
Books	150	150	150
Research	0	0	0
Dissertation/Accommodation IAHS	250	250	250
Fieldwork	0	0	280
Meals	600	600	600
Total Cost to Student	1070	1070	1350

Total Costs

Total Cost	Year 1	Year 2	Year 3
Money payable to University	1,915	1,860	1,860
Money payable to students	1070	1070	1350
GRAND TOTAL	2,985	2,985	3,210

IAHS PRIVATE STUDENTS FEE STRUCTURE

DDR, DMLS & DPS			
<i>Figures in TSh '000</i>	Year 1	Year 2	Year 3
Tuition	1400	1,400	1,400
Exam fee	50	50	50
Admission Administrative fee	30	0	0
Sustainability Fund	30	30	30
Registration	10	10	10
ID card	5	0	0
Medical	200	200	200
Equipment/ Special Faculty Requirement	150	150	150
Caution Money	50	0	0
Accommodation	250	250	250
Total Cost to University	2175	2,090	2,090

Moneys Payable to the Student

<i>Figures in TSh '000</i>	Year 1	Year 2	Year 3
Student Union	20	20	20
Stationery	50	50	50
Books	200	200	200
Research	0	0	0
Field work	0	0	280
Meals	600	600	600
Total Cost to Student	870	870	1150

Total Costs

Total Cost	Year 1	Year 2	Year 3
Money payable to University	2,175	2,090	2,090
Money payable to students	870	870	1,150
GRAND TOTAL	3,045	2,960	3,240

Registration Information

REGISTRATION INFORMATION

- 1 No student shall be allowed to register or attend classes unless the required fees have been paid.
- 2 Fees paid will not be refunded if a student withdraws or leaves the university after registration.
- 3 New students must register within the specified period. For purposes of registration a new student must submit originals of documents he/she had submitted as credentials in support of his/her application for admission.
- 4 Continuing students must complete registration formalities within the first week of the academic year.
- 5 Any late registration is liable to a penalty of Tshs. 100,000/=.
- 6 Students shall be registered under the names appearing in the certificates they submitted for their applications. Once registered, names may not be changed unless legal procedures are followed, and no change of names will be allowed in the final year of study.
- 7 Student must register for the course programme into which they have been admitted.
- 8 No student shall be allowed to postpone studies after the academic year has begun except under special circumstances. Permission to postpone studies and resume studies later shall be considered after the student has produced satisfactory evidence of the reasons for postponement. Special circumstances shall include ill health or serious social problems.
- 9 No student shall be allowed to postpone studies during the two weeks preceding final examinations, but may for valid reasons be considered for postponement of examinations.
- 10 A student discontinued from a programme/course on academic ground shall not be re-admitted for the same programme/course until two years have elapsed.
- 11 A student discontinued from studies on disciplinary grounds shall not be re-admitted to the University.
- 12 Students may be allowed to be away from studies for a maximum period of two years in the case of undergraduate programmes and one year for postgraduate students, if they are to be allowed to be re-admitted to the same year of studies where they left off.
- 13 Students shall commit themselves in writing to abide by the university's Charter, rules and Regulations as from time to time prescribed. A copy of the students' Rules and Regulations shall be made available or adequate notice will be given to students.

- 14 Students shall be issued identification cards, which they must carry at all times and which shall be produced when demanded by appropriate University officers. The identity card is not transferable and any fraudulent use may result in loss of student privileges or suspension.
- 15 Loss of the identity card should be reported immediately in writing to the office of Deans of Students, where a new one can be obtained after paying an appropriate fee (currently Tshs. 5000/=).
- 16 A student enrolled for any programme at CUHAS may not enroll concurrently in any other institution. However, students of CUHAS may be allowed to participate in courses offered by any institution leading to professional Certification after consulting the Head of the Department, the Faculty and Senate.
- 17 Students wishing to transfer to CUHAS will be allowed to do so, as long as they conform to TCU credit transfer guidelines; and will have to spend not less than three quarters of the duration required to complete the specific course.

Examination Regulations

EXAMINATION REGULATIONS

General University Examination Regulations

1.1 Form of Examination

The form of examinations shall include written, practical and oral examinations. The weighting of each shall be as determined under School/Departmental specific Examination Regulations approved by the Senate/Academic Committee upon recommendation of the School Board.

1.2 Time of Examinations

University examinations shall be conducted at the end of every semester in accordance with the University regulations. Students must bring their examination cards and identity cards with them to the examination room.

1.3 Registration for Examinations

Bonafide students shall be entitled to sit for the university examinations for the courses in which they are registered unless advised otherwise in writing by competent university authority. If a candidate sits for examinations for courses for which he/she is not registered, his/her results in that examination shall be nullified.

1.4 Eligibility for Examinations

1.4.1 No candidate shall be allowed to sit for an examination in any subject if he/she has not completed the requirements of the course by attendance or otherwise as stipulated by the specific School or Department regulations governing a course of study. If such a candidate enters the examination room and sits for the paper, his/her results in that paper shall be nullified. A student must have been present for at least 75% of the classes to be allowed to sit for final examination in a given subject.

1.4.2 A candidate whose course work or progress is considered unsatisfactory may be required by Senate/Academic Committee on recommendation of the appropriate School Board to withdraw from studies or to repeat any part of the course before admission to an examination.

1.5 Late Assignments and Examinations

Each School is asked to state in the course outline policy concerning acceptance of late assignments and examinations in the course. Normally, such work can be made up only for a good reason (e.g. serious illness, death of the immediate family, etc.). In no case will examinations be given early.

If circumstances warrant, they may be given late and the student may be charged a grade penalty and/or a late examination fee which will be determined by the University Council.

1.6 Absence from Examinations

A candidate who deliberately fails to appear for a scheduled examination without a valid reason shall be deregistered from studies. When a valid reason is admitted, a written permission will be issued to the affected student allowing him/her to sit at the time of the next supplementary examinations. When the examination is missed without a valid reason, the affected student will submit application for re-registration to the University. The student will pay registration fees and the Admission Committee will consider the case. The applicant may register after one semester.

1.7 Falling sick immediately before or during Examination

If a candidate falls sick immediately before or during the time of the scheduled examination and is medically unable to proceed (i.e. as certified by the University medical officer), he/she will be advised by the School Dean to postpone the examination until an appropriate time to be arranged by respective Department through the School or Institute. Any student who is sick and nevertheless decides to take an examination takes it at his/her own risk and must abide by the results of the examination.

1.8 Reporting late for Examination

1.8.1 A candidate who without a valid reason reports late for an examination (more than 30 minutes) shall be regarded as having failed in that examination but will be allowed to do special examination and will be awarded a minimum passing grade of 'C'. He/she shall not be entitled to take a supplementary examination for a failed special examination.

1.8.2 A candidate who, for a valid reason, reports late for an examination and pleads in writing to take the examination may, subject to the discretion of the invigilator, be allowed to do the examination at his/her own risk. If such a candidate fails in that examination, he/she may be allowed to do a supplementary examination. If permission is not granted by the invigilator to do the examination, such candidates will be allowed to do a special examination at an appropriate time to be arranged by the respective department through the School or Institute, and a late examination fee shall be duly charged against him or her.

1.8.3 All cases of late arrivals for examinations shall be reported in writing by the invigilator to the Head of Department.

1.9 Dates of Examinations

Examinations in all Faculties/Schools/Institutes shall be held at a time to be determined by the Senate, which shall normally be during the last week(s) of a semester, and/or last month of the academic year.

1.10 Supplementary Examination

Candidates who are permitted to take a supplementary examination will be re-examined in the designated subjects at a time to be determined by the School Board. A Pass in supplementary shall be recorded as a minimum passing grade of 'C'. Also examination regulations from specific programme shall apply

1.11 Repeating the year

A candidate may be allowed to repeat a year if he has a GPA of 1.5 or above. No candidate will be allowed to repeat any one-year of study more than once.

1.12 Delays in Completing Research Thesis

A student who fails to complete the research thesis by the specified date shall not be given more than one additional year to complete it.

1.14 Conduct of Examinations

University examinations shall be conducted under the control of the Deputy Vice Chancellor for Academic Affairs, Deans of Faculties/Schools, and Heads of Departments, or such other Officer of the University as the Deputy Vice Chancellor for Academic Affairs shall appoint.

1.15 Appointments of Examiners

The examiners for University examinations shall be appointed by the Senate upon recommendation of School Boards.

1.16 Board of Examiners

Every University examination shall be conducted by a Board of Examiners, consisting of:

- A. One or more external examiners appointed from outside the University by the Senate together with teachers who participated in teaching the candidates in the subjects under examination.
- B. Examiners may be appointed from within the university/college for the supplementary/special examinations under the supervision of a moderator who took no part in teaching the candidates the subjects(s) under examination.

1.17 External Examiners' Honorarium

External Examiners shall receive such honoraria as the Council shall prescribe.

1.18 Examination Irregularities or Academic Dishonesty

- (a) All cases of examination irregularities on the part of students or invigilators or any member of staff shall be referred to the Examinations Committee. The Committee shall have power to summon students and members of staff, as it

deems necessary. The chairman shall submit a report of its findings and recommendations to the Senate, which shall decide what further action to take.

- (b) For avoidance of doubt, examination irregularities shall include, but are not limited to, the following
 - (i) A candidate found with unauthorized material/information in any part of the examination process;
 - (ii) A candidate copying from another candidate's work;
 - (iii) A candidate cheating by using or copying from unauthorized material;
 - (iv) A candidate communicating with another candidate by giving or obtaining unauthorized assistance or attempting to do so;
 - (v) A candidate refusing to obey a lawful order by an invigilator;
 - (vi) A candidate behaving in such manner as would disrupt the examination process.
 - (viii) An invigilator violating examination regulations.

2.0 Specific Examination Regulations for Candidates:

These instructions should be read together with the above University General Examination Regulations.

- 2.1** Candidates should make sure that they have been issued Examination Numbers before examinations begin.
- 2.2** Candidate shall be responsible for consulting the Examination Time Tables for any changes
- 2.3** Candidates shall be seated 15 minutes before starting time, and no student shall be allowed into the examination room after the starting time, except for a compelling reason, without prejudice to regulation to 2.16 below.
- 2.4** Candidates must not begin writing before they are told to do so by the invigilator.
- 2.5** Candidates are allowed to carry only pens, pencils or other materials explicitly prescribed by the Department.
- 2.6** Candidates are not allowed to enter the examination room, with books, mobile phone, handbags, clipboards, purses, papers, magazines and/or other such items. They may use their own calculators.
- 2.7** In case candidates are allowed to come with specified items into the examination room, no borrowing from one another shall be allowed during the examinations. Items allowed into the examination room shall be liable to inspection by the invigilator.

- 2.8** Each answer in an examination shall begin on a fresh page of the examination booklet. All rough work must be done in the booklet and crossed out. Candidates are not allowed to sign their names anywhere in the examination booklets.
- 2.9** All candidates shall observe silence in the examination room
- 2.10** No food or drink shall be allowed into the examination room
- 2.11** Invigilators shall have power to specify or change the sitting arrangement in the examination room; or to require inspection of a candidate; or to confiscate an unauthorized material brought into the examination room; and shall have power to expel and report from the examination room any candidate who creates disturbance and record the incident to the head of Department.
- 2.12** In case of alleged cheating, the candidate and one or more invigilators shall be required to sign an Examination Incident Form which, together with other signed exhibits, as the case may be, and the candidate's examination booklet, shall be submitted to the Head of Department.
- 2.13** A candidate caught contravening the Examination Regulations shall not be allowed to continue with the examination for which he/she is scheduled.
- 2.14** Candidates are strongly warned that cheating or being caught with unauthorized material contravenes the University General Examination Regulations and leads to discontinuation from studies.
- 2.15** All candidates shall sign the Attendance Form at the beginning and end of every examination.
- 2.16** No candidate will be permitted to enter the examination room after lapse of thirty minutes from the commencement of the examination and no candidate will be allowed to leave his/her place during the examination, except as indicated below (2.17).
- 2.17** A candidate wishing to answer a call of nature may by permission of the invigilator and under escort leave the examination room for a reasonable period.
- 2.18** A candidate who walks out of an examination in protest shall be disqualified from that particular examination.
- 2.19** At the end of the examination period, and on instruction from the invigilator, candidates must stop writing and assemble their scripts, which they should

personally hand to the invigilator. They shall remain seated until all are allowed by the invigilator to leave.

- 2.20** Candidates are not allowed to take any examination material out of the examination room, unless specifically permitted by the invigilator.
- 2.21** Students who are required to do supplementary examinations or special examinations will be officially notified using their respective Examination Number on the University's notice board and website www.bugando.ac.tz or through any public means of communication. Students should also leave their latest contracts such as telephone numbers or e-mails to facilitate communication.
- 2.22** Students must understand that the ultimate responsibility for taking the supplementary examination precisely at the time when they are given rests with the student.

3 Guidance for Invigilators

3.1 Before the Examination

- 3.1.1** Invigilators should personally collect from the Examination Office sealed envelopes containing question papers and any other material prescribed in the rubrics at least thirty minutes before the examination
- 3.1.2** Invigilators shall be present in the examination room at least twenty minutes before the commencement of the examination,
- 3.1.3** Invigilators should admit candidates to the examination room at least fifteen minutes before the commencement of the examination and ensure that students take the right places.
- 3.1.4** During these fifteen minutes the invigilator should
 - a. Make an announcement to the effect that unauthorized materials are not allowed in the examination room.
 - b. Make an announcement to the effect that candidates should satisfy themselves that they are in possession of the correct paper
 - c. Tell the students to note any special rubric at the head of the paper.
 - d. Tell students when they may begin writing. Candidates will normally be allowed five minutes to read the paper.

3.2 During the Examination

- 3.2.1 Invigilators should not admit candidates to the examination room after thirty minutes have elapsed from the commencement of the examination and should not permit candidates to leave the examination room until one hour has expired.
- 3.2.2 By the end of thirty minutes from the commencement of the examination the invigilators should have a written list on the Examination Attendance sheet of the names of all the candidates present.
- 3.2.3 Invigilators should ensure that only one answer-book is provided for each candidate.
- 3.2.4 Candidate may be permitted to do rough work in the examination booklet on the understanding that rough work is crossed out.
- 3.2.5 Invigilators shall report immediately after the examination to the Head of Department any candidate who contravenes the Examination Regulations and instructions, especially by unfair practices, as spelt out in Regulation 1.18 above
- 3.2.6 In case of alleged examination irregularity, the invigilator shall require the candidate to sign an examination incident report and any other materials pertinent to the incident to confirm that they are his/hers. The invigilator also shall sign and submit to the Head of the Department the Examination Incident Report, together with the candidate's examination booklet and all pertinent materials.
- 3.2.7 The Head of the Department through the School Dean will submit a full written report on the incident to the Examinations Committee.
- 3.2.8 The processing of an alleged case of cheating or other irregularity shall be carried out as expeditiously as possible.

3.3 At the End of Examination

- 3.3.1 Invigilators shall tell the candidates to stop writing and assemble their examination scripts.
- 3.3.2 Invigilators shall not permit the candidates to leave their places before their scripts have been collected.
- 3.3.3 Candidates shall sign the Examination Attendance Sheet when they turn in their script.
- 3.3.4 Invigilators shall enter the number of candidates' scripts collected and/or received on the Attendance Sheet and sign it.

4 Common Academic Regulations

4.1 Introduction

The common academic regulations cover Appeals, Grading System, Certificates and Transcripts, Carry over Courses, Graduation Requirements, and Common Courses.

4.2 Appeals against Academic Decisions

4.2.1 Well-grounded appeals supported with substantive and documented evidence against any academic decision or recommendation shall first be lodged with the appellant's Faculty Dean, who shall forward it to Senate with the Faculty Board's observations and recommendations. The appeal by the student should be submitted within seven (7) days from the day the results were posted or a decision was communicated to the affected student. The decision of Senate shall be final.

4.2.2 In case of examinations, the Board of Examiner's recommendation shall be final except where well-authenticated claim for unfair marking or disregard for examination regulations is raised by the affected student. In such a case, findings and observations to the Examinations Committee for detailed discussion. It makes recommendation to the Senate, whose decision shall be final

4.2.3 A student who is dissatisfied with a grade obtained in a particular examination may apply for remarking of the examination paper to the Head of the Department in which the course was offered. The application should be made not less than one week after the release of the examination grades by Corporate Counsel or the individual instructor. A valid justification for the request must be given in writing. The Head of the Department and members of the faculty will then review the case to see if remarking is warranted. An examiner other than the one who initially marked the script will remark the paper. The grade after remarking the paper will be final regardless of whether it is lower or the same as the first grade. The student may not request for a second remarking of the same script. The grade will be communicated to the student by the Corporate Counsel or the head of the Department.

4.2.4 No appeal whatsoever pertaining to the conduct of any University examinations and the marking of the scripts thereof shall be entertained unless such an appeal is lodged with the appropriate University authorities within seven days of the date of publication of the results by or under the authority of the Senate.

4.2.5 All appeals regarding semester examination should be accompanied by a fee of five thousand shillings (Tshs. 5000/=) for Diploma students for each course, and of ten thousand shillings (Tshs. 10,000/=) for undergraduate and postgraduate students. The fee is non-refundable.

4.3 Grading System

As appears under the specific regulations for each programme

4.4 Publication of Examination Results

The Deputy Vice chancellor for Academic Affairs may, after the School Board meeting, publish the examination results provisionally subject to confirmation of the results by the Senate upon the recommendation of the School Board

4.5 Withholding or Cancellation of Results

4.5.1 The Senate may, where a candidate has failed to fulfill a fundamental contractual or legal obligation with CUHAS or a breach of the same e.g. not paying fees or outstanding dues or where is dishonesty or fraud, bar him or her from doing examination or withhold examination results until he/she discharges the obligation or is exonerated from the wrong.

4.5.2 The Senate may cancel results of student(s) where there is evidence of fraud or examination leakage.

4.6 Graduation

With the approval of the Senate, students who complete and fulfill the requirements of the programme will graduate in the Saturday of the third week of November. Graduation attire will be hired for three days at twenty thousand shillings (50,000/=) for degree and fifteen thousand shillings (30,000/=) for diploma graduands. Any late return of the graduation attire shall be charged at ten thousand shillings (10,000/=) a day.

4.7 Certificates and Academic Transcripts

Persons applying to the Deputy Vice Chancellor for Academic Affairs for academic transcript shall be charged a fee of 10,000/=Tshs. A clearance form from the Bursar's office must be submitted along with a passport size photograph for preparation of transcripts.

4.8 Loss of Certificates

The University may issue another copy in case of loss or destruction of the original certificated on condition that:

- (i) The applicant produces a sworn affidavit testifying to the loss or destruction
- (ii) The applicant must produce evidence that the loss has been adequately publicly announced
- (iii) The replacement certificate will not be issued until 12 months from the date of loss.
- (iv) A fee of Tshs 20,000/= shall be charged for the copy of the certificate issued.

4.9 Carry over courses

Carryover of a failed course into a subsequent year shall imply repeating the failed course in the subsequent year by fulfilling all the requirements of the course. Carryover of elective courses will be allowed only in exceptional circumstances, normally only when those units are needed to comply with regulations. All carried over courses shall be cleared within the allowable maximum period of registration; otherwise the student is discontinued from studies. The maximum period of registration is as specified under the specific programmes

5 Examination Regulations for the MD Programme

The General University Examination Regulations Also Apply

5.1 General Regulations for the MD Programme

- 5.1.1** The MD programme is a 10 semester programme and the maximum allowable period for registration shall be 14 semesters.
- 5.1.2** Registration of full time students shall be done yearly at the beginning of each academic audit year.
- 5.1.3** For every course taught there shall be at least one continuous assessment examination and an end of semester university examination. The continuous assessment shall constitute 50% of the end of semester examination grade.
- 5.1.4** A candidate who obtains a C grade or higher in all courses examined in an audit year shall be declared to have passed the examination and will be allowed to proceed to the next year of study.
- 5.1.5** A candidate who for compelling reasons does not appear for any regular examination wholly or partly shall be allowed by Senate to sit for special examination as first sitting on the recommendation of School/Institute and Academic Committee.
- 5.1.6** A candidate who fails in one or more subjects shall be allowed to sit for a supplementary examination during the long vacation if he/she obtained an overall GPA of 1.6 or higher.
- 5.1.7** A candidate who obtains an overall GPA of 1.5 at the end of an audit year shall be allowed to repeat the year.
- 5.1.8** A candidate who obtains an overall GPA of less than 1.5 at the end of an audit year shall be discontinued from studies.
- 5.1.9** A candidate who fails the first supplementary shall be allowed to proceed to the next year of study and sit for a second supplementary provided he/she obtains an overall GPA of 1.8 or higher.

- 5.1.10 A candidate who fails the first supplementary with an overall GPA of less than 1.8 shall be discontinued from studies.
- 5.1.11 No candidate shall be allowed to sit for a third supplementary, EXCEPT in special cases as may be determined by Senate on recommendations of the School Board and Senate.
- 5.1.12 The highest grade a candidate can obtain after a supplementary examination shall be a "C".

5.2 Examination regulations specific to MD in the Clinical Year

- 5.2.1 No candidate shall be allowed to proceed to the clinical year of study unless and until he/she has passed all professional basic science courses.
- 5.2.2 A candidate will be required to pass the junior rotation before he/she can proceed to the senior rotation.
- 5.2.3 At the end of a junior rotation, candidates shall sit for an examination, a clinical component of which will constitute 40% of the final clinical examination.
- 5.2.4 The candidate will be considered to have passed his clinical rotation if he will have demonstrated in the course of the rotation that;
 - 5.2.4.1 Has acquired a satisfactory level of clinical skills in eliciting a history and physical findings from a patient.
 - 5.2.4.2 Has clerked the required number of patients and submitted detailed write-up of the history, physical findings, lab results and a plan of management of each patient for evaluation.
 - 5.2.4.3 Has followed closely the patient's daily progress,
 - 5.2.4.4 Observe and assisted or executed the prescribed number of procedures
 - 5.2.4.5 Has passed an end of junior rotation examination.
- 5.2.5 A candidate who fails the junior clinical rotation shall be required to do a supplementary rotation of not less than 4 weeks in the failed rotation during the long vacation, provided that the maximum tenure of the MD program of 14 semesters is not exceeded.
- 5.2.6 At the end of the senior rotation the candidate will appear for a final examination comprising of a **written, clinical and oral** components;

- 5.2.7** A candidate will not pass the final examination in any clinical subject unless and until he/she has passed the clinical part, which will consist of 40% clinical continuous assessment and 60% of the final clinical examination.
- 5.2.8** A candidate failing the end of the year examination will be required to sit for a supplementary examination after repeating the senior rotation in the respective subject(s).
- 5.2.9** A candidate in the final year failing a supplementary examination after he/she has attended all prescribed courses shall sit for a second supplementary at the next opportunity of the same course.
- 5.2.10** A student shall be awarded the MD degree after passing all prescribed courses including Development Studies and an Elective period.
- 5.2.11** The MD degree shall not be classified
- 5.2.12** The grading system shall be as follows:

Numeric Mark	Letter Grade	GPA
75-100	A	4.4 – 5.0
70-74	B+	3.5 – 4.3
60-69	B	2.7 – 3.4
50-59	C	2.0 – 2.6
45-49	D	1.5 – 1.9
< 44	E	0.0 – 1.4

6. Examination Regulations for the Bachelor of Pharmacy Degree

The General University Examination Regulations Also Apply

Examination regulations for the B. Pharm. Programme

- 6.1.** The B. Pharm. Programme is an 8 semester programme and the maximum allowed period 12 semesters.
- 6.2.** Registration of full time students shall be done at the beginning of each academic audit year.
- 6.3.** For every course taught there shall be at least one continuous assessment examination and an end of semester University Examination. The continuous assessment shall constitute 50% of the end of semester examination grade.

- 6.4.** A candidate who obtains a C grade or higher in all courses examined in an audit year shall be declared to have passé the examination and shall be allowed to proceed to the next year of study.
- 6.5.** A candidate who for compelling reasons does not appear for any regular examination wholly or partly shall be allowed by Senate to sit for a special examination as first sitting on the recommendation of the Faculty/Institute and Academic Committee.
- 6.6.** A candidate who fails in one or more subjects shall be allowed to sit for a supplementary examination during the long vacation if he/she obtained an overall GPA of 1.6 or higher.
- 6.7.** A candidate who obtains an overall GPA of less than 1.6 at the end of the audit year shall be discontinued from the studies.
- 6.8.** A candidate who fails the first supplementary shall be allowed to proceed to the next year of study and sit for a second supplementary provided he/she obtains an overall GPA of 1.8 or higher.
- 6.9.** A candidate who fails the first supplementary with an overall GPA of less than 1.8 shall be discontinued from studies.
- 6.10.** No candidate shall be allowed to sit for a third supplementary, EXCEPT in special cases as may be determined by Senate on recommendation of the School/Institute and Senate.
- 6.11.** The highest grade a candidate can obtain after a supplementary examination shall be "C".
- 6.12.** A candidate who fails to attend at least 60% of allocated units of hospital/ward rounds or industrial training and fails to write a satisfactory report shall not be allowed to register for the University Examinations.
- 6.13.** A candidate failing the final University Examination will be required to appear for a supplementary examination in the failed subjects after three months if he/she has failed one or two subjects or six months if he/she has failed in three subjects.
- 6.14.** A candidate in the final year failing a supplementary examination after he/she has attended all prescribed courses shall sit for a second supplementary at the next opportunity of the same course.
- 6.15.** A candidate in the final year failing a supplementary examination shall have to register for subsequent supplementary (ies) one month before the commencement of the examination.
- 6.16.** A candidate failing the final research project shall be given three months to supplement the project starting from the new academic year.

- 6.17. A candidate shall be awarded the B. Pharm. Degree subject to passing all the prescribed courses/subjects (including Development studies) in the programme and project presentation.
- 6.18. The weighting contributing to the degree classification shall be based on the number of units for modules from all the semesters from the first to the fourth year.

GRADING OF THE BACHELOR OF PHARMACY DEGREE

The following grading system shall apply:

<i>Numerical Mark (%)</i>	<i>Grade</i>	<i>Points</i>
75 - 100	A	4.4 - 5.0
70 - 74	B+	3.5 - 4.3
60 - 69	B	2.7 - 3.4
50 - 59	C	2.0 - 2.6
45 - 49	D	1.5 - 1.9
<44	E	0.0 - 1.4

The B. Pharm degree shall be graded as follows:

<i>CLASS</i>	<i>GRADE</i>	<i>GPA(RANGE)</i>	<i>RANGE OF MARKS</i>
FIRST CLASS	A	4.4 - 5.0	75 - 100
UPPER SECOND	B+	3.5 - 4.3	70 - 74
LOWER SECOND	B	2.7 - 3.4	60 - 69
PASS	C	2.0 - 2.6	50 - 59

EXAMINATION REGULATIONS FOR THE BACHELOR OF MEDICAL LABORATORY SCIENCES

The General University Examination Regulations Also Apply

Examination regulations for the BMLS. Programme

- 7.1. The examination regulation and disposal of students will follow CUHAS examination regulations. The BMLS degree will be classified.
- 7.2. The registration of students shall be once at the beginning of each Academic year.
- 7.3. The grading system shall be as follows:

<i>Numeric Mark</i>	<i>Letter Grade</i>	<i>GPA</i>
75 - 100	A	4.4 - 5
70-74	B+	3.5 - 4.3
60-69	B	2.7 - 3.4
50-59	C	2.0 - 2.6
45-49	D	1.5 - 1.9

Numeric Mark	Letter Grade	GPA
44 and below	E	0.0 – 1.4

- 7.4. For every course/subject taught in a semester there shall be at least one continuous assessment examination and an end of semester university examination. The continuous assessment shall constitute 50% of the end of semester examination score.
- 7.5 A candidate who obtains a “C” grade or higher in all courses/subjects examined in an audit year shall be declared to have passed the examination and will be allowed to proceed to the next year of study.
- 7.6 A candidate who for compelling reasons does not appear for any regular examination, wholly or partly, shall be allowed by senate to sit for a special examination as first sitting on the recommendation of School Board
- 7.7 A candidate who obtains an overall GPA of 1.5 at the end of the audit year shall be allowed to repeat the year.
- 7.8 A candidate who obtains an overall GPA of less than 1.5 at the end of the audit year shall be discontinued from studies.
- 7.9 A candidate who fails in one or more subjects shall be allowed to sit for first supplementary during long vacation if he/she obtained an overall GPA of 1.6 or higher.
- 7.10 Supplementary in any clinical subject will include a supplementary laboratory rotation of at least 4 weeks
- 7.11 A candidate who fails the first supplementary examination with an overall GPA of less than 1.6 shall be discontinued from studies
- 7.12 A candidate who fails the first supplementary examination shall be allowed to proceed to the next year of study and sit for a second supplementary provided he/she obtains an overall GPA of 1.8 or higher.
- 7.13 No candidate shall be allowed to sit for a third supplementary, EXPECT in special cases as may be determined by Senate on recommendations of the School Board.
- 7.14 The highest grade a candidate can obtain after a supplementary shall be a “C”.

EXAMINATION REGULATIONS FOR THE BACHELOR OF SCIENCE IN NURSING EDUCATION (BSCNED) and Bachelor of Science in Nursing (B.Sc.N)

The General University Examination Regulations Also Apply

Bachelor of Science in Nursing Education (B.Sc.NED) [2, 3 and 4 years] and Bachelor of Science in Nursing (BSc.Nurs) [3 and 4 years]

Continuous assessment

There will be continuous assessment for each module; this will include assignments, course works and end of module examinations. The continuous assessment will constitute 50% of the total semester marks.

Summative Assessment

There will be summative assessment for each semester. This will include end of semester examinations. The summative assessment will constitute 50% to the total semester marks.

Examiners

The external examiners/moderators: There will be external examiners/moderators approved by the senate of CUHAS-BUGANDO

Internal examiner: These will come from among the teaching staff of the school

Examination Committee: This will constitute both external and internal examiners/moderators.

The grading system shall be as follows:

Numeric Mark	Letter Grade	GPA
75 - 100	A	4.4 – 5
70-74	B+	3.5 – 4.3
60-69	B	2.7 – 3.4
50-59	C	2.0 – 2.6
45-49	D	1.5 – 1.9
44 and below	E	0.0 – 1.4

Examination Regulations for Master of Medicine (MMED)

The General University Examination Regulations Also Apply

Specific School regulations

The MMED degree programmes offered at CUHAS are by course work and dissertation. Evaluation of candidates will include: course work and clinical assessment, dissertation and viva voce defense of the thesis

During each semester there will be:

- At least one continuous assessment test
- An end of semester examination consisting of a written paper and clinical examination (except for semester 1).

- The mode and manner of the clinical examination will be determined by the departments concerned and approved by the relevant boards.
- The continuous assessment tests will constitute 50% of the end of semester examination grade.
- A candidate who fails in one or two biomedical subjects during semester 1 will continue to semester 2 and sit for a supplementary after the end of semester
- A candidate who fails in 3 or more biomedical subjects during semester 1 shall be required to repeat a year

At the end of semester 6 (end of 3rd year) candidates will have to appear for a final university examination consisting of

- Written paper
- Clinical examination (long case, short cases and oral)
- Written paper shall carry 40% of the marks, the clinical 50% and oral 10%.
- Candidates must pass both the written and clinical components of the examination.

The grading system shall be as follows:

Numeric Mark	Letter Grade	GPA
70- 100%	A	4.4 - 5.0
60 – 69%	B+	3.5 - 4.3
50 – 59%	B	2.7 - 3.4
40 - 49%	C	2.0 - 2.6
0 -39%	D	1.5 - 1.9

The pass mark shall be B grade

Evaluation of the Thesis

- Candidates must submit 4 copies of loosely bound copies of the thesis at least three months before appearing for the final university examinations.
- The thesis will be assessed by the recommended internal and external examiners.
- If the external examiner is satisfied by the standard of the thesis, the candidate will have to appear for the oral defense (viva voce) at a panel of examiners as recommended by the School board/Academic board/Senate.

Disposal of students

- A candidate who fails any of the biomedical subjects during semester 1 will continue to semester 2 and sit for a supplementary after the end of semester 2.
- A candidate who fails the supplementary will be discontinued from the course.
- At the end of semester 6, a candidate will be awarded the degree if he/she has passed all the components of the university examination (i.e. written examination, clinical and dissertation)

- A candidate who fails any of the component will have to appear for a supplementary examination within three months
- Any corrections of the thesis have to be done and a submission of error free thesis done before a candidate will be awarded the degree.

Examination Regulations for Master of Public Health (MPH)

The General University Examination Regulations Also Apply

ASSESSMENT:

- Assessment will be done at the end of each module and marks or grades will be given per module, the students will be required to pass all modules at a mark of 50% or higher before the award of MPH
- All students registered for MPH shall present their dissertation to the panel of expertise on that topic / subject; this will be done at the end of the course just before the final semester examination.

EVALUATION SCHEME

- Assessment will be done at the end of each module and marks will be given per module, the students will be required to pass all modules at a mark of 50% or higher before the award of MPH
- All students registered for MPH shall present their dissertation to the panel of expertise on that topic / subject; this will be done at the end of the course just before the final semester examination.
- Evaluation of candidates will include course work, field work assessment and dissertation with viva voce defence at the end of the course.

During each semester there will be.

- At least one continuous assessment test and an end of semester examination consisting of a written paper and oral examination
- The continuous assessment tests will constitute 50% of the end of semester examination grade

Evaluation of Thesis

- Candidates must submit 4 loosely bound copies of the thesis at least two weeks before the presentation of thesis
- The Thesis will be assessed by the recommended internal and external examiners
- If the external examiner is satisfied by the standard of the thesis, the candidate will have to appear for the oral defence (viva voce) at a panel of examiners as recommended by the faculty board / Academic board/ Senate

Examination Regulations for IAHS Diploma programmes

The General University Examination Regulations Also Apply

General

- i) To pass any subject candidates must have obtained at least “C” grade which will consist of 50% contribution from C.A and 50% from the end of Semester examination.
- ii) Candidates who obtain “C” grade and above in all subjects will be deemed to have passed the examination.
- iii) Final year candidates who pass all semester examinations will be recommended for the award of the Diploma in Pharmaceutical Sciences (DPS), Diploma in Diagnostic Radiography (DDR), and Diploma in Medical laboratory Sciences (DMLS) of the Catholic University of Health and Allied Sciences (CUHAS)

The grading system shall be as follows:

<i>Numeric Mark</i>	<i>Letter grade</i>	<i>GPA</i>
75 – 100%	A	4.4 – 5.0
70 – 74%	B+	3.5 – 4.3
60- 69 %	B	2.7 – 3.4
50 – 59%	C	2.0 – 2.6
45 – 49%	D	1.5 – 1.9
=<44	E	0.00 – 1.4

DISPOSAL OF STUDENTS

The fate of a candidate is determined following the General University Examination regulations. Regulations 1.0 to 9.0 specifically deal with how to handle candidates using GPA namely:

- A candidate who obtains an overall GPA of less than 1.6 at the end of the audit year shall be discontinued from studies.
- A candidate who fails in one or more subjects shall be allowed to sit for first supplementary during long vacation if he/she obtained an overall GPA of 1.6 or higher.
- A candidate who fails the supplementary with an overall GPA of less than 1.8 shall be discontinued from studies.
- A candidate who fails the first supplementary shall be allowed to proceed to the next year of study and sit for a second supplementary provided he/she obtains an overall GPA of 1.8 or higher.

THE DOCTOR OF MEDICINE (MD) PROGRAMME

THE DOCTOR OF MEDICINE (MD) PROGRAMME

A TEN-SEMESTER CURRICULUM FOR THE DOCTOR OF MEDICINE (MD) COURSE

1.0 BACKGROUND

The School of Medicine is the first of several Schools and other Institutes that were envisaged under the BUCHS project which the Tanzania Episcopal Conference (TEC) conceived in 1994.

The MD training programme is the most pivotal upon which hinges the Mission of the University in its quest to enable Tanzania to produce enough doctors and other health professionals to achieve a satisfactory level of "Health for All" in the foreseeable future. As it is the current trend in other University Medical Universities in Tanzania and elsewhere –to semesterize and modularize all academic programmes, CUHAS - Bugando has adopted a similar model for its programmes.

2.0 OBJECTIVES

The objective of the University, as regards the MD Course, is to train competent general duty Medical Officers who after the appropriate period of internship can, without supervision, render adequate medical care both to the individual patient and to the community in differing situations.

The graduate therefore should be able to:

- Administer the health services of a district, and train, organize and direct the health team of medical and paramedical personnel in a district, in a hospital and in a health centre.
- Conduct his/her activities so that they are relevant to the community by understanding the significant social, political, economic, psychological and ecological factors of the community.
- Identify and solve the major health problems of the community under his/her care, according to the national and community priorities by organizing and providing preventive and curative community health services.
- Organize and provide routine and emergency, preventive and curative medical care for the individual by:
 - Knowing the normal structure, function, development and growth of the human body and personality.
 - Recognizing disorders and abnormalities of structure, function, development and growth of the human body and personality
 - Examining patients both clinically and with the relevant investigative procedures.
 - Evaluating the results of the examination and investigations and reaching an appropriate diagnosis.
 - Administering to the patients the appropriate medical/pediatric/surgical/mental health/gynecological and obstetric care and treatment.
 - Training and directing the health team in all of the above as required.

- Accept the responsibility of continuing his/her professional education, in order to utilize advances in medical science and to benefit from further postgraduate training provided in Tanzania or elsewhere.
- Recognize the limit of his/her competence and refer such issues to higher levels.

4.0 CURRICULUM TEACHING AND LEARNING METHODS

CUHAS-BUGANDO has established a well set up and managed Computing Center, linked to the Internet, which will provide “Student Centered Learning”(SCL), as well as “Problem Based Learning”(PBL), in addition to the more conventional MD Curriculum Teaching and Learning methods.

5.0 STRUCTURE OF MODULES FOR THE SEMESTER SYSTEM

SUMMARY OF THE MODULES FOR THE SEMESTER SYSTEM

Code	Course Title	Theory		Practical/seminars		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
Year 1 (Semester I) 25.9 Units							
AN 101-106	Anatomy	129	8.6	232	5.2	361	13.8
BC 101-104	Biochemistry	148	9.9	40	0.9	189	10.8
MF 301-	Medical Ethics & forensic medicine	19	1.3	0	0	19	1.3
TOTAL		296	19.8	272	6.1	569	25.9
YEAR I (Semester II) 25.7 Units							
PH 101-103	Physiology	115	7.7	74	1.6	189	9.3
BS 101-103	Behavioral Sciences	134	8.9	74	1.6	208	10.5
DS 101-103	Development Studies	60	4.0	30	0.6	90	4.6
MF 302	Medical Ethics & forensic medicine	19	1.3	0	0	19	1.3
TOTAL		328	21.9	178	3.8	506	25.7
YEAR 2 (Semester III) 27.5 Units							
MM 201-203	Microbiology/ Immunology	114	7.6	76	1.7	190	9.3
PE 201-203	Parasitology / Entomology	91	6.0	61	1.3	152	7.3
PH 201-202	Clinical physiology	57	3.8	0	0	57	3.8
DS 201-202	Development Studies	65	4.3	30	0.7	95	5.0
CM 201-204	Introduction to Basic Clinical methods	0	0	36	0.8	36	0.8
MF 300	Medical Ethics & forensic medicine	19	1.3	0	0	19	1.3
TOTAL		346	23	203	4.5	549	27.5
YEAR 2 (Semester IV) 32.9 Units							
MP 201-204	Pathology	229	15.3	76	1.7	305	16.9
ER 201-203	Epidemiology & Research Methodology	65	4.3	167	3.7	232	8.0
EF 201-202	Nutrition Field Project	50	3.3	90	2.0	140	5.3

<i>Code</i>	<i>Course Title</i>	<i>Theory</i>		<i>Practical/seminars</i>		<i>Total</i>	
		<i>Hrs</i>	<i>Units</i>	<i>Hrs</i>	<i>Units</i>	<i>Hrs</i>	<i>Units</i>
CM 205-206	Introduction to Clinical methods	37	2.5	9	0.2	46	2.7
TOTAL		381	25.4	342	7.6	723	32.9
YEAR 3 (Semester V) 25.1 Units							
CP 301-305	Clinical Pharmacology	167	11.1	16	0.36	183	11.5
MD 301-306	Management of Diseases (I)	204	13.6	0	0	204	13.6
TOTAL		371	24.7	16	0.04	387	25.1
YEAR 3 (Semester VI) 14.9 Units							
MF 304	Medical Ethics	19	1.3	0	0	19	1.3
MD 307-313	Management of Diseases (II)	204	13.6	0	0	204	13.6
TOTAL		223	14.9	0	0	223	14.9
YEAR 4 (Semester VII) 13.6 Units							
MD 314-316	Management of Diseases (III)	204	13.6	0	0	204	13.6
TOTAL		204	13.6	0	0	204	13.6
Semester VI & VII (Junior Rotations) Year 3 & 4 (24.4) Units							
MI 400	Internal medicine	18	1.2	220	4.9	238	6.1
MH 400	Paediatrics and Child health	18	1.2	220	4.9	238	6.1
MG 400	Obstetrics & Gynaecology	18	1.2	220	4.9	238	6.1
MS 400	Surgery	18	1.2	220	4.9	238	6.1
TOTAL		72	4.8	880	19.6	952	24.4
Semester VIII & IX (Rotations) (36.3 Units)							
MC 400	Community Medicine	15	1	365	8.1	380	9.1
MY 400	Psychiatry	48	3.2	315	7.0	363	10.2
MZ 400	Surgical Specialties	10	0.7	353	7.8	363	8.5
MW 400	Medical Specialties	10	0.7	353	7.8	363	8.5
TOTAL		83	5.6	1386	30.7	1469	36.3
Semester X (Senior Rotations) (12.4 Units)							
MI 500	Internal medicine	10	0.7	108	2.4	118	3.1
MH 500	Paediatric & Child health	10	0.7	108	2.4	118	3.1
MG 500	Obstetrics & Gynaecology	10	0.7	108	2.4	118	3.1
MS 500	Surgery	10	0.7	108	2.4	118	3.1
TOTAL		40	2.8	432	9.6	472	12.4

KEY to MD Course subjects

AN: Anatomy
BC: Biochemistry
BS: Behavioural Sciences & Biostatistics
CM: Introduction to Clinical Methods
CP: Clinical Pharmacology
DS: Development Studies
EF: Nutrition Field Project
ER: Epidemiology & Research Methodology
MC: Community Medicine
MD: Management of Diseases Courses I & II
ME: Elective Period
MF: Medical Ethics & Forensic Medicine
MG: Obstetrics & Gynaecology
MH: Paediatrics & Child Health
MI: Internal Medicine
MM: Microbiology/Immunology
MP: Pathology
MS: Surgery
MY: Psychiatry
MZ: Surgical Specialties (Anaesthesiology & Critical Care Medicine, Otorhinolaryngology, Ophthalmology)
PE: Parasitology/Entomology
PH: Physiology

SCHOOL OF MEDICINE

Teaching programme for the 10 semesters (MD)

SEMESTER ONE

AN 100: ANATOMY (13.8 Units)

Aim

Impart knowledge to the students on the structure and development of the human body in health.

Objectives

At the end of the course the student should be able to:

- Understand and describe the structure of the human body in health as seen with the naked eye
- Identify different parts of the human body
- Understand and use medical/anatomical terminology
- Understand and describe the structure of the human body in health at microscopic level
- Identify with the aid of a microscope different types of cells, tissues and organs
- Understand and describe the processes involved in the development of the human body
- Describe congenital malformations
- Explain how congenital malformations come about

Course Content

The course will be offered in modules as shown in the table below:-

Module	Code	Name	Lectures		Practical		Total	
			<i>Hrs</i>	<i>Units</i>	<i>Hrs</i>	<i>Units</i>	<i>Hrs</i>	<i>Units</i>
I	AN 101	Organization of the human body, Cell biology and genetics	19	1.3	-	-	19	1.3
II	AN 102	Upper limb, Thorax, Head and Neck	17	1.1	117	2.6	134	3.7
III	AN 103	Lower Limb Abdomen, Pelvis	13	0.9	75	1.7	88	2.6
IV	AN 104	Neurobiology	16	1.1	10	0.2	26	1.3
V	AN 105	General and Systemic Histology	32	2.1	30	0.7	62	2.8
VI	AN 106	Developmental Biology	32	2.1	-	-	32	2.1
Total			129	8.6	232	5.2	361	13.8

BC 100: BIOCHEMISTRY (10.7 Units)**Introduction**

Biochemistry is a basic science subject on which most biological sciences find their foundation. It entails the fundamental concepts of chemistry of life, which includes structural organization, energy interconnection, signal transduction and finally genetic information storage and flow. Recent developments in Molecular Biology are also embodied in Biochemistry.

Aim

To impart knowledge on structural organization of biomolecules

To impart knowledge on molecular and energy transformation and control of metabolism

To impart knowledge on signal transductions/flow and storage of genetic information

Objectives

At the end of the course the student should be able to:-

- Describe chemistry of proteins, lipids and carbohydrates and to recognize some basic structures
- Describe cellular organization at molecular level
- Describe structure and function of Enzymes including clinical application of enzymology
- Describe principles of Biological oxidation and oxidative phosphorylation and thermodynamics
- Describe processes in intermediary metabolism
- Describe selected concepts in Molecular Biology
- Describe porphyrins and bile pigments metabolism
- Describe hormone mechanisms and signal transduction

Course Content

The course will be offered in modules as shown in the table below:

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	BC 101	Chemistry of Biomolecules	25	1.7	0	0	25	1.7
II	BC 102	Enzymology, coenzymes and energy transformation	30	2.0	10	0.2	41	2.2
III	BC 103	Metabolism of proteins, carbohydrates, lipids and nucleic acids	50	3.3	10	0.2	60	3.5
IV	BC 104	Molecular Biology and hormone systems	43	2.9	20	0.4	63	3.3
Total			148	9.9	40	0.8	189	10.7

MF 300: MEDICAL ETHICS (6.5 Units]

Introduction

This is a vertical program to be taught during semesters 1-6 and 9 when students shall sit for the final examination. The forensic part of the course will begin after students have started pathology in semester 4. No student shall be allowed to graduate until and unless he/she has completed and passed examination in medical ethics and forensic medicine.

Aims

To develop working knowledge of current ethical guidelines and professional codes of practice.

To understand how ethical guidelines relate to medical practice & research.

Objectives

At the end of the course the student should be able to:

- Explain the concept of rights and duties of a doctor.
- Explain the concept of consent to treatment, medical procedure and participation in medical research
- Explain the prima facie moral principles
- List the ethical issues involved in screening
- List the ethical issues involved in research involving animals.
- Identify the ethical and legal issues involved in medical negligence
- Explain the abortion act and its implications
- Identify the ethical and legal issues involved in Obstetrics where there is conflict between care of mother and fetus.
- Identify the ethical and legal issues involved in care and research in Psychiatry
- Identify the legal and ethical issues involved in research involving minors
- List situations where confidentiality may be broken and give reasons.
- Perform a thorough medical legal autopsy and give a clear report.
- Investigate non-natural deaths and be able to give evidence in court
- Procure and preserve materials for forensic and toxicological investigations
- Interpret clinical toxicological findings
- Conduct oneself and discharge one's duties in a manner expected of the profession.

Course Content

The course will be offered in modules as shown in the table below:-

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MF 301	Medical Ethics I	19	1.3	-	-	19	1.3
	MF 302	Medical Ethics II	19	1.3	-	-	19	1.3
	MF 303	Medical Ethics III	19	1.3	-	-	19	1.3
II	MF 304	Medical Ethics IV	19	1.3	-	-	19	1.3
	MF 305	Medical Ethics V	19	1.3	-	-	19	1.3
Total			95	6.3			95	6.3

SEMESTER TWO

PH 100: PHYSIOLOGY (9.3 UNITS)

Aims

To provide students with knowledge on normal functioning of the human body and how the various normal functions are controlled and regulated.

Objectives

At the end of the course the student is expected to:

- Describe the various homeostatic and control systems and the way they operate in the human body.
- Enumerate the international system of units which describe mass, volume, and concentration.
- Describe the general physiology of the cell membrane; membrane potentials in excitable tissues (example; muscle cells and nerves).
- List the major constituents of body tissues, and describe the composition and partitioning of body fluids.
- List the composition of blood and describe the general functions of blood; the formation characteristics and functions of different blood cells.
- List the major divisions of the circulatory system, and describe its general organization, functions and the control of the cardiovascular system.
- Describe the functional anatomy of the respiratory system, the mechanics of breathing, alveolar gas exchange and the control of the respiratory system.
- Describe the functional anatomy of the kidney, the renal mechanisms of filtration, excretion and re-absorption; concentrating and diluting mechanisms and the endocrine function of the kidney.
- Describe the functional anatomy of the digestive system, the motility, secretory, digestive, absorptive and endocrine functions of the digestive system.
- Explain the chemical nature of hormones, and describe how the hormones are secreted, transported in plasma, their functions and how they are metabolized & excreted.
- Describe the organization of the nervous system and explain the physiological functions, sensory and motor system; autonomic nervous system; special senses

Course content

The course will be offered in modules as shown in the table below:-

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	PH 101	Fluid and circulation	37	2.4	36	0.8	73	3.2
II	PH 102	Metabolism and excretory systems	36	2.4	26	0.6	62	3.0
III	PH 103	Neuro-endocrine physiology	42	2.8	12	0.3	54	3.1
Total			115	7.6	74	1.7	189	9.3

BS 100: BEHAVIORAL SCIENCES AND BIostatISTICS (10.5 Units)

Aims

To provide a course that is relevant to current public health problems and their interventions.
 To provide students with fundamental statistical skills relevant to public health analysis.
 To introduce students to specific concepts and models that explain ill health and diseases.

Objectives

By the end of this course students should be able to:

- Understand the relationship between illness and human behavior.
- Recognize social, cultural and psychological factors that influence ill-health.
- Describe different models that explain health behavior.
- Measure health related knowledge and behavior in the community.
- Understand the relationship between culture and health.
- Appreciate the role of traditional medicine in health services provision.
- Understand and analyze factors that affect utilization of health services.
- Analyze risk behaviors pertaining to ill health.
- To enable students to identify social, cultural and psychological factors that may lead to adverse health outcomes in human populations.
- To enable students to identify broad based social issues that are important in public health interventions

Course Content

The course will be offered in modules as shown in the table below.

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	BS 101	Medical Sociology	50	3.3	28	0.6	78	3.9
II	BS 102	Health and Psychology	45	3.0	25	0.5	70	3.5
III	BS 103	Biostatistics and demography	39	2.6	21	0.5	60	3.1
Total			134	8.9	74	1.6	208	10.5

DS 100: DEVELOPMENT STUDIES (4.6 Units)

Aim:

The course exposes students to the theories, problems and contemporary issues of development in relation to health.

Objectives:

At the end of the course, students should be able to:-

- Define the concept of development
- Explain the different theories of development
- Describe the process of social and political developments in Africa
- Relate health to the theories of development

Course Contents:

The course will be offered in modules as shown in the table below:

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	DS 101	Social Development and Health	25	1.7	10	0.2	35	1.9
II	DS 102	Education, Rural Development, Gender and Health.	15	1.0	10	0.2	25	1.2
III	DS 103	Population, Poverty and Health	20	1.3	10	0.2	30	1.5
Total			60	4.0	30	0.6	90	4.6

SEMESTER THREE

MM 200: MICROBIOLOGY/IMMUNOLOGY (9.3 Units)

Aim

To provide students with knowledge and skills in the subject of Microbiology and Immunology.

Objectives

At the end of the course the student is expected to:

- Understand the main principles of general Medical Microbiology and Immunology.
- Acquire knowledge of host-parasite-environment relationship in health and in microbial diseases
- Understand the etiology of human microbial and immunological health problems
- Be familiar with the general epidemiological aspects of microbial health problems and simple preventive measures of specific health problems with special reference to sub Saharan Africa.
- Be familiar with collection and handling of appropriate specimens for Microbiological investigation.
- Be familiar with and able to perform essential microbiological and immunological laboratory procedures used in determining etiology of common microbial and immunological health problems.
- To enable them appreciate the role of the subject in problem solving in infectious disease management, prevention and control.

Course content

The course will be offered in modules as shown in the table below.

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MM 201	General Bacteriology	54	3.6	62	1.4	116	5.0

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
II	MM 202	Virology and Mycology	39	2.6	6	0.1	45	2.7
III	MM 203	Immunology	21	1.4	8	0.2	29	1.6
Total			114	7.6	76	1.7	190	9.3

PE 200: PARASITOLOGY/MEDICAL ENTOMOLOGY (7.3 Units)

Aim

To impart knowledge on identification of life cycles, epidemiological factors, host-parasite relationships.

To impart knowledge on identification of the appropriate preventive and control measures.

Objectives

At the end of the course the student should be able to:

- Describe in detail the life cycles of medically important parasites
- Describe the organs commonly involved in the infection
- Describe the relationship of this infection to symptoms, relapse and the accompanying pathology.
- Describe the factors that determine endemicity of the parasite infection
- Describe the distribution and epidemiology of the parasites in East Africa
- Describe the methods of parasite control e.g. chemotherapy, mollusciding, general sanitation, etc.
- Describe the advantages and disadvantages of each method.

Course content

The course will be offered in modules as shown in the table below.

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	PE 201	Protozoology and Immuno-Parasitology	35	2.3	19	0.4	54	2.7
II	PE 202	Helminthology	36	2.4	29	0.6	65	3.0
III	PE 203	Entomology	20	1.3	13	0.3	33	1.6
Total			91	6.0	61	1.3	152	7.3

PH 200: CLINICAL PHYSIOLOGY (3.8 Units)

Aims

To provide students with knowledge on normal and disordered functioning of the human body and how to use this knowledge in making correct diagnosis and management of disease conditions.

Objectives

At the end of study of this course the student should be able to:

- Explain the concept of reserve, compensation and failure.
- Describe the body fluid compartments, derangements of body fluid and how the kidneys compensate for such derangements.
- Describe the abnormalities in erythropoiesis, anaemia, haemostasis and bleeding tendencies.
- Describe the normal and abnormal functioning of the digestive system, including malabsorption and excess secretion of hydrochloric acid and its effects.
- Describe the various mechanisms that lead to disordered cardiovascular functions including hypertension, cardiac failure and circulatory shock.
- Describe the disordered function of the Respiratory system including impairment of the alveolar capillary gas transfer, respiratory insufficiency and failure, hypoxia, hypercapnoea.
- Describe the abnormalities in the endocrine functions including diabetes mellitus, thyroid dysfunction, adrenal gland dysfunction and parathyroid gland dysfunction.
- Describe the disorders of motor and sensory functions as well as disorders of the autonomic nervous system.

Course content

The course will be offered in modules as shown in the table below.

Module	Code	Name	Lectures		Total	
			Hrs	Units	Hrs	Units
I	PH 201	Clinical Physiology of fluid and circulation	20	1.3	20	1.3
II	PH 202	Clinical Physiology of Metabolism and excretory systems	19	1.2	19	1.3
III	PH 203	Clinical Physiology of Neurophysiology and Endocrinology	18	1.2	18	1.2
Total			57	3.7	57	3.8

DS 200: DEVELOPMENT STUDIES (4.9 Units)

Aims

To expose students to Tanzania's development experiences and be aware of alternative development strategies existing currently.

Objectives

At the end of the course students should be able to: -

- Analyze the dynamics of Tanzania's development plans/strategies and implementation in health and health related sectors.
- Compare and contrast different development strategies in developing countries.
- Analyze current development problems and issues in Tanzania and developing countries in general and how these problems relate to health
- Should be able to plan, organize and manage a private health care facility.

Course Contents

The course will be offered in modules as shown in the table below.

Module	Code	Name	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	DS 201	Globalization Environment and Health	20	1.3	10	0.2	28	1.5
II	DS 202	Human Rights, Governance and Entrepreneurship	45	3.0	20	0.4	62	3.4
Total			65	4.3	30	0.6	90	4.9

CM 200: INTRODUCTION TO BASIC CLINICAL METHODS (0.8 Units)

Introduction

During this course students will be divided into groups to rotate through different departments during semesters 3 and 4. Development of clinical skills initiated during this course will form basis for scaling up the same during semesters 5 through 10 to include comprehensive patient care and management.

Aims

1. To introduce students to clinical skills based on cognitive knowledge acquired in basic sciences
2. To introduce/orientate students to the wards, importance of team work (e.g. nurses, laboratory personnel, pharmacists,) in patient care.
3. To develop basic elementary professional skills (communication and physical signs/features) in Psychiatry, Surgery, Pediatrics and Child Health, Medicine, Obstetrics and Gynaecology.
4. To introduce students to the clinical setting for mental health care and common mental disorders

Objectives

To enable the students to gain insight of the scope of Medicine, Psychiatry, Surgery, Pediatrics and Child Health, Obstetrics & Gynaecology.

Course content

The course will be offered in modules as shown in the table below.

Module	Code	Name	Lectures		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
I	CM 201	Introduction to common physical signs in medicine	-	-	9	0.2	9	0.2
II	CM 202	Introduction to common physical signs in surgery	-	-	9	0.2	9	0.2
III	CM 203	Introduction to common physical signs in Obstetric and Gynaecological	-	-	9	0.2	9	0.2

Module	Code	Name	Lectures		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
IV	CM 204	Introduction to common physical signs in Paediatrics	-	-	9	0.2	9	0.2
Total			-	-	36	0.8	36	0.8

SEMESTER FOUR

MP 200: PATHOLOGY (16.9 Units)

Aims

To impart to students knowledge of aetiology, pathogenesis, morphologic and functional changes of the human body in disease.

Objectives

At the end of the course the student is expected to be able to do the following:

- Identify with the aid of a microscope cellular changes indicative of injury
- Describe the etiology and pathogenesis of infectious and non-infectious diseases.
- Select and carry out appropriate Laboratory tests for the diagnosis of diseases.
- Collect and handle appropriately specimens for investigations of the various diseases including biopsies
- Integrate and correlate laboratory results to the management of patient's illness.
- Perform clinical autopsy, describe morphological changes and write a detailed report.

Course Contents

The course will be offered in modules as shown in the table below.

Module	Code	Name	Lectures		Practicals		Total	
			Hours	Units	Hours	Units	Hours	Units
I	MP 201	Principles of General Pathology and Lympho-haemopoietic systems	65	4.3	26	0.6	91	4.9
II	MP 202	Systemic Pathology I (RS, CVS, UGS, GIT*)	80	5.3	20	0.4	100	5.7
III	MP 203	Systemic Pathology II (Endocrine, CNS skin and MSS, HIV/AIDS)	54	3.6	22	0.5	76	4.1
IV	MP 204	Forensic Medicine	30	2.0	8	0.2	38	2.2
Total			229	15.2	76	1.7	305	16.9

ER 200: EPIDEMIOLOGY AND RESEARCH METHODOLOGY (8.0 Units)

Aims

1. To introduce to the students the basic principles of epidemiology and research methodology and their application in the planning and provision of medical and health care services.
2. To introduce the students to environmental determinants of health and disease in human populations.

Objectives

At the end of the course, the student should be able to:

- Understand and utilize the basic principles of epidemiology in research and in planning provision medical and health care services
- Understand and use the epidemiological methods in research and assess community health needs
- Understand and use the research methods to collect, analyze and present critical information to stakeholders and wider audience
- Understand the epidemiology and control of the selected major diseases of public health importance in Tanzania.
- Describe the physical, biological, socio-cultural and environmental factors affecting health and disease.
- Identify the agencies and services available to families and the extent to which they meet their needs.

Course Content

The course will be offered in modules as shown in the table below.

Module	Code	Name	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	ER 201	Principles of Epidemiology	31	2.1	15	0.3	46	2.4
II	ER 202	Research Methodology	14	0.9	34	0.8	48	1.7
III	ER 203	Environmental Health and Family Case Studies	20	1.3	118	2.6	138	3.9
Total			65	4.3	167	3.7	232	8.0

CM 200: INTRODUCTION TO CLINICAL METHODS (2.7 Units)

Introduction

This is a vertical program, on introduction to clinical skills development. The course started during semester 3 and students were divided into groups that rotate through different departments. At the end of this semester students should have completed the rotations. During the fourth semester psychopathology and introduction to clinical methods in psychiatry courses will be taught within the Clinical Methods Module. The psychopathology course

introduces students to concepts of normality, disturbed behavior, and develops expressive skills for clinical psychiatry over 37 hours of lectures.

Aim

1. To introduce students to clinical skills based on cognitive knowledge acquired in basic sciences
2. To introduce/orientate students to the wards, importance of team work (e.g. nurses, laboratory personnel, pharmacists,) in patient care.
3. To develop basic elementary professional skills (communication and physical signs/features) in Psychiatry, Surgery, Pediatrics and Child Health, Medicine, Obstetrics and Gynaecology.
4. To introduce students to the clinical setting for mental health care and common mental disorders
5. To introduce the concept of psychopathology and normality and to provide an introduction to the technical language used to describe symptoms and signs in clinical psychiatry.

Objectives

To enable the students to gain insight of the scope of Medicine, Psychiatry, Surgery, Pediatrics and Child Health, Obstetrics & Gynaecology.

To define and describe psychopathology Vs normative behaviors

To list and define common abnormalities in basic human psychological processes.

Course Content

The course will be offered in module as shown in the table below:

Module	Code	Name	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
V	CM 205	Psychopathology	37	2.5	-	-	37	2.5
VI	CM 206	Introduction to common physical signs & features in Psychiatry	-	-	9	0.2	9	0.2
Total			37	2.5	9	0.2	46	2.7

EF 200: NUTRITION FIELD PROJECT (5.3 Units)

Introduction

Fieldwork for this course is done during the long vacation after the 4th Semester.

Aim

To impart to students knowledge on nutrition and nutritional disorders to the individual and community.

Objectives

At the end of the course the students should be able to;

- Describe nutrition disorders of public health importance globally and in Tanzania
- Analyse causes of malnutrition using the UNICEF’s conceptual framework and how to intervene using the Triple A Cycle.

- Develop a research proposal to assess nutritional status in the community.
- Carry out a nutritional survey in the community using anthropometric measurements.
- Interact well with mothers, families and community leaders.
- Analyse and interpret research findings and disseminate them to the community.

Course content

The course will be offered in module as shown in the table below:

Module	Code	Name	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	EF 201	Overview of nutritional problems of public health importance	35	2.3	-	-	35	2.3
II	EF 202	Applied research methodology in nutrition	15	1.0	90	2.0	105	3.0
Total			50	3.3	90	2.0	140	5.3

SEMESTER FIVE

CP 300: CLINICAL PHARMACOLOGY (11.5 Units)

Aims

1. To introduce the student to the basic concepts of pharmacology.
2. To provide the student with the basic principles of drug action and to apply them in rational clinical use in the diagnosis, prevention and treatment of disease.
3. To provide the student with knowledge of chemical agents found in environment.

Objectives

At the end of the course the student should be able to:

- Apply and discuss in a satisfactory and professional manner the use and actions of drugs in the wards and clinics.
- Recognize where required and in accordance with the law when prescription are written correctly
- Understand the importance of pharmacology in the practice of medicine and related social economic problems
- Keep current with new developments and to contribute new knowledge as the occasions may arise.

Course Content

The course will be taught in modules as shown below

Module	Code	Name	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	CP 301	Chemical Mediators	35	2.3	12	0.27	47	2.57
II	CP 302	Drug Disposition	19	1.3	4	0.09	23	1.39
III	CP 303	Systemic Pharmacology	73	4.8	-	-	73	4.8

Module	Code	Name	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
IV	CP 304	Chemotherapy of Parasites	24	1.6	-	-	24	1.6
V	CP 305	Applied Pharmacology	16	1.1	-	-	16	1.1
Total			167	11.1	16	0.36	183	11.46

MD 300: MANAGEMENT OF DISEASES COURSES I, II & III

Introduction

The Management of Diseases course comprises of Internal Medicine, Surgery and Surgical Specialities, Obstetrics and Gynaecology, Paediatrics and Child Health, Psychiatry and Community Medicine. The course is taught in three semesters (5, 6 and 7). Management of Diseases I (MD 300) is taught during the 5th semester, Management of Diseases II (MD 300) during the 6th semester and Management of Disease III (MD300) during 7th semester.

Aim

Promote the acquisition of cognitive knowledge, basic clinical skills and investigations.

Objectives

At the end of the course the student should be able to:

- Understand the scientific basis of diagnosis and management of common clinical conditions
- Take history and elicit clinical features of disease conditions.
- Make diagnosis and be able to suggest treatment
- Apply public health, epidemiology, social and behavioural aspects of disease into disease prevention, health promotion and care in the community.

MD 300: MANAGEMENT OF DISEASES I (13.6 Units)

Course Content

This course will be offered in modules as shown in the table below:

Module	Code	System	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MD 301	Principles of Surgery	31	2.1	-	-	31	2.1
II	MD 302	Infectious diseases	36	2.4	-	-	36	2.4
III	MD 303	Cardiovascular and Respiratory diseases	48	3.2	-	-	48	3.2
IV	MD 304	Dermatology and Rheumatology	25	1.7	-	-	25	1.7
V	MD 305	Neurology	28	1.8	-	-	28	1.8
VI	MD 306	Nephrology, Urology, Geriatrics and chronic illnesses	36	2.4	-	-	36	2.4
Total			204	13.6	-	-	204	13.6

SEMESTERS SIX AND SEVEN

Introduction

During semesters 6 and 7 students will be divided into four groups of equal size and shall remain in their respective junior rotation groups throughout. The rotations shall be of 10 weeks each in Internal Medicine, Paediatrics and Child Health, Obstetrics & Gynaecology and Surgery.

Objectives

The objectives for semester 6 and 7 are found in the main document of the curriculum

Course Contents

This course will be offered in modules as shown in the table below:

Rotation	Code	Course Name	Lectures		Practical/Seminars		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MI 400	Internal Medicine Junior rotation	18	1.2	220	4.9	238	6.1
II	MH 400	Paediatrics and Child Health Junior rotation	18	1.2	220	4.9	238	6.1
III	MG 400	Obstetrics and Gynaecology Junior rotation	18	1.2	220	4.9	238	6.1
IV	MS 400	Surgery Junior rotation	18	1.2	220	4.9	238	6.1
Total			72	4.8	880	19.6	952	24.4

MD 300: MANAGEMENT OF DISEASES II (13.6 Units)

Objective, Method of teaching and evaluation as under management of disease I in semester five above.

Course content

This course will be offered in modules as shown in the table below:

Module	Code	Name	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
VII	MD 307	Endocrine and GIT disorders	18	1.2	-	-	18	1.2
VIII	MD 308	Orthopaedics and Neurosurgery	18	1.2	-	-	18	1.2
IX	MD 309	Mental illnesses and related disorders	18	1.2	-	-	18	1.2

Module	Code	Name	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
X	MD 310	Diseases of the eye	15	1.0	-	-	15	1.0
XI	MD 311	Paediatrics and Child Health	60	4.0	-	-	60	4.0
XII	MD 312	Obstetrical and Gynaecology	60	4.0	-	-	60	4.0
XIII	MD 313	Communicable diseases control	15	1.0	-	-	15	1.0
Total			204	13.6	-	-	204	13.6

MD 300 MANAGEMENT OF DISEASES III (13.6 Units) (Semester 7)

Module	Code	Name	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
XIV	MD 314	ENT	53	3.5	-	-	53	3.5
XV	MD 315	Diagnostic Radiology and radiotherapy	76	5.1	-	-	76	5.1
XVI	MD 316	Anesthesiology	75	5.0	-	-	75	5.0
Total			204	13.6			204	13.6

SEMESTERS EIGHT AND NINE

Introduction

During semesters 8 and 9 students will be divided into four groups of equal size and shall rotate for a period of ten (10) weeks each in Community Medicine, Psychiatry, Surgical specialties (Anaesthesiology, Otorhinolaryngology and Ophthalmology) and in Medical Specialties.

Objectives

The objectives for semester 8 and 9 are found in the main document of the curriculum

Course content

Rotation	Code	Course Name	Lectures		Practical/Seminars		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MC 400	Community Medicine rotation	15	1.0	365	8.1	380	9.1
II	MY 400	Psychiatry rotation	48	3.2	315	7.0	363	10.2
III	MZ 400	Surgical Specialities rotation	10	0.7	353	7.8	363	8.5

Rotation	Code	Course Name	Lectures		Practical/Seminars		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
IV	MW 400	Medical Specialities rotation	10	0.7	353	7.8	363	8.5
Total			83	5.6	1386	30.7	1469	36.3

SEMESTER TEN

Introduction

During semester 10 students will be divided into four groups of equal size and shall remain in their respective senior rotation groups throughout. The rotations shall be of 5 weeks each in Internal Medicine, Paediatrics and Child Health, Obstetrics & Gynaecology and Surgery.

Objectives

The objectives for semester 10 are found in the main document of the curriculum

Course Contents

This course will be offered in modules as shown in the table below:

Rotation	Code	Course Name	Lectures		Practical/Seminars		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MI 500	Internal Medicine Senior rotation	10	0.7	108	2.4	118	3.1
II	MH 500	Paediatrics and Child Health Senior rotation	10	0.7	108	2.4	118	3.1
III	MG 500	Obstetrics and Gynaecology Senuior rotation	10	0.7	108	2.4	118	3.1
IV	MS 500	Surgery Senior rotation	10	0.7	108	2.4	118	3.1
Total			40	2.8	432	9.6	472	12.4

CLINICAL CLERKSHIP GUIDELINES

INTRODUCTION

The University places a lot of importance to this stage of training of the medical student because it lies at the heart of medical education. In the new curriculum the University has strived to give the student as much clinical exposure as possible. It is designed to provide the medical student with an opportunity to learn by experience in patient care and by the examples set by the faculty and house staff. It will be focused on real problems in the context of professional practice. It is expected that the students will be motivated by its relevance and through active participation. We believe it is the only setting in which the skills of history

taking, physical examination, clinical reasoning, decision making, empathy, and professionalism can be taught and learnt as an integrated whole.

Weill Bugando School of Medicine (WBSOM) has now split clinical teaching into a 10-week junior clerkship and a 5-week senior clerkship. The students will be divided into four groups of equal size and shall have rotations in Medicine, Surgery, Paediatrics and Child Health and in Obstetrics and Gynaecology for their junior clerkship in semester 6 and 7 and their clerkship in surgical specialties (Anaesthesiology, Otorhinolaryngology and Ophthalmology), Community Medicine, Psychiatry and Forensic Medicine in semesters 8 and 9. The senior rotation will take place in the 10th semester.

During the 10 weeks of clerkship, the student will be expected to take a complete history, conduct a thorough and accurate physical exam, take into consideration complex psychosocial issues, formulate a problem list, construct a relevant differential diagnosis, and along with her/his team begin to manage the daily details of the care of patients.

During the 5 weeks of senior clerkship the student will learn how to take a more focused history and physical, manage chronic conditions and symptoms, and develop a more detailed approach and knowledge base regarding two specialty areas of her/his choice.

GOALS

- To develop the skills and knowledge needed to take an accurate history and physical examination and to formulate an appropriate differential diagnosis;
- To introduce the student to the principles of developing a management/treatment plan for various diagnosis;
- To encourage the student to take an active role as a member of the health care team, to learn to be responsible for patient management, to learn to work effectively with other members of the health care team and to develop skills as a professional.

CLERKSHIP GUIDELINES

The following will constitute general guidelines and an outline of what is expected of a student, and what the student should expect from teachers during their inpatient clerkships rotations. Although minor variations may exist from firm to firm and from discipline to discipline the basic format will apply to all.

Clinical clerks are expected to:

1. Perform an admission history and physical examination on at least five patients per week. For each patient the student will:
 - a. Limit initial formal contact with patient to one hour.
 - b. Submit for review within 24 hours a detailed write-up of the history physical findings, admission lab results, a formulation, and a plan of management.
 - c. Read suggested information relevant to a major aspect of the patient's illness.
 - d. Follow closely the patient's daily progress, and report on this progress during ward rounds.
 - e. Assist interns with routine chores (data-gathering, etc.) necessary for the care of the patient.
2. Demonstrate to the consultant (during twice-weekly "students only" sessions) their level of skill in eliciting historical information and physical findings.
3. Observe and assist with special procedures such as bladder catheterization, Nasal Gastric tube insertions, bone marrow aspirations, lumbar punctures, venepuncture, etc.

4. Present cases during attending rounds.

The Consultant/Attending Specialist is expected to:

1. Meet separately with the clinical clerks at least twice each week. During these sessions the consultant will directly supervise and observe the ability of clerks to take histories and to elicit and demonstrate physical findings.
2. Participate actively with the resident in the process of reviewing and criticizing student write-ups and being certain that write-ups are returned to the student within 24-48 hours.
3. Suggest reading material relevant to the student's cases.
4. Observe closely and improve the interactions between house staff and clinical clerks.
5. Discuss the student's progress and level of performance (personally) after two weeks and again at the end of the rotation.
6. Observe the student do a comprehensive history and physical on an unknown patient the last week of the rotation.

The ward resident is expected to:

1. Assign new cases to the clinical clerks. In making these assignments the resident will:
 - a. select those cases most suitable for advancing the medical education of the student
 - b. be certain that an appropriate one hour interval is set aside for the admission contact between patient and student.
2. Assign specific reading directly relevant to each patient worked up by the student
3. Review student write-ups with the attending physician. Discuss these with the student within 24-48 hours of submission.
4. Closely supervise and improve interactions between clinical clerks and interns.
5. Determine when each clinical clerk is qualified to:
 - a. present progress data during ward rounds
 - b. present cases during attending rounds
 - c. write progress notes in the medical record
6. Discuss with each student (personally) that student's level of performance at two weeks intervals.

The intern is expected to:

1. Discuss with the student (personally), after the student has completed a formulation and plan of management, all aspects of the case assigned to the student.
2. Review with the student the orders written by the intern and the reasons for those orders.
3. Supervise directly "bedside" lab procedures (blood gas, cultures, etc.) performed by the student.
4. Keep the clinical clerk fully informed of all developments in that clerk's cases.
5. Review with the clerk progress notes written by he clerk and countersign these notes.

RESPONSIBILITIES FOR THE CLERK

- To be punctual to all rounds and lectures and other teaching opportunities;
- Perform a history and physical examination on new admissions assigned by the resident team;
- Assist the resident team in simple procedures and become familiar with these procedures;

- Present patients at Work and Attending Rounds. To have read thoroughly on these patients prior to presentation;
- Submit write-ups for patients using the format requested by the specialty to the coordinator for formal evaluation;
- Be up to date and familiar with the patients' pertinent development and write daily progress notes. Progress notes must be discussed with and countersigned by the assigned intern or resident;
- Accompany patients to special procedures and participate in discussions with consultants whenever possible;
- Read daily for conferences, assigned topics or presentations and especially patients' medical problems;
- Attend all assigned conferences given by the Department, including Medical Grand Rounds, house staff lectures, as well as specific conferences for clerks.

**BACHELOR OF MEDICAL
LABORATORY SCIENCES
DEGREE PROGRAMME**

BACHELOR OF MEDICAL LABORATORY SCIENCES (BMLS)

BACKGROUND

Clinical laboratory professionals play a pivotal role in the provision of health services in any health facility setting. They are an essential component of members of the health care team; uncovering scientific facts leading to accurate diagnosis and timely treatment of patients. Physicians therefore rely heavily on the clinical laboratory data provided by medical technologists to determine the presence or absence, cause, extent and prognosis of disease. Students of clinical laboratory science should develop the analytical thinking skills necessary to function effectively in a clinical laboratory environment. Unless medical technologists can produce reliable diagnostic data reflective management of patient becomes severely compromised. This service has hitherto been provided largely by Health Laboratory Technicians who undergo a three year training programme after "O" level. With advances in scientific and medical technology it is increasingly becoming difficult for the bulk of available health laboratory technologist to keep pace with advances in medical technology. The Bachelor of Science in Medical Laboratory Sciences (BMLS) is meant to provide an undergraduate education to those preparing to enter the field of Medical laboratory science in this era. Graduates of this programme will fill the growing skills-gap in clinical practice settings of hospital diagnostic laboratories, biomedical research laboratories, public health agencies, clinics, and reference laboratories.

Career options also exist outside the traditional clinical laboratory. Graduates with backgrounds in clinical laboratory science occupy positions as medical research and development technologists, technical representatives for medical product and medical equipment companies, and other bio-medically related positions in the biotechnology industry. The Bachelor of Medical Laboratory Sciences (BMLS) is designed to provide a broadly based background including biomedical sciences and laboratory science course requirements.

The degree program in Medical Science is also an excellent foundation for students preparing for graduate studies in a sub-discipline or another health-related area or for pre-professional training in one of the medical sciences. Starting this programme fits in well with Mission of the University in its quest to enable Tanzania produce enough medical practitioners and medical scientists, who are expected to work together to achieve a satisfactory level of "**Health for All**" in the foreseeable future.

PROGRAMME GOALS

The BMLS programme is intended to achieve the following goals:

- To produce a Laboratory technologist with sound knowledge and skills for diagnosis, monitoring and research in medical field.
- To produce technologists with high caliber in implementing and promoting quality services in medical laboratories.
- To produce medical technologists with highest analytical ability, with concerns for ethical and moral values.
- To produce a Laboratory technologist who can translate the national health laboratory policies into Programme, planning and management activities.

PROGRAMME OBJECTIVES

Broad Objective

To produce a competent Medical technologist who will be able to perform tests and manage a medical laboratory with minimal supervision.

Specific Objectives

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

- Apply the principles and clinical significances of advanced tests;
- Use his/her critical thinking to improve the laboratory-working environment.
- Improve the quality of laboratory services rendered to the society by applying the latest knowledge.
- Recognize and adhere to established safety rules
- Recognize factors that affect procedures and results, and take appropriate action.
- Recognize the relationship between laboratory finding and disease processes.
- Design and conduct medical research

ORGANIZATION OF THE PROGRAMME

This is a six semester modularized academic programme that will be covered in three years. Courses in each semester will be taught by lecturers, practicals and tutorials and examined during the semester. There will be a special research project in one of the medical field. CUHAS has established a well set up and managed Computing Centre, linked to the Internet, which will provide “Student Centred Learning” (SCL). This will complement the more conventional BMLS Curriculum Teaching and Learning methods.

With the above design and methods of teaching, the course will cater for specific knowledge, skills and competencies. It will also give students expanded access to different categories of clients, programmes and medical researches that are based on the societal needs and demands.

A course unit weighting system will be used, whereby each 15 hours of lecture, constitutes a unit, while 45 hours of practical/seminars constitute a unit. Final University examinations will be held at the end of each semester where external examiners will be invited.

Summary of the Six semester Modules for BMLS Programmes

CODE	COURSE TITLE	THEORY		PRACTICAL		Total
		Hrs	Units	Hrs	Units	Units
YEAR I: SEMESTER I						
BC 140	Biochemistry	148	9.9	189	4.2	14.1
AN 140	Functional Anatomy and Histology	90	6	134	3.0	9.0
DS 140	Development studies	60	4	90	2	6.0
PE 140	Parasitology and Entomology	91	6.1	152	3.4	9.5
LP 140	Medical laboratory practices	20	1.3	30	0.7	2.0
		409	27.3	595	13.3	40.6
YEAR I: SEMESTER II						
MP 140	Principles of Pathology and Hematology	95	6.3	120	2.7	9.0
PH 140	Basic Physiology	100	6.7	120	2.7	9.4
MB 140	Molecular Biology	100	6.7	143	3.2	9.9
EP 140	Laboratory Procedures	20	1.3	86	1.9	3.2
ER 140	Bio-statistics and Epidemiology	90	6	120	2.7	8.7
		405	27	589	13.2	40.2
YEAR II SEMESTER III						
IT 240	Computing and Laboratory practice	20	1.3	60	1.3	2.6
HT 240	Histotechnology 1	39	2.6	150	3.3	5.9
MM 240	Microbiology/Immunology	114	7.6	190	4.2	11.8
DS 240	Development studies 2	60	4	90	2	6
GN 240	Pharmacogenomics	60	4	105	2.3	6.4
		293	19.5	595	13.1	32.7
YEAR II: SEMESTER IV						
SM 240	Clinical Microbiology	46	3.1	246	5.5	8.6
CC 240	Clinical Chemistry	46	3.1	246	5.5	8.6
PM 240	Public Microbiology	22	1.5	102	2.3	3.8
		114	7.7	594	13.3	21
YEAR III SEMESTER V						
HT 340	Histotechnology II	50	3.3	187	4.2	7.5
SH 340	Clinical Serology and Haematology	50	3.3	187	4.2	7.5
DT 340	Molecular diagnostics techniques	50	3.3	187	4.2	7.5
MG 340	Laboratory Management and Planning	24	1.6	34	0.02	1.6
		174	11.5	595	12.62	24.1
YEAR III SEMESTER VI						
LP 340	Senior Clinical Laboratory Practice	50	3.3	370	8.2	11.5
EF 340	Elective Field Research Project	4	0.3	276	6	6.3
ES 340	Entrepreneurship	34	2.3	34	0.8	3.1
		88	5.9	680	15.0	20.9

KEY to BMLS Course subjects

AN: Functional Anatomy and Histology

BC: Biochemistry

CC: Clinical Chemistry

DS: Development studies

DT: Molecular diagnostics techniques

EF: Elective Field Research Project

EP: Laboratory Procedures
ER: Bio-statistics and Epidemiology
ES: Entrepreneurship
GN: Pharmacogenomics
HT: Histotechnology
IT: Computing and Laboratory practice
LP: Medical laboratory practices
LP: Senior Clinical Laboratory Practice
MB: Molecular Biology
MG: Laboratory Management and Planning
MM: Microbiology/Immunology
MP: Principles of Pathology and Hematology
PE: Parasitology and Entomology
PH: Basic Physiology
PM: Public Microbiology
SH: Clinical Serology and Haematology
SM: Clinical Microbiology

Teaching programme for the six semester BMLS

SEMESTER ONE

BC 140: BIOCHEMISTRY (10.7 Units)

Course Description

Biochemistry is a basic science subject on which most biological sciences find their foundation. It entails the fundamental concepts of chemistry of life which includes structural organization, energy inter-conversion, signal transduction and finally genetic information storage and flow. Recent developments in Molecular Biology are also embodied in Biochemistry.

Aims

To impart knowledge on structural organization of biomolecules
To impart knowledge on molecular and energy transformation and control of metabolism
To impart knowledge on signal transductions/flow and storage of genetic information

Objectives

At the end of the course the student should be able to:
Describe chemistry of proteins, lipids and carbohydrates and to recognize some basic structures
Describe cellular organization at molecular level
Describe structure and function of Enzymes including clinical application of enzymology
Describe principles of Biological oxidation and oxidative phosphorylation and thermodynamics
Describe processes in intermediary metabolism
Describe selected concepts in Molecular Biology
Describe porphyrins and bile pigments metabolism
Describe hormone mechanisms and signal transduction

Course Content:

CODE	Course Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
BC 141	Introduction of Biomolecules	25	1.7	-	-	25	1.7
BC 142	Catalysis and Energy Biosynthesis	30	2.0	10	0.2	41	2.2
BC 143	Dynamics of life	50	3.3	10	0.2	60	3.5
BC 144	Metabolism and Signal Transduction	43	2.9	20	0.4	63	3.3
Total		148	9.9	41	0.8	189	10.7

AN 140: FUNCTIONAL ANATOMY AND HISTOLOGY (7.4 Units)

Course Description

The trainee will study basic structure of human body in health. The trainee will cover various subtopics including gross anatomy, developmental anatomy, cell biology, histology and histological techniques.

Aim

To impart to trainee knowledge of human body structures relevant to various laboratory techniques.

Objectives

At the end of the course the trainee should be able to:

1. Describe the developmental anatomy body
2. Describe the gross and microscopic structures of the human body
3. Carry-out various routine and special gross and histological laboratory techniques

Course content

Module	Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
AN 141	The Human Body, Cell Biology & Genetics	19	1.2	-	-	19	1.2
AN 142	Regional Anatomy	20	1.3	20	0.4	40	1.7
AN 143	General and Systemic Histology	35	2.3	54	1.2	64	3.5
AN 144	Applied Developmental Biology	16	1.0	-	-	16	1.0
Total		90	6	64	1.6	134	7.4

DS 140: DEVELOPMENT STUDIES (4.6 units)

Course Description

Development studies are a multidisciplinary branch of social science which addresses issues of concern to developing countries. It has historically placed a particular focus on issues related to social and economic development, and its relevance may therefore extend to communities and regions outside of the developing world.

Aim

The course exposes students to the theories, problems and contemporary issues of development in relation to health.

Objectives

At the end of the course, students should be able to:

- Define the concept of development
- Explain the different theories of development
- Describe the process of social and political developments in Africa
- Relate health to the theories of development

Course Contents

Code	Course Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
DS 141	Social Development and Health	25	1.7	10	0.2	35	1.9
DS 142	Education, Rural Development, Gender and Health	15	1.0	10	0.2	25	1.2
DS 143	Population, Poverty and Health	20	1.3	10	0.2	30	1.5
Total		60	4.0	30	0.6	90	4.6

PE 140: PARASITOLOGY/MEDICAL ENTOMOLOGY (7.3 units)

Course description

In this course student will learn different parasites and insects involved in causation of diseases to human, details properties of these parasites will be studied

Aim

To impart knowledge on identification of life cycles, epidemiological factors, host-parasite relationships

To impart knowledge on identification of the appropriate preventive and control measures.

Objectives

At the end of the course the student should be able to:

Describe in detail the life cycles of medically important parasites

Describe the organs commonly involved in the infection

Describe the relationship of this infection to symptoms, relapse and the accompanying pathology.

Describe the factors that determine endemicity of the parasite infection

Describe the distribution and epidemiology of the parasites in East Africa

Describe the methods of parasite control e.g. chemotherapy, mollusciciding general sanitation etc.

Describe the advantages and disadvantages of each method.

Course Contents

Module code	Course Name	Lectures		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PE 141	Protozoology & Immuno-Parasitology	35	2.3	19	0.4	54	2.7
PE 142	Helminthology	36	2.4	29	0.6	65	3.0
PE 143	Entomology	20	1.3	13	0.3	33	1.6
Total		91	6.0	61	1.3	152	7.3

LP 140: MEDICAL LABORATORY PRACTICE (1.6 Units)

Course Description

During this course the trainee will learn the organization of the health Laboratory, Laboratory practices and ethical issues.

Aim

To impart to the trainee knowledge and skills on health Laboratory organization and basic aspects of laboratory practices.

Objective

At the end of the course the trainee should be able to:

- Describe the structure and organization of health laboratory
- Collect, transport and document laboratory specimens

Course content

Code	Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
LP 141	Laboratory Structure and Organization	8	0.5	2	0.04	10	0.5
LP 142	Laboratory Practices and Ethics	16	1.1	4	0.08	20	1.1
Total		24	1.5	6	0.1	30	1.6

SEMESTER TWO:

MP 140: PRINCIPLES OF PATHOLOGY AND HAEMATOLOGY (6.8 Units)

Course description

During the course the student will learn principles of Pathology and use them to learn pathological process in the diseases. Student will have knowledge on changes seen in various pathological processes. Student will also learn on blood cells and their disorders

Objectives

At the end of the course the student will be expected to:

- Describe causes and cellular changes in cell injury
- Describe causes and morphology of cell death
- Describe the etiology and pathogenesis of diseases
- Collection and handling specimens for disease investigation
- Describe blood cells, their disorders and blood transfusion processes

Course content

Code	Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MP 141	Principles of Pathology	70	4.6	20	0.5	90	5.1
MP 142	Haematology	25	1.6	5	0.1	30	1.7
Total		95	6.2	25	0.6	120	6.8

PH 140: BASIC PHYSIOLOGY (7.1 Units)

Course Description

During the Physiology course the trainee will study normal functioning of the human body with particular emphasis on the intricate control system and regulatory mechanisms that permit the body to operate and survive in an often-hostile environment.

Aim

To impart to the trainee knowledge on normal functions of the human body systems and their control and regulatory mechanisms.

Objectives

At the end of the course the trainee is expected to:

- Describe the composition, partitioning and functions of body fluids and tissues.
- Describe the metabolic and excretory functions of the digestive, respiratory and renal systems
- Describe the organization and functions of the Neuro-endocrine systems.

Course content

Module Code	Name	lectures		Practical/se minar		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PH 141	Fluid and circulation	34	2.3	7	0.15	41	2.5
PH 142	Metabolism and Excretion	32	2.1	7	0.15	39	2.3
PH 143	Neuro-Endocrine Physiology	34	2.3	6	0.13	40	2.4
Total		100	6.7	20	0.4	120	7.2

MB 140: MOLECULAR BIOLOGY (7.6 Units)

Course Description

In the Molecular Biology course the trainee will study basic aspects of the human cell, bio-molecules, genetics, recombinant DNA technology and their relevance in health.

Aim

To impart to the trainee knowledge and skills on cell and molecular biology as applied to laboratory diagnosis of human diseases.

Objectives

At the end of the course the trainee should be able to:

Describe the molecular basis of human diseases.

Describe the principles of heredity.

Understand the principles of DNA transfer and recombination.

Course content

Module	Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MB 141	Cell Biology and Mutations	30	2.0	10	0.2	40	2.2
MB 142	DNA Transfer, Recombination and Inheritance	20	1.3	9	0.2	29	1.5
MB 143	Gene expression and arrangement	20	1.3	12	0.3	32	1.6
MB 144	Nucleic acid techniques	30	2.0	12	0.3	32	2.3
Total		100	6.6	43	1.0	143	7.6

EP 140: LABORATORY PROCEDURES (2.8 Units)

Course Description

During this course the trainee will learn the organization of the health laboratory and basic laboratory procedures including specimen collection, transportation and documentation, basic microscopy and straining techniques.

Aim

To impart to the trainee knowledge and skills on health laboratory organization and basic aspects of laboratory practice.

Objectives

- At the end of the course the trainee should be able to:
- Describe the structure and organization of the health laboratory
- collect, transport and document laboratory specimens
- use a microscope in the examination of stained and unstained preparations

Course content

Module	Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Hrs	Units	Hrs
EP 141	Laboratory structure and organization	6	0.4	16	0.3	22	0.7
EP 142	Specimen collection, transportation and documentation	7	0.5	20	0.4	30	0.9

Module	Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Hrs	Units	Hrs
EP 143	Microscopy and staining techniques	7	0.5	30	0.7	40	1.2
Total		20	1.4	66	1.4	86	2.8

ER 140: BIostatISTICS AND EPIDEMIOLOGY (6.6 Units)

Course description

The course focuses on the principles of epidemiology and biostatistics, their practical applications for investigation of public health problems, planning, implementation and evaluation of intervention strategies for health problems.

Aims

1. To introduce to the students the basic principles of epidemiology and research methodology and their application in the planning and provision of medical and health care services.
2. To introduce the students to environmental determinants of health and disease in human populations.

Objectives

At the end of the course, the student should be able to:

Understand and utilize the basic principles of epidemiology in research and in planning provision medical and health care services

Understand and use the epidemiological methods in research and assess community health needs

Understand and use the research methods to collect, analyze and present critical information to stakeholders and wider audience

Understand the epidemiology and control of the selected major diseases of public health importance in Tanzania.

Describe the physical, biological, socio-cultural and environmental factors affecting health and disease.

Identify the agencies and services available to families and the extent to which they meet their needs.

Course content

Module	Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Hrs	Units	Hrs
ER 141	Biostatistics	40	2.6	10	0.2	50	2.8
ER 142	Epidemiology	50	3.4	10	0.4	50	3.8
Total		90	6	30	0.6	120	6.6

SEMESTER THREE

IT 240: COMPUTING AND LAB PRACTICE (3.2 Units)

Course description

This course is designed to provide trainee with knowledge of computer usage in Health Sciences. It will include hardware configuration, software applications in health care and on-line searching of periodicals, journals etc. Instruction will be primarily on-line and require specific computer requirements. The course will be carried out through lectures and practices at Computer Laboratory.

Aim

To impart to the trainee with appropriate skills for analysis of current technical laboratory concepts and practices in the core use of computing information technologies.

Objectives

At the end of the course the students should be able to:

1. Form the IT operational backbone of a Clinical Laboratory Group.
2. Apply specific laboratory applications of computer and information sciences to support and manage his/her health care activities.
3. Use E-mail based discussion group e.g. "Labmed" (list server) that is intended for individuals who work in, or have an interest in, laboratory medicine in general, and clinical microbiology, pathology, clinical chemistry, clinical haematology, toxicology, etc, in particular. The goal of labmed is to improve communication among clinical laboratories and ultimately, improve patient care.
4. Develop costumed database application for data manipulations.
5. Perform some computer hardware and software troubleshooting at first level support.

Course content

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
IT 241	Computers and Internet Browsing	10	0.7	40	0.8	40	1.5
IT 242	Office Applications	4	0.3	10	0.2	14	0.5
IT 243	Data Base Management	8	0.6	30	0.6	38	1.2
Total		22	1.6	80	1.6	102	3.2

HT 240: HISTOTECHNOLOGY I (4.9 Units)

Course description

In this course the student will learn and practice different laboratory methods of histological/cytological studies including tissue fixation, grossing of specimen, photomicrography, tissue processing, staining, slide preparation, histological artifacts and microscopy.

Aim

To impart a trainee with knowledge and skills on histological procedures starting from tissue fixation, grossing, processing, and staining including special stain and molecular studies on tissue and cytology specimens. Trainee will practice all procedures in the laboratory given on lectures.

Objectives

At the end of the course the student will be able to:

- Understand and use microscopic evaluation in histology

- Describe principles of tissue/cytological fixation
- Know different methods of tissue fixation
- Know tissue grossing
- Know tissue processing and staining techniques
- Perform special stains including immunohistochemical
- Know molecular diagnostic techniques in tissue and cytology specimens
- Know cytological techniques and their use in diagnosis

Course content

Module	Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Hrs	Units	Hrs
HT 241	Microscopy Tissue Fixation, and Processing	10	0.6	30	0.6	40	0.8
HT 242	Laboratory Methods in Histotechnology	14	1	46	1.0	60	2.0
HT 243	Molecular Pathology Methods	10	0.7	20	0.4	30	1.0
HT 244	Cytology	5	0.3	15	0.3	20	0.4
Total		39	2.6	111	2.3	150	4.9

MM 240: MICROBIOLOGY/IMMUNOLOGY (9.3 units)

Course descriptions

Medical knowledge of microorganisms and their relationship to humans in health and disease. The medical microbiology course focuses on human diseases (infectious diseases) caused by microorganisms, its prevention and treatment. Also the relationship of medical microbiology to other health related sciences will be highlighted and these sciences include human immunology, cell biology and molecular biology, human genetics and biochemistry as it relates to humans in health or disease

Aim

To provide students with knowledge and skills in the subject of Microbiology and Immunology

Objectives

At the end of the course the student is expected to:

- Understand the main principles of general Medical Microbiology and Immunology.
- Acquire knowledge of host-parasite-environment relationship in health and in microbial diseases
- Understand the etiology of human microbial and immunological health problems
- Be familiar with the general epidemiological aspects of microbial health problems and simple preventive measures of specific health problems with special reference to sub Saharan Africa.
- Be familiar with collection and handling of appropriate specimens for Microbiological investigation.
- Be familiar with and able to perform essential microbiological and immunological laboratory procedures used in determining etiology of common microbial and immunological health problems.

- To enable them appreciate the role of the subject in problem solving in infectious disease management, prevention and control.

Course Contents

Code	Course Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Hrs	Units	Hrs
MM 241	General Bacteriology	54	3.6	62	1.4	116	5.0
MM 242	Virology and Mycology	39	2.6	6	0.1	45	2.7
MM 243	Immunology	21	1.4	8	0.2	29	1.6
Total		114	7.6	76	1.7	190	9.3

DS 240: DEVELOPMENT STUDIES 240 (4.9 units)

Course description

Development studies are a multidisciplinary branch of social science which addresses issues of concern to developing countries. It has historically placed a particular focus on issues related to social and economic development, and its relevance may therefore extend to communities and regions outside of the developing world.

Aims

To expose students to Tanzania's development experiences and be aware of alternative development strategies existing currently

Objectives

At the end of the course students should be able to: -

- Analyze the dynamics of Tanzania's development plans/strategies and implementation in health and health related sectors.
- Compare and contrast different development strategies in developing countries.
- Analyze current development problems and issues in Tanzania and developing countries in general and how these problems relate to health.
- Should be able to plan, organize and manage a private health care facility.

Course Contents

Code	Course Name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
DS 241	Globalization Environment and Health	20	1.3	10	0.2	30	1.5
DS 242	Human Rights/ Governance	30	2.0	20	0.4	50	2.4
DS 243	Entrepreneurship	15	1.0			15	1.0
Total		65	4.3	30	0.6	95	4.9

SEMESTER FOUR

SM 240: CLINICAL MICROBIOLOGY (7.5 Units)

Course description

During Clinical microbiology the trainee will learn how to process various samples in the laboratory, be acquainted with different types of laboratory equipment and their use as well

as procedures for ordering of supplies and stock taking. The trainee will also study and perform various procedures for identification of pathogens, will also learn how to correlate lab results with clinical findings on request form.

Aim

To impart to the trainee knowledge and skills on basic clinical microbiology

Objectives

At the end of the course the trainee should be able to:

- Collect and process appropriate samples
- Use, operate and trouble shoot common laboratory equipment
- Order, store and make an inventory of laboratory supplies
- Perform basic identification procedures for pathogens
- Interpret and issue laboratory results

Course content

Module	Name	Lectures		Practical/Seminar		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
SM 241	Sample Collection and processing	26	1.7	90	2	30	3.8
SM 242	Lab Equipment and Supplies	10	0.6	20	0.4	30	1.0
SM 243	Pathogen Identification	10	0.7	90	2	20	2.6
Total		46	3.0	200	4.4	246	7.5

CC 240: CLINICAL CHEMISTRY (Units 7.5)

Course description

During this course the trainee will undergo practical and theoretical training that will enable them to acquire knowledge and skills for specimen processing and analytical methods used in clinical chemistry. The course will be carried out through supervised rotations in various sections of the Clinical Chemistry laboratory.

Aim

To impart to the trainee appropriate skills for specimen processing and analytical procedures used for diagnosis of diseases in clinical chemistry laboratory

Objectives

At the end of the course the students should be able to:

- Appropriately process specimens for Clinical Chemistry investigation.
- Describe and perform analytical methods used in clinical chemistry practice
- Perform procedures for quantifying, glucose and hormones.
- Perform renal, intestinal, pancreatic and liver function tests
- Describe and perform procedures for quantifying proteins from various body compartments.
- Describe different immunological techniques for use in clinical chemistry assays

Course content

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
CC 241	Analytical Methods	12	0.8	40	0.8	52	1.6
CC 242	Tests of Organ Failure	12	0.8	60	1.4	72	2.2
CC 243	Nitrogenous Metabolites	6	0.4	20	0.4	26	0.8
CC 244	Clinical Enzymology and Biomarkers	10	0.7	50	1.1	60	1.8
CC 245	Analysis of Urine, CSF and Stool	6	0.4	30	0.7	36	1.1
Total		46	3.1	200	4.4	246	7.5

PM 240: PUBLIC MICROBIOLOGY (3.2 Units)

Course Description

During this course the trainee will study on water system and sanitation, food sanitation and role of laboratory during outbreaks.

Aim

To impart to the trainee knowledge and skills on public microbiology

Objectives

At the end of the course the trainee should be able to

- To analyze water to rule of microorganisms contamination
- To process and isolate pathogens from food.
- To investigate an outbreak

Course Content

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PM 241	Water sanitation	6	0.4	25	0.5	22	0.7
PM 242	Food sanitation	8	0.5	25	0.6	30	0.9
PM 243	Role of Laboratory during outbreaks	8	0.5	30	0.7	40	1.2
Total		22	1.4	80	1.8	102	3.2

SEMESTER FIVE

HT 340: HISTOTECHNOLOGY (5.2 Units)

Course Description

During this course the trainee will acquire knowledge and practice in museum Pathology laboratory. Trainee will spend time in general pathology laboratory to acquire more practice and skills in Histotechnology, Histochemistry, Immunohistochemistry, Molecular methods and cytology techniques. Trainee will also learn quality control in Pathology laboratory.

Aim

Trainee to know the skill and practices in museum and quality control in Pathology laboratory

Objectives

At the end of the course the trainee will be able to:

- Know the meaning of Pathology museum
- Know techniques in museum
- Prepare specimen for pathology museum
- Know and plan quality system for anatomical and histology laboratory

Course content

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Hrs	Hrs	Units
HT 341	Museum Techniques and practice	20	1.3	40	0.9	60	2.2
HT 342	Laboratory Quality System	-	-	40	0.9	40	0.9
HT 343	Histotechnology II	-	-	20	0.5	20	0.5
HT 344	Histochemistry/Immunohistochemistry II	-	-	20	0.5	20	0.5
HT 345	Molecular Methods II	-	-	20	0.5	20	0.5
HT 346	Cytology II	-	-	27	0.6	27	0.6
Total		20	1.3	167	3.9	187	5.2

SH 340: CLINICAL SEROLOGICAL AND HAEMATOLOGY (6.5 Units)

Course description

During rotation of serology and Haematology the trainee will learn how to process various samples in the laboratory, be acquainted with different types of laboratory equipment and their use as well as procedures for ordering of supplies and stock taking. The trainee will also study and perform various serological techniques such as agglutination, ELISA, Immunofluorescent techniques, western blots, FACS etc. The trainee will also learn how to correlate lab results with clinical findings on request form.

Aim

To impart to the trainee knowledge and skills on basic and advanced serological and hematological techniques

Objectives

At the end of the course the trainee should be able to:

- Collect and process appropriate samples required for serological and hematological testing
- Use, operate and trouble shoot common laboratory equipments
- Order, store and make an inventory of laboratory supplies
- Perform basic and advanced serological and hematological techniques
- Interpret and issue laboratory results

Course content

Module	Name	Lectures		Practical/Seminar		Total	
		Hours	Credits	Hours	Credits	Hours	CU
SH341	Serological techniques	25	1.7	70	1.6	30	3.3
SH342	Haematology	25	1.7	67	1.5	20	3.2
Total		50	3.4	137	3.1	187	6.5

DT 340: MOLECULAR DIAGNOSTIC TECHNIQUES (6.3 Units)

Course Description

During this course the trainee will learn and acquire skills for handling Nucleic acid specimens, extraction of nucleic acids and proteins and analytical methods used in molecular diagnostics. The course will be carried out through lectures and supervised rotations in molecular biology laboratory.

Aim

To impart to the trainee, appropriate skills for specimen processing and molecular procedures used for diagnosis of diseases in molecular biology laboratory.

Objectives

At the end of the course the students should be able to:

- Appropriately process specimens for molecular biology investigation.
- Describe and perform extraction methods for nucleic acids used in molecular diagnosis
- Perform procedures for quantifying, imaging and detection of nucleic acids and proteins.
- Perform molecular diagnostic tests and controls for potential contamination.

Course content

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
DT 341	Nucleic Acid and Protein Extraction	15	1.0	45	1.0	60	2.0
DT 342	Analytical Methods	35	2.3	92	2.0	127	4.3
Total		50	3.3	137	3.0	187	6.3

MG 340: LABORATORY MANAGEMENT AND PLANNING (1.4 Units)

Course Description

During this course the trainee will study laboratory management and planning

Aim

To impart to the trainee knowledge and skills on principles of Laboratory management and planning

Objectives

At the end of the course the trainee should be able to

- Plan and manage a health laboratory

Course content

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MG 341	Laboratory management	10	0.6	5	0.1	15	0.7
MG 342	Laboratory planning	10	0.6	5	0.1	15	0.7
Total		24	1.2	10	0.2	34	1.4

SEMESTER SIX

LP 340: SENIOR CLINICAL LABORATORY PRACTICE (11.5 Units)

Course Description

During this course the trainee will select the medical laboratory rotation that captured interest to him/her and rotate for 12 weeks before going to elective field. This will be done within the laboratories in our premises for effective supervision

Aim:

To impart the trainee further knowledge and skills on clinical laboratory practice of his/her interest.

Objectives:

At the end of the course the trainee should be able to:

- Collect and process appropriate samples
- Use. Operate and trouble shoot common laboratory equipment
- Order, store and make inventory of laboratory supplies.
- Perform basic and advanced procedures for identification, extraction, quantification and analytical from various samples.
- Interpret and issue laboratory results
- Strictly adhere with the SOP and issues regarding Quality assurance

Course content

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
LP 341	Senior Clinical Laboratory Practice	50	3.3	370	8.2	420	11.5
	Total	50	3.3	370	8.2	420	11.5

EF 340: ELECTIVE FIELD RESEARCH PROJECT (6.3 Units)

Course Description

During this course the trainee will select the medical laboratory rotation that capture interest to him/her and design a problem solving study that he/she will conduct under supervision for 8 weeks. The priority will be focused on the medical laboratory investigations research, however, trainees may also do other laboratory research pertaining to health in general, such as public microbiology, hygiene and sanitation, food processing, etc.

Aim:

To impart the trainee skills on conducting medical research.

Objectives:

At the end of the course the trainee should be able to demonstrate skills for:

- Designing a medical research
- Conducting a medical research
- Summarizing, presenting, discussing and defending findings derived from a medical research.

Course content:

Module	Name	Lecture		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
EF 341	Elective Field Research Project	4	0.3	275	6	280	6.3
	Total	4	0.3	275	6	280	6.3

ES 340: ENTREPRENEURSHIP (2.3 units)

Course description

During this course the trainee will study introduction to entrepreneurship, law for Entrepreneurs, funding for entrepreneurs and entrepreneurship issues, entrepreneur marketing, innovation and creativity

Aim

To impart to the trainee knowledge and skills on: Starting and operating of an entrepreneurial venture, basic legal concepts specifically relevant to a business start-up venture, developing and enhancing individual and organizational creativity and innovation, techniques to correctly research and define the target market to increase sales for startup businesses or to expand current businesses. Also knowledge on current and emerging entrepreneurship issues and opportunities, financial issues and needs confronting entrepreneurs attempting to grow their businesses by attracting startup and growth capital will be imparted.

Objectives

Upon completion, students should be able to:

- Demonstrate an understanding of entrepreneurship concepts and how to use the entrepreneurial mindset to succeed in their careers.
- Assess the legal responsibilities of a business start-up
- Apply innovation and creativity principles in the work place.
- Demonstrate an understanding of how to correctly target market for a start-up business with limited resources.
- Apply a variety of analytical and decision-making requirements to start a new business.
- Demonstrate an understanding of how to effectively finance a business venture.

Module	Course Name	Lectures		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
ES 341	Entrepreneurship	11	0.7	-	-	11	0.7
ES 342	Innovation Creativity and Marketing	13	0.9	-	-	13	0.9
ES 343	Funding and Entrepreneurship	10	0.7	-	-	10	0.4
	Total	34	2.3			34	2.3

BACHELOR OF PHARMACY DEGREE PROGRAMME

SCHOOL OF PHARMACY

School of Pharmacy offers the Bachelor of Pharmacy (B Pharm) undergraduate degree programme.

VISION

The vision of the School of Pharmacy is "To provide highly qualified Pharmacists who can suit the needs of Pharmaceutical services of Tanzania in Health Care systems, Community, Training and Research institutions'.

MISSION

Activities of the School of Pharmacy will be guided by the following components of the Mission of the Catholic University of Health and Allied Sciences (CUHAS), which are:

- To provide skilled and competent human resources in the health sector that is vested with moral and ethical values,
- Search, discover and communicate the truth to advance the frontiers of knowledge and
- Provide quality services to the community".

Objectives of the programme

Broad Objectives

- To produce pharmacists who have excellent academic knowledge and competence in order to meet the pharmaceutical requirements and standard in the country.

Specific Objectives

- To produce pharmacists who have the ability to work methodically, carefully and accurately in Pharmaceutical industry, Hospital & Community Pharmacy, Pharmaceutical Quality Control & Assurance, Pharmacy Regulatory Affairs, Drug Information Services, Research & Development and Academia/Consultancy.

PROGRAMME GOALS

- To train highly qualified pharmacists, in order to meet the requirements of pharmaceutical services in Tanzania, who can provide pharmaceutical care to patients, who can develop and manage medication distribution and drug control system, who can manage community pharmacies properly and participate in promoting public health and provide adequate drug information and education.
- To produce pharmacists suited to the needs of the country, but, also meet the general standard of competence of pharmacists from other countries in the region.
- To stimulate and nurture in students and graduates the desire to initiate research in local drug problems and traditional medicinal plants as well as research into other fields of pharmaceutical and medical interests

Summary of the Eight Semester Modules for B.Pharm Programme

Structure of the programme

SEMESTER I

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	AN120	Anatomy	120	8.0	45	1.0	165	9.0
2.	PC120	Solution, Phase & Interfacial Phenomena	60	4.0	73	1.6	133	5.6
3.	PP120	Introduction to Dispensing	55	3.7	78	1.7	133	5.4
4.	BC120	Biochemistry	111	7.4	60	1.3	171	8.7
Total Hrs/Units			346	23.1	256	5.6	602	28.9

SEMESTER 2

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	CH120	General, Physical, Inorganic & Aliphatic Chemistry	115	7.7	69	1.6	184	9.2
2.	PH120	Physiology	153	10.2	75	1.7	228	11.9
3.	PB120	Pharmaceutical Botany	55	3.7	97	2.2	152	5.9
4.	DS120	Development Studies 1	65	4.3	30	0.7	95	5.0
Total Hrs/Units			388	25.9	271	6.2	659	32

SEMESTER 3

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	PE220	Parasitology & Medical Entomology	107	7.1	45	1.0	152	8.1
2.	PC220	Introduction to Pharmaceutical Technology	70	4.7	57	1.3	127	6.0
3.	PP220	Introduction to Pharmacy Practice	50	3.3	128	2.8	178	6.1
4.	DS220	Development Studies II	65	4.3	30	0.7	95	5.0
Total Hrs/Units			292	19.4	260	5.8	552	25.2

SEMESTER 4

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	CH220	Organic Chemistry & Spectroscopy	141	9.4	50	1.1	191	10.5
2.	ER220	Epidemiology & Biostatics	130	8.7	40	0.9	170	9.6
3.	PG220	Pharmacognosy	75	5.0	205	4.6	280	9.6
4.	MP220	Principles of General Pathology	33	2.2	16	0.4	49	2.6
Total Hrs/Units			379	25.3	311	7	690	32.3

SEMESTER 5

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	CP320	Clinical Pharmacology 1	178	11.9	50	1.1	228	13.0
3.	MM220	Pharmaceutical Microbiology	166	11.1	100	2.2	266	13.3
Total Hrs/Units			344	23	150	3.3	494	26.3

SEMESTER 6

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	DC320	Drug Development and Chemotherapy	75	5.0	175	3.9	250	8.9
2.	PT320	Pharmaceutical Phytochemistry	80	5.3	91	2.0	171	7.3
3.	PC320	Solid dosage forms, Sterile Products & Radiopharmaceuticals.	60	4.0	130	2.9	190	6.7
4.	PP320	Medicine Scheduling, Patient Information, Drug Information and Pharmacy Management	75	5.0	115	2.6	190	7.6
Total Hrs/Units			290	19.3	511	11.4	801	30.5

SEMESTER 7

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	CP420	Clinical Pharmacology II	153	10.2	75	1.7	228	11.9

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
2.	PC420	Biopharmaceutics, Pharmacokinetics and Principles of Good manufacturing Practice.	110	7.3	42	0.9	152	8.2
3.	PP420	Forensic Pharmacy, Pharmacy management Clinical Pharmacy Practice	95	6.3	263	5.8	358	12.1
Total Hrs/Units			358	23.8	380	8.4	738	32.2

SEMESTER 8

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	PD420	Pharmacodynamic Agents and Drug Design	152	10.1	57	1.3	209	11.4
2.	PG420	Applied Pharmacognosy	80	5.3	110	2.4	190	7.8
3.	RP420	Research Project	0	0	209	4.6	209	4.6
Total Hrs/Units			232	15.4	376	8.3	608	23.8

KEY to B Pharm Course subjects

AN: Anatomy.

BC: Biochemistry.

CH: Chemistry.

CP: Clinical Pharmacology

DC: Drug Development and Chemotherapy

DS: Developmental Studies

ER: Epidemiology & Biostatistics.

MM: Pharmaceutical Microbiology

MP: Principle of General Pathology

PB: Pharmaceutical Botany.

PC: Pharmaceutics.

PD: Pharmacodynamic Agents and Drug Design

PE: Parasitology & Medical Entomology.

PG: Pharmacognosy.

PH: Physiology.

PP: Pharmacy Practice.

PT: Pharmaceutical Phytochemistry.

RP: Research Project.

SCHOOL OF PHARMACY

Teaching programme for the 8 semesters

Teaching Programme for 8 semester B.Pharm

SEMESTER ONE

AN 120: ANATOMY (9.0 Units)

Introduction:

Drugs are administered to a patient by various routes and once in the body these drugs need to be distributed to various body compartments before they reach the target tissues where they produce their effects. A student will need to have a good knowledge of the human anatomy so that he can appreciate these processes.

Aim

To provide the student with knowledge of the human body anatomy

Objectives

At the end of the course the students should be able to:-

1. Describe the structure of the human body as seen by the naked eye in health.
2. Identify different parts of the human body.
3. Use medical/anatomical terminology.
4. describe physiological processes in health and disease using the anatomy terms
5. Describe the processes involved in the development of the human body.
6. Describe congenital malformations and how they come about and the times when drugs can have teratological effect.

Course Content summary

Course Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
AN 121	Organization of the Human Body	15	1.0	15	0.3	30	1.0
AN 122	The Skeletal & Muscular System	20	1.3	0	0.0	20	1.0
AN 123	The Alimentary, Respiratory and Cardiovascular systems	25	1.7	10	0.2	35	1.0
AN 124	Endocrine, Reproductive and Urinary systems	20	1.3	10	0.2	30	1.0
AN 125	Neurology and Sensory System	20	1.3	10	0.2	30	1.0
AN 126	Lymphoid system, skin and basic embryology	20	1.3	0	0.2	20	1.0
Total		120	8.0	45	1.0	165	9.0

PC120: SOLUTION, PHASE AND INTERFACIAL PHENOMENA (5.7 Units)

Introduction

In Pharmaceutics the student will be taught the art of compounding drugs. Many human drugs are dispensed as mixtures either as solids or solutions or ointments/gels. The student will learn how to formulate these in Pharmaceutics.

Aim

To provide the students with fundamental principles of solutions, basic knowledge of equilibrium between phases and knowledge of behaviour of interfaces.

Objectives

At the end of the course students should be able to:

1. Describe types of solutions, their physical properties and applications
2. Define solubility of solutes in solvents and various expressions.
3. Understand the dissolution process and factors affecting it.
4. Describe the distribution of solutes between immiscible liquids and its application in extraction and preservation.
5. Define phase, degrees of freedom as it relates to the number of components and describe partial miscibility in liquids, eutectic mixtures and their applications.
6. Differentiate surface and interfacial tensions and describe the solubilization phenomenon.
7. Distinguish various adsorption isotherms and their application.

Course content summary

Code	Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Unit
PC 121	Solution Theory	20	1.3	24	0.5	44	1.9
PC 122	Phase Equilibria	20	1.3	25	0.6	45	1.9
PC 123	Surface & Interfacial Phenomena	20	1.3	24	0.5	44	1.9
Total		60	4.0	73	1.6	133	5.7

PP 120: INTRODUCTION TO DISPENSING (5.4 Units)

Introduction

The student will be taught the interpretation of prescriptions and be able to explain to the patient the effect and purpose of medicines that are dispensed to the patient.

Aim

To provide students with adequate knowledge and skills in pharmaceutical calculations and communication.

Objectives

At the end of the course the students should be able to:

1. Account for pharmacy history and pharmaceutical reference materials

2. List the common delivery systems and describe systems of measurements.
3. Calculate doses of drugs, isotonicity and osmolality of pharmaceutical preparations.
4. Define and describe communication skills, the goals, types, the fidelity, and factors affecting it.
5. Know and explain the pharmacist-patient communication process.
6. Read, interpret and obtain the formula for the prescription given.
7. Perform standard weighing and measuring techniques, Compound and label.

Course content summary

Code	Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PP 121	Pharm. Calculations	35	2.3	39	0.9	74	3.2
PP 122	Communication Skills	20	1.3	39	0.9	59	2.2
Total		55	3.7	78	1.7	133	5.4

BC 120: BIOCHEMISTRY (8.8 Units)

Introduction

Most pharmaceuticals administered to man produce their effects through interaction with either biochemical reactions or enzymes or cellular components in the body systems. A sound knowledge of molecular biology will enhance the understanding of drug effects in man.

Aim

To impart knowledge on structural organization of biomolecules (20hrs)

1. To impart knowledge on molecular and energy transformation and control of metabolism.
2. To impart knowledge on signal transductions/flow and storage of genetic information.

Objectives

At the end of the course the student should be able to:-

Describe chemistry of proteins, lipids and carbohydrates and to recognize some basic structures.

1. Describe cellular organization at molecular level.
2. Describe structure and function of Enzymes including clinical application of enzymology.
3. Describe principles of Biological oxidation and oxidative phosphorylation.
4. Describe processes in intermediary metabolism.
5. Describe structure and function of informational molecules.
6. Describe porphyrins and bile pigments metabolism.
7. Describe hormone mechanisms and signal transduction.

Course Content Summary

Code	Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
BC 121	Chem. Of Biomolecules	25	1.7	15	0.3	40	2.0
BC 122	Enzymology	20	1.3	15	0.3	35	1.7
BC 123	Intermediary & Heme Metabolism	31	2.1	15	0.3	46	2.4
BC 124	Molecular Biology & Hormone systems	35	2.3	15	0.3	50	2.7
Total		111	7.4	60	1.3	171	8.8

SEMESTER TWO**CH 120: GENERAL, PHYSICAL, INORGANIC AND ALIPHATIC CHEMISTRY (9.2 units)****Introduction**

Most of the medicines that are studied in pharmacy are made from chemical substances. A student of pharmacy needs to have a good knowledge in chemistry to be able to comprehend the chemical nature of medicines and be able to understand how these substances will interact with cellular components of the body.

Aim

To provide students with a sound knowledge of general, physical, inorganic and aliphatic chemistry, including practical aspects.

Objectives

At the end of this course the student should be able to;

1. Define the common concepts and parameters used in physical, general, inorganic and organic chemistry.
2. Balance acid-base, redox and other chemical equations and choose appropriate indicators for titrations.
3. Explain the electronic basis of the modern form of the periodic table with particular emphasis on elements of pharmaceutical interest.
4. Demonstrate the properties and types of the bonds formed between atoms, the molecular orbital theory and the factors governing molecular geometry and hence shapes of molecules and the geometry of the carbon atom.
5. Describe the methods used in the detection and measurement of radioactivity and applications of radioisotopes and the relation between order of a reaction and the half-life.
6. Use laws of thermodynamics to predict whether a given reaction will occur spontaneously or not, and explain the relationship free energy, entropy, and the equilibrium constant.
7. Give an account of the chemistry of aliphatic compounds including alkanes, alkenes, alkyl halides, alcohols, ethers, epoxides, carboxylic acids and their derivatives using a functional group approach and name organic compounds using the IUPAC system.

Course content

Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
CH 121	General Chemistry	30	2.0	19	0.4	49	2.4
CH 122	Physical Chemistry	30	2.0	19	0.4	49	2.4
CH 123	Inorganic Chemistry	16	1.1	19	0.4	49	1.5
CH 124	Aliphatic Chemistry	39	2.6	12	0.3	51	2.9
Total		115	7.7	69	1.6	184	9.2

PH 120: PHYSIOLOGY (11.9 Units)

Introduction

The pharmacist prepares and dispenses drugs to patients. The drugs should be able to integrate with body systems so that they can produce the desired effects. It is therefore necessary for the pharmacist to know the physiological processes in the human body so that he can design drugs that can regulate these processes.

Aim

To provide the student with knowledge on composition and function body tissues, systems and organs.

Objectives

At the end of study of the course the students is expected to:

1. Describe the various homeostatic and control systems and the way they operate in the human body
2. Enumerate the international system of units which describe mass, volume, and concentration.
3. Describe the general physiology of the cell membrane; membrane potentials in excitable tissues (example; muscle cells and nerves)
4. List the major constituents of body tissues, and describe the composition and partitioning of body fluids.
5. List of composition of blood and describe the general functions of blood, the formation characteristics and functions of different blood cells.
6. List the major divisions of the circulatory system, and describe its general organization, functions and the control of the cardiovascular system.
7. Describe the functional anatomy of the respiratory system, the mechanics of breathing, alveolar gas exchange, and the control of the respiratory system.
8. Describe the functional anatomy of the kidney, the renal mechanisms of filtration, excretion and reabsorption; concentrating and diluting mechanisms and the endocrine function of the kidney.
9. Describe the functional anatomy the digestive system, the motility, secretory, digestive, absorptive and endocrine functions of the digestive system.
10. Explain the chemical nature of hormones, and describe how the hormones are secreted, transported in plasma, their functions and how they are metabolized and excreted.
11. Describe the organization of the nervous system and explain the physiological functions, sensory and motor system; autonomic nervous system; special senses.

Course content summary

<i>Course Code</i>	<i>Course Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		<i>Hours</i>	<i>Units</i>	<i>Hours</i>	<i>Units</i>	<i>Hours</i>	<i>Units</i>
PH 121	Fluid Circulation	51	3.4	25	0.6	76	4.0
PH 122	Metabolism and excretory systems	51	3.4	25	0.6	76	4.0
PH 123	Neuro-endocrine Physiology	51	3.4	25	0.6	76	4.0
Total		153	10.2	75	1.7	228	11.9

PB 120: PHARMACEUTICAL BOTANY (5.8 Units)

Introduction

Many of the drugs used in the treatment of human disease are derived from plants. The drugs may be extracted from leaves, flowers, tree barks or from roots. Knowledge of the anatomy of plants becomes essential if the pharmacist will need to make drugs from portions of a tree.

Aim

To equip students with a sound knowledge of botanical aspects and taxonomy of medical plants.

Objectives

At the end of the course the student should be able to:

1. Describe the construction and functions of the plant cell and its components
2. Identify ergastic substances of diagnostic importance
3. outline the morphology and describe the microscopical characters of all plant parts
4. Use the microscope to analyze plant materials
5. outline the principles of plant taxonomy
6. Prepare and preserve herbarium specimens

Course content summary

Course Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PB 121	The Plant Cell & Tissues	15	1.0	32	0.7	47	1.7
PB 122	Study of Plant Organs	25	1.7	33	0.7	58	2.4
PB 123	Plant Taxonomy	15	1.0	32	0.7	47	1.7
Total		55	3.7	97	2.2	152	5.8

DS 120: DEVELOPMENT STUDIES I (5.0 Units)

Introduction

Development studies broaden the pharmacist’s awareness of the environmental factors surrounding him.

Aim

The course exposes students to the theories, problems and contemporary issues of health and development in general.

Objectives

At the end of the Semester, student should be able to:-

1. Define the concept of development
2. Explain the different theories of development
3. Describe the process of social and political developments in Africa
4. Relate health to the theories of development.

Course Content Summary

Module	Code	Title	Theory		Seminars		Total	
			Hrs	Credits	Hrs	Credit	Hrs	Credits
I	DS 121	Social Development & Health	22	1.5	10	0.2	32	1.7
II	DS 122	Education, Gender and Health	21	1.4	10	0.2	31	1.6
III	DS 123	Population Development and Health	22	1.5	10	0.2	32	1.7
Total			65	4.3	30	0.7	95	5.0

SEMESTER THREE

PC220: INTRODUCTION TO PHARMACEUTICAL TECHNOLOGY (5.9 Units)

Introduction

Details of the compounding of drugs will be given to the student.

Aim

To equip students with adequate knowledge related to dispersed systems, unit processes and powder technology.

Objectives

At the end of the course the student should be able to:

1. Define all types of dispersed systems, their formulation, properties and uses.
2. Define viscosity, types of flow behavior, application and the Stoke's law.
3. Differentiate and explain the basic principles underlying fluid mechanics, heat transfer, mass transfer, evaporation drying and separation techniques
4. Define powder particles; describe their uses, various production methods and the sizes analysis.
5. Determinations of pharmaceutical parameters such as particle size, mass transfer and mixing of powders.

Course Content Summary

Course Code	Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PC 221	Dispersed Systems and Rheology	30	2.0	19	0.4	49	2.4
PC 122	Unit Processes	20	1.3	19	0.4	39	1.8
PC 123	Powder Technology	20	1.3	19	0.4	39	1.8
Total		70	4.7	57	1.3	127	5.9

PP 220: INTRODUCTION TO PHARMACY PRACTICE (6.1 Units)

Introduction

The student will be given more light on patient pharmacist interaction.

Aim

To equip the student with the knowledge on the profession ethics, policy and healthcare issues,

Objectives

At the end of the course students should be able to:

1. Define ethics, professional ethics, principles of ethics and differentiate ethics from law
2. State principles and objectives of essential drug concept
3. Identify the factors, which stimulated the development of the essential drug concept and the criteria used for the selection of drugs.
4. Describe effective distribution systems and describe the responsibility of the pharmaceutical services in the supply of drugs.
5. Describe principles of the kit, indenting systems, and handling of drugs during disaster and epidemics
6. Define food and different nutrients and describe their sources
7. Identify deficiencies/or excessiveness of these nutrients and their interactions with drugs in the body.

Summary of Course Content

Course Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PP 221	Pharmacy ethics & Pharmaceutical society	20	1.3	19	0.4	39	1.7
PP 222	Essential drug policy & health care and nutrition	30	2	19	0.4	49	2.4
PP 223	Community pharmacy Field work	0	0.0	90	2.0	90	2.0
Total		50	3.3	128	2.8	178	6.1

PE 220: PARASITOLOGY AND MEDICAL ENTOMOLOGY (8.1 Units)

Introduction:

The students will be taught the use of drugs in the control of bacterial and parasitic infections. Preparation of uncontaminated pharmaceuticals will be emphasized.

Objectives

At the end of the course the student be able to:

1. Describe in detail the life cycle of medically important parasites.
2. Describe the organs commonly involved in the infection
3. Describe the relationship of this infection to symptoms, relapse and the accompanying pathology.

4. describe the factors that determine endemicity of the parasite infection
5. Describe the distribution and epidemiology of the parasites in East Africa.
6. Describe the methods of parasite control, e.g. chemotherapy, mollusciding, general sanitation, etc.
7. Describe the advantages and disadvantages of each method.

Course Content Summary

Course Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PE 221	Protozoology & Immunoparasitology	36	2.4	15	0.3	51	2.7
PE 222	Helminthology	35	2.3	15	0.3	50	2.7
PE 223	Medical Entomology	36	2.4	15	0.3	51	2.7
Total		107	7.1	45	1.0	152	8.1

DS 220: DEVELOPMENTAL STUDIES II (5.4 Units)

Introduction

Developmental studies broaden the pharmacist's awareness of the developmental experiences and alternative strategies existing in his environment.

Aim

To expose the students to Tanzania's development experiences and alternative development strategies existing currently.

Objectives

At the end of the Semester students should be able to:-

- 1 Analyze the dynamics of Tanzania's development plans/strategies and implementation in health and health related sectors.
- 2 Compare and contrast different development strategies in developing countries.
- 3 Analyze current development problems and issues in Tanzania and developing countries in general and how these problems relate to health.

Course Content Summary

Course Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
DS 221	Globalization, Environment and Health	33	2.2	15	0.3	48	2.5
DS 222	Human rights, Governance and Entrepreneurship	32	2.1	15	0.3	47	2.5
Total		65	4.3	30	0.6	95	5.0

SEMESTER FOUR

CH220: ORGANIC CHEMISTRY AND ORGANIC SPECTROSCOPY

(10.5 Units)**Introduction**

The student will be taught the science of spectroscopy as applied in organic qualitative and quantitative analysis.

Aim

To equip students with basic knowledge of aromatic, heterocyclic and stereochemistry. To introduce students to the science of spectroscopy as applied in organic Qualitative and Quantitative analysis.

Objectives

At the end of the course students should be able to:

1. Describe the properties and chemical reactions of aromatic systems and their derivatives.
2. Describe the chemistry of the common heterocycles: systems, quinoines, isoquinolines, acridines, diazines, furas, thiophen, pyrrolles, indoles, purines and xanthines.
3. Define and explain the terms optical activity, diastereomers, resolution, racemisation, geometric and conformational isomerism, symmetry and dissymmetry, meso compounds.
4. Describe the stereochemistry of cyclakanes.
5. Define and differentiate between stereoselective and stereospecific reactions.
6. Define the scientific basis and application of the technique of ultraviolet, infrared, proton and C-13 magnetic resonance and mass spectrometry in qualitative analysis.
7. Elucidate the structure of an unknown compound using spectroscopic data.

Course Content Summary

No.	Course Code	Course Name	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	CH 221	Aromatic Chemistry	39	2.6	19	0.4	58	3.0
2.	CH 222	Heterocyclic Chemistry	24	1.6	15	0.3	39	1.9
3.	CH 223	Stereochemistry	39	2.6	11	0.2	50	2.8
4.	CH 224	Organic Spectroscopy	39	2.6	5	0.1	44	2.7
Total			141	9.4	50	1.0	191	10.4

PG220: PHARMACOGNOSY (9.6 Units)**Introduction**

The student will be taught about plants and animal products that may have medicinal value. Methods of identifying the various ingredients will be described.

Aims

1. To impart knowledge to students on the sources, characteristics and medicinal or pharmaceutical application of naturally occurring drugs, pharmaceutical aids, filtering aids and fibres.
2. To give students a practical field experience and introduce them to ethnomedical surveys on medicinal plants.

Objectives

At the end of the course the student should be able to:

1. Apply the knowledge gained and be able to advise the community, on issues concerning cultivation, harvesting and processing of medicinal plants and their products.
2. Define a given drug or pharmaceutical aid and state its botanical/animal/mineral and geographical sources.
3. Describe macro-and microscopic characters of a given crude drug.
4. Identify and describe the source, characteristics, preparation, and applications of surgical dressings and filtering aids.
5. Identify and name medicinal plants in their natural environment and prepare and preserve herbarium specimens.
6. Carry out independent ethnomedical studies
7. Describe the medicinal uses and of the applications of the collected and identified medicinal plants.

Course Content

No	Course Code	Title	Theory		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
1.	PG221	Study of crude Drugs	60	4.0	58	1.3	118	5.3
2.	PG222	Natural Fibers and Filtering Aids	15	1.0	57	1.3	72	2.3
3.	BP223	Pharmacognosy Field work	0	0.0	90	2.0	90	2.0
Total			75	5.0	205	4.6	280	9.0

ER 220: EPIDEMIOLOGY AND BIostatISTICS (9.6 Units)

Introduction

Drugs are widely used in the community the student will be taught how to evaluate the use of drugs in the community.

Aim

1. To provide students with fundamental statistical skills relevant to public health analysis.
2. To enable the student to understand the basic principles of epidemiology and research methodology and their application in planning and provision of medical and health care services.
3. To introduce the student to environmental determination of the health and disease in human populations.

Objectives

On completing the course, the student should be able to:

1. Understand and utilize the basic principles of epidemiology in research and in planning provision medical and health care services.
2. Understand and use the epidemiological methods in research and assess community health needs.

3. Understand and utilize the research methods to collect analyze and present critical information to stake holders and wider audience.
4. Understand the epidemiology and control of the selected major diseases of public health importance in Tanzania.

Course Content Summary

Course Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
ER 221	Descriptive statistical methods	32	2.1	10	0.2	42	2.4
ER 222	Inferential statistics	33	2.2	10	0.2	43	2.4
ER 223	Principles of Epidemiology	32	2.1	10	0.2	42	2.4
ER 224	Research Methodology	33	2.2	10	0.2	43	2.4
Total		130	8.7	40	0.9	170	9.6

MP 220: PRINCIPLES OF GENERAL PATHOLOGY (2.6 Units)

Introduction:

Drugs are used for management of diseases and hence the pharmacist should be able to appreciate the various disease processes going on in the patient so that he can design drugs appropriate to the clinical condition.

Aim

To make the student know the etiology, pathogenesis, morphological and functional changes of the human body in disease.

Objectives

At the end of the course students should be able to:

1. Define, describe, give examples and discuss etiology and pathogenesis of diseases.

Course content Summary

Module	Code	Title	Theory		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	M P221	Principles of General Pathology	33	2.2	16	0.4	49	2.6
Total			33	2.2	16	0.4	49	2.6

SEMESTER FIVE

CP 320: CLINICAL PHARMACOLOGY (13.0 Units)

Introduction

Clinical pharmacology teaches the student pharmacological actions, mechanisms of action, therapeutic uses and adverse effects of drugs. Information which is very essential for pharmacist.

Aim

To equip the student with appropriate knowledge and skills on uses, mechanisms of action, side effects and distribution of drugs in the body.

Objectives

At the end of this topic students should be able to:-

1. Describe the processes that precede drug absorption and factors influencing drug absorption
2. Describe different places in the body where the drug is distributed after being absorbed and factors that may influence distribution to a particular part of the body
3. Describe the organs that will finally get rid of the drug/metabolite from the body and factors influencing elimination of a particular drug for example by the kidney.
4. Describe different phases of drug metabolism
5. Describe hormones secreted by different glands and their function, the mechanisms that regulate hormone release; and the side-effects encountered when hormones are use in high doses and for prolonged period of time.
6. Describe drugs that are used in the above mentioned conditions their mechanism of action, adverse effects, the contraindications and route of administration.
7. Describe uses and side effects, site of action and mechanism of drugs used for cardiovascular conditions and drugs acting on the central nervous system.
8. Describe the classification, mechanism and clinical application of anticoagulants, fibrinolytic agents, local anesthetics and analgesics according to their route of administration.
9. Describe chemical transmission in the autonomic nervous system and the effect of stimulating the autonomic nervous system on different organs.
10. Differentiate the drugs that mimic the endogenous transmitters at different receptors and those that antagonize the endogenous transmitters at their receptors.
11. Describe the effect of the antagonists on the receptors
12. Describe the clinical application of drugs that either mimic or antagonize the transmitters at their receptors.

Course content summary

Module	Code	Title	Theory		Practical		Total	
			Hrs	Credits	Hrs	Credits	Hrs	Credits
I	CP 321	Drug Classification and disposition	38	2.5	10	0.2	48	2.8
II	CP 322	Hormones, Drugs acting on the hormonal system, drugs used in asthma, GIT, coughs, colds, migraine and haematinics	36	2.4	10	0.2	46	2.6
III	CP 323	Drugs acting on the cardiovascular system	36	2.4	10	0.2	46	2.6

Module	Code	Title	Theory		Practical		Total	
			Hrs	Credits	Hrs	Credits	Hrs	Credits
		and blood, the autonomic nervous system, local and general anaesthetics						
IV	CP 324	Chemical transmission and drugs acting on the CNS; the non-steroidal anti-inflammatory agents	38	2.5	10	0.2	48	2.8
V	CP 325	Chemotherapeutic agents	30	2.0	10	0.2	40	2.2
Total			178	11.9	50	1.1	228	13.0

MM 220: PHARMACEUTICAL MICROBIOLOGY (12.1 Units)

Introduction

The student will be taught on microorganism of pharmaceutical importance. Preparation and storage of pharmaceuticals under aseptic techniques will be emphasized.

Aim

To equip the student with knowledge on principles of Pharmaceutical Microbiology

Objectives

At the end of the course students should be able to:

1. Describe microorganisms of medical and pharmaceutical importance
2. Describe the diseases caused by microorganisms of medical importance
3. Describe basic methods for identification of microorganisms
4. Describe the immune system and immunological products
5. Carry out basic microbiological quality control tests under Good Laboratory Practice.
6. Describe methods of the production microbial vaccines
7. Evaluate disinfection, sterilization and anti-microbial activity.
8. Describe the applications of biotechnology in the pharmaceutical industry.

Course content summary

Module	Code	Title	Theory		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MM 321	Medical bacteriology	40	2.7	20	0.4	60	1.0
II	MM 322	Medical mycology & Virology	40	2.7	20	0.4	60	2.0
III	MM 323	Infection Control	30	2.0	20	0.4	50	3.0
IV	MM 324	Immunology & Vaccinology	30	2.0	20	0.4	50	4.0
V	MM 325	Applied Pharmaceutical Microbiology	26	1.7	20	0.4	46	2.0
Total			166	11.1	100	2.2	266	12.0

SEMESTER 6

DC320: DRUG DEVELOPMENT AND CHEMOTHERAPY (8.9 Units)

Introduction

The student is taught on methods available for checking the quality of drugs. Will also be taught on processes involved in development of new drugs.

Aim

To equip students with adequate knowledge and skills in drug quality assurance, drug development, and chemotherapeutic agents.

Objectives

At the end of the course the student should be able to:-

1. Analyze drugs using the various chemicals, physical and instrumental methods learnt
2. Design and establish a prototype chemical quality assurance system and develop and validate new methods of drug analysis.
3. Present the various approaches to drug development.
4. Analyze dossiers submitted for new drug registration purposes.
5. State and explain the origin of drug resistance in chemotherapy.
6. Present a comprehensive description of the chemistry of chemical agents use in the chemotherapy of pathogenic organisms and cancer, and structural relationships to pharmacological action.
7. Give advice to patients and other health professionals on the proper use of chemotherapeutic agents in human and veterinary medicine

Course content summary

Module	Code	Title	Theory		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	DC 321	Chemical and instrumental methods of QA	25	1.7	85	1.9	110	3.6
II	DC 322	Drug Development and Chemotherapy	50	3.3	0	00	50	3.3
III	DC 323	Medicinal chemistry fieldwork	0	0.0	90	2.0	90	2.0
Total			75	5.0	175	3.9	250	8.9

PT320: PHARMACEUTICAL PHYTOCHEMISTRY (7.4 Units)

Introduction

The student will be taught the chemistry of natural products obtained from plants.

Aim

To equip the student with knowledge of naturally occurring compounds of medicinal and pharmaceutical importance, and their biosynthetic pathways and extraction and isolation techniques

Objectives

At the end of the course students should be able to:

1. Describe the principles and techniques of extraction and isolation of plant metabolites
2. Describe and predict the biosynthetic pathway of a given compound if provided with a structure
3. Select appropriate methods of extraction and isolation of various secondary metabolites.
4. Explain the medicinal, pharmaceutical and commercial uses of various secondary metabolites

Course content summary

Module	Code	Title	Theory		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	PT 321	Isolation of bioactive compounds	20	1.3	41	0.9	61	2.2
II	PT 322	Study of plant metabolites	60	4.0	50	1.1	110	5.1
Total			80	5.3	91	2.0	171	7.4

PC320: SOLID DOSAGE FORMS, STERILE PRODUCTS AND RADIOPHARMACEUTICALS (6.9 Units)

Introduction

In this course the students will be taught how to handle solid dosages, radioactive and sterile products which are frequently used in clinical practice.

Aims

To equip the student with adequate skills on solid dosage form, radiopharmaceuticals and sterile products.

Objectives

At the end of this course students should be able to:

1. Define and describe all types of solid dosage forms, methods of production and factors influencing them.
2. Describe coating technique and identify solid dosage forms requiring coating.
3. Explain the science of modified release drug dosage forms
4. Describe the different types of radioisotopes used for radiopharmaceuticals, their uses and their control in nuclear pharmacy/medicine.
5. Formulate the various types of sterile products.
6. Describe and apply different methods of packaging, labeling and pharmaceutical products and explain the importance of closures.
7. Carry out all activities necessary in the manufacture and in-process control of pharmaceuticals.

Course content summary

Module	Code	Title	Theory		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	PC321	Solid dosage forms	20	1.3	43	1.0	63	2.3

Module	Code	Title	Theory		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
II	PC322	Radiopharmaceuticals	20	1.3	43	1.0	63	2.3
III	PC323	Sterile products and packaging	20	1.3	43	1.0	63	2.3
Total			60	4.0	130	2.9	190	6.9

PP320: MEDICINE SCHEDULING, PATIENT DRUG INFORMATION AND PHARMACY MANAGEMENT (7.6 Units)

Introduction

The student is taught to cultivate the habit of taking a drug history before dispensing over-the-counter medicines in order to avoid the possibility of drug interaction. Also the student will be taught to be critical about the appropriateness of the drugs prescribed for the clinical condition of the patient.

Aims

Equip students with adequate skills in over the counter products, patient records drug management and clinical pharmacy.

Objectives

Students should be able to:

1. Distinguish and describe the prescription and OTC departments and the legal operating aspects.
2. Determine specific symptoms amenable to self-medication and give advice to patient and refer patients to physicians, where necessary.
3. Describe patient's record systems and policy of prescription medicine return.
4. explain regulations prohibiting the return of medication by patients
5. Explain the need, source, evaluation, poison control and dissemination of drug information.
6. Describe and apply the drug supply management and analyze the management functions.
7. Describe the different sections of the hospital pharmacy and community pharmacy.
8. Handle DDA and problems associated with drugs e.g. poisons, allergies etc.

Course content summary

Module	Code	Title	Theory		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	PP 321	Prescription and over the counter departments	40	2.7	38	0.8	78	3.5
II	PP 322	Patient record system, medical returns and drug information	15	1.0	39	0.9	54	1.9
II	PP 323	Pharmacy Management	20	1.3	38	0.8	58	2.2
Total			75	5.0	115	2.6	190	7.7

SEMESTER SEVEN**CP 420: CLINICAL PHARMACOLOGY II [THERAPEUTICS] (11.9 Units)****Introduction**

The students will be taught how drugs are used in various clinical situations.

Aim

To provide students with the knowledge of signs and symptoms of the diseases, therapeutic uses of drugs and their side effects.

Objectives

At the end of the course the student should be able to:

1. Describe the classification, uses, side effects, mechanism and site of action of chemotherapeutic agents.
2. Describe the importance adverse effects and interactions of drugs.
3. Give advice on environmental toxicity.
4. Give on environmental toxicity.
5. Describe the basic steps in drug development and drug evaluation.
6. Carry out pharmacological evaluation of applications for drug registration.
7. Describe the essential drugs concept and give advice on rational drug use.
8. Identify the symptoms and signs of different diseases and describe the investigations to be carried out to confirm the differential diagnosis.
9. Describe therapeutic and non-therapeutic approaches to the problems.

Course Content Summary

Course Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
CP 421	Chemotherapeutic Agents	50	3.3	0	0.0	50	3.0
CP 422	Adverse Effects of Drugs, Drug interactions, Environmental Toxicity and Drug Abuse	50	3.3	15	0.3	65	3.0
CP 423	Drug Development, Evaluation, & Registration; Prescription sampling & Case studies.	53	3.5	60	1.3	113	4.0
Total		153	10.2	75	1.7	228	11.0

PC420: BIOPHARMACEUTICS, PHARMACOKINETICS AND PRINCIPLES OF GOOD MANUFACTURING PRACTICE (8.3 Units)

Introduction

The student will be taught how drugs are handled by the body. The relationship between physicochemical characteristics and drug handling in the body will be described.

Aim

To provide the student with adequate knowledge on biopharmaceutical & pharmacokinetics, drug development and GMP

Objectives:

At the end of the course students should be able to:

Define biopharmaceutics, pharmacokinetics, bioequivalence, bioavailability, and pharmacokinetics and describe the mechanism and parameters affecting drug absorption.

Explain how drugs absorption can be optimized.

Describe the role of pharmacokinetics in dosage regimen design, adjustment and interpretation of data.

Describe stages in drug development, production and define GMP, quality assurance.

Describe a prototype pharmaceutical industry and standard operating procedures for pharmaceutical industrial processes.

Carry out computer simulations of blood profiles given the necessary parameters determining drug pharmacokinetic models.

Course Content Summary

Course Code	Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PC 421	Biopharmaceutics	45	3.0	14	0.3	59	3.3
PC 422	Pharmacokinetics	50	3.3	14	0.3	64	3.6
PC 423	Drug Development, Production and Good Manufacturing Practices	15	1.0	14	0.3	29	1.3
Total		110	7.3	42	0.9	152	8.3

PP 420: FORENSIC PHARMACY, PHARMACY MANAGEMENT AND CLINICAL PHARMACY PRACTICE (12.2 Units)

Introduction

The student will be taught on legal aspects of the pharmacy practice and entrepreneurship.

Aim

To equip the students with knowledge of legal, social and clinical pharmacy and entrepreneurial skills.

Objectives

At the end of this course students should be able to:

Define pharmacy laws and describe the steps taken to control narcotic, psychotropic and dangerous drugs.

Differentiate management from entrepreneurship and also prepare, monitor and evaluate business plans.

Define community pharmacy and also differentiate business from professional services in community pharmacy.

Describe social aspects of pharmacy and approaches of solving problems related to ethics and drug abuse and misuse.

Differentiate disease conditions and also diagnose, manage adverse drug effects.

Describe the different sections in a pharmaceutical plant or hospital pharmacy and assess whether Good Manufacturing or Good Dispensing Practice or recommended standards are adhered to.

Use computers for storing, processing, retrieving, sending data and improving pharmaceutical operations

Course Content Summary

Course Code	Course Name	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PP 421	Forensic Pharmacy and Drug abuse	15	1.0	10	0.2	25	1.2
PP 422	Community and Social Pharmacy	15	1.0	10	0.2	25	1.2
PP 423	Computer Applications in Pharmacy	15	1.0	10	0.2	25	1.2
PP 424	Therapeutics	30	2.0	8	0.2	38	2.2
PP 425	Management Entrepreneurship	20	1.3	0	5.0	225	5.0
BP 426	Hospital and industrial Pharmacy Fieldwork	0	0.0	225	5.0	225	12.2
Total		95	6.3	263	5.8	358	12.2

SEMESTER EIGHT

PD 420: PHARMACODYNAMIC AGENTS AND DRUG DESIGN (11.4 Units)

Introduction:

The student will be given more details on how drugs are developed and evaluated. The pharmacodynamic effects of drugs in animal models and in human beings will be described.

Aims

To equip students with concise knowledge of the chemistry and mechanism of action of pharmacodynamic agents.

To expose students to the basic principles of the design and development of new drugs.

Objectives

At the end of the course the student should be able to:-

Describe the chemistry of drugs acting on the central nervous system and non-steroidal anti-inflammatory drugs (NSAIDS).

Predict the metabolic fates of the drugs studied.

Show the relationship between chemical structure and pharmacological action.

Classify drugs according to chemical and pharmacological groups.

Describe the precise mode or mechanisms of drug action
 Give professional advice, using a simple language, to patients and other health care workers on drug effects and side effects from a chemical point of view.
 Describe the procedures used in the development in the new drugs

Course Content Summary

Course Code	Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PD 421	Pharmacodynamic Agent	137	9.1	25	0.6	162	9.7
PD 422	Drug Design	15	1.0	32	0.7	47	1.7
Total		152	10.1	57	1.3	209	11.4

PG 420: APPLIED PHARMACOGNOSY (7.8 Units)

Introduction:

The student will be taught quality control tests of crude extracts of plant origin and current development in pharmacognosy.

Aims:

To equip students with knowledge and skills used in quality of crude drugs and pharmaceutical aids.
 To familiarize students with methods which are used to discover new drugs from natural sources and make them aware of current development in pharmacognosy.

Objectives:

At the end of the course the student should be able to:-
 Describe a monograph and carry out quality control tests on crude drugs and pharmaceutical aids according to monograph specification
 Formulate quality assurance guidelines for crude drugs and pharmaceutical aids.
 Select potential medicinal plants using appropriate criteria for biological screening and appropriate biological assay methods
 Describe types of culture techniques, their applications, advantages and disadvantages.
 Show the importance of alternative systems of medicine, with emphasis on traditional medicine practice in Tanzania and their contribution to modern medicine.
 Give examples and explain the mechanisms of newly discovered drugs, such as anticancer, antimalarials and antiviral drugs.
 Describe the chemical nature, action of natural pesticides, hallucinogens, dermatogens and poisonous plants and their products.

Course Content Summary

Course Code	Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
PG 421	Quality Control of Crude Drugs	20	1.3	37	0.8	57	2.2
PG 422	Discovery of Drugs from Natural sources	30	2.0	36	0.8	66	2.0
PG 423	Poisonous plants	50	2.0	37	0.8	67	2.8
Total		80	5.3	110	2.4	190	7.8

RP420: RESEARCH PROJECT (4.6 Units)

Introduction

Student will be taught how to collect data and make meaningful conclusion from data collected.

Aim

To equip the student with data collecting skills

Objectives

At the end of the course the student should be able to:

Collect data by doing bench work in the laboratory or through surveys

Analyze data using statistical, computing or other techniques learned in earlier semesters

Compile the literature, procedures collected data and analytical results into a scientific report.

Course content summary

Module	Code	Name of course	Lectures		Practical		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	RP 420	Elective Field 56 days and research	-	-	209	4.6	209	4.6
Total			-	-	209	4.6	209	4.6

**BACHELOR OF SCIENCE IN NURSING
(BSc.NED & BSc.N)**

ARCHBISHOP ANTHONY MAYALA SCHOOL OF NURSING

INTRODUCTION

CUHAS has been granted permission to run the Bachelor of Science in Nursing Education (B.Sc.NED) degree programme. During the academic year 2010/2012 the Governing Board approved the establishment of the Archbishop Anthony Mayala School of Nursing with the responsibility for administering the B.Sc.NED degree programme. The degree programme is offered to three categories of applicants as follows:

- i) Category I: B.Sc.NED conversion programme, this is a 2 years programme for holders of Advanced diploma in Nursing education.
- ii) Category II: B.Sc.NED 3 years programme for holders of Diploma in Nursing.
- iii) Category III: B.Sc.NED 4 years programme for holders Advanced Level Certificate (Direct entrants)

BACHELOR OF SCIENCE IN NURSING EDUCATION (B.SC.NED)

BACKGROUND

The training of health personnel in Tanzania has not kept pace with the increasing needs for health services. According to staffing levels approved in 1999 the country requires a workforce of 53,481 in its 5,500 health facilities. However, the staffing level stands at 21,248; implying a workforce deficit of 32,403. Therefore, nearly 60% of the posts in the health sector are vacant. The deficit for enrolled nurses is the highest. It stands at 18,878. The nursing sector therefore contributes more than half of the deficit in the entire health sector.

The low number of nursing staff may be a result of few training positions. However there are over fifty institutions that offer a diploma and/or certificate in nursing in Tanzania. But these are poorly staffed. Each has an average of four professionally trained and registered nurse tutors; most of them had Advance Diploma in Nursing Education. Shortage of nurse tutors in Tanzania may have contributed to the inadequate qualified nurses. None the less there is a growing demand for higher quality nursing care in Tanzania; brought about by changes in health seeking behavior and growth of health risks in a changing global environment. Unfortunately, Tanzania has for a long time depended upon overseas Universities for higher education in nursing. The numbers of degree opportunities remain quite limited compared with the local demand for more highly educated nursing professionals. Due to significant growing of levels of education, these tutors need to be upgraded to degree level. Currently there is no any training school which produces Nurse Teachers to degree level in Tanzania, hence the need to start a conversion Degree Programme in Nursing Education at CUHAS. This will provide more and highly qualified nurse teachers to keep pace with the technological and social changes relevant to the nursing profession. CUHAS is well placed. It is in close proximity to the Bugando Medical Centre (BMC) a teaching, referral and consultant hospital with capacity of 870 beds. BMC is responsible for health services in the Lake Zone, serving a population of approximately 10 million people.

PROGRAMME GOALS

- (i) To upgrade Nurse tutors with Advance Diploma in Nursing Education to degree level, in order to meet the general standard of competence in nursing education.
- (ii) To produce Nurse Tutors suited to the needs of the country, but also meet the general standard of competence in nursing education.

PROGRAMME OBJECTIVES

Broad Objectives

- To produce competent university graduates in nursing education who will have: sound knowledge of nursing education and health science adapted to suit local needs, real commitment to the health needs of people and role models
- Create a pool of nurses endowed with a quality scientific base necessary to enable them to be innovative and to handle nursing problems in Tanzania; able to rehabilitate the sick, to prevent or minimize the adverse sequelae of disease and to promote health.

Specific Objectives

The graduate of BSc Nursing Education conversion programme should be able to:

- Interpret and base nursing practice on philosophy, purpose, policy and standards of the institution at which he/she belongs.
- Relate health of the community to socio-economic and political development in providing health and education services
- Conduct research, publish and utilize research findings for evidence based practice,
- Recognize limits of her/his competence in the provision of health care in the community and refer such issues to higher levels
- Manage health care and educational institutions
- Improve the health and wellbeing of all clients by quality-nursing care based on their needs, problems, ongoing reforms and advances in science and technology.
- Utilize concepts of educational media and technology in teaching and learning environment
- Utilize concepts of sociology both at learning institution and community
- Facilitate effectively and efficient learning and teaching activities to nurses and other personnel
- Apply concepts of educational psychology in teaching and learning settings

JUSTIFICATION

The growing demand for high quality nursing provision, increase level of education and growing of technology among communities in Tanzania has contributed to the need for highly qualified nurse tutors, who will then produce the competent nurses. Furthermore, there is a growing demand for higher quality nursing provision in Tanzania due to the increasing population, health seeking behavior and growth of health risks in a changing global environment. Currently there is no any training school which aims to convert Nurse Teachers (Advance Diploma in Nursing Education) to degree level in Tanzania. Collectively, all these factors have resulted into a high demand of qualified nurses and hence the serious needs to start conversional programme in nursing education at CUHAS which will produce the highly qualified nurse teachers in degree level.

PROGRAMME ORGANIZATION

B.Sc. NED (2 years) Conversion Programme

The programme will be of two academic years. Consisting of 40 teaching weeks in each academic year. The academic year shall be the basic accounting time unit.

The programme will be structured in semesters. Each academic year will consist of two semesters; each semester lasting for 20 weeks including examinations.

There will be a total of 20 courses. The content in each course will be made up of modules using a course unit weighting system in which each 15 hours of theory will constitute one unit, while 45 hours of practical or clinical session will constitute one unit.

During the course of study students will have a total of five weeks (185 hrs) for field work practice for research data collection (2nd semester), community health nursing practice and teaching practice in diploma schools of nursing (4th semester).

There will be a mid-semester break (breather) offered in the middle of each semester. The breather in the first semester will last for three weeks organized to coincide with X-Mass Holiday.

Allow a one week inter-semester vacation.

There will be University examinations at the end of each semester. External examiners/moderators will be invited during these examinations.

The grade point average (GPA) is adopted for the process of disposal of students, these includes supplementary, discontinuation and repeating a semester (year).

STRUCTURE AND FEATURE OF THE B.Sc.NED (Conversion) PROGRAMME

Semester 1

Code	Name of Course	Theory		Practice		Total	
		Hours	Units	Hours	Units	Hours	Units
AN100	Anatomy	129	8.6	232	5.2	361	13.8
BC100	Biochemistry	148	9.9	41	0.9	189	10.8
BE100	Bioethics I	19	1.3	-	-	19	1.3
TOTAL		296	19.8	353	6.1	569	25.9

Semester 2

Code	Name of Course	Theory		Practice		Total	
		Hours	Units	Hours	Units	Hours	Units
PH100	Physiology	113	7.5	74	1.6	187	9.1
BS100	Behavioural Science and Biostatistics	134	8.9	74	1.6	208	10.5
DS100	Development studies	60	4.0	30	0.6	90	4.6
ER100	Epidemiology and Research	65	4.3	0	0	65	4.3

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hours	Units	Hours	Units	Hours	Units
ER104	Field work Research	0	0	70	1.6-	70	1.6
BE100	Bioethics II	19	1.3	0	0	19	1.3
TOTAL		391	26	248	5.4	639	31.4

Semester 3

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		<i>Hours</i>	<i>Units</i>	<i>Hours</i>	<i>Units</i>	<i>Hours</i>	<i>Units</i>
LM200	Leadership and management	50	3.3	40	0.9	90	4.1
CP200	Clinical Pharmacology	167	11.1	16	0.4	183	11.5
DS200	Development studies	65	4.3	30	0.7	95	5.0
MC200	Maternal and child health Nursing	85	5.7	100	2.2	185	7.8
TOTAL		367	24.4	186	4.2	553	28.4

Semester 4

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		<i>Hours</i>	<i>Units</i>	<i>Hours</i>	<i>Units</i>	<i>Hours</i>	<i>Units</i>
EP200	Applied Educational Psychology	40	2.7	0	0.0	40	2.7
CH200	Community Health Nursing	60	4.0	0	0.0	60	4.0
CH203	FIELD WORK (COMMUNITY HEALTH NURSING)	0	0	40	0.9	40	0.9
AP200	Advanced principles of Nursing	89	5.9	80	1.8	169	7.7
HE200	Health Education Media and Technology	62	4.1	15	0.3	77	4.4
CD200	Curriculum development	80	5.3	0	0.0	80	5.3
CD206	FIELD WORK (TEACHING PRACTICE I DIPLOMA SCHOOLS)	0	0	75	1.7	75	1.7
MS200	Medical Surgical Nursing	62	4.2	110	2.4	172	6.2
TOTAL		393	26.2	320	7.1	713	32.9

THE TEACHING PROGRAMME (B.Sc. NED conversion)

SEMESTER ONE

AN 100: ANATOMY (13.8 Units)

Course Description

The course of anatomy is a fundamental subject for understanding the structure and organization of the human body in relation to its basic function.

Aim

Impart knowledge to the students on the structure and development of the human body in health

Objectives

At the end of the course the student should be able to:

1. Describe the structure of the human body in health as seen with the naked eye.
2. Identify different parts of the body
3. Define the medical/anatomical terminology
4. Describe the structure of the human body in health at microscopic level
5. level
6. Identify different types of cells, tissues and organs with the aid of microscope
7. Understand the processes involved in the development of the human
8. Body
9. Describe congenital malformations
10. Identify the causes of congenital malformation

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
AN 101	Human Biology and Genetics	45	3.0	30	0.7	75	3.9
AN 102	Upper limb, thorax, head and neck.	21	1.4	117	2.6	138	4.0
AN 103	Lower limb, abdomen, perineum and pelvis	21	1.4	75	1.7	96	3.1
AN 104	Neurobiology and Developmental Biology	42	2.6	10	0.2	52	2.9
Total		129	8.6	232	5.2	361	13.8

BC 100: BIOCHEMISTRY (10.8 Units)

Course Description

Biochemistry is a basic science subject on which most biological sciences find their foundation. It entails the fundamental concepts of chemistry of life, which include structural organization, energy interconversion, signal transduction and genetic information storage and flow. Recent developments in Molecular Biology are also embodied in Biochemistry.

Aim

1. To impart knowledge on structural organization of biomolecules.
2. To impart knowledge on Molecular and energy transformation and control of metabolism.
3. To impart knowledge on Signal transduction / flow and storage of genetic information.

4. To understand the enzymatic effects on food substances
5. To interpret laboratory results
6. To observe the effects of treatment on patients in order to plan and implement nursing care accordingly and to take appropriate actions

Objectives

Upon completion of the course, the student should be able to:

1. Describe chemistry of proteins, lipids and carbohydrates and to recognize some basic structures.
2. Describe cellular organization of molecular level
3. Describe the structure and function of enzymes including clinical application of enzymology
4. Describe principles of biological oxidation and oxidative phosphorylation and thermodynamics.
5. Describe processes in the intermediary metabolism
6. Describe selected concepts in molecule biology
7. Describe porphyrins and bile pigments metabolism
8. Describe hormone mechanisms and signal transduction

Course content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
BC101	Chemistry of biomolecules	25	1.7	-	-	25	1.7
BC102	Enzymology Energy Transformation	30	2.0	11	0.2	41	2.2
BC103	Proteins, Carbohydrates, Lipids Metabolism	50	3.3	10	0.2	60	3.5
BC104	Molecular biology and hormone systems	43	2.9	20	0.4	63	3.3
Total		148	9.9	41	0.8	189	10.8

BE 100: BIOETHICS (2.6 units)

Course description

This is the vertical course to be taught during semesters 1-5. No student shall be allowed to graduate until and unless he/she has completed and passed examination in bioethics. The course uses a topical approach to ethics based on philosophical examination of self-interest ethics, virtue ethics, consequentialist (utilitarian) ethics, duty-based ethics, and rights-based ethics.

Aims

To develop working knowledge of current ethical guidelines, professional codes of practice.
To relate ethical guidelines in relation to nursing practice and research.

Objectives

- Discuss some of the moral frameworks in relation to professionalism, self-awareness and ethical decision-making

- Discuss the ethical and legal issues in the care of clients throughout the life span.
- Apply knowledge about the legal and ethical responsibilities of the nurse, and assume responsibility for own learning and growth.
- Explain the concept of rights and duties of a nurse.
- Explain the concept of consent to treatment, medical procedure and participation in nursing research.
- List the ethical issues involved in screening
- List the ethical issues involved in research involving animals
- Identify the ethical and legal issues involved in nursing negligence.
- Explain the abortion act and its implications
- Identify the ethical and legal issues involved in obstetrics where there is conflict between care of mother and fetus
- Identify the ethical and legal issues in care and research in psychiatry.
- List situations where confidentiality may be broken and give reasons.
- Procure and preserve materials for forensic and toxicological investigations.

Course content

Code	Course Name	Lectures		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
BE 201	Bioethics I	19	1.3	-	-	19	1.3
BE 202	Bioethics II	19	1.3	-	-	19	1.3
	Total	38	2.6	-	-	38	2.6

SEMESTER TWO

PH 100: PHYSIOLOGY (9.1 units)

Course description

For nursing students, this knowledge will enable them to critically plan, implement and evaluate the nursing care of the patient in a more rational and scientific way. Some of the competences that the nursing student will be able to do include performing a nursing assessment, making observations, determining nursing diagnoses, performing nursing interventions and determining client outcomes as a result of nursing care.

Aim

The course is aimed at providing knowledge on normal functioning of the human body and how the various normal functions are controlled and regulated.

Objectives

Upon completion of the course, the student should be able to:

1. Describe the various homeostatic and control systems and the way they operate in the human.
2. Enumerate the international system of units which describe mass, volume and concentration
3. Describe the general physiology of the cell membrane; membrane potentials in excitable tissues (example muscle cells and nerves)
4. List the major co constituents of body tissues and describe the composition and partitioning of body fluids.

5. List the composition of blood and describe the general functions of blood; the formation characteristics of and functions of different blood cells.
6. List the major divisions of the circulatory system, and describe its general organization, functions and the control of the cardiovascular system.
7. Describe the functional anatomy of the respiratory system, the mechanism of breathing alveolar gas exchange and the control of the respiratory system
8. Describe functional anatomy of the kidney, the renal mechanism, filtration excretion and absorption; concentrating and diluting mechanisms and the endocrine function of the kidney.
9. Describe the functional anatomy of the digestive system, motility, secretory, digestive, absorptive, and endocrine functions of the digestive system.
10. Explain the chemical nature of hormones, and how the hormones are secreted, transported in plasma, their functions and how they are metabolized and excreted.
11. Describe the organization of the nervous system and the physiological functions, sensory, and motor system, autonomic nervous system; special senses

Course Content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
PH 151	Fluids and circulation	35	2.3	36	0.8	71	3.1
PH 152	Metabolism and Excretion	36	2.4	26	0.6	62	3.0
PH 153	Neuro-endocrine Physiology	42	2.8	12	0.3	54	3.1
	Total	113	7.5	74	1.6	187	9.1

BS 100: BEHAVIOURAL SCIENCE AND BIostatISTICS (10.5 Units)

Course description

The psychology aspect provides students with a basic understanding of fundamental psychological theory and research essential for nursing care. The knowledge acquired should enable the student to understand peoples’ psychological reactions to for examples, illness, hospitalization, stress and anxiety. The sociology part enables the students to understand health attitudes, beliefs and practices of patients and health professionals of culturally diverse groups. The knowledge on sociology provides some of the conceptual tools to help the students understand the relationships between social structures and people’s health experiences. The Biostatistics part of the course is relevant for nurses in enabling them to use the knowledge in research and in compiling, analyzing and interpreting patients/clients records. This course will also enable nurses to read quantitative nursing and related research articles effectively.

Aims

1. To provide a course that is relevant to current public health problems and their interventions
2. To provide students with fundamental statistical skills relevant to public health analysis.
3. To introduce students to specific concepts and models that explain ill health and diseases.

Objectives

Upon completion of the course, the student should be able to:

1. Understand the relationship between illness and human behaviour.
2. Recognize social cultural and psychological factors that influence ill-health.
3. Describe the different models that explain health behaviour in the community.
4. Measure health related knowledge and behaviour in the community.
5. Understand the relationship between culture and health.
6. Appreciate the role of traditional medicine in health service provision.
7. Understand and analyze factors that affect utilization of health services
8. Analyze risk behaviour pertaining to health.
9. Identify the social, cultural and psychological factors that may lead to adverse health outcomes in human populations.
10. Identify broad based social issues that are important in public health interventions.

Course Content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
BS 101	Medical Sociology	52	3.4	24	0.5	76	3.9
BS 102	Health Psychology	45	3.0	25	0.6	70	3.6
BS 103	Biostatistics and Demography	37	2.5	25	0.5	62	3.0
	Total	134	8.9	74	1.6	208	10.5

DS 100: DEVELOPMENT STUDIES (4.6 units)

Course description

The course exposes students to the theories, problems and contemporary issues of development in relation to health. The course will also contribute to the self and professional development of a nurse who is aware of the social, economic and political environment in which she/he functions.

Aim

The course is important for nurses in order to understand the process of social development, practical development perspectives, economic and social-political consequences and their implications on health, health policies, health care systems and nursing practice.

Objectives

Upon completion of the course, the student should be able to:

1. Define the concept of development
2. Explain the different theories of development
3. Describe the process of social and political developments in Africa.
4. Relate health to the theories of development.
5. Describe the concept of entrepreneurship

Course Content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
DS 101	Social Development and Health	25	1.7	10	0.2	35	1.9

DS 102	Education, Rural Development, Gender and Health	15	1.0	10	0.2	25	1.2
DS 103	Population, poverty and Health	20	1.3	10	0.2	30	1.5
	Total	60	4.0	30	0.6	90	4.6

ER 100: EPIDEMIOLOGY AND RESEARCH METHODOLOGY (4.3 units)

Course description

The students oriented with the principle and methods of epidemiology and research. The epidemiological control of diseases of public importance will be discussed. During this course students will have field work on research work.

Aim

1. To introduce to the students the basic principles of epidemiology and research methodology and their application in the planning and provision of medical and health care services
2. To introduce the students to environmental determinants of health and disease in human populations.

Objectives

At the end of the course, the student should be able to:

1. Understand and utilize the basic principles of epidemiology in research and in planning provision medical and health care services.
2. Understand and use the epidemiological methods in research and assess community health needs.
3. Understand and use the research methods to collect, analyze and present critical information to stakeholders and wider audience.
4. Understand the epidemiology and control of the selected major diseases of public health importance in Tanzania.
5. Describe physical, biological, socio-cultural and environmental factors affecting health and disease.
6. Identify the agencies and services available to families and the extent to which they meet their needs.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
ER101	Principles of Epidemiology	31	2.1	0	0	31	2.1
ER102	Research Methodology	20	1.3	0	0	20	1.3
ER103	Environmental Health and Family Case Study	14	0.9	0	0	14	0.9
ER104	Field work (Research)	0	0	70	1.6	70	1.6
	Total	65	4.3	70	1.6	135	5.9

SEMESTER THREE

LEADERSHIP AND MANAGEMENT OF HEALTH CARE AND HEALTH EDUCATION INSTITUTION (LM200) (5.7 Units)

Course description

The course orients the students in leadership and management issues. These include resource and project management, also exposed on audit and supervision of health care.

Aim

1. To enable the learner to acquire managerial skills for solving problems in the Health and Educational Institutions. Special attention will be given to resources management, project planning and quality assurance within the context of health sector reforms.
2. To equip the learner with knowledge, skills and attitudes to manage health and educational institutions.

Course content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
LM 201	Introduction to Management and Leadership	5	0.3	0	0.0	5	0.3
LM 202	Resource management	10	0.7	10	0.2	20	0.9
LM 202	Project management	15	1	15	0.3	30	0.4
LM 203	Innovation in health system	5	0.3	5	0.1	10	0.4
LM 204	Supervision of Health-care & Health-educational institutions	15	1.0	10	0.2	25	1.2
Total		50	3.3	40	0.8	90	4.1

CP 200: CLINICAL PHARMACOLOGY (11.5 Units)

Course description

The course will base in basic principles of drug action and its application to the rational clinical use during administration of drugs in the practice of nursing so as to evaluate expected therapeutic responses in patients, as well as to evaluate for possible adverse effects.

Aim

1. To introduce the student to the basic concepts of pharmacology.
2. To provide the student with knowledge of chemical agents found in environment

Objectives

Upon completion of course, the student should be able to:

1. Apply and discusses in satisfactory and professional manner the use and actions of drugs in the wards and clinics.
2. Recognize where required and in accordance with the law when prescriptions are written correctly.
3. Understand the importance of pharmacology in patient care.
4. Keep current with new developments and contribute new knowledge as need may arise.
5. Assesses patient condition for safe medication and outcomes of drug administration.
6. Use the instrumental skills related to drug administration in provision of quality nursing care.

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
CP201	Chemical Mediators	35	2.3	12	0.27	47	2.57
CP 202	Drug Disposition	19	1.3	4	0.09	23	1.39
CP 203	Systemic Pharmacology	73	4.8	-	-	73	4.8
CP 204	Chemotherapy of Parasites	24	1.6	-	-	24	1.6
CP 205	Applied Pharmacology	16	1.1	-	-	16	1.1
	Total	167	11.1	16	0.4	183	11.5

DS 200: DEVELOPMENT STUDIES (5.0 units)

Course description

The student nurse teachers will identify some developmental issues including plans and strategies including health plans.

Aims

To expose students to Tanzania’s development experiences and be aware of alternative development strategies existing currently.

Objectives

At the end of the course students should be able to:

1. Analyze the dynamics of Tanzania’s development plans/strategies and implementation in health and health related sector
2. Compare and contrast different development strategies in developing countries
3. Analyze current development problems and issues in Tanzania and developing countries in general and how these problems relate to health
4. Should be able to plan, organize and manage a private health care facility

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
DS 201	Globalization Environment and health	20	1.3	10	0.2	30	1.5
DS 202	Human Rights, Governance and Entrepreneurship	45	3.0	20	0.4	65	3.4
	Total	65	4.3	30	0.7	95	5.0

MC 200: MATERNAL AND CHILD HEALTH NURSING (7.8 Units)

Course description

This course is designed to emphasize human development and family and centred care. Through this course, the student is expected to become acquainted with the knowledge of women’s role and adaptation to normal and high-risk pregnancy, delivery, as well as postpartum period and the characteristics of the newborn. The course also teaches how to

take care of the expectant mother, the newborn, and under five children in Maternal and Child Health clinics.

Aim

1. To enable learner to take care to the mothers in pre-natal, intra natal and post natal.
2. To be able to take care to the children in order to prevent the diseases.

Objectives

Upon completion of the course, the student should be able to:

1. Understand the national and global policies and guidelines related to women and children’s health
2. Understand the psychosocial and gender issues in reproductive health
3. Provide appropriate family planning methods to clients
4. Integrate STD/HIV care in reproductive health
5. Provide quality nursing care to women in the inter-partum and post -partum periods
6. Provide quality nursing care to the newborn baby.
7. Provide necessary information to regarding breastfeeding to new mothers.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MC 201	Family planning, sexuality and STDs, HIV/AIDS	20	1.3	20	0.4	40	1.7
MC 202	Antepartum, Intrapartum and Postpartum Haemorrhage	47	3.1	40	0.9	87	4.0
MC 203	Newborn & Under-Five Child Assessment and Management	18	1.2	40	0.9	58	2.1
	Total	85	5.6	100	2.2	185	7.8

SEMESTER FOUR

EP 200: APPLIED EDUCATIONAL PSYCHOLOGY (2.7 Units)

Course description

The course is designed to enable the learner to apply the psychological perspectives in teaching and learning. The content of the course has been selected to cater for the needs of the nurse teacher in specified subject areas of personality development and education, the nature and learning process. It also assists the learner acquire basic principles in adult learning, guidance and counseling. Introduce special aspects of dealing with individuals with academic problems in learning situations.

Aim

1. To enable learners internalize the main concepts of educational psychology and apply it to various situations.
2. Make the learner have an inventory of the theoretical and practical skills in dealing with adult learners and problem solving in teaching and learning environment.

Objectives

At the end of the course the learner is expected to be able to:

1. Identify the key concepts of psychology, educational psychology, learning, counseling and personality.
2. Promote learning focusing on factors which influence personality development at various developmental phases
3. Utilize various theories of learning in teaching and learning situations.
4. Facilitate adult learning in health institutions and community
5. Demonstrate and counseling skill in dealing with learning and teaching aspects.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
EP 201	Personality development	5	0.3	0	0	5	0.3
EP 202	The learning process	15	1.0	0	0	15	1.0
EP 203	Psychology of adult learning	10	0.7	0	0	10	0.7
EP 204	Guidance and Counseling	10	0.7	0	0	20	0.9
	Total	40	2.7	-	-	40	2.7

CH 200: COMMUNITY HEALTH NURSING (4.9 Units)

Course description

The course focuses on the principles underlying community health nursing practice, as well as the roles and functions of community health nurses in primary, secondary, and tertiary prevention. Knowledge of epidemiology and the nursing process provide a framework for maximizing a community's health. The influence of culture, economics, politics, environments, and ethics as they impact community health nursing practice are explored throughout the course. **They will have field work on community practice**

Aim

1. This practicum provides opportunities for students to apply community/public health nursing concepts, theories, and processes in the care of individuals, families, aggregates and the total community.
2. The aim of community health nursing is prevention of illness, disability, and disease; early identification of risk factors; and promotion of optimal health for the total community and its people.

Objectives

At the end of the course, the student should be able to:

1. Identify the role of the community health nurse
2. Understand the concepts of primary, secondary and tertiary prevention in the community
3. Develop health promotion strategies appropriate for communities.
4. Identify and examiner selected community resources appropriate for specific groups in the community.
5. Discuss current demographic and economic factors influencing health care issues.
6. Understand the methods of influencing/motivating/educating//changing people

7. Implement the nursing process as an interdisciplinary team member to meet the health care needs of individuals, families, and groups throughout the life span in a variety of community settings.
8. Apply epidemiological data to meet the health and nursing care needs of individuals, families, aggregates, and communities.
9. Incorporate cultural assessment into nursing care of individuals, families and aggregates
10. Identify ethical, environmental political and economic factors that influence the health of individuals, families, aggregates and the community.
11. Practice nursing in community settings using principles of health promotion, disease promotion, health restoration with individuals, families, aggregates, and the community.
12. Participate in case management activities such as administration of nursing care in a community context, referral to community resources, multidisciplinary collaboration, and coordination of activities.
13. Apply theories and models of health education to individuals, families, and the community.
14. Select and use appropriate nursing research findings that related to the nursing care of assigned caseload of families, aggregates, and the community.
15. Demonstrate progression from a dependent to a more independent role in providing nursing care in the community.
16. Practice community health nursing according to legal, ethical, and professional standards.

Course Content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
CH 201	Primary Health Care and Health Promotion	34	2.3	-	-	34	2.3
CH 202	The Community Health Nurse	26	1.7	-	-	26	1.7
CH 203	Community Field Work	-	-	40	0.9	40	0.9
Total		60	4.0	40	0.9	100	4.9

AP 200: ADVANCED PRINCIPLES OF NURSING (7.7 Units)

Course description

The course uses a topical approach to ethics based on a philosophical examination of self-interest ethics, virtue ethics, consequentialist (utilitarian) ethics, duty-based ethics, and rights-based ethics. Care of elderly and dying are included in the cases.

It exposes learner on the contribution of nurse/midwife theorists to the practice. The issues and trends important to contemporary nursing are explored.

Also it's relevant for students in order to learn effectively especially during lectures, improve English language, and toward independent learning, for example individual/group assignments and study skills.

Various theories in personality and cognitive development are discussed.

It covers interpersonal communication skills necessary for communicating with clients and colleagues in health care settings.

Aim

1. The learner examines and applies ethics to the life span of patients/clients.

2. To provide the student with increased awareness in nursing process.
3. Understand the process of growth and development throughout the life span
4. Able to identify specific nutrition related aspects of nursing.

Objectives

At the end of the course, the student should be able to:

1. Describe the steps of the nursing process.
2. Describe the major components of nursing/midwifery theory.
3. Examine the evolution of current trends in professional nursing utilizing leadership and change theory
4. Discuss socio-cultural factors that affect ethical decision making for nurses.
5. Build self-confidence in the use of English to communicate ideas/views and arguments both verbally and in written forms.
6. Develop effective communication skills with clients, co-workers and the community at large.
7. Develop and maintains effective and positive interpersonal relationship at work, within families, clients and the community at large.
8. Plan and implement relevant nutrition interventions
9. Understand the physical, cognitive, affective and psychosocial domains of an individual's growth and development.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
AP101	Trends, Concepts and Skills in Nursing/Midwifery Care	15	1.0			15	1.0
AP102	Communication Skills	18	1.2			18	1.2
AP103	Fundamentals of Nursing	35	2.3	80	1.8	115	2.3
	Total	89	5.9	80	1.8	169	7.7

HE 100: HEALTH EDUCATION MEDIA AND TECHNOLOGY (4.4 Units)

Course Description

The course is designed to enable the learner to identify the health educational media and technology in teaching and learning. This includes the visual aids and textual materials for learning and teaching purposes.

Aim

1. To simplify the work of the trainer and trainee
2. To improve teaching and learning processes in a learner

Objectives

Upon completion of the course, the student should be able to:

1. Identify the effectiveness of health educational media and technology in teaching and learning.
2. Produce visual aids and textual materials for teaching and learning purposes.

3. Utilize, care and maintain health educational media commonly used in teaching and learning in health training settings
4. Initiate and maintain a health learning resource centre in health training institution.

Course content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
HE 101	Producing visual aids and textual material	23	1.5	6	0.1	29	1.6
HE 102	Health educational equipment	21	1.4	5	0.1	26	1.5
HE 103	Health learning resource centre	18	1.2	4	0.1	22	1.3
	Total	62	4.1	15	0.3	77	4.4

CD 200: CURRICULUM DEVELOPMENT (7.0 Units)

Course description

Curriculum development is a scientific technical skill applied in the process of inventing or modifying a guide containing suitable and relevant knowledge, skills and attitudes precisely cultivated by a learner.

The course will give emphasis on developing, within the learner, abilities in assessing and utilizing health education needs of a selected community.

During this course students will need to go for field work teaching practice in various selected Diploma and certificate nursing schools.

Aim

1. To provide a learner with theoretical conceptual framework and sufficient learning experience of programme building process, implementation and evaluation of a programme utilizing available human and non-human resources.
2. The learner will develop solid foundation for concepts, skills and attitudes of teaching and learning processes

Objectives

At the end of this course the learner is expected to:

1. Utilize appropriate key curriculum development concepts when developing any curriculum
2. Adapt accurately curriculum models and design in planning a curriculum.
3. Integrate effectively basic elements of a curriculum when developing a curriculum
4. Apply skillfully steps of curriculum development process in developing a curriculum.
5. Utilize effectively communication skills during teacher – learner interaction.
6. Apply relevant principles and methods of learning at a given teaching and learning situation.
7. Apply without difficulties appropriate principles and methods of teaching at any setting.
8. Develop skills in evaluating performance of a learner and achievements of an educational programme
9. Demonstrate competence in facilitating learning to a learner in nursing utilizing available human and non-human resources

Course content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
CD 201	The nature of curriculum development	10	0.7	0	0	10	0.7
CD 202	Curriculum elements	10	0.7	0	0	10	0.7
CD 203	Curriculum development process	25	1.7	0	0	25	1.7
CD 204	Communication skills in teaching and learning	15	1.0	0	0	15	1.0
CD 205	Principles and methods of learning and teaching	20	1.2	0	0	20	1.2
CD 206	Field work (Teaching practice in diploma nursing schools)	0	0	75	1.7	75	1.7
	Total	80	5.3	75	1.7	155	7

MS 200: MEDICAL SURGICAL NURSING (6.6 units)

Course Description

This course builds on the Basic Nursing courses by considering the nursing care of patients and treatment in more depth. Through the use of case studies and clinical practice, the students will gain knowledge in the assessment, planning implementation and evaluation of care of patients with medical conditions including common psychiatric disorders. The students will have the opportunity to acquire the pre-requisite knowledge necessary to assess, plan implement and evaluate care for surgical patient.

Aim

1. To equip learners with necessary knowledge, skills and attitude for the practice in the care of the patient undergoing surgery in more depth.
2. To enable students to give holistic care to the medical conditions.

Objectives

Upon completion of the course, the student will be able to

- 1) Understand the methods of caring for patients with medical and surgical conditions.
- 2) Use the nursing process to implement appropriate nursing care for clients with medical and surgical conditions in general and acute care setting.
- 3) Give appropriate counselling, education and psychological support to patients undergoing surgery.
- 4) Understand the methods of Theatre technique.
- 5) Utilize the problem-solving approach (nursing process) in management the clients with mental health problems.
- 6) Apply selected theoretical perspectives to nursing care of clients with mental disorders.
- 7) Design and implement treatment plans for patients and families with common mental health problems and comorbid conditions.
- 8) Promote and maintain mental health and manage the effects of mental illness through teaching and counseling.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MS 201	Nursing management of patients with medical and Surgical conditions	30	2.0	90	2.0	120	4.0
MS 203	Theatre techniques	10	0.7	10	0.2	20	0.9
MS 204	Managing patients with specific mental health problems.	22	1.5	10	0.2	32	1.7
	Total	62	4.2	110	2.4	172	6.6

B.Sc. NED (3 AND 4 YEARS PROGRAMME)

PROGRAMME ORGANIZATION

The programme will be of three academic years for nurses with diploma and four academic years for direct entrants. It will consist of 40 teaching weeks in each academic year. The academic year shall be the basic accounting time unit.

The programme will be structured in semesters. Each academic year will consist of two semesters; each semester lasting for 20 weeks including examinations.

There will be a total of 25 courses. The content in each course will be made up of modules using a course unit weighting system in which each 15 hours of theory will constitute one unit, while 45 hours of practical or clinical session will constitute one unit.

The course will cover a total of 13 weeks field work practice for research data collection (4th semester), community health nursing practice (semester 5) and teaching practice in the diploma schools of nursing during semester 6.

There will be a mid-semester break (breather) offered in the middle of each semester. The breather in the first semester will last for three weeks organized to coincide with X-Mass Holiday.

Allow a one week inter-semester vacation.

There will be University examinations at the end of each semester. External examiners/moderators will be invited during these examinations.

The grade point average (GPA) is adopted for the process of disposal of students, these includes supplementary, discontinuation and repeating a semester (year).

The clinical modules of Principles of Nursing Course will be made up of twelve weeks of practice for diploma entrants and one year and twelve weeks for direct entrants.

The field work modules will be made up of 4 weeks for Community Health Nursing Course.

There will be 20 weeks of field work in Curriculum Development and Management of Health Care and Educational Institutions. Field work for research course will be done during second year long vacation.

STRUCTURE AND FEATURE OF THE PROGRAMME (B.Sc. NED 3 and 4 years)

Semester 1

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
AN100	Anatomy	129	8.6	232	5.2	342	13.8
BC100	Biochemistry	148	9.9	41	0.9	189	10.8
BE100	Bioethics I	19	1.3	-	-	19	1.3
TOTAL		296	19.8	273	6.1	550	31.9

Semester 2

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
PH100	Physiology	113	7.5	74	1.6	187	9.1
BS100	Behavioural Science and Biostatistics	134	8.9	74	1.6	208	10.5
DS100	Development studies	60	4.0	30	0.6	90	4.6
BN100	Basic Nursing I	120	8.0	-	-	120	8.0
BE100	Bioethics II	19	1.3	-	-	19	1.3
TOTAL		446	29.7	178	3.8	624	33.5

Semester 3

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
MM200	Microbiology/Immunology	114	7.6	76	1.7	190	9.3
PE 200	Parasitology/ Entomology	91	6.0	61	1.3	152	7.3
DS200	Development studies	65	4.3	30	0.7	95	5.0
CP200	Clinical Pharmacology	167	11.1	16	0.4	183	11.5
BE200	Bioethics III	19	1.3	-	-	19	1.3
TOTAL		456	30.3	183	4.1	639	34.4

Semester 4

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
ER200	Epidemiology & Research	65	4.3	-	-	65	4.3
BN200	Basic Nursing II	135	9.1	80	1.8	215	10.9
MS200	Medical Surgical Nursing	166	11.1	150	3.3	316	14.4
MA200	Mental Health & Psychiatric Nursing	56	3.7	70	1.6	126	7.3

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
ER204	FIELD WORK (RESEARCH)	0	0	70	1.6	70	1.6
TOTAL		422	28.2	370	8.3	792	38.5

Semester 5

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
PD300	Paediatric Nursing	69	4.6	139	3.1	208	7.7
MC300	Maternal and Child Health Nursing	130	8.7	150	3.3	280	12.0
CH300	Community Health Nursing	80	5.3	120	2.7	200	8.0
CH305	FIELD WORK (COMMUNITY HEALTH NURSING)	0	0	120	2.7	120	2.7
TOTAL		279	18.6	529	11.8	808	30.4

Semester 6

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
LM300	Leadership and Management	55	3.7	80	1.8	135	5.4
AP300	Applied Educational Psychology	80	5.3	0	0	80	5.3
HE300	Health Educational Media Technology	73	4.9	90	2.0	163	6.9
CD300	Curriculum Development	99	6.6	0	0	99	6.6
CD 306	FIELD WORK (TEACHING PRACTICE)	0	0	330	7.3	330	7.3
TOTAL		307	20.5	500	11.1	807	31.5

Semester 7

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
PN400	Principles of Nursing	-	-	700	15.6	700	15.6
TOTAL		-	-	700	15.6	700	15.6

Semester 8

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
MC400	Maternal and Child Health Nursing	-	-	600	13.3	600	13.3
MA400	Mental Health & Psychiatric Nursing	-	-	100	2.2	100	2.2
TOTAL		-	-	700	15.5	700	15.5

TEACHING PROGRAMME (B.Sc. NED 3 and 4 years)

AN 100: ANATOMY (13.8 units)

Course Description

The course of anatomy is a fundamental subject for understanding the structure and organization of the human body in relation to its basic function.

Aim

Impart knowledge to the students on the structure and development of the human body in health

Objectives

At the end of the course the student should be able to:

1. Describe the structure of the human body in health as seen with the naked eye.
2. Identify different parts of the body
3. Define the medical/anatomical terminology
4. Describe the structure of the human body in health at microscopic level
5. Identify different types of cells, tissues and organs with the aid of microscope
6. Understand the processes involved in the development of the human Body
7. Describe congenital malformations
8. Identify the causes of congenital malformation

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
AN 101	Human Biology and Genetics	45	3.0	30	0.7	75	3.9
AN 102	Upper limb, thorax, head and neck.	21	1.4	117	2.6	138	4.0
AN 103	Lower limb, abdomen, perineum and pelvis	21	1.4	75	1.7	96	3.1
AN 104	Neurobiology and Developmental Biology	42	2.6	10	0.2	52	2.9
	Total	129	8.6	232	5.2	361	13.8

BC 100: BIOCHEMISTRY (10.8 units)

Course Description

Biochemistry is a basic science subject on which most biological sciences find their foundation. It entails the fundamental concepts of chemistry of life, which include structural organization, energy interconversion, signal transduction and genetic information storage and flow. Recent developments in Molecular Biology are also embodied in Biochemistry.

Aim

- To impart knowledge on structural organization of biomolecules.
- To impart knowledge on Molecular and energy transformation and control of metabolism.
- To impart knowledge on Signal transduction / flow and storage of genetic information.
- To understand the enzymatic effects on food substances
- To interpret laboratory results

- To observe the effects of treatment on patients in order to plan and implement nursing care accordingly and to take appropriate actions

Objectives

Upon completion of the course, the student should be able to:

- Describe chemistry of proteins, lipids and carbohydrates and to recognize some basic structures.
- Describe cellular organization of molecular level
- Describe the structure and function of enzymes including clinical application of enzymology
- Describe principles of biological oxidation and oxidative phosphorylation and thermodynamics.
- Describe processes in the intermediary metabolism
- Describe selected concepts in molecule biology
- Describe porphyrins and bile pigments metabolism
- Describe hormone mechanisms and signal transduction

Course content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
BC101	Chemistry of biomolecules	25	1.7	-	-	25	1.7
BC102	Enzymology Energy Transformation	30	2.0	11	0.2	41	2.2
BC103	Proteins, Carbohydrates, Lipids Metabolism	50	3.3	10	0.2	60	3.5
BC104	Molecular biology and hormone systems	43	2.9	20	0.4	63	3.3
Total		148	9.9	41	0.8	189	10.8

BE 100: BIOETHICS (2.6 units)

Course description

This is the vertical course to be taught during semesters 1-5. No student shall be allowed to graduate until and unless he/she has completed and passed examination in bioethics. The course uses a topical approach to ethics based on philosophical examination of self-interest ethics, virtue ethics, consequentialist (utilitarian) ethics, duty-based ethics, and rights-based ethics.

Aims

To develop working knowledge of current ethical guidelines, professional codes of practice. To relate ethical guidelines in relation to nursing practice and research.

Objectives

- Discuss some of the moral frameworks in relation to professionalism, self-awareness and ethical decision-making
- Discuss the ethical and legal issues in the care of clients throughout the life span.

- Apply knowledge about the legal and ethical responsibilities of the nurse, and assume responsibility for own learning and growth.
- Explain the concept of rights and duties of a nurse.
- Explain the concept of consent to treatment, medical procedure and participation in nursing research.
- List the ethical issues involved in screening
- List the ethical issues involved in research involving animals
- Identify the ethical and legal issues involved in nursing negligence.
- Explain the abortion act and its implications
- Identify the ethical and legal issues involved in obstetrics where there is conflict between care of mother and fetus
- Identify the ethical and legal issues in care and research in psychiatry.
- List situations where confidentiality may be broken and give reasons.
- Procure and preserve materials for forensic and toxicological investigations.

Course content

Code	Course Name	Lectures		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
BE 201	Bioethics I	19	1.3	-	-	19	1.3
BE 202	Bioethics II	19	1.3	-	-	19	1.3
	Total	38	2.6	-	-	38	2.6

SEMESTER TWO

PH 100: PHYSIOLOGY (9.1units)

Course description

For nursing students, this knowledge will enable them to critically plan, implement and evaluate the nursing care of the patient in a more rational and scientific way. Some of the competences that the nursing student will be able to do include performing a nursing assessment, making observations, determining nursing diagnoses, performing nursing interventions and determining client outcomes as a result of nursing care.

Aim

The course is aimed at providing knowledge on normal functioning of the human body and how the various normal functions are controlled and regulated.

Objectives

Upon completion of the course, the student should be able to:

1. Describe the various homeostatic and control systems and the way they operate in the human.
2. Enumerate the international system of units which describe mass, volume and concentration
3. Describe the general physiology of the cell membrane; membrane potentials in excitable tissues (example muscle cells and nerves)

4. List the major co constituents of body tissues and describe the composition and partitioning of body fluids.
5. List the composition of blood and describe the general functions of blood; the formation characteristics of and functions of different blood cells.
6. List the major divisions of the circulatory system, and describe its general organization, functions and the control of the cardiovascular system.
7. Describe the functional anatomy of the respiratory system, the mechanism of breathing alveolar gas exchange and the control of the respiratory system
8. Describe functional anatomy of the kidney, the renal mechanism, filtration excretion and absorption; concentrating and diluting mechanisms and the endocrine function of the kidney.
9. Describe the functional anatomy of the digestive system, motility, secretory, digestive, absorptive, and endocrine functions of the digestive system.
10. Explain the chemical nature of hormones, and how the hormones are secreted, transported in plasma, their functions and how they are metabolized and excreted.
11. Describe the organization of the nervous system and the physiological functions, sensory, and motor system, autonomic nervous system; special senses

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PH 151	Fluids and circulation	35	2.3	36	0.8	71	3.1
PH 152	Metabolism and Excretion	36	2.4	26	0.6	62	3.0
PH 153	Neuro-endocrine Physiology	42	2.8	12	0.3	54	3.1
	Total	113	7.5	74	1.6	187	9.1

BS 100: BEHAVIOURAL SCIENCE AND BIostatISTICS (10.5 units)

Course description

The psychology aspect provides students with a basic understanding of fundamental psychological theory and research essential for nursing care. The knowledge acquired should enable the student to understand peoples' psychological reactions to for examples, illness, hospitalization, stress and anxiety. The sociology part enables the students to understand health attitudes, beliefs and practices of patients and health professionals of culturally diverse groups. The knowledge on sociology provides some of the conceptual tools to help the students understand the relationships between social structures and people's health experiences. The Biostatistics part of the course is relevant for nurses in enabling them to use the knowledge in research and in compiling, analyzing and interpreting patients/clients records. This course will also enable nurses to read quantitative nursing and related research articles effectively.

Aims

1. To provide a course that is relevant to current public health problems and their interventions
2. To provide students with fundamental statistical skills relevant to public health analysis.
3. To introduce students to specific concepts and models that explain ill health and diseases.

Objectives

Upon completion of the course, the student should be able to:

1. Understand the relationship between illness and human behaviour.
2. Recognize social cultural and psychological factors that influence ill-health.
3. Describe the different models that explain health behaviour in the community.
4. Measure health related knowledge and behaviour in the community.
5. Understand the relationship between culture and health.
6. Appreciate the role of traditional medicine in health service provision.
7. Understand and analyze factors that affect utilization of health services
8. Analyze risk behaviour pertaining to health.
9. Identify the social, cultural and psychological factors that may lead to adverse health outcomes in human populations.
10. Identify broad based social issues that are important in public health interventions.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
BS 101	Medical Sociology	52	3.4	24	0.5	76	3.9
BS 102	Health Psychology	45	3.0	25	0.6	70	3.6
BS 103	Biostatistics and Demography	37	2.5	25	0.5	62	3.0
Total		134	8.9	74	1.6	208	10.5

DS 100: DEVELOPMENT STUDIES (4.6 units)

Course description

The course exposes students to the theories, problems and contemporary issues of development in relation to health. The course will also contribute to the self and professional development of a nurse who is aware of the social, economic and political environment in which she/he functions.

Aim

The course is important for nurses in order to understand the process of social development, practical development perspectives, economic and social-political consequences and their implications on health, health policies, health care systems and nursing practice.

Objectives

Upon completion of the course, the student should be able to:

1. Define the concept of development
2. Explain the different theories of development
3. Describe the process of social and political developments in Africa.
4. Relate health to the theories of development.
5. Describe the concept of entrepreneurship

Course Content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hrs	Units	Hrs	Units	Hrs	Units
DS 101	Social Development and Health	25	1.7	10	0.2	35	1.9
DS 102	Education, Rural Development, Gender and Health	15	1.0	10	0.2	25	1.2
DS 103	Population, poverty and Health	20	1.3	10	0.2	30	1.5
	Total	60	4.0	30	0.6	90	4.6

BN 100: BASIC NURSING (I) (8 Units)

Course description

The course uses a topical approach to ethics based on a philosophical examination of self-interest ethics, virtue ethics, consequentialist (utilitarian) ethics, duty-based ethics, and rights-based ethics. Care of elderly and dying are included in the cases.

Philosophy is relevant to nurses in enabling them to understand things happening in life and influence the nursing profession, for example, ethical issues, value of human life and dilemmas in the nursing and midwifery professions.

The course will expose the learner on the contribution of nurse/midwife theorists to the practice. The issues and trends important to contemporary nursing are explored. Social forces including economic, political, legal, and ethical viewpoints influencing decisions in nursing and health care policy are examined.

Aim

1. The learner examines and applies ethics to the life span of patients/clients.
2. To provide the student with increased awareness in nursing process

Objectives

At the end of the course, the student should be able to:

1. Discuss the ethical and legal issues in the care of clients throughout the life span.
2. Apply knowledge about the legal and ethical responsibilities of the nurse, and assume responsibility for own learning and growth.
3. Describe the steps of the nursing process.
4. Describe the major components of nursing/midwifery theory.
5. Examine the evolution of current trends in professional nursing utilizing leadership and change theory
6. Identify issues in nursing and health care delivery systems which influence nursing
7. Discuss current major trends, which influence nursing education and practice.
8. Discuss socio-cultural factors that affect ethical decision making for nurses.
9. Discuss societal and educational factors that can cause changes in the abilities of the new nursing graduate.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
BN 101	Concepts Skills in Nursing/Midwifery	45	3.0			45	3.0
BN 102	Trends and Issues in Nursing	40	2.7			40	2.7
BN 103	Philosophy	35	2.3			35	2.3
	Total	120	8.0			120	8.0

SEMESTER THREE

MM 200: MICROBIOLOGY/IMMUNOLOGY (9.3 units)

Course description

The course provides students with a basic understanding of the general microbiology and immunology, fundamental psychological theory and research essential for nursing care. The knowledge acquired should enable the student to be familiar with etiology of health problems and the laboratory procedures.

Aim

1. To provide students with knowledge and skills in the subject of Microbiology and Immunology.
2. To identify measures for infection prevention.
3. To interpret laboratory findings of microbiological investigations.

Objectives

Upon completion of the course, the student should be able to:

1. Understand the main principles of general medical microbiology and immunology.
2. Acquire the knowledge of the host- parasite environment relationship in health and in microbial diseases.
3. Understand the etiology of known microbial and immunological health problems.
4. Become familiar with general Epidemiological aspects of microbial health problems, that is modes of transmission of microbial infections, role of "carriers" in certain cases, sources of infecting agents, nosocomial infections, and simple preventive measures of specific health problems with special reference to sub Saharan Africa.
5. Be familiar with the laboratory procedures used for determining the etiology of common microbial and immunological health problems.
6. To enable them appreciate the role of the subject in problem solving in infectious disease management, prevention and control.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MI 201	General Bacteriology	54	3.6	62	1.4	116	5.0
MI 202	Virology and Mycology	39	2.6	6	0.1	45	2.7
MI203	Immunology	21	1.4	8	0.2	29	1.6
	Total	114	7.6	76	1.7	190	9.3

PE 200 PARASITOLOGY/ ENTOMOLOGY (7.3 units)

Course description

The course will include the life cycle of different parasites and the parts of the body affected. They also provided the methods of parasite control. This knowledge will be utilized by nurses in health/ nursing care.

Aim

1. To impart knowledge on identification of life cycles, epidemiological factors, host-parasite relationships
2. To impart knowledge on identification of the appropriate preventive and control measures.

Objectives

Upon completion of the course, the student should be able to:

1. Describe in detail the life cycle of medically important parasite.
2. Describe the organs most commonly involved in infection
3. Describe the relationship of this infection to symptoms, relapses and accompanying pathology
4. Describe the factors that determine endemicity of the parasite infection.
5. Describe the distribution and epidemiology of the parasites in East Africa
6. Describe the methods of parasite control e.g. chemotherapy, mollusciding, general sanitation etc.
7. Describe the advantages and disadvantages of each method.
8. Provide the qualify health/nursing care by utilizing knowledge of the parasitic infective process i.e host-parasitic relationship, classification and how parasites cause diseases.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PE 201	Protozoa & Immuno-Parasitology	35	2.3	19	0.4	54	2.7
PE 202	Helminthology	36	2.4	29	0.6	65	3.0
PE 203	Entomology	20	1.3	13	0.3	33	1.6
	Total	91	6.0	61	1.3	152	7.3

DS 200: DEVELOPMENT STUDIES (5.0 units)

Course description

The student nurse teachers will identify some developmental issues including plans and strategies including health plans.

Aims

To expose students to Tanzania's development experiences and be aware of alternative development strategies existing currently.

Objectives

At the end of the course students should be able to:

1. Analyze the dynamics of Tanzania's development plans/strategies and implementation in health and health related sector
2. Compare and contrast different development strategies in developing countries
3. Analyze current development problems and issues in Tanzania and developing countries in general and how these problems relate to health
4. Should be able to plan, organize and manage a private health care facility

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
DS 201	Globalization Environment and health	20	1.3	10	0.2	30	1.5
DS 202	Human Rights, Governance and Entrepreneurship	45	3.0	20	0.4	65	3.4
	Total	65	4.3	30	0.7	95	5.0

CP 200: CLINICAL PHARMACOLOGY (11.5 Units)

Course description

The course will base in basic principles of drug action and its application to the rational clinical use during administration of drugs in the practice of nursing so as to evaluate expected therapeutic responses in patients, as well as to evaluate for possible adverse effects.

Aim

1. To introduce the student to the basic concepts of pharmacology.
2. To provide the student with knowledge of chemical agents found in environment

Objectives

Upon completion of course, the student should be able to:

1. Apply and discusses in satisfactory and professional manner the use and actions of drugs in the wards and clinics.
2. Recognize where required and in accordance with the law when prescriptions are written correctly.
3. Understand the importance of pharmacology in patient care.
4. Keep current with new developments and contribute new knowledge as need may arise.
5. Assesses patient condition for safe medication and outcomes of drug administration.
6. Use the instrumental skills related to drug administration in provision of quality nursing care.

Course Content

<i>Code</i>	<i>Name</i>	<i>Theory</i>		<i>Practicals</i>		<i>Total</i>	
		Hrs	Units	Hrs			Hrs
CP201	Chemical Mediators	35	2.3	12	0.27	47	2.57
CP 202	Drug Disposition	19	1.3	4	0.09	23	1.39
CP 203	Systemic Pharmacology	73	4.8	-	-	73	4.8
CP 204	Chemotherapy of Parasites	24	1.6	-	-	24	1.6
CP 205	Applied Pharmacology	16	1.1	-	-	16	1.1
	Total	167	11.1	16	0.4	183	11.5

SEMESTER FOUR**ER 200: EPIDEMIOLOGY AND RESEARCH METHODOLOGY (5.9) Units****Course description**

The students oriented with the principle and methods of epidemiology and research. The epidemiological control of diseases of public importance will be discussed. During this course students will have field work on research.

Aim

1. To introduce to the students the basic principles of epidemiology and research methodology and their application in the planning and provision of medical and health care services
2. To introduce the students to environmental determinants of health and disease in human populations.

Objectives

At the end of the course in Principles of Epidemiology the student should be able to:

1. Understand and utilize the basic principles of epidemiology in research and in planning provision medical and health care services.
2. Understand and use the epidemiological methods in research and assess community health needs.
3. Understand and use the research methods to collect, analyze and present critical information to stakeholders and wider audience.
4. Understand the epidemiology and control of the selected major diseases of public health importance in Tanzania.
5. Describe physical, biological, socio-cultural and environmental factors affecting health and disease.
6. Identify the agencies and services available to families and the extent to which they meet their needs.

At the end of the course in Environmental Health and Family case studies course the student should be able to:

7. Describe the physical, biological and socio-cultural environmental factors affecting health and disease.
8. Identify the agencies and services available to families and the extent to which they meet their needs.
9. Have a longitudinal and not merely episodic view of family health and its determinants.

10. Describe the implications of a disease to a family and not merely to an individual
11. To develop social attitudes of
 - o Seeking ways to promote and maintain the health of the family, understanding that it is better to prevent than cure disease.
 - o Viewing patients not as purely clinical entities or individuals afflicted by disease but as a members of family, a work group and as part of the society in which they live.
12. Develop skills in:
 - o Gathering data and analysing it in an epidemiological manner.
 - o Communicating with patients and their families, and visiting homes.
 - o adapting preventive and curative measures to psychosocial, cultural and economic background of patients and their families
 - o Analysing the stressful or health promotive factors operating within a family group, including observations of environmental factors.
 - o Health education of a family group, as related to their specific education needs.

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Units	Hrs		Hrs	Units
ER 201	Principles of Epidemiology	31	2.1	-	-	31	2.1
ER202	Research Methodology	20	1.3	-	-	20	1.3
ER203	Environmental Health and Family Case Study	14	0.9	-	-	14	0.9
ER 204	FIELD WORK Research	0	0	70	1.6	70	1.6
	Total	65	4.3	-	1.6	135	5.9

BN 200: BASIC NURSING II (10.9 units)

Course description

This course is relevant for students in order to learn effectively especially during lectures and improve the English language. The course also introduces the students toward independent learning, for example individual/group assignments and study skills.

Various theories in personality and cognitive development are discussed. The uniqueness of the individual as she/he undergoes through the development processes in considered in the context of social, cultural and environmental situations.

It covers interpersonal communication skills necessary for communicating with clients and colleagues in health care settings.

Aim

Enables student to understand the process of growth and development throughout the life span.

It makes students understands the background and the recent approaches/concepts in nutritional problems affecting society, and specific nutrition related aspects of nursing.

Objectives

1. Build self-confidence in the use of English to communicate ideas/views and arguments both verbally and in written forms.
2. Utilize verbal and non-verbal cues for therapeutic communication in patient/client care.

3. Develop effective communication skills with clients, co-workers and the community at large..
4. Understand the unique needs of the client.
5. Develop and maintains effective and positive interpersonal relationship at work, within families, clients and the community at large.
6. Identify the aetiologies, manifestations and effects of the major nutrition disorders.
7. Plan and implement relevant nutrition interventions
8. Understand the physical, cognitive, affective and psychosocial domains of an individual's growth and development.

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
BN 201	Nutrition	19	1.3	-	-	19	1.3
BN 202	Human growth and Development	31	2.1	-	-	31	2.1
BN 203	Communication Skills	40	2.7	-	-	40	2.7
BN 204	Principal of Nursing	45	3.0	80	1.8	125	4.8
Total		135	9.1	80	1.8	215	10.9

MS 200: MEDICAL SURGICAL NURSING (14.4 UNITS)

Course Description

This course builds on the Basic Nursing courses by considering the nursing care of patients and treatment in more depth. Through the use of case studies and clinical practice, the students will gain knowledge in the assessment, planning implementation and evaluation of care of patients with medical and surgical conditions.

Aim

1. To equip learners with necessary knowledge, skills and attitude for the practice in the care of the patient undergoing surgery in more depth.
2. To enable students to give holistic care to the medical conditions.

Objectives

Upon completion of the course, the student will be able to

- 1) Understand the methods of caring for patients with medical and surgical conditions.
- 2) Use the nursing process to implement appropriate nursing care for clients with medical and surgical conditions in general and acute care setting.
- 3) Give appropriate counselling, education and psychological support to patients undergoing surgery.
- 4) Understand the methods of Theatre technique.
- 5) Use the instrumental skills in caring for patients with surgical problems and undergoing operation.
- 6) Give appropriate counseling, education and psychological support to patients undergoing surgery.

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MS 201	Management of Patients with Medical & Surgical Conditions	138	9.2	104	2.3	242	11.5
MS 202	Theatre Techniques	28	1.9	46	1	74	2.9
	Total	166	11.1	150	3.3	316	14.4

MA 200: MENTAL HEALTH & PSYCHIATRIC NURSING (5.3 Units)

Course description

Emphasis will be on personality structures and common psychiatric disorders. History of mental health in Tanzania and the use of specific neurological drugs will be covered. The course is also designed to expose learners to dealing with criminal clients with mental disorders.

Aim

1. The primary purpose of the course is to equip learners with necessary knowledge, skills and attitude for the practice in the promotion of community mental health
2. Be able to function as first level nurses in mental health institutions and communities.

Objectives

Upon completion of the course, the student should be able to:

- Appreciate the influence of historical events and recent trends in mental health services in the country.
- Make biopsychosocial health assessments that are culturally sensitive.
- Utilize the problem-solving approach (nursing process) in management of clients with mental health problems.
- Apply selected theoretical perspectives to nursing care of clients with mental disorders.
- Design and implement treatment plans for patients and families with common mental health problems and comorbid conditions.
- Demonstrate awareness of community resources for mental health and give guidance to individuals, families and groups appropriately.
- Engage in case management activities, such as organizing, accession, negotiating and integrating services and benefits for individuals and families.
- Promote and maintain mental health and manage the effects of mental illness through teaching and counseling.
- Practice mental health and psychiatric nursing according to legal, ethical, and professional standards.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MA 201	Mental disorders and behaviour pathology	12	0.8	-	-	12	0.8

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MA 202	Managing patients with specific mental health problems.	32	2.1	51	1.1	83	3.2
MA 203	Community Mental health Nursing	12	0.8	20	0.4	32	1.2
	Total	56	3.7	71	1.6	127	5.3

SEMESTER FIVE

PD 300: PAEDIATRIC NURSING (7.7 Units)

Course description

The course is designed to help students understand the potential health problems and needs of children based on their development process. Commonly seen diseases, communication skills, the impact of illness and hospitalisation on the children and their families are emphasized.

Aim

It gives students a foundation of paediatric knowledge and skills on which to build a long life learner approach to caring for children in a range of acute, critical and chronic care situations.

Objectives

Upon completion of the course, the student should be able to:

- Explain the Psychosocial, cultural, religion developmental and communication influence on child and family.
- Apply special consideration in the care of sick children.
- Utilize the nursing process in the care of a sick new born, infants, early childhood, middle childhood and adolescence.
- Plan and implement appropriate nursing care of children with common medical and surgical health problems.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PD 301	Paediatric medical conditions	47	3.1	81	1.8	128	4.9
PD 302	Paediatric surgical conditions	22	1.5	58	1.3	80	2.8
	Total	69	4.6	139	3.1	208	7.7

MC 300: MATERNAL AND CHILD HEALTH NURSING (10.8 Units)

Course description

This course is designed to emphasize human development and family and centred care. Through this course, the student is expected to become acquainted with the knowledge of women's role and adaptation to normal and high-risk pregnancy, delivery, as well as

postpartum period and the characteristics of the new-born. The course also teaches how to take care of the expectant mother, the new-born, and under five children in Maternal and Child Health clinics.

Aim

- To enable learner to take care to the mothers in pre-natal, intra natal and post natal.
- To be able to take care to the children in order to prevent the diseases.

Objectives

Upon completion of the course, the student should be able to:

- Understand the national and global policies and guidelines related to women and children’s health
- Understand the psychosocial and gender issues in reproductive health
- Provide appropriate family planning methods to clients
- Integrate STD/HIV care in reproductive health
- Provide quality nursing care to women in the inter-partum and post -partum periods
- Provide quality nursing care to the newborn baby.
- Provide necessary information to regarding breastfeeding to new mothers.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MC301	Policies, Guidelines in Reproductive Health and MCH	5	0.3	-	-	5	0.3
MC 302	Family Planning, STD and HIV/AIDS	25	1.7	35	0.8	75	2.5
MC 303	Ante partum, Intrapartum & Postpartum Haemorrhage	56	3.7	70	1.6	170	5.3
MC304	Newborn, Under-Five Child Management	25	1.7	45	1.0	100	2.7
Total		111	7.4	150	3.4	261	10.8

CH 300: COMMUNITY HEALTH NURSING (8.0 units)

Course description

The course focuses on the principles underlying community health nursing practice, as well as the roles and functions of community health nurses in primary, secondary, and tertiary prevention. Knowledge of epidemiology and the nursing process provide a framework for maximizing a community’s health. The influence of culture, economics, politics, environments, and ethics as they impact community health nursing practice are explored throughout the course. **Students will have fieldwork practice on community health nursing.**

Aim

1. This practicum provides opportunities for students to apply community/public health nursing concepts, theories, and processes in the care of individuals, families, aggregates and the total community.

2. The aim of community health nursing is prevention of illness, disability, and disease; early identification of risk factors; and promotion of optimal health for the total community and its people.

Objectives

At the end of the course, the student should be able to:

- Identify the role of the community health nurse
- Understand the concepts of primary, secondary and tertiary prevention in the community
- Develop health promotion strategies appropriate for communities.
- Identify and examiner selected community resources appropriate for specific groups in the community.
- Discuss current demographic and economic factors influencing health care issues.
- Understand the methods of influencing/motivating/educating//changing people
- Implement the nursing process as an interdisciplinary team member to meet the health care needs of individuals, families, and groups throughout the life span in a variety of community settings.
- Apply epidemiological data to meet the health and nursing care needs of individuals, families, aggregates, and communities.
- Incorporate cultural assessment into nursing care of individuals, families and aggregates
- Identify ethical, environmental political, and economic factors that influence the health of individuals, families, aggregates and the community.
- Practice nursing in community settings using principles of health promotion, disease promotion, health restoration with individuals, families, aggregates, and the community.
- Participate in case management activities such as administration of nursing care in a community context, referral to community resources, multidisciplinary collaboration, and coordination of activities.
- Apply theories and models of health education to individuals, families, and the community.
- Select and use appropriate nursing research findings that related to the nursing care of assigned caseload of families, aggregates, and the community.
- Demonstrate progression from a dependent to a more independent role in providing nursing care in the community.
- Practice community health nursing according to legal, ethical, and professional standards.

Course Content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		<i>Hrs</i>	<i>Units</i>	<i>Hrs</i>	<i>Units</i>	<i>Hrs</i>	<i>Units</i>
CH 301	Community Assessment Planning Interventions	10	0.7	0	0	10	0.7
CH 302	Primary Health Care/Health Promotion	20	1.3	0	0	20	1.3
CH 303	COHE Nurse as Educator, Developer, Evaluator	20	1.3	0	0	20	1.3
CH 304	Community Health (COHE) Nurse and the Community	30	2.0	0	0	30	2.0

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
CH 305	FIELD WORK (COMMUNITY HEALTH NURSING)	0	0	120	2.7	120	2.7
	Total	80	5.3	120	2.7	200	8

SEMESTER SIX

LM 300: LEADERSHIP AND MANAGEMENT (5.4 units)

Course description

The course orients the students in leadership and management issues. These include resource and project management, also exposed on audit and supervision of health care.

Aim

1. To enable the learner to acquire managerial skills for solving problems in the Health and Educational Institutions. Special attention will be given to resources management, project planning and quality assurance within the context of health sector reforms.
2. To equip the learner with knowledge, skills and attitudes to manage health and educational institutions.

Course content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
LM 301	Resource Management	20	1.3	30	0.7	35	2.0
LM 302	Project Management	20	1.3	40	0.9	60	2.2
LM 303	Innovation in Health System	15	1	10	0.2	25	1.2
	Total	55	3.6	80	1.8	135	5.4

APPLIED EDUCATIONAL PSYCHOLOGY (AP 300)

Course description

The course is designed to enable the learner to apply the psychological perspectives in teaching and learning. The content of the course has been selected to cater for the needs of the nurse teacher in specified subject areas of personality development and education, the nature and learning process. It also assists the learner acquire basic principles in adult learning, guidance and counseling. Introduce special aspects of dealing with individuals with academic problems in learning situations.

Aim

1. To enable learners internalize the main concepts of educational psychology and apply it to various situations.
2. Make the learner have an inventory of the theoretical and practical skills in dealing with adult learners and problem solving in teaching and learning environment.

Objectives

At the end of the course the learner is expected to be able to:

- Identify the key concepts of psychology, educational psychology, learning, counseling and personality.
- Promote learning focusing on factors which influence personality development at various developmental phases
- Utilize various theories of learning in teaching and learning situations.
- Facilitate adult learning in health institutions and community
- Demonstrate and counseling skill in dealing with learning and teaching aspects.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
EP 301	Personality development	10	0.7	-	-	10	0.7
EP 302	The learning process	35	2.3	-	-	35	2.3
EP 303	Psychology of adult learning	15	1.0	-	-	15	1.0
EP 304	Guidance and Counseling	20	1.3	-	-	20	1.3
Total		80	5.3	-	-	80	5.3

HE 300: HEALTH EDUCATION MEDIA AND TECHNOLOGY (6.9 Units)

Course Description

The course is designed to enable the learner to identify the health educational media and technology in teaching and learning. This includes the visual aids and textual materials for learning and teaching purposes.

Aim

1. To simplify the work of the trainer and trainee
2. To improve teaching and learning processes in a learner

Objectives

Upon completion of the course, the student should be able to:

- Identify the effectiveness of health educational media and technology in teaching and learning.
- Produce visual aids and textual materials for teaching and learning purposes.
- Utilize, care and maintain health educational media commonly used in teaching and learning in health training settings
- Initiate and maintain a health learning resource centre in health training institution.

Course content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
HE 301	Producing visual aids and textual material	28	1.9	90	2.0	118	3.9
HE 302	Health educational equipment	26	1.7	-	-	26	1.7
HE 303	Health learning resource centre	19	1.3	-	-	19	1.3

	Total	73	4.9	90	2.0	163	6.9
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CD 300: CURRICULUM DEVELOPMENT (13.7 Units)

Course description

Curriculum development is a scientific technical skill applied in the process of inventing or modifying a guide containing suitable and relevant knowledge, skills and attitudes precisely cultivated by a learner.

The course will give emphasis on developing, within the learner, abilities in assessing and utilizing health education needs of a selected community;

During this course students will need to go for field work teaching practice in various selected Diploma and certificate nursing schools.

Aim

- To provide a learner with theoretical conceptual framework and sufficient learning experience of programme building process, implementation and evaluation of a programme utilizing available human and non-human resources.
- The learner will develop solid foundation for concepts, skills and attitudes of teaching and learning processes

Objectives

At the end of this course the learner is expected to:

- Utilize appropriate key curriculum development concepts when developing any curriculum
- Adapt accurately curriculum models and design in planning a curriculum.
- Integrate effectively basic elements of a curriculum when developing a curriculum
- Apply skillfully steps of curriculum development process in developing a curriculum.
- Utilize effectively communication skills during teacher – learner interaction.
- Apply relevant principles and methods of learning at a given teaching and learning situation.
- Apply without difficulties appropriate principles and methods of teaching at any setting.
- Develop skills in evaluating performance of a learner and achievements of an educational programme
- Demonstrate competence in facilitating learning to a learner in nursing utilizing available human and non-human resources

Course content

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
CD 301	The nature of curriculum development	10	0.7	-	-	10	0.7
CD 302	Curriculum elements	15	1.0	-	-	15	1.0
CD 303	Curriculum development process	20	1.3	-	-	20	1.3
CD 304	Communication skills in learning and teaching	15	1.0	-	-	15	1.0
CD 305	Principles and methods of learning and teaching	39	2.6	-	-	39	2.6

Code	Module Name	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
CD 306	FIELD WORK Teaching Practice in Nursing Schools	-	-	320	7.1	320	7.1
	Total	99	6.6	320	7.1	419	13.7

SEMESTER SEVEN

Course description

In this semester students will be exposed to principals of nursing clinical practice.

Semester 7

Code	Name of Course	Theory		Practice		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PN400	Principles of Nursing	-	-	700	15.6	700	15.6
	Total	-	-	700	15.6	700	15.6

SEMESTER EIGHT

Course description

The semester involves practical exposure to the field of maternal and Child Health Nursing as well as Mental Health & Psychiatric Nursing.

Semester 8

Code	Name of Course	Theory		Practice		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
MC400	Maternal and Child Health Nursing	-	-	600	13.3	600	13.3
MA400	Mental Health & Psychiatric Nursing	-	-	100	2.2	100	2.2
	Total	-	-	700	15.5	700	15.5

**BACHELOR OF SCIENCE IN NURSING
(BSc.N)**

ARCHBISHOP ANTHONY MAYALA SCHOOL OF NURSING

BACHELOR OF SCIENCE IN NURSING (BSC.N) (4 YEARS PROGRAMME)

EIGHT SEMESTER CURRICULUM FOR THE GENERIC BACHELOR OF SCIENCE IN NURSING PROGRAMME

BACKGROUND

Tanzania is facing a human resource crisis in the health sector. This shortage is mainly caused, amongst other factors, by a low output of qualified staff and mal-distribution in health facilities in the country. The Ministry of Health and Social Welfare intends to minimize the problem of human resource shortage by increasing training output, expansion of students' intake and involvement of the private sector in training health workers who will be able to provide quality health care services. It is in this spirit that the Tanzania Episcopal Conference decided to start a medical school in order to participate in addressing this health human resource crisis.

In the Tanzania Development Vision 2025, the main objective is to achieve high quality livelihood of all Tanzanians. So training of highly qualified professionals will enable meet this objective. AAMSON-CUHAS is therefore, in line with the Tanzanian vision of 2025. The Archbishop Anthony Mayala School of Nursing (AAMSON), of the Catholic University of Health and Allied Sciences (CUHAS), is undertaking an expansion of its academic programmes. The AAMSON-CUHAS aims at running a four-year Generic Basic Bachelor of Science in Nursing (B. Sc. N) programme which will provide room for Form six leavers to continue with higher learning. The programme aims at producing highly competent nurse graduates who will be responsible for providing quality nursing services to the people of Tanzania and elsewhere.

Like other professional nursing training programs the programme is intended to prepare nurses who are accountable and responsible for health care in a dynamic society. To this end nurses must be educated to assume current nursing roles and to adapt to future health needs.

We believe graduates of this programme will create a pool that can later focus on clinical practice and those who may wish to join the teaching profession. These different focus areas may later form the basis for the development of various Masters Programmes in line with the current thinking of the Nursing Council.

AIM OF THE PROGRAM

To strengthen the nursing profession by developing competent nurses with knowledge, skills and positive attitude pertaining to nursing and midwifery care utilising evidence based practice and thus display professional, moral and ethical conduct in order to handle the growing health care needs nationally, regionally and internationally.

EXPECTED COMPETENCIES

On completion of the programme, the graduate is expected to be able to do the following competently:

Professional Cognitive skills

- Apply the knowledge of basic sciences in caring for client/patient with different health conditions.
- Apply effective interpersonal relationship skills at work, within families, clients and the community at large.
- Utilize ethical principles when providing care to clients/patients, families and the community at large
- Apply entrepreneurship skills for self, professional and institutional development in the social, economic and political context.
- Apply the principles of infection prevention and control when caring for clients/patients in all settings.
- Utilize computer skills in processing health information.
- Demonstrate quality nursing care utilizing nurse practice acts and standards.
- Use the research knowledge in provision of evidence based care to client/ patients.
- Utilize nursing process when managing patients/clients in health related setting.
- Utilize the public health/ Community health knowledge in managing community health problems.
- Apply the principles of teaching/learning during provision of care to patients, co-workers and the community at large.
- Apply leadership and management skills in nursing practice.

Professional Psychomotor Skills

- Demonstrate skills in providing quality care to patients with various conditions in all settings.
- Maintain effective interpersonal relationship skills at work, within families, clients and the community at large.
- Demonstrate ethical principles when providing care to clients/patients, families and the community at large
- Design entrepreneurship project for self, professional and institutional development.
- Maintain the principles of infection prevention and control when caring for clients/patients in all settings.
- Apply computer skills in processing health information.
- Conduct health related research and utilize research findings for evidence-based practice
- Use nursing process when managing patients/clients in health related setting.
- Demonstrate public health/ Community health skills in managing community health problems.
- Use principles of teaching & learning during provision of care to patients, co-workers and the community at large.
- Demonstrate leadership and management skills and act as a change agent within the political, social, and health care systems in the practice of nursing
- Respond efficiently and effectively to emergency and disaster situations.
- Demonstrate skills in managing client with STI and HIV/AIDS

Professional affective skills

- Share empathetically relevant information regarding sensitive health problems with patients/ clients and families

- Practice ethically and with integrity in maintaining patients confidentiality, obtaining appropriate informed consent and responding to medical evidence
- Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when providing care to clients.
- Value standards of professional conducts when providing care to patients/clients.
- Observe compassion, respect and sensitivity to patient/client’s individuality when giving nursing care
- Use information technology to access medical information and assimilate evidence from scientific studies to manage patients effectively.

SEMESTERISATION / MODULARISATION OF THE PROGRAMME

The BSc.N programme is a four-year semesterized programme. There are eight semesters with courses and modules specified. For basic science courses, they will be taught in a tailored manner. The total number of Credits in this programme is 728. During this programme students will have field practice i.e. research data collection in semester 6, Community health Nursing II in semester 7; Mental Health Nursing II in semester 8.

Important Features in the Semesterized Programme

- The academic year will have two semesters of twenty weeks each.
- Use a weighting system in which 1 Credit = 10 notion hours. These hours include lectures, seminars and tutorials, Assignments, independent studies & Research and Practical training.
- Have a one week mid-semester break
- Have a two weeks break between each semester
- Conduct final university examinations at the end of each semester
- Invite external examiners at the end of each semester
- Use the GPA system to assist in disposal of students
- Each course should have at least one continuous assessment

ENTRY CRITERIA

Holder of form-six certificate with THREE Advanced level passes in Physics, Chemistry, Biology, Geography, Agriculture and Nutrition; at least TWO passes at “D” or higher.

STRUCTURE OF MODULES

Semester 1

Code	Name of Course	Theory		Practice		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
AN100	Anatomy	129	12.9	232	23.4	361	36.1
BC100	Biochemistry	148	14.8	41	4.1	189	18.9
PS100	Philosophy	40	4.0	-	-	40.0	40.0
TOTAL		317	31.7	273	27.3	590	59.0

Semester 2

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
BS 100	Behavioural Science and Biostatistics	140	14.0	-	-	140	14.0
PH 100	Physiology	114	11.4	74	7.4	188	18.8
PC100	Professional Communication Skills	45	4.5	46	4.6	91	9.1
NE 100	Nursing Ethics	75	7.5	-	-	75	7.5
DS100	Development studies I	65	6.5	30	3.0	95	9.5
TOTAL		439	43.9	150	15.0	589	58.9

Semester 3

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MM200	Microbiology/Immunology	114	11.4	76	7.6	190	19.0
PE 200	Parasitology/ Entomology	91	9.1	61	6.1	152	15.2
NI 200	Nursing Informatics	35	3.5	70	7.0	105	10.5
BN 200	Basic Nursing I	55	5.5	90	9.0	145	14.5
DS 200	Developmental Studies II	65	6.5	30	3.0	95	9.5
TOTAL		360	36.0	327	32.7	687	68.7

Semester 4

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER 200	Epidemiology and Research Methodology I	60	6.0	20	2.0	80	8.0
HG200	Human Growth and Development	90	9.0	-	-	90	9.0
BN 200	Basic Nursing II	90	9.0	150	15.0	240	24.0
AC 200	Advocacy and Counselling	40	4.0	45	4.5	85	8.5
NT 200	Nutrition	80	8.0	35	3.5	115	11.5
TOTAL		360	36.0	250	25.0	610	61.0

Semester 5

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CP300	Clinical Pharmacology	167	16.7	16	1.6	183	18.3
MS 300	Medical Surgical Nursing	170	17.0	285	28.5	455	45.5
TOTAL		337	33.7	301	30.1	638	63.8

Semester 6

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		<i>Hrs</i>	<i>Credits</i>	<i>Hrs</i>	<i>Credits</i>	<i>Hrs</i>	<i>Credits</i>
MW 300	Midwifery	130	13.0	145	14.5	275	27.5
ER 300	Epidemiology and Research Methodology II FIELD WORK	35	3.5	70	7.0	106	10.6
CH 300	Community Health Nursing I	80	8.0	-	-	80	8.0
PD 300	Paediatric Nursing	85	8.5	135	13.5	220	22.0
TOTAL		330	33.0	350	35.0	681	68.1

Semester 7

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		<i>Hrs</i>	<i>Credits</i>	<i>Hrs</i>	<i>Credits</i>	<i>Hrs</i>	<i>Credits</i>
MP 400	Mental Health & Psychiatric Nursing I	70	7.0	90	9.0	160	16.0
PL 400	Principles of Learning and Teaching	60	6.0	60	6.0	120	12.0
TI 400	Trends and Issues in Nursing	55	5.5	-	-	55	5.5
CH 400	Community Health Nursing II (FIELD WORK)	15	1.5	240	24.0	255	25.5
TOTAL		200	20.0	390	39.0	590	59.0

Semester 8

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		<i>Hrs</i>	<i>Credits</i>	<i>Hrs</i>	<i>Credits</i>	<i>Hrs</i>	<i>Credits</i>
MP 400	FIELD WORK Mental Health & Psychiatric Nursing II	55	5.5	160	16.0	215	21.5
LM 400	Leadership & Management in Nursing	70	7.0	135	13.5	205	20.5
EP 400	Entrepreneurship	30	3.0	45	4.5	75	7.5
TOTAL		155	15.5	340	34.0	495	49.5

THE TEACHING PROGRAMME

SEMESTER ONE

AN 100: Anatomy (36.1 Credits)

Course Description

The course of anatomy is a fundamental subject for understanding the structure and organization of the human body in relation to its basic function. A sound knowledge of anatomy will enable the nursing students to plan and implement care in a more rational and scientific way during and after graduation as professional nurses. A sound knowledge of anatomy will enable the nursing students to plan and implement care in a more rational and scientific way during and after graduation as professional nurses.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Define the medical/anatomical terminology • Describe the structure of the human body in health as seen with the naked eye. • Identify different parts of the body • Describe the structure of the human body in health at microscopic level • Identify different types of cells, tissues and organs with the aid of microscope • Understand the processes involved in the development of the human body • Describe congenital malformations • Identify the causes of congenital malformation
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Locate areas for checking vital signs • Locate areas for injection • Use effectively body mechanics when handling patients. • Maintain good bone alignment when caring patients with fractures • Perform physical assessment to identify normal and abnormal structures of the body
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Express respect, compassion and integrity in providing nursing care • Observe sensitivity and responsiveness to culture, race / ethnicity, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity and identity when providing care to clients

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
AN 101	Cell Biology and Genetics	45	4.5	30	3.0	75	7.5
AN 102	Upper limb, thorax, head and neck.	21	2.1	117	11.7	138	13.8
AN 103	Lower limb, abdomen, perineum and pelvis	21	2.1	75	7.5	96	9.6
AN 104	Neurobiology and Developmental Biology	42	4.2	10	1.0	52	5.2
Total		129	12.9	232	23.2	361	36.1

BC 100: BIOCHEMISTRY (18.9 Credits)

Course Description

Biochemistry is a basic science subject on which most biological sciences find their foundation. It entails the fundamental concepts of chemistry of life, which includes structural organisation, energy interconversion, signal transduction and finally genetic information storage and flow. Recent developments in Molecular Biology are also embodied in Biochemistry. This course will enable nursing student to understand the enzymatic effects on food substances, to interpret laboratory results, to observe the effects of treatment on patients in order to plan and implement nursing care accordingly and to take appropriate actions.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Describe the functions of each biomolecule in the human body • Describe the concepts in molecular biology • Explain the metabolism of carbohydrates, lipids, proteins and nucleic acids • Explain the role of enzymes in the body • Apply the knowledge of genetics in managing patients with hereditary conditions/diseases • Apply the knowledge of the different biomolecules (proteins, carbohydrates, lipids) in managing a patient with various medical and surgical problems
Professional psychomotor skills	<ul style="list-style-type: none"> • Approach patients, families and /or caretakers in addressing appropriate biomolecules to patients with medical/surgical conditions.

	<ul style="list-style-type: none"> • Illustrate the different categories of food stuff that are relevant for a particular patient's condition. • Design patient care plan according to the biochemistry laboratory findings
Professional affective skills	<ul style="list-style-type: none"> • Share empathetically relevant information regarding hereditary/genetic problems with patients and families

Course content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
BC 101	Chemistry of Biomolecules	25	2.5	-	-	25	2.5
BC 102	Enzymology, Co-enzymes and Energy Transformation	30	3.0	10	1.0	40	4.0
BC 103	Metabolism of Carbohydrates, Lipids, Proteins, heme and Nucleic Acid	50	5.0	11	1.1	51	5.1
BC 104	Molecular Biology and Hormone Systems	43	4.3	20	2.0	63	6.3
	Total	148	14.8	41	4.1	189	18.9

PS 100: PHILOSOPHY (40.0 Credits)

Course Description

The course of Philosophy is a fundamental subject of understanding the things happening in life and influence the nursing professional in the delivery of nursing care.

This course enables nursing students to understand the importance of philosophy in order to care for individuals in a holistic manner and reach an adequate personal understanding of those things happening in life and influence the nursing profession, for example, ethical issues, value of human life and dilemmas in the nursing and midwifery professions.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Explain the historical developments and trends in philosophy • Describe the ancient and contemporary philosophers relevant in nursing profession • Discuss the common theoretical and practical problems in the nursing profession. • Describe Philosophical Problems in Man-Medicine Relations • Analyse philosophical Problems in Man (Health) - Nurse Relation
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Professional psychomotor skills	<ul style="list-style-type: none"> • Display profession philosophy when providing care • Disclose one's errors including medical errors, patient's data gathering errors, or misinterpretation of data to appropriate supervisor.
Professional affective skills	<ul style="list-style-type: none"> • Practice ethically and with integrity in maintaining patients confidentiality, obtaining appropriate informed consent and responding to medical evidence • Accept own gaps in knowledge and skills when providing care to patients and be ready to seek for help when necessary. • Develop a positive self-image and confidence as a professional nurse. • Approach all nursing actions with integrity, honest and authenticity

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PS 101	Introduction to Philosophy	10	1.0	-	-	10	1.0
PS 102	Philosophical Problems in Man-Medicine Relations	15	1.5	-	-	15	1.5
PS 103	Philosophical Problems in Man (Health) - Nurse Relation	15	1.5	-	-	15	1.5
	Total	40	4.0	-	-	40	4.0

SEMESTER TWO

BS 100: BEHAVIOURAL SCIENCE AND BIostatISTICS (14.0 Credits)

Course Description

This course comprises of three components namely Psychology, Sociology and Biostatistics. The psychology aspect provides student with a basic understanding of fundamental psychological theory and research essential for nursing care. The knowledge acquired should enable the student to understand peoples' psychological reactions to for example; illness, hospitalization, stress and anxiety.

The sociology part enables the student to understand health attitudes, beliefs and practices of patients and health professionals of culturally diverse groups. The knowledge on sociology provides some of the conceptual tools to help the students understand the relationships between social structures and people's health experiences.

The Biostatistics part of the course is provide a student with fundamental statistics skills relevant to public health analysis. It is also relevant for nurses in enabling them to use the

knowledge in research and in compiling, analysing and interpreting patients/clients records. This course will also enable nurses to read quantitative nursing and related research articles effectively.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Describe the relationship between illness and human behaviour. • Differentiate models that explain health behaviour. • Measure health related knowledge and behaviour in the community. • Analyse the relationship between culture and health. • Appreciate the role of traditional medicine in health service provision. • Analyse factors that affect utilization of health services • Analyse risk behaviour pertaining to health. • Identify the social, cultural and psychological factors that may lead to adverse health outcomes in human populations. • Identify broad based social issues that are important in public health interventions.
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Discover socio-cultural differences during caring clients/patients • Design culturally sensitive care plan for clients/patients • Prepare statistical presentations of the health information collected.
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients • Express compassion, respect and sensitivity to patient/client individuality when giving nursing care. • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to patients with medical/surgical conditions. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals.

Course Content

Code	Name of Module	Theory		Seminars		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
BS 101	Medical Sociology	50	5.0	-	-	50	5.0
BS 102	Health Psychology	45	4.5	-	-	45	4.5
BS 103	Biostatistics and Demography	45	4.5	-	-	45	4.5
Total		140	14.0	-	-	140	14.0

PH 100: PHYSIOLOGY (18.8 Credits)

Course Description

The course is aimed at providing knowledge on normal functioning of the human body and how the various normal functions are controlled and regulated.

For nursing students, this knowledge will enable them to critically plan, implement and evaluate the nursing care of the patient in a more rational and scientific way.

Expected competencies

Professional cognitive skills	<ol style="list-style-type: none"> 1. Describe the various homeostatic and control systems and the way they operate in the human body. 2. Explain the international system of units which describe mass, volume and concentration 3. Describe the general physiology of the cell membrane; membrane potentials in excitable tissues (example muscle cells and nerves) 4. Describe the major constituents of body tissues and the composition and partitioning of body fluids. 5. Describe the composition and its general functions of blood, formation characteristics and functions of different blood cells. 6. Describe the major divisions of the circulatory system, its general organization, functions and the control of the cardiovascular system. 7. Explain the functional anatomy of the respiratory system, the mechanism of breathing alveolar gas exchange and the control of the respiratory system 8. Explain the functional anatomy of the kidney, the renal mechanism, filtration excretion and absorption; concentrating and diluting mechanisms and the endocrine function of the kidney. 9. Describe the functional anatomy of the digestive system, motility, secretory, digestive, absorptive, and endocrine functions of the digestive system. 10. Explain the chemical nature of hormones, and how the hormones are secreted, transported in plasma, their functions and how they are metabolised and excreted.
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	11. Describe the organisation of the nervous system and the physiological functions, sensory, and motor system, autonomic nervous system; special senses
Professional psychomotor skills	<ul style="list-style-type: none"> • Determine normal and abnormal vital signs of the patients/clients • Determine patients/clients responses to stressors • Use effectively body mechanics when handling patients. • Demonstrate accuracy in giving injections to patients through various routes. • Maintain good bone alignment when caring patients with fractures • Demonstrate ability in monitoring intake and output of electrolyte and fluid balance of clients/patients. • Perform physical assessment to identify normal and abnormal functions of the human body systems
Professional affective skills	<ul style="list-style-type: none"> • Express respect, compassion and integrity in providing nursing care • Observe sensitivity and responsiveness to clients'/patients' coping mechanisms when providing care

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PH 101	Fluids and circulation	36	3.6	36	3.6	72	7.2
PH 102	Metabolism and Excretory system	36	3.6	26	2.6	62	6.2
PH 103	Neuro-endocrine Physiology	42	4.2	12	1.2	54	5.4
	Total	114	11.4	74	7.4	188	18.8

PC 100: PROFESSIONAL COMMUNICATION SKILLS (9.1 Credits)

Course Description

The course covers therapeutic and interpersonal communication skills necessary for communicating with clients, families and colleagues in health care settings.

The student will be expected to demonstrate professional communication skills with clients, co-workers and the community at large.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe effective communication skills when dealing with clients, co-workers and the community at large. Relate communication competences to the conceptual framework of the nursing process. Discuss the unique communication needs of client with special problems. Apply effective interpersonal relationship skills at work, within families, clients and the community at large.
Professional psychomotor skills	<ul style="list-style-type: none"> Demonstrate effective communication skills with clients, co-workers and the community at large when providing nursing care. Maintain principles of effective communication skills when relating with co-workers, patients/clients and the community at large.
Professional affective skills	<ul style="list-style-type: none"> Share experiences with client through setting of mutually chosen goals. Value the confidentiality of information gathered from the patients/clients Express compassion, respect and sensitivity to patient/client individuality when communicating. Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when communicating.

Course Content

Code	Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PC 101	Communication skills in Nursing	15	1.5	15	1.5	30	3.0
PC 102	The nurse patient relationship	15	1.5	16	1.6	31	3.1
PC 103	Communicating with special groups	15	1.5	15	1.5	30	3.0
Total		45	4.5	46	4.6	91	9.1

NE 100: NURSING ETHICS (7.5 Credits)

Course description

The course uses a topical approach to ethics based on philosophical examination of self-interest ethics, virtue ethics, consequentialist (utilitarian) ethics, duty-based ethics, and rights-based ethics.

It also emphasizes the use of ethical theories that provide a structured approach, moral reasoning in nursing practice. Ethical issues in nursing are better understood if the nurse explores the various methods of moral reasoning that are used to make judgements about the moral values of action. Sharpening fundamental principles of each theory increases its applicability and usefulness to the student. The learner examines and applies ethics to the life span of patients/clients

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Describe moral frameworks in relation to professionalism, self-awareness and ethical decision-making. • Discuss the ethical and legal issues in the care of clients throughout the life span. • Apply knowledge about the legal and ethical responsibilities of the nurse, and assume responsibility for own learning and growth. • Apply the ethical principles in the care of clients throughout the life span • Utilize ethical principles in decision making when providing care to clients/patients • Explain ethical issues involved in screening • Explain ethical issues involved in research involving human • Describe the abortion act and its implications
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Design an ethical appropriate plan in dealing with professional misconduct. • Demonstrate moral reasoning when providing care to clients • Demonstrate nursing professional ethics when providing care to clients/patients • Determine abortion act and its implications when providing care to clients/patients
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value standards of professional conducts when providing care to patients/clients. • Practice ethically with integrity in maintaining patient confidentiality when providing care.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
NE 101	Moral Pathways in Nursing	15	1.5	-	-	15	1.5
NE 102	Ethical theories and Principles	15	1.5	-	-	15	1.5
NE 103	Nursing Ethics Through the Life Span	26	2.6	-	-	26	2.6
NE 104	Bioethics	19	1.9	-	-	19	1.9
	Total	75	7.5	-	-	75	7.5

DS 100: DEVELOPMENT STUDIES I (9.5 Credits)

Course description

The course exposes students to the theories, problems and contemporary issues of health and development in general.

The course is important for nurses in order to understand the process of social development, practical development perspectives, economic and social-political consequences and their implications on health, health policies, health care systems and nursing practice. It will also contribute to the self and professional development of a nurse who is aware of the social, economic and political environment in which she/he functions

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Define the concept of development Explain the different theories of development Describe the process of social and political developments in Africa. Relate health to the theories of development. Describe the concept of entrepreneurship
Professional psychomotor skills	<ul style="list-style-type: none"> Design business plan which enhancing the wellbeing of the people in the community you live and foster own self economic development
Professional affective skills	<ul style="list-style-type: none"> Accept culture, race / ethnicity, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity and identity when providing care to clients Weigh the policies in place whether they influence the wellbeing of client/patient cared. Adhere to the development policies of the country that address the needs of the clients/patient when providing care

Course Content

Code	Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
DS 101	Social Development and Health	25	2.5	-	-	25	2.5
DS 102	Education, Health and Gender	25	2.5	15	1.5	40	4.0
DS 103	Population Health and Entrepreneurship	15	1.5	15	1.5	30	3.0
Total		65	6.5	30	3.0	95	9.5

SEMESTER THREE

MM 200: MICROBIOLOGY / IMMUNOLOGY (19.0 Credits)

Course Description

The course provides students with a basic understanding the general microbiology and immunology.

The knowledge acquired should enable the student to be familiar with etiology of health problems and the laboratory procedures and infection prevention.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the main principles of general medical microbiology and immunology. Apply the knowledge of the host- parasite environment relationship in health and in microbial diseases. Discuss the etiology of known microbial and immunological health problems. Describe the general Epidemiological aspects of microbial health problems, that is modes of transmission of microbial infections, role of "carriers" in certain cases, sources of infecting agents, nosocomial infections, and simple preventive measures of specific health problems with special reference to sub Saharan Africa. Explain the laboratory procedures used for determining the etiology of common microbial and immunological health problems. Interpret the role of the Nurse based on the knowledge of microbiology in solving problems of the patients with infectious disease, prevention and control.
Professional psychomotor skills	<ul style="list-style-type: none"> Prepare specimen of the patient/client for laboratory investigation

	<ul style="list-style-type: none"> Determining the etiology of common microbial and immunological health problems Design a plan of care for the patient based on microbial and immunological results.
Professional affective skills	<ul style="list-style-type: none"> Value the confidentiality of information gathered from the patients/clients investigations. Observe compassion, respect and sensitivity to patient/client individuality when taking and giving laboratory results. Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, spirituality, disabilities and other aspects of diversity when taking and giving laboratory results

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MM 201	General Bacteriology and Microbial infections	30	3.0	15	1.5	45	4.5
MM 202	Virology, mycology and Immunology	30	3.0	25	2.5	55	5.5
MM 203	Protozoology and immuno parasitology	30	3.0	16	1.6	46	4.6
MM 204	Helminthology and Entomology	24	2.4	20	2.0	44	4.4
	Total	114	11.4	76	7.6	190	19.0

PE 200: PARASITOLOGY/ ENTOMOLOGY (15.2 Credits)

Course description

The course will include the life cycle of different parasites, identification of life cycles, epidemiological factors, host-parasite relationships and the parts of the body affected. It also provides the appropriate methods of prevention and control measures of parasite. This knowledge will be utilized by nurses in nursing care.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Review in detail the life cycle of medically important parasite. Describe the organs most commonly involved in infection Discuss the relationship of this infection to symptoms, relapses and accompanying pathology Explain the factors that determine endemicity of the parasite infection. Describe the distribution and epidemiology of the parasites in East Africa Apply methods of parasite control e.g. chemotherapy, mollusciding, general sanitation etc. Explain the advantages and disadvantages of each method.
Professional psychomotor skills	<ul style="list-style-type: none"> Provide nursing care to patient by utilizing knowledge of the parasitic infective process i.e host-parasitic relationship, classification and how parasites cause diseases.
Professional affective skills	<ul style="list-style-type: none"> Value the confidentiality of information gathered from the patients/clients with parasitic infection Observe compassion, respect and sensitivity to patient/client individuality when giving nursing care to a patient with parasitic infection.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PE 201	Protozoa & Immuno-Parasitology	35	3.5	19	1.9	54	5.4
PE 202	Helminthology	36	3.6	29	2.9	65	6.5
PE 203	Entomology	20	2.0	13	1.3	33	3.3
	Total	91	9.1	61	6.1	152	15.2

NI 200: NURSING INFORMATICS (10.5 Credits)

Course description

Nursing informatics is the use of computer information systems, the most common computer hardware and software nurses may come across in the nursing setting. The course emphasizes the need for nurses to design and adopt computer processes to enhance client care, education, administration and management and nursing research.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Describe the common components of desktop computers • Apply word processing, database, spreadsheets and communication software in nursing • Describe computer application in nursing education • Discuss the advantages and concern of computerized patient documentation systems • Use computer in direct client monitoring and diagnosis. • Explain the ways computers may be used by nurse administrators in the area of personnel, facility management, finance, quality assurance and accreditation • Explain the role of computers in each step of the nursing and research process • Apply principles in disclosure of individually identifiable health information
Professional psychomotor skills	<ul style="list-style-type: none"> • Demonstrate the use of different data management systems • Demonstrate skills in maintaining privacy and confidentiality in relation to accessing electronic data • Demonstrate computer applications used in direct client monitoring and diagnosis.
Professional affective skills	<ul style="list-style-type: none"> • Use information technology to locate scientific studies related to individual patient's/client's health problems. • Use information technology to access medical information and assimilate evidence from scientific studies to manage patients effectively.

Course content

Code	Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
NI 201	General Concepts	05	0.5	10	1.0	15	1.5
NI 202	Computers in Nursing Education	05	0.5	10	1.0	15	1.5
NI 203	Computers in Nursing Practice	05	0.5	20	2.0	25	2.5
NI 204	Computers in nursing administration	05	0.5	15	1.5	20	2.0
NI 205	Computers in nursing research	15	1.5	15	1.5	30	3.0
	Total	35	3.5	70	7.0	105	10.5

BN 200: BASIC NURSING I (14.5 Credits)

Course description

The course provides opportunity for the students to orient themselves to a range of activities that constitute nursing and nursing core skills associated with the following activities of living: maintaining a safe environment, communication, breathing, personal cleansing and dressing; maintaining body temperature and mobilizing.

Orientation to this at an early stage of professional development provides the student with the confidence to proceed to more complex skills and procedures. The course will also expose the learners to the use of the nursing process in patient care

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Define terms related to nursing profession • Discuss historical and contemporary factors influencing the development of nursing • Describe the essential aspects of nursing • Discuss four major areas within the scope of nursing practice • Explain the purposes of nurse practice acts and standards for nursing practice. • Describe the roles of nurses • Describe the expanded carrier roles and their functions • Describe the criteria of profession and the professionalization of nursing • Explain the functions of national, international nurses associations and Tanzania Nurses and Midwifery Council (TNMC) • Describe concepts, models and theories applied in nursing practice • Describe vital /cardinal signs • Describe hygienic care that nurses provide to clients • Describe the nursing process • Describe ways of maintaining a safe environment during provision of care • Describe effective communication to patents during provision of care • Explain the physiological needs of the patient when providing nursing care
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Locate areas for taking vital /cardinal signs • Determine the normal and abnormal vital signs when providing care. • Design a nursing care plan to meet the physiological and hygiene needs of patients using the nursing process.

	<ul style="list-style-type: none"> • Demonstrate effective communication skills when providing nursing care
Professional affective skills	<ul style="list-style-type: none"> • Relate essential nursing values to personal attitudes, qualities and behaviours • Adhere on nursing code of conduct when caring patients/clients • Value the confidentiality of information gathered from the patients/clients • Express compassion, respect and sensitivity to patient/client individuality when giving nursing care. • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to patients with medical/surgical conditions. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals.

Course content

Code	Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
BN 201	Basic Concepts & Methodologies of Nursing Practice	10	1.0	-	-	10	1.0
BN 202	Assessment of patients Health status & promoting patients Hygiene, comfort, Rest & Sleep	15	1.5	30	3.0	45	4.5
BN 203	Maintaining Safe Environment of Patient/Client	15	1.5	30	3.0	45	4.5
BN 204	Interpersonal relationship & Principles of Admission, Transferring & Discharging Patients	15	1.5	30	3.0	45	4.5
Total		55	5.5	90	9.0	145	14.5

DS 200: DEVELOPMENT STUDIES II (9.5 Credits)

Course description

The course exposes student to Tanzania's development experiences and to be aware of alternative development strategies existing currently.

The importance of the course to nursing student is to develop positive attitude towards independent and lifelong learning as professionals. The student nurse is also able to network

with other categories of students (Medicine, Dentistry & Pharmacy) by sharing knowledge, skills and experiences.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the dynamics of Tanzania’s development plans/strategies and implementation in health and health related sectors. Compare and contrast different development strategies in developing countries. Examine current development problems and issues in Tanzania and developing countries in general and how these problems relate to health Plan, organize and manage a private health facility.
Professional psychomotor skills	<ul style="list-style-type: none"> Demonstrate networking skills with other categories of students within and outside the institution by sharing knowledge, skills and experiences. Demonstrate knowledge and skills in planning, organising and managing a private health facility Design health strategies to overcome problems of youth resulting from globalisation.
Professional affective skills	<ul style="list-style-type: none"> Express positive attitude towards independent learning and also lifelong learning as professionals Value patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, and other aspects of diversity when giving nursing care globally. Observe respect, compassion, accountability, and integrity while interacting with people nationally and internationally.

Course Content

Code	Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
DS 201	Globalization, Environment and Health	35	3.5	15	1.5	50	5.0
DS 202	Human Rights, Governance and Entrepreneurship	30	3.0	15	1.5	45	4.5
	Total	65	6.5	30	3.0	95	9.5

SEMESTER FOUR

ER 200: EPIDEMIOLOGY & RESEARCH METHODOLOGY I (8.0 Credits)

Course description

The course comprises of two components, namely Epidemiology and Research methodology.

The Epidemiology part introduces the students to environmental determinants of health and disease in human populations. The aim of the course is to enable the student understand the basic principles of epidemiology and its application in the planning and provision of medical and health care services.

The research methodology part explores the type and method for nursing and midwifery research, examine the steps in the development of a research, review and evaluates current research findings in nursing for its applicability to nursing theory and practice and to study the process of scientific investigation.

Students will be introduced to a range of research methodologies and the principles underpinning research activity in nursing, midwifery and health care. Skills in searching for evidence and critical reading are enhanced.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Describe the basic principles of epidemiology in research and in planning provision medical and health care services. • Explain the epidemiological methods in research and assessing the community health needs. • Use the research methods to collect, analyze and present critical information to stakeholders and wider audience. • Describe the control of major diseases of public health importance in Tanzania. • Describe physical, biological, socio-cultural and environmental factors affecting health and disease. • Describe the stages of the research process. • Explain the methods of utilizing research findings in nursing and midwifery practice. • Evaluate research findings
Professional psychomotor skills	<ul style="list-style-type: none"> • Determine the epidemiological methods in research and assess community health needs • Use the research methods to collect, analyze and present critical information to stakeholders and wider audience. • Prepare the research proposal • Demonstrate skills in writing research report • Produce research findings to improve the standard of nursing and midwifery care in Tanzania. • Use skills in critiquing nursing research.
Professional affective skills	<ul style="list-style-type: none"> • Value the importance of evidence-based practice in nursing and midwifery. • Use research findings to improve the standard of nursing and midwifery care in Tanzania.

	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients during research process • Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when collecting the research data • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals in research process.
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COURSE CONTENT

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER 201	Principles of Epidemiology	20	2.0	-	-	20	2.0
ER 202	The Research Process	20	2.0	10	1.0	30	3.0
ER 203	Contexts for nursing and midwifery research	20	2.0	10	1.0	30	3.0
Total		60	6.0	20	2.0	80	8.0

HG 200: HUMAN GROWTH AND DEVELOPMENT (9.0 Credits)

Course Description

This course describes various theories in personality and cognitive development, the uniqueness of the individual as she/he undergoes through the development processes in the context of social, cultural and environmental situations.

The course enables the student to identify environments that support optimal growth and development of individuals and families on physical, cognitive and psychosocial development processes throughout the life span.

It also enables the student to examine a broad, dynamic conceptualization of human growth and development derived from examination of relevant theoretical and empirical knowledge.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Explain foundation of human growth and development • Describe human biological growth and development • Discuss physiological changes in relation to human growth and development • Describe the theories of human growth and development • Discuss factors influencing human growth and development
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	<ul style="list-style-type: none"> • Explain the concept of family centred care in relation to human growth and development • Apply family centered approach in relation to human growth and development • Assess growth and development at various developmental stage of the human being and compare with normal standards of growth and development
Professional psychomotor skills	<ul style="list-style-type: none"> • Determine a variety of theories of human growth and development at various stages of the lifespan during provision of care. • Demonstrate skills in communicating with individuals at various stages of human growth and development. • Determine the physical, cognitive, affective and psychosocial domains of an individual's growth and development. • Demonstrate skills in detecting the common health/safety problems that may develop at a particular individual's growth and development stage. • Determine the individual's needs according to growth and developmental stage. • Design a plan of care according to the information gathered in the various stages of human growth and development for provision of quality care.
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered during growth and development assessment of individuals at various stages • Express compassion, respect and sensitivity to individual's individuality when giving nursing care at various stage of growth and development. • Respond professionally to individuals' cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity at various stages of growth and development when providing nursing care • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals when dealing with issues relating to growth and development of individuals. •

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
HG 201	Introduction to human growth and development	20	2.0	-	-	20	2.0

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
HG 202	Human growth and development at various stages of life	70	7.0	-	-	70	7.0
	Total	90	9.0	-	-	90	9.0

BN 200: BASIC NURSING II (24.0 Credits)

Course Description

The course exposes students to learning specific skills in relation to meeting nutritional and elimination needs, and promoting tissue healing. Basic Nursing II builds on Basic Nursing I, with more advanced nursing skills and knowledge which will help learners to acquire the necessary knowledge and skills in assisting clients to achieve their maximum health potential both physically, mentally, socially and spiritually; maintain and promote health, prevent disease and suffering and help them die peacefully.

Expected Competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the nursing care of a patient in meeting nutritional and elimination needs. Describe the first aid management of a patient/client in emergency situations. Manage a terminally ill patient. Explain the nursing care of a dead body (last office). Discuss stress management and grieving in caring for terminally ill patients.
Professional psychomotor skills	<ul style="list-style-type: none"> Demonstrate skills in meeting nutritional and elimination needs of clients during provision of care. Demonstrate skills of first aid management for a patient/client in an emergency situation. Demonstrate skills in managing a terminally ill patient. Demonstrate skills in caring for a dead body. Demonstrate skills managing stress and grieving when caring for terminally ill patient.
Professional affective skills	<ul style="list-style-type: none"> Value the confidentiality of information gathered when caring for a terminally ill patient. Express compassion, respect and sensitivity to patient/client individuality when giving nursing care to a terminally ill patient. Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to a terminally ill patient.

	<ul style="list-style-type: none"> Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals when giving nursing care to a terminally ill patient.
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Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
BN 201	Meeting Nutritional, Elimination and Oxygenation Needs of Patients	50	5.0	100	10.0	150	15.0
BN 202	Introduction to First Aid & Promotion of Tissue Healing,	40	4.0	50	5.0	90	9.0
Total		90	9.0	150	15.0	240	24.0

AC 200: ADVOCACY AND COUNSELING (5 Credits)

Course description

This course equips a student with knowledge, skills and attitudes to enable him/her advocate for change in health and health related issues. The course will also enable the student to develop effective counselling skills. Emphasis will be on familiarity and sensitivity to the cultural as well as to characteristics and needs of the clients.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Define advocacy and counselling Discuss issues that are pertinent for advocacy Discuss incidences where by advocacy can be a challenge Discuss values that are basic to the client during advocacy Review the goals of counselling Identify the models of counselling Describe the co values for counselling Explain the co- values of counselling Discuss the qualities and the characteristics of a good counsellor. Describe the process of counselling
Professional psychomotor skills	<ul style="list-style-type: none"> Demonstrate advocacy skills when giving care to patients/clients. Demonstrate effective counselling skills when dealing with patients in difficulty situations

	<ul style="list-style-type: none"> • Use lobbying skills to effect change • Plan for the implementation and evaluation of advocacy.
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients during the process of advocacy and counselling. • Express compassion, respect and sensitivity to patient/client individuality during the process of advocacy and counselling. • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during the process of advocacy and counselling. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals concerning the outcome of the advocacy and counselling done to patients/clients.

COURSE CONTENT

Code	Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
AC 201	Advocacy	20	2.0	15	1.5	35	3.5
AC 202	Counselling	20	2.0	30	3.0	50	5.0
	Total	40	4.0	45	4.5	85	8.5

NT 200: NUTRITION (11.5 Credits)

Course description

The course intends to provide knowledge on socio-cultural, economic and specific nutrition related aspects of nursing, such as the role of diet in nutrition related diseases. The course aims at making students understand the background and the recent approaches/concepts in nutritional problems affecting the society. The knowledge gained will enable them to plan, implement and evaluate relevant nutrition interventions to individual patients/client and the community at large in collaboration with other sectors involved in this issue.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Use the conceptual framework to assess major nutrition problems nationally and globally. • Analyse major nutrition problems nationally and globally. • Describe the aetiologies, manifestations and effects of the major nutrition disorders. • Plan relevant nutrition interventions
Professional psychomotor skills	<ul style="list-style-type: none"> • Apply the knowledge of socio-cultural and economic influences in managing patients with nutritional disorders/diseases • Determine major nutrition problems using the integrated conceptual framework model • Design relevant nutritional interventions relating to identified patients problems • Maintain quality care to clients with nutritional needs. • Develop an evaluation plan for the different nutritional programmes in the community
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients with nutritional disorders. • Express compassion, respect and sensitivity to patient/client individuality when giving nursing care to a patient with nutritional disorders. • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to patients with nutritional disorders. • Observe respect, compassion, accountability, and integrity caring to the patient with nutritional disorders.

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
NT 201	Basic information on nutrition	20	2.0	-	-	20	2.0
NT 202	Assessment and analysis of major nutrition problems using the integrated conceptual framework model	25	2.5	35	3.5	60	6.0
NT 203	Nutrition Programme planning, implementation management and evaluation	20	2.0			20	2.0
NT 204	Aetiologies, manifestations and epidemiology of the major nutrition disorders of nutrition disorders	15	1.5	-	-	15	1.5
	Total	80	8.0	35	3.5	115	11.5

SEMESTER FIVE

CP 300: CLINICAL PHARMACOLOGY (18.3 Credits)

Course Description

This course aims at introducing the student to the basic concepts of pharmacology, with emphasis on how drugs act in human beings and chemical agents found in the environment. It will also help students to use the knowledge for effective clinical judgments when providing nursing care.

The student can apply this knowledge during administration of drugs in the practice of nursing so as to evaluate expected therapeutic responses in patients, as well as to evaluate for possible adverse effects.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Apply the principles of drug administration when administering drugs to patients. • Review prescriptions if written correctly in accordance with the law. • Describe the importance of pharmacology in patient care. • Assess patients' condition for safe medication and outcome of drug administration. • Apply different methods of drug administration when providing nursing care.
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Determine new developments in pharmacology when caring patients/client with different health conditions. • Determine the common drugs used in the wards and clinic • Demonstrate knowledge and skills when administration drugs to the patients/client. • Illustrate the importance, action, adverse effect and compliance of drugs when giving care to the patient. • Determine patient condition for safe medication and outcomes of drug administration • Develop a plan in accordance with the law to detect any incorrectly written prescriptions for Dangerous Drug Act (DDA).
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value new knowledge in the development of pharmacology in nursing. • Value the confidentiality of information gathered from the patients/clients during drug administration. • Express compassion, respect and sensitivity to patient/client individuality when giving medication. • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities

	<p>and other aspects of diversity when giving medication to patients</p> <ul style="list-style-type: none"> Express respect, compassion, accountability, and integrity while interacting with peers and other health professionals in case of drug errors during the process of drug administration.
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Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CP201	Chemical Mediators	35	3.5	12	1.2	47	4.7
CP 202	Drug Disposition	19	1.9	4	0.4	23	2.3
CP 203	Systemic Pharmacology	73	7.3	-	-	73	7.3
CP 204	Chemotherapy of Parasites	24	2.4	-	-	24	2.4
CP 205	Applied Pharmacology	16	1.6	-	-	16	1.6
	Total	167	16.7	16	1.6	183	18.3

MS 300: MEDICAL SURGICAL NURSING (45.5 Credits)

Course description

This course integrates the knowledge, skills and attitudes the student has obtained from the basic nursing courses. The course exposes students to patients with different medical surgical conditions which facilitates learning and allows them to achieve the necessary competences. Through the use of theory, case studies and clinical practice, the students will gain knowledge in the assessment, planning implementation and evaluation in order to provide quality care to patients with medical surgical conditions.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe various medical surgical conditions. Describe health care system and recognize ways to assess and improve health care. Assess the patients with various medical and surgical conditions. Design a nursing care plan using the nursing process in caring for patients with medical and surgical conditions. Evaluate the nursing care plan and re-plan according to the needs of patient with medical and surgical condition. Apply a family centred approach in the education and care of patients with medical and surgical conditions in general and acute care setting.
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	<ul style="list-style-type: none"> • Demonstrate the methods of theatre techniques when caring for patients undergoing surgery. • Describe the pathophysiology of human disease at molecular, cellular, systems, and whole organism levels of different diseases/conditions • Discuss the natural history of illness and strategies for promoting health and preventing illness in the patient with medical and surgical condition. • Apply universal precautions and sterile technique when giving care to the patient with medical and surgical conditions. • Explain the importance of documentation when giving care to the patient with medical and surgical conditions. • Manage patients with acute and chronic surgical and medical conditions. • Describe common procedures used to patients with medical and surgical conditions
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Demonstrate skills in assessing the patients with various medical and surgical conditions. • Design a nursing care plan using the nursing process in caring for medical and surgical patients. • Demonstrate understanding of basic science subjects and evidence-based medicine when caring patients with medical and surgical conditions • Demonstrate skills in family centred approach in the education and care of patients with medical and surgical conditions in various care setting. • Demonstrate advocacy skills when dealing with patients with medical and surgical conditions including their families, and their communities • Demonstrate skills in giving education to patients with medical and surgical conditions • Maintain ethical principles effectively when faced with ethical challenges when caring for patients with medical and surgical conditions
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value the confidentiality of information gathered when caring for patients with medical and surgical conditions. • Express compassion, respect and sensitivity to patient/client individuality when caring for patients with medical and surgical conditions. • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to patients with medical/surgical conditions. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health

	professionals when caring for patients with medical and surgical conditions.
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Course Content

Code	Module Name	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MS 301	An overview to adult medical surgical nursing	20	2.0	60	6.0	80	8.0
MS 302	Nursing Management of Patients with Cardiovascular system disorders	30	3.0	45	4.5	75	7.5
MS 303	Nursing Management of Patients with Respiratory, Gastrointestinal and nutritional disorders.	30	3.0	45	4.5	75	7.5
MS 304	Nursing Management of Patients with Renal and genitourinary, Endocrine and metabolic disorders	30	3.0	45	4.5	75	7.5
MS 305	Nursing Management of Patients with Cardiovascular, Circulatory and Hematologic, Musculoskeletal and Neurological disorders	30	3.0	45	4.5	75	7.5
MS 306	Nursing Management of Patients with Oncology disorders and Infectious/Communicable Diseases	30	3.0	45	4.5	75	7.5
Total		170	17.0	285	28.5	455	45.5

SEMESTER SIX

MW 300: MIDWIFERY (27.5 Credits)

Course Description

This course teaches how to take care for the expectant mother, the newborn, and underfive children in Maternal and Child Health clinics.

The course also emphasizes human development and family centred care. Through this course, the student is expected to become acquainted with the knowledge of women’s role and adaptation to normal and high-risk pregnancy, delivery, as well as postpartum period and the characteristics of the newborn.

Expected competencies

Professional skills	cognitive	<ul style="list-style-type: none"> Describe the national and global policies and guidelines related to women and children’s health Discuss the psychosocial and gender issues in reproductive health
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	<ul style="list-style-type: none"> • Describe family planning methods currently used by clients • Explain gender dynamic in improving mother and child health • Integrate STD/HIV care in reproductive health • Describe the nursing care of women in the ante, inter and post -partum periods • Describe the nursing care to the new-born baby. • Describe the necessary information regarding breastfeeding to new mothers.
Professional psychomotor skills	<ul style="list-style-type: none"> • Maintain the national and global policies and guidelines related to women and children's health when caring for women in their reproductive age. • Determine the psychosocial and gender issues in reproductive health when caring for women in their reproductive age • Illustrate appropriate family planning methods to clients according to needs. • Demonstrate skills in provision of quality nursing care to women in the ante-partum, inter-partum and post -partum periods utilizing the nursing process. • Demonstrate skills in provision of quality nursing care to the new-born baby utilizing the nursing process. • Develop a plan for giving necessary information to regarding breastfeeding to new mothers.
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from women in their reproductive age during provision of care. • Express compassion, respect and sensitivity to individual woman in her reproductive age during provision of care. • Respond professionally to women's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during provision of care in their reproductive age. • Observe respect, compassion, accountability, and integrity while interacting with peers and other professionals when providing care to women in their reproductive age.

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MW 301	National and Global trends, Policies, Guidelines in Reproductive Health and Maternal and Child Health	15	1.5	-	-	15	1.5
MW 302	Gender in Health and Gender based violence	15	1.5	-	-	15	1.5
MW 303	Family planning, sexuality and STDs, HIV/AIDS	20	2.0	25	2.5	45	4.5
MW 304	Assessment and Management in the Antepartum, Intrapartum, Postpartum Periods and lactation	45	4.5	80	8.0	125	12.5
MW 305	Newborn and under-five child assessment and management	35	3.5	40	4.0	75	7.5
Total		130	13.0	145	14.5	275	27.5

ER 300: EPIDEMIOLOGY AND RESEARCH METHODOLOGY II (10.6 Credits)

Course description

The focus of this course is on assisting the learners to acquire skills in research proposal and report writing. Health institutions will be contacted to provide relevant areas of study from which students will select a topic for research. Students will be directing their work with the support of a supervisor, which will provide an opportunity to enhance their experiences of management and collaborative activities. During this course students will have field work on research.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the steps in research proposal writing. Identify the appropriate research topic Explain the process of grant application. Identify major sources of funding for research projects. Describe the process of dissemination of research findings.
Professional psychomotor skills	<ul style="list-style-type: none"> Develop a research proposal on a selected topic Demonstrate knowledge and skills in grant application Demonstrate skills from research methodology in data collection analysis and presentation. Develop a research report from research findings and publish to enhance clinical practice. Determine areas for dissemination of research findings at Faculty symposia, meetings and scientific conferences at national and international forums.
Professional affective skills	<ul style="list-style-type: none"> Value the confidentiality of information gathered from the patients/clients when conducting research.

	<ul style="list-style-type: none"> Express compassion, respect and sensitivity to patient/client individuality when conducting research. Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when conducting research. Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals when conducting research.
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Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER 301	Writing a research proposal	30	3.0	-	-	30	3.0
ER 302	FIELD WORK and Report writing	-	-	76	7.6	76	7.6
Total		30	3.0	76	7.6	106	10.6

CH 300: COMMUNITY HEALTH NURSING I (8.0 Credits)

Course Description

The course focuses on the principles underlying community health nursing practice, as well as the roles and functions of community health nurses in primary, secondary, and tertiary prevention. The influence of culture, economics, politics, environments, and ethics as they impact community health nursing practice are explored throughout the course.

This course enables the students to provide quality care to individuals, families and community at large. They will also have field work on community health nursing.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Explain the role of the community health nursing Describe the concepts of primary, secondary and tertiary prevention in the community context. Design health promotion strategies appropriate for communities. Evaluate the selected community resources appropriate for specific groups in the community. Discuss current demographic and economic factors influencing health care issues. Describe the methods used to influence, motivate, educate, and change people
Professional psychomotor skills	<ul style="list-style-type: none"> Design health promotion strategies appropriate for communities. Demonstrate the role of the community health nurse.

	<ul style="list-style-type: none"> Adapt the concepts of primary, secondary and tertiary prevention in the community context when working with the community. Develop a plan in relation to the current demographic and economic factors influencing health care issues.
Professional affective skills	<ul style="list-style-type: none"> Value the confidentiality of information gathered from the community. Express compassion, respect and sensitivity to patient/client individuality while working with the people in the community. Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to the community. Observe respect, compassion, accountability, and integrity while interacting with peers and other professionals in the community.

Course Content

Code	Name of Module	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CH 301	Community Assessment Planning Interventions	30	3.0	-	-	30	3.0
CH 302	Primary Health Care/Health Promotion	30	3.0	-	-	30	3.0
CH 303	Community Health Nurse as an Educator, Developer, Evaluator	20	2.0	-	-	20	2.0
	Total	80	8.0	-	-	80	8.0

PD 300: PAEDIATRIC (22.0 Credits)

Course description

The course gives a student a foundation of paediatric knowledge, skills and attitudes on which builds a long life learner approach to caring for children in a range of acute, critical and chronic care situations.

The course is designed to help student understand the potential health problems and needs of children and families based on their development process. Commonly seen diseases, communication skills, the impact of illness and hospitalisation on the children and their families are emphasized.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none">• Discuss the changing perspectives of child rearing in Tanzania• Review the role of the Paediatric Nurse in promoting the health of children and families• Describe the family centred model of care• Explain the nursing process for caring for a paediatric patient and family• Examine the Social, cultural, and religious influences on child health promotion• Differentiate complete health assessment to paediatric patients/clients• Discuss principles of taking vital signs in a paediatric patient and use of appropriate equipment• Employ different methods of specimens collection in paediatric patients• Practice personal hygiene of patients/clients in different setting.• Use different techniques for communicating with children and families• Review factors influencing communication process in children and families• Discuss guidelines for communication and interviewing children and families• Evaluate the nutritional status of children according to developmental stages.• Review the immunizations scheduled of children for proper administration of vaccine• Discuss safety hazards and appropriate preventive measures for the developmental age of client and family.• Explain nursing measures to promote patients/clients comforts, rest and sleep.• Describe the management of common medical and surgical conditions in children.• Calculate medication dosages for the paediatric patient (weight based)• Choose the different routes of drug administration according to developmental stage of the child.• Discuss the effects of hospitalization on children and families.• Discuss techniques for counselling families of ill children• Describe basic needs of the terminally ill child and his/her family• Discuss care of the child after death and its family• Discuss needs of the bereaved family in paediatric
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	<ul style="list-style-type: none"> • Discuss home based care for children with chronic illnesses/disability
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Design the nursing care of a child and family utilizing the nursing process. • Discover socio-cultural, economic and religious influences the growth and development of child when providing nursing care. • Demonstrate family centered model of care when providing nursing care to children. • Demonstrate skills in assessment of pain to a child. • Determine normal and abnormal vital signs when caring for sick child by using appropriate equipment. • Demonstrate skills in collecting different specimens for diagnostic purposes from a child. • Demonstrate communication skills when communicating with children and families of various developmental stages. • Develop nutritional plans appropriate to child's age and condition with families • Determine immunization status of a child • Design child's injury prevention and safety plan with family. • Determine developmental milestones of the paediatric patient and the family • Demonstrate skills in drug administration according to the prescribed routes. • Demonstrate skills in caring for a family with terminally ill child. • Demonstrate skills in caring for a paediatric dead body. • Demonstrate skills in counselling for the grieving family and significant others • Prepare home based care plan for children with chronic illness/disability
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from a child. • Express compassion, respect and sensitivity to a child's individuality when giving nursing care. • Respond professionally to a child/family's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals when giving care to children and families. •

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PD 301	Introduction to Paediatric Nursing	15	1.5			15	1.5
PD 302	Nursing process in the care of the child and family	15	1.5	25	2.5	40	4.0
PD 303	Assessment of the child and family	15	1.5	25	2.5	40	4.0
PD 304	Health promotion for child and family	20	2.0	25	2.5	45	4.5
PD 305	Management of the child with common medical and surgical conditions and with special needs	20	2.0	60	6.0	80	8.0
Total		85	8.5	135	13.5	220	22.0

SEMESTER SEVEN

MP 400: MENTAL HEALTH & PSYCHIATRIC NURSING I (16.0 Credits)

Course Description

This course emphasises on personality traits and common psychiatric disorders. History of mental health in Tanzania and the use of specific neurological drugs will be covered. In addition, it will also emphasise biopsyo-social health assessments that are culturally sensitive utilising problem-solving approach (nursing process) in management of clients with mental health problems. It will also enable the students to design and implement treatment plans for patients and families with common mental health problems and co-morbid conditions.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Explain the influence of historical events and recent trends in mental health services in the country. • Explain human adjustive /mental mechanisms • Describe the common anxiety disorders • Describe legal aspects of mental health practice nationally and internationally. • Describe epidemiology of mental illness nationally and internationally • Discuss biopsyo-social health assessments that are culturally sensitive to clients with mental health problems. • Explain psychiatric evaluation of clients/patients • Explain classification of mental health disorders according to Diagnostic Statistical Manual for mental illness and international Classification of Diseases 10 (DSM IV and ICD 10 respectively).
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	<ul style="list-style-type: none"> • Explain the problem-solving approach (nursing process) in management of clients with mental health problems. • Relate selected theoretical perspectives to nursing care of clients with mental health disorders. • Explain treatment modalities for patients and families with common mental health problems and co-morbid conditions.
Professional psychomotor skills	<ul style="list-style-type: none"> • Design treatment modalities for patients and families with common mental health problems and co-morbid conditions. • Demonstrate skills of treatment modalities in managing patients and families with common mental health problems and co-morbid conditions. • Design a nursing care plan for clients/patients with mental health problems by utilizing nursing process • Demonstrate skills in application of the selected theoretical perspectives to nursing care of patient/client with mental health disorders • Demonstrate skills in managing patients with mental health disorders
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from patients with mental health disorders • Express compassion, respect and sensitivity to individual patient with mental health disorders during provision of nursing care • Respond professionally to patient's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when caring a patient with mental health disorders. • Observe respect, compassion, accountability, and integrity while interacting with peers and other professionals when managing patients with mental health disorders.

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MP 401	Psychiatric/ Mental Health Nursing Practice	20	2.0	15	1.5	35	3.5
MP 402	Mental disorders and behaviour pathology	20	2.0	30	3.0	50	5.0
MP 403	Managing patients with specific mental health problems.	30	3.0	45	4.5	75	7.5

	Total	70	7.0	90	9.0	160	16.0
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PL 400: PRINCIPLES OF LEARNING AND TEACHING (12.0 Credits)

Course Description

This course helps students understand the nature of curriculum development, planning, implementation and evaluation. It will also focus on the principles of learning and teaching using a variety of teaching strategies with emphasis on health teaching to different groups in the clinical setting.

It seeks to equip students with appropriate knowledge, skills and attitudes necessary to effectively identify, analyse and utilize learning, teaching and assessment opportunities in relation to clients, their significant others and staff within the clinical setting primarily. The course adopts the view that effective teaching, learning, mentoring, assessment and evaluating employ a number of common approaches although the contexts in which these activities take place may vary, for example, in a clinical setting as opposed to a classroom.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Describe the conditions necessary to bring about learning. • Explain the principles for the selection of appropriate teaching/learning methods. • Discuss the methods of teaching, supervising facilitating and coaching. • Describe the learning process and different ways of learning. • Explain the conditions necessary to bring about learning. • Discuss the nature of curriculum development and planning.
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Set up an environment necessary to bring about learning. • Determine the principles necessary for the selection of appropriate teaching/learning methods. • Demonstrate the skills of supervising, facilitating, coaching and tutoring in health settings. • Demonstrate skills in teaching, supervising, facilitating, coaching, tutoring and other methods according to different ways of learning. • Demonstrate knowledge and skills in teaching nurses in various schools of nursing.
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from student nurses. • Express compassion, respect and sensitivity to individual students during the process of learning and teaching. • Respond professionally to student’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other

	<p>aspects of diversity during the process of learning and teaching.</p> <ul style="list-style-type: none"> Observe respect, compassion, accountability, and integrity while interacting with peers and other teaching professionals.
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Course Content

Code	Name of Module	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PL 401	Principles of teaching and learning	30	3.0	15	1.5	45	4.5
PL 402	Methods of teaching and learning	30	3.0	45	4.5	75	7.5
Total		60	6.0	60	6.0	120	12.0

TI 400: TRENDS AND ISSUES IN NURSING (5.5 Credits)

Course description

The course aims at enabling student understand the current and future challenges in the nursing profession. They will also learn about factors that influence the nursing profession on issues of practice, education and research. This course will also enable the student to understand the legal dimensions of nursing.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Discuss factors that influence nursing practice, education and research Describe the global trends that have influenced nursing practice nationally, regionally and internationally Assess the impact of health policies on the nursing profession Discuss the legal dimensions of nursing practice Compare the current situation and forecast the future of the nursing profession Analyse the evolution of the nursing profession
Professional psychomotor skills	<ul style="list-style-type: none"> Demonstrate knowledge and skills gained from legal dimensions of the nursing practice in improving the image of nursing Develop strategies that may improve the image of the nursing profession Maintain quality delivery of nursing care through the knowledge and skills gained from the trends in nursing practice
Professional affective skills	<ul style="list-style-type: none"> Value professionalism according to current and future trends in nursing career.

	<ul style="list-style-type: none"> Observe respect, compassion, accountability, to foster the image of nursing when providing nursing care to patients/clients.
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Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
TI 401	Transitions to professional nursing	10	1.0	-	-	10	1.0
TI 402	Dynamics of professional nursing practice	15	1.5	-	-	15	1.5
TI 403	Impact of policies on the nursing profession	15	1.5	-	-	15	1.5
TI 404	Educating nurses for the future	15	1.5	-	-	15	1.5
	Total	55	5.5	-	-	55	5.5

CH 400: COMMUNITY HEALTH NURSING II (25.5 Credits)

Course description

This course provides opportunities for students to apply community health nursing concepts, theories, and processes in the care of individuals, families, aggregates and the total community. It emphasizes on prevention of illness, disability, disease, early identification of risk factors and promotion of optimal health for the total community. Selected case studies of families as well as special projects are assigned to develop student skills in the practice of community health nursing. Emphasis is on interdisciplinary health care with multicultural and high – risk families and aggregates in the community.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the relationship between illness and human behaviour. Differentiate models that explain health behaviour. Compare health related knowledge and behaviour in the community. Assess the relationship between culture and health. Examine the role of traditional medicine in health service provision. Describe factors that affect utilization of health services Describe risk behaviour pertaining to health. Examine the social, cultural and psychological factors that may lead to adverse health outcomes in human populations. Describe broad based social issues that are important in public health interventions.
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<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> Operate as an interdisciplinary team member using the nursing process to meet the health care needs of individuals, families, and groups throughout the life span in a variety of community settings. Adapt cultural assessment into nursing care of individuals, families and aggregates Determine ethical, environmental political and economic factors that influence the health of individuals, families, aggregates and the community. Maintain nursing in community settings using principles of health promotion, disease prevention, health restoration with individuals, families, aggregates, and the community. Determine theories and models of health education to individuals, families, and the community. Demonstrate progression from a dependent to a more independent role in providing nursing care in the community. Demonstrate community health nursing according to legal, ethical, and professional standards.
<p>Professional affective skills</p>	<ul style="list-style-type: none"> Value the confidentiality of information gathered from the patients/clients during community health nursing practice Express compassion, respect and sensitivity to patient/client individuality during community health nursing practice. Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during community health nursing practice Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals during community health nursing practice.

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CH 401	Community Health Nurse and the Community Situations	15	1.5	-	-	15	1.0
CH 402	FIELD WORK	-	-	240	24.0	240	24.0
	Total	15	1.5	240	24.0	255	25.5

SEMETER EIGHT

MP 400: MENTAL HEALTH & PSYCHIATRIC NURSING II (21.5 Credits)

Course description

The course is designed to expose learners to deal with criminal patients with mental disorders.

The primary purpose of the course is to equip learners with necessary knowledge, skills and attitude for the practice in the promotion of community mental health and to be able to function as first level nurses in mental health institutions and communities. During this course students will have field work practice on mental health and psychiatric nursing.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Describe the nursing management of special groups in relation to mental health and psychiatric problems • Explain an overview of community mental health • Describe community mental health nursing utilizing the principles of PHC • Describe the strategies for mental health promotion for various group of individuals with mental health problems basing on gender perspectives. • Relate mental illness and crime • Explain Criminal Procedure Act related to mental illness • Explain Criminal Procedure codes related to mental illness • Assess a criminal client Comprehensively • Explain role of psychiatric nurse, advisory board and board of visitors in forensic care • Explain the ethical issues in forensic Psychiatry •
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Demonstrate skills in mental health and psychiatric nursing according to legal, ethical, and professional standards. • Demonstrate skills in assessing civil and forensic patients • Design care for special groups of clients with mental disorders • Demonstrate skills in report writing concerning patients with mental health disorders
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients with mental health disorders when providing care. • Express compassion, respect and sensitivity to patient’s individuality when providing care.

	<ul style="list-style-type: none"> Respond professionally to patient's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when providing care Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals when providing care to patients with mental health disorders.
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Course Content

Code	Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MP 401	Nursing management of special group	20	2.0	40	4.0	60	6.0
MP 402	FIELD WORK Community Mental Health Nursing	15	1.5	80	8.0	95	9.5
MP 403	Forensic Psychiatry	20	2.0	40	4.0	60	6.0
Total		55	5.5	160	16.0	215	21.5

LM 400: LEADERSHIP & MANAGEMENT IN NURSING (20.5 Credits)

Course description

The course will address the importance of leadership within nursing and the need to recognize and develop leadership skills and potential within the profession.

Students will be afforded the opportunity to explore their own leadership skills and knowledge through fieldwork underpinned by relevant theoretical constructs in order to provide quality nursing care. Action learning sets will be used to integrate the theoretical base of leadership with fieldwork within an identified health care setting.

Expected competencies

Professional cognitive skills	<ol style="list-style-type: none"> Differentiate leadership and management. Describe effective roles of the leader and the manager Apply critical thinking in leadership and management roles in nursing practice. Describe leadership and management in health care organization. Use appropriate decision making in assisting clients toward recovery and/or improving their health. Employ suitable managerial and planning skills for proper development of human resource necessary for provision of health services in Tanzania. Employ suitable managerial and planning skills for proper management of non-human resource necessary for provision of health services in Tanzania.
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Professional psychomotor skills	<ol style="list-style-type: none"> 1. Demonstrate skills in leadership and management roles in nursing practice. 2. Demonstrate effective decision making skills in assisting clients toward recovery and/or improving their health. 3. Demonstrate and knowledge and skills suitable for managerial and planning human resource necessary for the development of good nursing leadership and services in Tanzania.
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients during leadership and management practice. • Express compassion, respect and sensitivity to patient/client individuality during leadership and management practice. • Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during leadership and management practice. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals during leadership and management practice.

Course Content

Code	Name of Module	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
LM 401	An overview of Nursing Leadership and Management.	15	1.5	-	-	15	1.5
LM 402	Nursing Leadership and Management Skills	15	1.5	45	4.5	60	6.0
LM 403	Leadership and Management in Nursing Practice	20	2.0	45	4.5	65	6.5
LM 404	Leadership and Management in Health Care Organisations	20	2.0	45	4.5	65	6.5
	Total	70	7.0	135	13.5	205	20.5

EP 400: ENTREPRENEURSHIP (7.5 Credits)

Course Description

This course is designed to equip the learner with the knowledge, skills and mindset to enable the learner to identify, start and manage a growing business. The course will provide the opportunity to explore new models of practice and innovations in healthcare delivery and services.

This course will focus on establishing a successful entrepreneurship venture in connections with a larger healthcare system. The content will be on assessment of business ideas, analyzing trends, making a feasibility study, writing a business plans, marketing, business development and start up opportunities.

Emphasis will be put on implementation, monitoring and conducting business.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Define the terms relating to entrepreneurship • Describe the components of entrepreneurship • Discuss the risks, challenges and rewards in entrepreneurship • Describe the components of project proposals and business plans. • Describe the marketing tools and strategies for different potential Markets.
Professional psychomotor skills	<ul style="list-style-type: none"> • Write project proposals and business plans. • Develop marketing tools and strategies for different potential Markets. • Design project proposals and business plans. • Approach others in establishing and managing small and Medium scale business
Professional affective skills	<ul style="list-style-type: none"> • Share pertinent information with others in establishing and managing small and medium scale business. • Observe respect and sensitivity when relating with others during project and business plans write-ups

COURSE CONTENTS

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
EP 401	Introduction to Entrepreneurship	15	1.5	-	-	15	1.5
EP 402	Business Management	15	1.5	45	4.5	15	1.5
	Total	30	3.0	45	4,5	75	7.5

ARCHBISHOP ANTHONY MAYALA SCHOOL OF NURSING

BACHELOR OF SCIENCE IN NURSING (BSc.N) (3 years programme)

SIX SEMESTER CURRICULUM FOR POST BASIC BACHELOR OF SCIENCE IN NURSING PROGRAMME

BACKGROUND

The Archbishop Anthony Mayala School of Nursing (AAMSON), of the Catholic University of Health and Allied Sciences (CUHAS), is undertaking an expansion of its academic programmes. The institution is aware of the increasing need for general nurses and midwives with higher qualifications; an answer to the aspirations of many post registered nurses who wish to advance themselves with further studies at a degree level in line with the professional goals of the 21st century and of the country at large.

AAMSON –CUHAS aims at running a three-year Post Basic Bachelor of Science in Nursing (B.Sc.N) programme which will produce highly competent nurse graduates who will be responsible for providing quality nursing services to the people of Tanzania and elsewhere. In so doing this will provide room for Nurses to continue with higher learning to achieve advanced skills which will enable them perform duties competently. The World Health Organization (WHO) advocates for skilled and motivated health workers in producing good health services and increase performance of health systems (WHO World Health Report, 2006). Moreover, Primary Health Care Development Programme (PHCDP) (2007-15) urges the nation to strengthen and expand health services at ALL levels. This can only be achieved when the nation has adequate, appropriately trained and competent work force that can be deployed in the health facilities to facilitate the provision of quality health care services.

We believe graduates of this programme will create a pool that can later focus on clinical practice and those who may wish to join the teaching profession. These different focus areas may later form the basis for the development of various Masters Programmes in line with the current thinking of the Nursing Board.

AIM OF THE PROGRAMME

To strengthen the nursing profession by developing competent nurses with knowledge, skills and positive attitude pertaining to nursing and midwifery care utilising evidence based practice and thus display professional, moral and ethical conduct in order to handle the growing health care needs nationally, regionally and internationally.

EXPECTED COMPETENCIES

On completion of the programme, the graduate is expected to be able to do the following competently:

Professional Cognitive skills

- Apply the knowledge of basic sciences in caring for client/patient with different health conditions.

- Apply effective interpersonal relationship skills at work, within families, clients and the community at large.
- Utilize ethical principles when providing care to clients/patients, families and the community at large
- Apply entrepreneurship skills for self, professional and institutional development in the social, economic and political context.
- Apply the principles of infection prevention and control when caring for clients/patients in all settings.
- Utilize computer skills in processing health information.
- Demonstrate quality nursing care utilizing nurse practice acts and standards.
- Use the research knowledge in provision of evidence based care to client/ patients.
- Utilize nursing process when managing patients/clients in health related setting.
- Utilize the public health/ Community health knowledge in managing community health problems.
- Apply the principles of teaching/learning during provision of care to patients, co-workers and the community at large.
- Apply leadership and management skills in nursing practice.

Professional Psychomotor Skills

- Demonstrate skills in providing quality care to patients with various conditions in all settings.
- Maintain effective interpersonal relationship skills at work, within families, clients and the community at large.
- Demonstrate ethical principles when providing care to clients/patients, families and the community at large
- Design entrepreneurship project for self, professional and institutional development.
- Maintain the principles of infection prevention and control when caring for clients/patients in all settings.
- Apply computer skills in processing health information.
- Conduct health related research and utilize research findings for evidence-based practice
- Use nursing process when managing patients/clients in health related setting.
- Demonstrate public health/ Community health skills in managing community health problems.
- Use principles of teaching & learning during provision of care to patients, co-workers and the community at large.
- Demonstrate leadership and management skills and act as a change agent within the political, social, and health care systems in the practice of nursing
- Respond efficiently and effectively to emergency and disaster situations.
- Demonstrate skills in managing client with STI and HIV/AIDS

Professional affective skills

- Share empathetically relevant information regarding sensitive health problems with patients/ clients and families
- Practice ethically and with integrity in maintaining patients confidentiality, obtaining appropriate informed consent and responding to medical evidence
- Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when providing care to clients.

- Value standards of professional conducts when providing care to patients/clients.
- Observe compassion, respect and sensitivity to patient/client’s individuality when giving nursing care
- Use information technology to access medical information and assimilate evidence from scientific studies to manage patients effectively.

SEMESTERISATION / MODULARISATION OF THE PROGRAMME

The BSc.N programme is a three-year semesterized programme. There are six semesters with courses and modules specified. For basic science courses, they will be taught in a tailored manner. The total number of Credits in this programme is 368. The previous Credits obtained in the Diploma Programme were 360. Therefore, the cumulative credits from the lowest level to this level are 728. During this programme the students will also have field practice during semester 5 on research data collection and Community health Nursing II and Mental Health Nursing.

Important Features in the Semesterized Programme

- The academic year will have two semesters of twenty weeks each.
- Use a weighting system in which 1 Credit = 10 notion hours. These hours include lectures, seminars and tutorials, Assignments, independent studies & Research and Practical training.
- Have a one week mid-semester break
- Have a two weeks break between each semester
- Conduct final university examinations at the end of each semester
- Invite external examiners at the end of each semester
- Use the GPA system to assist in disposal of students
- Each course should have at least one continuous assessment

ENTRY CRITERIA

Holder of Diploma in nursing with at least FOUR passes in Biology, Chemistry, Physics, Nutrition, Agriculture and Geography at “O”-level. They should have a working experience of at least 2 years. Preference will be given for those who have attempted “A” Level.

STRUCTURE OF MODULES

Semester 1

Code	Name of Course	Theory		Practice		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
AN100	Anatomy	129	12.9	232	23.2	361	36.1
BC100	Biochemistry	148	14.8	40	4.0	189	18.9
PS100	Philosophy	40	4.0	-	-	40	4.0
TOTAL		317	31.7	272	27.2	590	59.0

Semester 2

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
BS100	Behavioural Science and Biostatistics	140	14.0	-	-	140	14.0
PH100	Physiology	114	11.4	74	7.4	188	18.8
PC100	Professional Communication Skills	45	4.5	46	4.6	91	9.1
NE100	Nursing Ethics	75	7.5	-	-	75	7.5
DS100	Developmental Studies I	65	6.5	30	3.0	95	9.5
TOTAL		439	43.9	150	15.0	589	58.9

Semester 3

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MM200	Microbiology/Immunology	114	11.4	76	7.6	190	19.0
PE200	Parasitology/ Entomology	91	9.1	61	6.1	152	15.2
NI 200	Nursing Informatics	35	3.5	70	7.0	105	10.5
DS200	Development studies II	65	6.5	30	3.0	95	9.5
TOTAL		305	30.5	237	23.7	542	54.2

Semester 4

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER200	Epidemiology & Research Methodology I	60	6.1	20	2.0	80	8.0
AD 200	Advanced Concepts in Nursing	65	6.5	130	13.0	195	19.5
EP 200	Entrepreneurship	30	3.0	45	4.5	75	7.5
CH 200	Community Health Nursing I	50	5.0	-	-	50	5.0
NT200	Nutrition	50	5.0	35	3.5	85	8.5
MW 200	Midwifery	80	8.0	100	10.0	180	18.0
TOTAL		335	33.5	330	33.0	665	66.5

Semester 5

<i>Code</i>	<i>Name of Course</i>	<i>Theory</i>		<i>Practice</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CP 300	Clinical Pharmacology	167	16.7	16	1.6	183	18.3
ER 300	Epidemiology and Research Methodology II (FIELD PRACTICE)	35	3.5	70	7.0	105	10.5
CH 300	Community Health Nursing II (FIELD PRACTICE)	15	1.5	140	14.0	155	15.5
TI 300	Trends and Issues in Nursing	55	5.5	-	-	55	5.5
MP 300	Mental Health & Psychiatric Nursing I	70	7.0	100	10.0	170	17.0

Code	Name of Course	Theory		Practice		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
TOTAL		342	34.2	326	32.6	668	66.8

Semester 6

Code	Name of Course	Theory		Practice		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
AC 300	Advocacy and Counselling	40	4.0	45	4.5	85	8.5
LM 300	Leadership & Management	70	7.0	135	13.5	205	20.5
PD 300	Paediatric Nursing	85	8.5	135	13.5	220	22.0
PL 300	Principles of Learning and Teaching	60	6.0	60	6.0	120	12.0
TOTAL		255	25.5	375	37.5	630	63.0

SEMESTER ONE

AN 100: ANATOMY (36.1 Credits)

Course Description

The course of anatomy is a fundamental subject for understanding the structure and organization of the human body in relation to its basic function.

A sound knowledge of anatomy will enable the nursing students to plan and implement care in a more rational and scientific way during and after graduation as professional nurses.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Define the medical/anatomical terminology • Describe the structure of the human body in health as seen with the naked eye. • Identify different parts of the body • Describe the structure of the human body in health at microscopic level • Identify different types of cells, tissues and organs with the aid of microscope • Understand the processes involved in the development of the human body • Describe congenital malformations • Identify the causes of congenital malformation
Professional psychomotor skills	<ul style="list-style-type: none"> • Locate areas for checking vital signs • Locate areas for injection • Use effectively body mechanics when handling patients.

	<ul style="list-style-type: none"> • Maintain good bone alignment when caring patients with fractures • Perform physical assessment to identify normal and abnormal structures of the body •
Professional affective skills	<ul style="list-style-type: none"> • Express respect, compassion and integrity in providing nursing care • Observe sensitivity and responsiveness to culture, race / ethnicity, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity and identity when providing care to clients

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
AN 101	Cell Biology and Genetics	45	4.5	30	3.0	75	7.5
AN 102	Upper limb, thorax, head and neck	21	2.1	117	11.7	138	13.8
AN 103	Lower limb, abdomen, perineum and pelvis	21	2.1	75	7.5	96	9.6
AN 104	Neurobiology and Developmental Biology	42	4.2	10	1.0	52	5.2
Total		129	12.9	232	23.2	361	36.1

BC 100: BIOCHEMISTRY (18.9 Credits)

Course Description

Biochemistry is a basic science subject on which most biological sciences find their foundation. It entails the fundamental concepts of chemistry of life, which includes structural organisation, energy interconversion, signal transduction and finally genetic information storage and flow. Recent developments in Molecular Biology are also embodied in Biochemistry.

This course will enable nursing student to understand the biochemical basis of diseases, enzymatic effects on food substances, to interpret laboratory results, to observe the effects of treatment on patients in order to plan and implement nursing care accordingly and to take appropriate actions.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the functions of each biomolecule in the human body Describe the concepts in molecular biology Explain the metabolism of carbohydrates, lipids, proteins and nucleic acids Explain the role of enzymes in the body Apply the knowledge of genetics in managing patients with hereditary conditions/diseases Apply the knowledge of the different biomolecules (proteins, carbohydrates, lipids) in managing a patient with various medical and surgical problems
Professional psychomotor skills	<ul style="list-style-type: none"> Approach patients, families and /or caretakers in addressing appropriate biomolecules to patients with medical/surgical conditions. Illustrate the different categories of food stuff that are relevant for a particular patient's condition. Design patient care plan according to the biochemistry laboratory findings
Professional affective skills	<ul style="list-style-type: none"> Share empathetically relevant information regarding hereditary/genetic problems with patients and families

Course content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
BC 101	Chemistry of Biomolecules	25	2.5	-	-	25	2.5
BC 102	Enzymology, Co-enzymes and Energy Transformation	30	3.0	10	1.0	40	4.0
BC 103	Metabolism of Carbohydrates, Lipids, Proteins, heme and Nucleic Acid	50	5.0	11	1.1	51	5.1
BC 104	Molecular Biology and Hormone Systems	43	4.3	20	2.0	63	6.3
	Total	148	14.8	41	4.1	189	18.9

PS 100: PHILOSOPHY (4.0 Credits)

Course Description

The course of Philosophy is a fundamental subject of understanding the things happening in life and influence the nursing professional in the delivery of nursing care.

This course enables nursing students to understand the importance of philosophy in order to care for individuals in a holistic manner and reach an adequate personal understanding of those things happening in life and influence the nursing profession, for example, ethical issues, value of human life and dilemmas in the nursing and midwifery professions.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none">• Explain the historical developments and trends in philosophy• Describe the ancient and contemporary philosophers relevant in nursing profession• Discuss the common theoretical and practical problems in the nursing profession.• Describe Philosophical Problems in Man-Medicine Relations• Analyse philosophical Problems in Man (Health) - Nurse Relation
Professional psychomotor skills	<ul style="list-style-type: none">• Display profession philosophy when providing care• Disclose one's errors including medical errors, patient's data gathering errors, or misinterpretation of data to appropriate supervisor.
Professional affective skills	<ul style="list-style-type: none">• Practice ethically and with integrity in maintaining patients confidentiality, obtaining appropriate informed consent and responding to medical evidence• Accept own gaps in knowledge and skills when providing care to patients and be ready to seek for help when necessary.• Develop a positive self-image and confidence as a professional nurse.• Approach all nursing actions with integrity, honest and authenticity

Course Content

Code	Name	Theory		Practicals		Total	
		Hours	Credits	Hours	Credits	Hours	Credits
PS 101	Introduction to Philosophy	10	1.0	-	-	10	1.0
PS 102	Philosophical Problems in Man-Medicine Relations	15	1.5	-	-	15	1.5
PS103	Philosophical Problems in Man (Health) - Nurse Relation	15	1.5	-	-	15	1.5
Total		40	4.0	-	-	40	4.0

SEMESTER TWO

BS 100: BEHAVIOURAL SCIENCES AND BIOSTATISTICS (14 Credits)

Course Description

This course comprises of three components namely Psychology, Sociology and Biostatistics. The psychology aspect provides student with a basic understanding of fundamental psychological theory and research essential for nursing care. The knowledge acquired should enable the student to understand peoples’ psychological reactions to for example; illness, hospitalization, stress and anxiety.

The sociology part enables the student to understand health attitudes, beliefs and practices of patients and health professionals of culturally diverse groups. The knowledge on sociology provides some of the conceptual tools to help the students understand the relationships between social structures and people’s health experiences.

The Biostatistics part of the course is provide a student with fundamental statistics skills relevant to public health analysis. It is also relevant for nurses in enabling them to use the knowledge in research and in compiling, analysing and interpreting patients/clients records. This course will also enable nurses to read quantitative nursing and related research articles effectively.

Expected competencies

Professional skills	cognitive	<ul style="list-style-type: none"> • Describe the relationship between illness and human behaviour. • Differentiate models that explain health behaviour. • Measure health related knowledge and behaviour in the community. • Analyse the relationship between culture and health. • Appreciate the role of traditional medicine in health service provision. • Analyse factors that affect utilization of health services • Analyse risk behaviour pertaining to health.
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	<ul style="list-style-type: none"> Identify the social, cultural and psychological factors that may lead to adverse health outcomes in human populations. Identify broad based social issues that are important in public health interventions.
Professional psychomotor skills	<ul style="list-style-type: none"> Discover socio-cultural differences during caring clients/patients Design culturally sensitive care plan for clients/patients Prepare statistical presentations of the health information collected.
Professional affective skills	<ul style="list-style-type: none"> Value the confidentiality of information gathered from the patients/clients Observe compassion, respect and sensitivity to patient/client individuality when giving nursing care. Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to patients with medical/surgical conditions. Express respect, compassion, accountability, and integrity while interacting with peers and other health professionals.

Course Content

Code	Module Name	Theory		Seminars		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
BS 101	Medical Sociology	50	5.0	-	-	50	5.0
BS 102	Health Psychology	45	4.5	-	-	45	4.5
BS 103	Biostatistics and Demography	45	4.5	-	-	45	4.5
	Total	140	14.0	-	-	140	14.0

PH 100: PHYSIOLOGY (18.8 Credits)

Course Description

The course is aimed at providing knowledge on normal functioning of the human body and how the various normal functions are controlled and regulated. For nursing students, this knowledge will enable them to critically plan, implement and evaluate the nursing care of the patient in a more rational and scientific way.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Describe the various homeostatic and control systems and the way they operate in the human body. • Explain the international system of units which describe mass, volume and concentration • Describe the general physiology of the cell membrane; membrane potentials in excitable tissues (example muscle cells and nerves) • Describe the major constituents of body tissues and the composition and partitioning of body fluids. • Describe the composition and its general functions of blood, formation characteristics and functions of different blood cells. • Describe the major divisions of the circulatory system, its general organization, functions and the control of the cardiovascular system. • Explain the functional anatomy of the respiratory system, the mechanism of breathing alveolar gas exchange and the control of the respiratory system • Explain the functional anatomy of the kidney, the renal mechanism, filtration excretion and absorption; concentrating and diluting mechanisms and the endocrine function of the kidney. • Describe the functional anatomy of the digestive system, motility, secretory, digestive, absorptive, and endocrine functions of the digestive system. • Explain the chemical nature of hormones, and how the hormones are secreted, transported in plasma, their functions and how they are metabolized and excreted. • Describe the organization of the nervous system and the physiological functions, sensory, and motor system, autonomic nervous system; special senses
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Determine normal and abnormal vital signs of the patients/clients • Determine patients/clients responses to stressors • Use effectively body mechanics when handling patients. • Demonstrate accuracy in giving injections to patients through various routes.

	<ul style="list-style-type: none"> • Maintain good bone alignment when caring patients with fractures • Demonstrate ability in monitoring intake and output of electrolyte and fluid balance of clients/patients. • Perform physical assessment to identify normal and abnormal functions of the human body systems
Professional affective skills	<ul style="list-style-type: none"> • Express respect, compassion and integrity in providing nursing care • Observe sensitivity and responsiveness to clients'/patients' coping mechanisms when providing care

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PH 101	Fluids and circulation	36	3.6	36	3.6	72	7.2
PH 102	Metabolism and Excretory system	36	3.6	26	2.6	62	6.2
PH 103	Neuro-endocrine Physiology	42	4.2	12	1.2	54	5.4
	Total	114	11.4	74	7.4	188	18.8

PC 100: PROFESSIONAL COMMUNICATION SKILLS (9.1 Credits)

Course Description

The course covers therapeutic and interpersonal communication skills necessary for communicating with clients, families and colleagues in health care settings. The student will be expected to demonstrate professional communication skills with clients, co-workers and the community at large.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Describe effective communication skills when dealing with clients, co-workers and the community at large. • Relate communication competences to the conceptual framework of the nursing process. • Discuss the unique communication needs of client with special problems. • Apply effective interpersonal relationship skills at work, within families, clients and the community at large.
Professional psychomotor skills	<ul style="list-style-type: none"> • Demonstrate effective communication skills with clients, co-workers and the community at large when providing nursing care.

	<ul style="list-style-type: none"> Maintain principles of effective communication skills when relating with co-workers, patients/clients and the community at large.
Professional affective skills	<ul style="list-style-type: none"> Share experiences with client through setting of mutually chosen goals. Value the confidentiality of information gathered from the patients/clients Observe compassion, respect and sensitivity to patient/client individuality when communicating. Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when communicating.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PC 101	Communication skills in Nursing	15	1.5	15	1.5	30	3.0
PC 102	The nurse patient relationship	15	1.5	16	1.6	31	3.1
PC 103	Communicating with special groups	15	1.5	15	1.5	30	3.0
Total		45	4.5	46	4.6	91	9.1

NE 100: NURSING ETHICS (7.5 Credits)

Course description

The course uses a topical approach to ethics based on philosophical examination of self-interest ethics, virtue ethics, consequentialist (utilitarian) ethics, duty-based ethics, and rights-based ethics.

It also emphasizes the use of ethical theories that provide a structured approach, moral reasoning in nursing practice. Ethical issues in nursing are better understood if the nurse explores the various methods of moral reasoning that are used to make judgements about the moral values of action. Sharpening fundamental principles of each theory increases its applicability and usefulness to the student. The learner examines and applies ethics to the life span of patients/clients

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Describe moral frameworks in relation to professionalism, self-awareness and ethical decision-making. • Discuss the ethical and legal issues in the care of clients throughout the life span. • Apply knowledge about the legal and ethical responsibilities of the nurse, and assume responsibility for own learning and growth. • Apply the ethical principles in the care of clients throughout the life span • Utilize ethical principles in decision making when providing care to clients/patients • Explain ethical issues involved in screening • Explain ethical issues involved in research involving human • Describe the abortion act and its implications
Professional psychomotor skills	<ul style="list-style-type: none"> • Design an ethical appropriate plan in dealing with professional misconduct. • Demonstrate moral reasoning when providing care to clients • Demonstrate nursing professional ethics when providing care to clients/patients • Determine abortion act and its implications when providing care to clients/patients
Professional affective skills	<ul style="list-style-type: none"> • Value standards of professional conducts when providing care to patients/clients. • Practice ethically with integrity in maintaining patient confidentiality when providing care.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
NE 101	Moral Pathways in Nursing	15	1.5	-	-	15	1.5
NE 102	Ethical theories and Principles	15	1.5	-	-	15	1.5
NE 103	Nursing Ethics Through the Life Span	26	2.6	-	-	26	2.6
NE 104	Bioethics	19	1.9	-	-	19	1.9
	Total	75	7.5	-	-	75	7.5

DS 100: DEVELOPMENT STUDIES I (9.5 Credits)

Course description

The course exposes students to the theories, problems and contemporary issues of health and development in general.

The course is important for nurses in order to understand the process of social development, practical development perspectives, economic and social-political consequences and their implications on health, health policies, health care systems and nursing practice. It will also contribute to the self and professional development of a nurse who is aware of the social, economic and political environment in which she/he functions

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Define the concept of development • Explain the different theories of development • Describe the process of social and political developments in Africa. • Relate health to the theories of development. • Describe the concept of entrepreneurship
Professional psychomotor skills	<ul style="list-style-type: none"> • Design business plan which enhancing the wellbeing of the people in the community you live and foster own self economic development
Professional affective skills	<ul style="list-style-type: none"> • Accept culture, race / ethnicity, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity and identity when providing care to clients • Weigh the policies in place whether they influence the wellbeing of client/patient cared. • Adhere to the development policies of the country that address the needs of the clients/patient when providing care.

Course Content

<i>Code</i>	<i>Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hours	Credits	Hours	Credits	Hours	Credits
DS 101	Social Development and Health	25	2.5	-	-	25	2.5
DS 102	Education, Health and Gender	25	2.5	15	1.5	40	4.0
DS 103	Population Health and Entrepreneurship	15	1.5	15	1.5	30	3.0
	Total	65	6.5	30	3.0	95	9.5

SEMESTER THREE

MM 200: MICROBIOLOGY/IMMUNOLOGY (19 Credits)

Course description

The course provides students with a basic understanding the general microbiology and immunology.

The knowledge acquired should enable the student to be familiar with etiology of health problems and the laboratory procedures and infection prevention.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Describe the main principles of general medical microbiology and immunology. • Apply the knowledge of the host- parasite environment relationship in health and in microbial diseases. • Discuss the etiology of known microbial and immunological health problems. • Describe the general Epidemiological aspects of microbial health problems, that is modes of transmission of microbial infections, role of "carriers" in certain cases, sources of infecting agents, nosocomial infections, and simple preventive measures of specific health problems with special reference to sub Saharan Africa. • Explain the laboratory procedures used for determining the etiology of common microbial and immunological health problems. • Interpret the role of the Nurse based on the knowledge of microbiology in solving problems of the patients with infectious disease, prevention and control.
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Prepare specimen of the patient/client for laboratory investigation • Determining the etiology of common microbial and immunological health problems • Design a plan of care for the patient based on microbial and immunological results.
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients investigations. • Express compassion, respect and sensitivity to patient/client individuality when taking and giving laboratory results. • Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status,

	gender, spirituality, disabilities and other aspects of diversity when taking and giving laboratory results
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Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MM 201	General Bacteriology and Microbial infections	30	3.0	15	1.5	45	4.5
MM 202	Virology, mycology and Immunology	30	3.0	25	2.5	55	5.5
MM 203	Protozoology and immuno parasitology	30	3.0	16	1.6	46	4.6
MM 204	Helminthology and Entomology	24	2.4	20	2.0	44	4.4
	Total	114	11.4	76	7.6	190	19.0

PE 200: PARASITOLOGY/ ENTOMOLOGY (15.2 Credits)

Course description

The course will include the life cycle of different parasites, identification of life cycles, epidemiological factors, host-parasite relationships and the parts of the body affected. It also provides the appropriate methods of prevention and control measures of parasite. This knowledge will be utilized by nurses in nursing care.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Review in detail the life cycle of medically important parasite. • Describe the organs most commonly involved in infection • Discuss the relationship of this infection to symptoms, relapses and accompanying pathology • Explain the factors that determine endemicity of the parasite infection. • Describe the distribution and epidemiology of the parasites in East Africa • Apply methods of parasite control e.g. chemotherapy, mollusciding, general sanitation etc. • Apply methods of parasite prevention in the community level (Personal hygiene, management of wounds, water safety, sanitation, good hygiene etc.
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	<ul style="list-style-type: none"> Explain the advantages and disadvantages of each method.
Professional psychomotor skills	<ul style="list-style-type: none"> Demonstrate skills in planning and implementing nursing care utilizing knowledge of the parasitic infective process i.e host-parasitic relationship, classification and how parasites cause diseases.
Professional affective skills	<ul style="list-style-type: none"> Value the confidentiality of information gathered from the patients/clients with parasitic infection Observe compassion, respect and sensitivity to patient/client individuality when giving nursing care to a patient with parasitic infection.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PE 201	Protozoa & Immuno-Parasitology	35	3.5	19	1.9	54	5.4
PE 202	Helminthology	36	3.6	29	2.9	65	6.5
PE 203	Entomology	20	2.0	13	1.3	33	3.3
	Total	91	9.1	61	6.1	152	15.2

NI 200: NURSING INFORMATICS (10.5 Credits)

Course description

Nursing informatics is the use of computer information systems, the most common computer hardware and software nurses may come across in the nursing setting. The course emphasizes the need for nurses to design and adopt computer processes to enhance client care, education, administration and management and nursing research.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the common components of desktop computers Apply word processing, database, spreadsheets and communication software in nursing Describe computer application in nursing education Discuss the advantages and concern of computerized patient documentation systems Use computer in direct client monitoring and diagnosis. Explain the ways computers may be used by nurse administrators in the area of personnel,
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	<p>facility management, finance, quality assurance and accreditation</p> <ul style="list-style-type: none"> • Explain the role of computers in each step of the nursing and research process • Apply principles in disclosure of individually identifiable health information
Professional psychomotor skills	<ul style="list-style-type: none"> • Demonstrate the use of different data management systems • Demonstrate skills in maintaining privacy and confidentiality in relation to accessing electronic data • Demonstrate computer applications used in direct client monitoring and diagnosis.
Professional affective skills	<ul style="list-style-type: none"> • Use information technology to locate scientific studies related to individual patient's/client's health problems. • Use information technology to access medical information and assimilate evidence from scientific studies to manage patients effectively.

Course content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
NI 201	General Concepts in Nursing Informatics	05	0.5	10	1.0	15	1.5
NI 202	Computers in Nursing Education	05	0.5	10	1.0	15	1.5
NI 203	Computers in Nursing Practice	05	0.5	20	2.0	25	2.5
NI 204	Computers in nursing administration	05	0.5	15	1.5	20	2.0
NI 205	Computers in nursing research	15	1.5	15	1.5	30	3.0
	Total	35	3.5	70	7.0	105	10.5

DS 200: DEVELOPMENT STUDIES (9.5 CREDITS)

Course description

The course exposes student to Tanzania's development experiences and to be aware of alternative development strategies existing currently.

The importance of the course to nursing student is to develop positive attitude towards independent and lifelong learning as professionals. The student nurse is also able to network with other categories of students (Medicine, Dentistry & Pharmacy) by sharing knowledge, skills and experiences.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the dynamics of Tanzania’s development plans/strategies and implementation in health and health related sectors. Compare and contrast different development strategies in developing countries. Examine current development problems and issues in Tanzania and developing countries in general and how these problems relate to health Plan, organize and manage a private health facility.
Professional psychomotor skills	<ul style="list-style-type: none"> Demonstrate networking skills with other categories of students within and outside the institution by sharing knowledge, skills and experiences. Demonstrate knowledge and skills in planning, organising and managing a private health facility Design health strategies to overcome problems of youth resulting from globalisation.
Professional affective skills	<ul style="list-style-type: none"> Express positive attitude towards independent learning and also lifelong learning as professionals Value patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, and other aspects of diversity when giving nursing care globally. Observe respect, compassion, accountability, and integrity while interacting with people nationally and internationally.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
DS 201	Globalization, Environment and Health	35	3.5	15	1.5	50	5.0
DS 202	Human Rights and Governance	30	3.0	15	1.5	45	4.5
	Total	65	6.5	30	3.0	95	9.5

SEMESTER FOUR

ER 200: EPIDEMIOLOGY & RESEARCH METHODOLOGY I (8 Credits)

Course description

The course comprises of two components, namely Epidemiology and Research methodology.

The Epidemiology part introduces the students to environmental determinants of health and disease in human populations. The aim of the course is to enable the student understand the basic principles of epidemiology and its application in the planning and provision of medical and health care services.

The research methodology part explores the type and method for nursing and midwifery research, examine the steps in the development of a research, review and evaluates current research findings in nursing for its applicability to nursing theory and practice and to study the process of scientific investigation.

Students will be introduced to a range of research methodologies and the principles underpinning research activity in nursing, midwifery and health care. Skills in searching for evidence and critical reading are enhanced.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none">• Describe the basic principles of epidemiology in research and in planning provision medical and health care services.• Explain the epidemiological methods in research and assessing the community health needs.• Use the research methods to collect, analyse and present critical information to stakeholders and wider audience.• Describe the control of major diseases of public health importance in Tanzania.• Describe physical, biological, socio-cultural and environmental factors affecting health and disease.• Describe the stages of the research process.• Explain the methods of utilizing research findings in nursing and midwifery practice.• Evaluate research findings
Professional psychomotor skills	<ul style="list-style-type: none">• Determine the epidemiological methods in research and assess community health needs• Use the research methods to collect, analyze and present critical information to stakeholders and wider audience.• Prepare the research proposal• Demonstrate skills in writing research report

	<ul style="list-style-type: none"> • Produce research findings to improve the standard of nursing and midwifery care in Tanzania. • Use skills in critiquing nursing research.
Professional affective skills	<ul style="list-style-type: none"> • Value the importance of evidence-based practice in nursing and midwifery. • Use research findings to improve the standard of nursing and midwifery care in Tanzania. • Value the confidentiality of information gathered from the patients/clients during research process • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when collecting the research data • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals in research process.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER 201	Principles of Epidemiology	20	2.0	-	-	20	2.0
ER 202	The Research Process	20	2.0	10	1.0	30	3.0
ER 203	Contexts for nursing and midwifery research	20	2.0	10	1.0	30	3.0
	Total	60	6.0	20	2.0	80	8.0

AD 200: ADVANCED CONCEPTS IN NURSING (19.5 Credits)

Course description

This course focuses on building nursing skills in areas of assessment and diagnosis based on physiological, pathophysiological, psychosocial, pharmacological, cultural and spiritual concepts. This course will also emphasize on intervention based on concepts and theories which will increase student's critical thinking and problem solving skills and become self-directed learners.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Apply effective interviewing skills and observation techniques to obtain data from the patients / clients. • Describe relevant scientific approaches (Gordon Functional Health Patterns, nursing process) in assessing patients/clients. • Assess clients / patients in varying developmental stages through physical examination. • Evaluate critically the assessment data of the patients/clients by incorporating physical, psychological, pharmacological, social and spiritual aspects of care. • Formulate nursing diagnoses based on analysis of assessment data. • Plan nursing care in relation to formulated nursing diagnoses for management of patients / clients. • Record accurately medical and nursing information. • Differentiate the various nursing theories in improving nursing care • Apply the different nursing theories in providing evidence based care
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Demonstrate effective communication skills when interacting and interviewing patients. • Demonstrate professional responsibility and accountability in clinical practice. • Demonstrate knowledge and skills in physical assessment • Develop a plan of care utilizing the nursing process in the management of patients / clients. • Demonstrate knowledge and skills when interviewing special groups of patients (silent patients, over talkative, seductive patients, angry patients, aggressive patients, paranoid patients, demanding patients)
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients • Express compassion, respect and sensitivity to patient/client individuality when giving nursing care. • Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to patients with medical/surgical conditions. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
AD 201	Theories and theorists	10	1.0	-	-	10	1.0
AD 202	Advanced concepts in Medical, Surgical and Geriatric Nursing	25	2.5	50	5.0	75	7.5
AD 203	Advanced concepts in Mental Health	15	1.5	50	5.0	65	6.5
AD 204	Advanced concepts in Maternal and neonatal Nursing	15	1.5	30	3.0	45	4.5
Total		65	6.5	130	13.0	195	19.5

EP 200: ENTREPRENEURSHIP (7.5 Credits)

Course Description

This course is designed to equip the learner with the knowledge, skills and mind-set to enable the learner to identify, start and manage a growing business. The course will provide the opportunity to explore new models of practice and innovations in healthcare delivery and services.

This course will focus on establishing a successful entrepreneurship venture in connections with a larger healthcare system. The content will be on assessment of business ideas, analysing trends, making a feasibility study, writing a business plans, marketing, business development and start up opportunities. Emphasis will be put on implementation, monitoring and conducting business.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Define the terms relating to entrepreneurship Describe the components of entrepreneurship Discuss the risks, challenges and rewards in entrepreneurship Describe the components of project proposals and business plans. Describe the marketing tools and strategies for different potential Markets.
Professional psychomotor skills	<ul style="list-style-type: none"> Write project proposals and business plans. Develop marketing tools and strategies for different potential Markets. Design project proposals and business plans. Approach others in establishing and managing small and Medium scale business
Professional affective skills	<ul style="list-style-type: none"> Share pertinent information with others in establishing and managing small and medium scale business. Observe respect and sensitivity when relating with others during project and business plans write-ups

Course contents

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
EP 201	Introduction to Entrepreneurship	15	1.5	-	-	15	1.5
EP 202	Business Management	15	1.5	45	4.5	15	1.5
	Total	30	3.0	45	4.5	75	7.5

CH 200: COMMUNITY HEALTH NURSING I (5.0 Credits)

Course Description

The course focuses on the principles underlying community health nursing practice, as well as the roles and functions of community health nurses in primary, secondary, and tertiary prevention. The influence of culture, economics, politics, environments, and ethics as they impact community health nursing practice are explored throughout the course.

This course enables the students to provide quality care to individuals, families and community at large.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Explain the role of the community health nursing • Describe the concepts of primary, secondary and tertiary prevention in the community context. • Design health promotion strategies appropriate for communities. • Evaluate the selected community resources appropriate for specific groups in the community. • Discuss current demographic and economic factors influencing health care issues. • Describe the methods used to influence, motivate, educate, and change people
Professional psychomotor skills	<ul style="list-style-type: none"> • Design health promotion strategies appropriate for communities. • Demonstrate the role of the community health nurse. • Adapt the concepts of primary, secondary and tertiary prevention in the community context when working with the community. • Develop a plan in relation to the current demographic and economic factors influencing health care issues.
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the community. • Express compassion, respect and sensitivity to patient/client individuality while working with the people in the community.

	<ul style="list-style-type: none"> Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to the community. Observe respect, compassion, accountability, and integrity while interacting with peers and other professionals in the community.
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Course Content

Code	Module Name	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CH 201	Community Assessment Planning Interventions	10	1.0	-	-	10	1.0
CH 202	Primary Health Care/Health Promotion	20	2.0	-	-	20	2.0
CH 203	Community Health Nurse as an Educator, Developer, Evaluator	20	2.0	-	-	20	2.0
Total		50	5.0	-	-	50	5.0

NT 200: NUTRITION (8.5 Credits)

Course description

The course intends to provide knowledge on socio-cultural, economic and specific nutrition related aspects of nursing, such as the role of diet in nutrition related diseases. The course aims at making students understand the background and the recent approaches/concepts in nutritional problems affecting the society.

The knowledge gained will enable them to plan, implement and evaluate relevant nutrition interventions to individual patients/client and the community at large in collaboration with other sectors involved in this issue.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Use the conceptual framework to assess major nutrition problems nationally and globally. Analyse major nutrition problems nationally and globally. Describe the aetiologies, manifestations and effects of the major nutrition disorders. Plan relevant nutrition interventions
Professional psychomotor skills	<ul style="list-style-type: none"> Apply the knowledge of socio-cultural and economic influences in managing patients with nutritional disorders/diseases Determine major nutrition problems using the integrated conceptual framework model

	<ul style="list-style-type: none"> • Design relevant nutritional interventions relating to identified patients problems • Maintain quality care to clients with nutritional needs. • Develop an evaluation plan for the different nutritional programmes in the community
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients with nutritional disorders. • Express compassion, respect and sensitivity to patient/client individuality when giving nursing care to a patient with nutritional disorders. • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care to patients with nutritional disorders. • Observe respect, compassion, accountability, and integrity caring to the patient with nutritional disorders.

Course Content

<i>Code</i>	<i>Module Name</i>	<i>Theory</i>		<i>Practical</i>		<i>Total</i>	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
NT 201	Basic information on nutrition	10	1.0	-	-	10	1.0
NT 202	Assessment and analysis of major nutrition problems using the integrated conceptual framework model	15	1.5	35	3.5	50	5.0
NT 203	Nutrition Programme planning, implementation management and evaluation	10	1.0	-	-	10	1.0
NT 204	Aetiologies, manifestations and epidemiology of the major nutrition disorders of nutrition disorders	15	1.5	-	-	15	1.5
	Total	50	5.0	35	3.5	85	8.5

MW 200: MIDWIFERY (18 Credits)

Course Description

This course teaches how to take care for the expectant mother, the newborn, and under-five children in Maternal and Child Health clinics.

The course also emphasizes human development and family centred care. Through this course, the student is expected to become acquainted with the knowledge of women's role and adaptation to normal and high-risk pregnancy, delivery, as well as postpartum period and the characteristics of the newborn.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Describe the national and global policies and guidelines related to women and children’s health • Discuss the psychosocial and gender issues in reproductive health • Describe family planning methods currently used by clients • Explain gender dynamic in improving mother and child health • Integrate STD/HIV care in reproductive health • Describe the nursing care of women in the ante, inter and post -partum periods • Describe the nursing care to the newborn baby. • Describe the necessary information regarding breastfeeding to new mothers.
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Maintain the national and global policies and guidelines related to women and children’s health when caring for women in their reproductive age. • Determine the psychosocial and gender issues in reproductive health when caring for women in their reproductive age • Illustrate appropriate family planning methods to clients according to needs. • Demonstrate skills in provision of quality nursing care to women in the ante-partum, inter-partum and post -partum periods utilizing the nursing process. • Demonstrate skills in provision of quality nursing care to the newborn baby utilizing the nursing process. • Develop a plan for giving necessary information to regarding breastfeeding to new mothers.
<p>Professional affective skills</p>	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from women in their reproductive age during provision of care. • Express compassion, respect and sensitivity to individual woman in her reproductive age during provision of care. • Respond professionally to women’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during provision of care in their reproductive age. • Observe respect, compassion, accountability, and integrity while interacting with peers and other professionals when providing care to women in their reproductive age.

Course Content

Code	Name	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MW 201	National and Global trends, Policies, Guidelines in Reproductive Health and Maternal and Child Health	10	1.0	-	-	10	1.0
MW 202	Gender in Health and Gender based violence	05	0.5	-	-	05	0.5
MW 203	Family planning, sexuality and STDs, HIV/AIDS	20	2.0	15	1.5	35	3.5
MW 204	Assessment and Management in the Antepartum, Intrapartum and Postpartum Periods	35	3.5	55	5.5	90	9.0
MW 205	Newborn and under-five child assessment and management	10	1.0	30	3.0	40	4.0
Total		80	8.0	100	10.0	180	18.0

SEMESTER FIVE

CP 300: CLINICAL PHARMACOLOGY (18.3 Credits)

Course Description

This course aims at introducing the student to the basic concepts of pharmacology, with emphasis on how drugs act in human beings and chemical agents found in the environment. It will also help students to use the knowledge for effective clinical judgments when providing nursing care.

The student can apply this knowledge during administration of drugs in the practice of nursing so as to evaluate expected therapeutic responses in patients, as well as to evaluate for possible adverse effects.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Apply the principles of drug administration when administering drugs to patients. • Review prescriptions if written correctly in accordance with the law. • Describe the importance of pharmacology in patient care. • Assess patients' condition for safe medication and outcome of drug administration. • Apply different methods of drug administration when providing nursing care.
Professional psychomotor skills	<ul style="list-style-type: none"> • Determine new developments in pharmacology when caring patients/client with different health conditions.

	<ul style="list-style-type: none"> • Determine the common drugs used in the wards and clinic • Demonstrate knowledge and skills when administration drugs to the patients/client. • Illustrate the importance, action, adverse effect and compliance of drugs when giving care to the patient. • Determine patient condition for safe medication and outcomes of drug administration • Develop a plan in accordance with the law to detect any incorrectly written prescriptions for Dangerous Drug Act (DDA).
Professional affective skills	<ul style="list-style-type: none"> • Value new knowledge in the development of pharmacology in nursing. • Value the confidentiality of information gathered from the patients/clients during drug administration. • Express compassion, respect and sensitivity to patient/client individuality when giving medication. • Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving medication to patients • Express respect, compassion, accountability, and integrity while interacting with peers and other health professionals in case of drug errors during the process of drug administration.

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CP201	Chemical Mediators	35	3.5	12	1.2	47	4.7
CP 202	Drug Disposition	19	1.9	4	0.4	23	2.3
CP 203	Systemic Pharmacology	73	7.3	-	-	73	7.3
CP 204	Chemotherapy of Parasites	24	2.4	-	-	24	2.4
CP 205	Applied Pharmacology	16	1.6	-	-	16	1.6
	Total	167	16.7	16	1.6	183	18.3

ER 300: EPIDEMIOLOGY & RESEARCH METHODOLOGY II (10.5 Credits)

Course description

The focus of this course is on assisting the learners to acquire skills in research proposal and report writing. Health institutions will be contacted to provide relevant areas of study from which students will select a topic for research. Students will be directing their work with the

support of a supervisor, which will provide an opportunity to enhance their experiences of management and collaborative activities.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Describe the steps in research proposal writing. Identify the appropriate research topic Explain the process of grant application. Identify major sources of funding for research projects. Describe the process of dissemination of research findings.
Professional psychomotor skills	<ul style="list-style-type: none"> Develop a research proposal on a selected topic Demonstrate knowledge and skills in grant application Demonstrate skills from research methodology in data collection analysis and presentation. Develop a research report from research findings and publish to enhance clinical practice. Determine areas for dissemination of research findings at Faculty symposia, meetings and scientific conferences at national and international forums.
Professional affective skills	<ul style="list-style-type: none"> Value the confidentiality of information gathered from the patients/clients when conducting research. Express compassion, respect and sensitivity to patient/client individuality when conducting research. Respond professionally to patient/client's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when conducting research. Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals when conducting research.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER 301	Writing a research proposal	35	3.5	-	-	35	3.5
ER 302	FIELD WORK and Report writing	-	-	70	7.0	70	7.0
	Total	35	3.5	70	7.0	105	10.5

CH 300: COMMUNITY HEALTH NURSING II (15.5 credits)

Course description

This course provides opportunities for students to apply community health nursing concepts, theories, and processes in the care of individuals, families, aggregates and the total

community. It emphasizes on prevention of illness, disability, disease, early identification of risk factors and promotion of optimal health for the total community. Selected case studies of families as well as special projects are assigned to develop student skills in the practice of community health nursing. Emphasis is on interdisciplinary health care with multicultural and high – risk families and aggregates in the community.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Describe the relationship between illness and human behaviour. • Differentiate models that explain health behaviour. • Compare health related knowledge and behaviour in the community. • Assess the relationship between culture and health. • Examine the role of traditional medicine in health service provision. • Describe factors that affect utilization of health services • Describe risk behaviour pertaining to health. • Examine the social, cultural and psychological factors that may lead to adverse health outcomes in human populations. • Describe broad based social issues that are important in public health interventions.
Professional psychomotor skills	<ul style="list-style-type: none"> • Operate as an interdisciplinary team member using the nursing process to meet the health care needs of individuals, families, and groups throughout the life span in a variety of community settings. • Adapt cultural assessment into nursing care of individuals, families and aggregates • Determine ethical, environmental political and economic factors that influence the health of individuals, families, aggregates and the community. • Maintain nursing in community settings using principles of health promotion, disease prevention, health restoration with individuals, families, aggregates, and the community. • Determine theories and models of health education to individuals, families, and the community. • Demonstrate progression from a dependent to a more independent role in providing nursing care in the community. • Demonstrate community health nursing according to legal, ethical, and professional standards.
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients during community health nursing practice

	<ul style="list-style-type: none"> Express compassion, respect and sensitivity to patient/client individuality during community health nursing practice. Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during community health nursing practice Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals during community health nursing practice.
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Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CH 301	Community Health Nurse and the Community Situations	15	1.5	-	-	15	1.5
CH 302	FIELD WORK	-	-	140	14.0	140	14.0
	Total	15	1.5	140	14.0	155	15.5

TI 200: TRENDS AND ISSUES IN NURSING (5.5 Credits)

Course description

The course aims at enabling student understand the current and future challenges in the nursing profession. They will also learn about factors that influence the nursing profession on issues of practice, education and research. This course will also enable the student to understand the legal dimensions of nursing.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> Discuss factors that influence nursing practice, education and research Describe the global trends that have influenced nursing practice nationally, regionally and internationally Assess the impact of health policies on the nursing profession Discuss the legal dimensions of nursing practice Compare the current situation and forecast the future of the nursing profession Analyse the evolution of the nursing profession
Professional psychomotor skills	<ul style="list-style-type: none"> Demonstrate knowledge and skills gained from legal dimensions of the nursing practice in improving the image of nursing

	<ul style="list-style-type: none"> Develop strategies that may improve the image of the nursing profession Maintain quality delivery of nursing care through the knowledge and skills gained from the trends in nursing practice
Professional affective skills	<ul style="list-style-type: none"> Value professionalism according to current and future trends in nursing career. Observe respect, compassion, accountability, to foster the image of nursing when providing nursing care to patients/clients.

Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
TI 301	Transitions to professional nursing	10	1.0	-	-	10	1.0
TI 302	Dynamics of professional nursing practice	15	1.5	-	-	15	1.5
TI 303	Impact of policies on the nursing profession	15	1.5	-	-	15	1.5
TI 304	Educating nurses for the future	15	1.5	-	-	15	1.5
	Total	55	5.5	-	-	55	5.5

MP 300: MENTAL HEALTH & PSYCHIATRIC NURSING (17.0 Credits)

Course Description

This course emphasises on personality traits and common psychiatric disorders. History of mental health in Tanzania and the use of specific neurological drugs will be covered. In addition, it will also emphasise biopsyo-social health assessments that are culturally sensitive utilising problem-solving approach (nursing process) in management of clients with mental health problems. It will also enable the students to design and implement treatment plans for patients and families with common mental health problems and co-morbid conditions.

The course is also designed to expose learners to deal with criminal patients with mental disorders. The learners are equipped with necessary knowledge, skills and attitude for the practice in the promotion of community mental health and to be able to function as first level nurses in mental health institutions and communities.

Expected competencies

<p>Professional cognitive skills</p>	<ul style="list-style-type: none"> • Explain the influence of historical events and recent trends in mental health services in the country. • Explain human adjustive /mental mechanisms • Describe the common anxiety disorders • Describe legal aspects of mental health practice nationally and internationally. • Describe epidemiology of mental illness nationally and internationally • Discuss biopsyo-social health assessments that are culturally sensitive to clients with mental health problems. • Explain psychiatric evaluation of clients/patients • Explain classification of mental health disorders according to Diagnostic Statistical Manual for mental illness and international Classification of Diseases 10 (DSM IV and ICD 10 respectively). • Explain the problem-solving approach (nursing process) in management of clients with mental health problems. • Relate selected theoretical perspectives to nursing care of clients with mental health disorders. • Explain treatment modalities for patients and families with common mental health problems and co-morbid conditions. • Describe the nursing management of special groups in relation to mental health and psychiatric problems • Explain an overview of community mental health • Describe community mental health nursing utilizing the principles of PHC • Describe the strategies for mental health promotion for various group of individuals with mental health problems basing on gender perspectives. • Relate mental illness and crime • Explain Criminal Procedure Act related to mental illness • Explain Criminal Procedure codes related to mental illness • Assess a criminal client Comprehensively • Explain role of psychiatric nurse, advisory board and board of visitors in forensic care • Explain the ethical issues in forensic Psychiatry
<p>Professional psychomotor skills</p>	<ul style="list-style-type: none"> • Design treatment modalities for patients and families with common mental health problems and co-morbid conditions.

	<ul style="list-style-type: none"> • Demonstrate skills of treatment modalities in managing patients and families with common mental health problems and co-morbid conditions. • Design a nursing care plan for clients/patients with mental health problems by utilizing nursing process • Demonstrate skills in application of the selected theoretical perspectives to nursing care of patient/client with mental health disorders • Demonstrate skills in managing patients with mental health disorders • Demonstrate skills in mental health and psychiatric nursing according to legal, ethical, and professional standards. • Demonstrate skills in assessing civil and forensic patients • Design care for special groups of clients with mental disorders • Demonstrate skills in report writing concerning patients with mental health disorders
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from patients with mental health disorders • Express compassion, respect and sensitivity to individual patient with mental health disorders during provision of nursing care • Respond professionally to patient's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when caring a patient with mental health disorders. • Observe respect, compassion, accountability, and integrity while interacting with peers and other professionals when managing patients with mental health disorders.

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MP 301	Psychiatric/ Mental Health Nursing Practice	10	1.0	10	1.0	20	2.0
MP 302	Mental disorders and behaviour pathology	10	1.0	10	1.0	20	2.0
MP 303	Managing patients with specific mental health problems.	20	2.0	30	3.0	50	5.0
MP 304	Nursing management of special group	10	1.0	15	1.0	25	2.5
MP 305	Community Mental Health Nursing	10	1.0	20	2.0	30	3.0
MP 306	Forensic Psychiatry	10	1.0	15	1.5	25	2.5

	Total	70	1.7	100	10.0	170	17.0
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SEMESTER SIX

AC 300: ADVOCACY AND COUNSELING (8.5 Credits)

Course description

This course equips a student with knowledge, skills and attitudes to enable him/her advocate for change in health and health related issues. The course will also enable the student to develop effective counselling skills. Emphasis will be on familiarity and sensitivity to the cultural as well as to characteristics and needs of the clients.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Define advocacy and counselling • Discuss issues that are pertinent for advocacy • Discuss incidences where by advocacy can be a challenge • Discuss values that are basic to the client during advocacy • Review the goals of counselling • Identify the models of counselling • Describe the co values for counselling • Explain the co- values of counselling • Discuss the qualities and the characteristics of a good counsellor. • Describe the process of counselling
Professional psychomotor skills	<ul style="list-style-type: none"> • Demonstrate advocacy skills when giving care to patients/clients. • Demonstrate effective counselling skills when dealing with patients in difficulty situations • Use lobbying skills to effect change • Plan for the implementation and evaluation of advocacy.
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients during the process of advocacy and counseling. • Express compassion, respect and sensitivity to patient/client individuality during the process of advocacy and counseling. • Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during the process of advocacy and counseling. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health

	professionals concerning the outcome of the advocacy and counseling done to patients/clients.
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Course content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
AC 301	Advocacy	20	2.0	15	1.5	35	3.5
AC 302	Counselling	20	2.0	30	3.0	50	5.0
	Total	40	4.0	45	4.5	85	8.5

LM 300: LEADERSHIP & MANAGEMENT (20.5 Credits)

Course description

The course will address the importance of leadership within nursing and the need to recognize and develop leadership skills and potential within the profession. Students will be afforded the opportunity to explore their own leadership skills and knowledge through fieldwork underpinned by relevant theoretical constructs in order to provide quality nursing care. Action learning sets will be used to integrate the theoretical base of leadership with fieldwork within an identified health care setting.

Expected competencies

Professional cognitive skills	<ol style="list-style-type: none"> 8. Differentiate leadership and management. 9. Describe effective roles of the leader and the manager 10. Apply critical thinking in leadership and management roles in nursing practice. 11. Describe leadership and management in health care organization. 12. Use appropriate decision making in assisting clients toward recovery and/or improving their health. 13. Employ suitable managerial and planning skills for proper development of human resource necessary for provision of health services in Tanzania. 14. Employ suitable managerial and planning skills for proper management of non-human resource necessary for provision of health services in Tanzania.
Professional psychomotor skills	<ol style="list-style-type: none"> 4. Demonstrate skills in leadership and management roles in nursing practice. 5. Demonstrate effective decision making skills in assisting clients toward recovery and/or improving their health. 6. Demonstrate and knowledge and skills suitable for managerial and planning human resource necessary for the development of good nursing leadership and services in Tanzania.

Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from the patients/clients during leadership and management practice. • Express compassion, respect and sensitivity to patient/client individuality during leadership and management practice. • Respond professionally to patient/client’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during leadership and management practice. • Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals during leadership and management practice.
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Course Content

Code	Module Name	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
LM 301	An overview of Nursing Leadership and Management.	15	1.5	-	-	15	1.5
LM 302	Nursing Leadership and Management Skills	15	1.5	45	4.5	60	6.0
LM 303	Leadership and Management in Nursing Practice	20	2.0	45	4.5	65	6.5
LM 304	Leadership and Management in Health Care Organisations	20	2.0	45	4.5	65	6.5
	Total	70	7.0	135	13.5	205	20.5

PD 300: PAEDIATRIC NURSING (22 Credits)

Course description

The course gives a student a foundation of paediatric knowledge, skills and attitudes on which builds a long life learner approach to caring for children in a range of acute, critical and chronic care situations.

The course is designed to help student understand the potential health problems and needs of children and families based on their development process. Commonly seen diseases, communication skills, the impact of illness and hospitalisation on the children and their families are emphasized.

Expected competencies

Professional cognitive skills

- Discuss the changing perspectives of child rearing in Tanzania and globally.
- Review the role of the Paediatric Nurse in promoting the health of children

- Describe the family centred model of care
- Explain the nursing process for caring for a paediatric patient and family
- Examine the Social, cultural, and religious influences on child health promotion
- Differentiate complete health assessment of paediatric patients/clients from that of an adult
- Discuss principles of taking vital signs in a paediatric patient and use of appropriate equipment
- Employ different methods of specimens collection in paediatric patients
- Practice personal hygiene of patients/clients in different setting.
- Use different techniques for communicating with children and families
- Review factors influencing communication process in children and families
- Discuss guidelines for communication and interviewing children and families
- Evaluate the nutritional status of children according to developmental stages.
- Review the immunization schedules for proper administration of vaccine to children
- Discuss safety hazards and appropriate preventive measures for the developmental age of client and family.
- Explain nursing measures to promote patients/clients comfort, rest and sleep.
- Describe the management of common medical and surgical conditions in children.
- Calculate medication dosages for the paediatric patient (weight based)
- Choose the different routes of drug administration according to developmental stage of the child.
- Discuss the effects of hospitalization on children and families.
- Discuss techniques for counselling families of ill children with genetic disorders
- Describe basic needs of the terminally ill child and his/her family
- Discuss care of the child after death and its family
- Discuss needs of the bereaved family in paediatric
- Discuss home based care for children with chronic illnesses/disability

Professional psychomotor skills

- Design the nursing care of a child and family utilizing the nursing process.
- Discover socio-cultural, economic and religious influences the growth and development of child when providing nursing care.
- Demonstrate family centered model of care when providing nursing care to children.
- Demonstrate skills in assessment of pain to a child.
- Determine normal and abnormal vital signs when caring for sick child by using appropriate equipment.
- Demonstrate skills in collecting different specimens for diagnostic purposes from a child.
- Demonstrate communication skills when communicating with children and families of various developmental stages.
- Develop nutritional plans appropriate to child's age and condition with families
- Determine immunization status of a child
- Design child's injury prevention and safety plan with family.
- Determine developmental milestones of the paediatric patient and the family
- Demonstrate skills in drug administration according to the prescribed routes.
- Demonstrate skills in caring for a family with terminally ill child.
- Demonstrate skills in caring for a paediatric dead body.
- Demonstrate skills in counselling for the grieving family and significant others

- Prepare home based care plan for children with chronic illness/disability

Professional affective skills

- Value the confidentiality of information gathered from a child.
- Express compassion, respect and sensitivity to a child’s individuality when giving nursing care.
- Respond professionally to a child/family’s cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity when giving nursing care.
- Observe respect, compassion, accountability, and integrity while interacting with peers and other health professionals when giving care to children and families.

Course Content

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PD 301	Introduction to Paediatric Nursing	15	1.5	-	-	15	1.5
PD 302	Nursing process in the care of the child and family	15	1.5	25	2.5	40	4.0
PD 303	Assessment of the child and family	15	1.5	25	2.5	40	4.0
PD 304	Health promotion for child and family	20	2.0	25	2.5	45	4.5
PD 305	Management of the child with common medical and surgical conditions and with special needs	20	2.0	60	6.0	80	8.0
Total		85	8.5	135	13.5	220	22.0

PL 300: PRINCIPLES OF LEARNING AND TEACHING (12 Credits)

Course Description

This course helps students understand the nature of curriculum development, planning, implementation and evaluation. It will also focus on the principles of learning and teaching using a variety of teaching strategies with emphasis on health teaching to different groups in the clinical setting.

It seeks to equip students with appropriate knowledge, skills and attitudes necessary to effectively identify, analyse and utilize learning, teaching and assessment opportunities in relation to clients, their significant others and staff within the clinical setting primarily. The course adopts the view that effective teaching, learning, mentoring, assessment and evaluating employ a number of common approaches although the contexts in which these activities take place may vary, for example, in a clinical setting as opposed to a classroom.

Expected competencies

Professional cognitive skills	<ul style="list-style-type: none"> • Describe the conditions necessary to bring about learning. • Explain the principles for the selection of appropriate teaching/learning methods. • Discuss the methods of teaching, supervising facilitating and coaching. • Describe the learning process and different ways of learning. • Explain the conditions necessary to bring about learning. • Discuss the nature of curriculum development and planning.
Professional psychomotor skills	<ul style="list-style-type: none"> • Set up an environment necessary to bring about learning. • Determine the principles necessary for the selection of appropriate teaching/learning methods. • Demonstrate the skills of supervising, facilitating, coaching and tutoring in health settings. • Demonstrate skills in teaching, supervising, facilitating, coaching, tutoring and other methods according to different ways of learning. • Demonstrate knowledge and skills in teaching nurses in various schools of nursing.
Professional affective skills	<ul style="list-style-type: none"> • Value the confidentiality of information gathered from student nurses. • Express compassion, respect and sensitivity to individual students during the process of learning and teaching. • Respond professionally to student's cultural diversity, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities and other aspects of diversity during the process of learning and teaching. • Observe respect, compassion, accountability, and integrity while interacting with peers and other teaching professionals.

Course Contents

Code	Module Name	Theory		Practicals		Total	
		Hours	Credits	Hours	Credits	Hours	Credits
PL 301	Principles of teaching and learning	30	3.0	15	1.5	45	4.5
PL 302	Methods of teaching and learning	30	3.0	45	4.5	75	7.5
	Total	60	6.0	60	6.0	120	12.0

THE MASTER OF MEDICINE (MMED) PROGRAMMES

SCHOOL OF GRADUATE STUDIES

CUHAS POSTGRADUATE PROGRAMMES

MASTER OF MEDICINE PROGRAMMES

The Catholic University of Health and Allied Health Sciences-Bugando (CUHAS-Bugando) currently runs Master of Medicine programmes in the following specialties: Internal Medicine, Surgery, Paediatrics and Child health, Obstetrics and Gynaecology, and Anaesthesiology.

SUMMARY OF THE MASTER OF MEDICINE (MMED) CURRICULUM

These are three years programmes to be offered in six semesters.

Semester I will cover biomedical science subjects relevant to the specialty. It will also cover the theoretical and technical background on the various relevant technical investigations.

Semesters 2 to 6 will cover the specific clinical subjects of the different specialties as indicated below.

MMED PART I

SEMESTER ONE (BIOMEDICAL SCIENCES)

Applied Anatomy (428 Hrs)

Objectives

At the end of the course the candidate should be able to:

1. Describe the surgical anatomy of various organs and tissues of the human body of surgical importance.
2. Apply anatomical knowledge to explain the various surgical procedures including diagnostic procedures and surgical operations.
3. Apply anatomical principles to explain various symptoms and signs of various surgical diseases.
4. Apply knowledge of embryology to explain essence of various congenital malformations of surgical importance.

Course Content

Module	Code	Name	Lecture Hrs	Seminar Hrs	Practical Hrs	Total Hrs
I	SN 101	Head and Neck	16	16	24	56
II	SN 102	Thorax	16	16	24	56
III	SN 103	Abdomen and pelvis	16	16	24	56
IV	SN 104	Upper limb	16	16	24	56
V	SN 105	Lower limb	16	16	24	56

Module	Code	Name	Lecture Hrs	Seminar Hrs	Practical Hrs	Total Hrs
VI	SN 106	Central nervous system	16	16	24	56
VII	SN 107	Embryology	24	12	0	36
VIII	SN 108	Histology	12	8	36	56
Total			132	116	180	428

PH 600: CLINICAL PHYSIOLOGY (5.6 Uniits)

Aims

To provide students with knowledge on normal and disordered functioning of the human body and how to use this knowledge in making correct diagnosis and management of disease conditions.

Objectives

At the end of the course the student must be able to:

1. Describe the normal physiology of various body systems
2. Describe the pathophysiology of common disease conditions
3. Discuss the physiological basis of diagnosis and treatment

Course content

Module	Code	Name	Lectures		Total	
			Hrs	Units	Hrs	Units
I	PH 601	Clinical Physiology of fluid, blood and immuneresponse	20	1.3	20	1.3
II	PH602	Clinical physiology of the Cardiorespiratoy and renal system	20	1.3	20	1.3
III	PH603	Clinical Physiology of Metabolism, Endocrinology and reproductive physiology	30	2.0	30	2.0
IV	PH 603	Clinical Neurophysiology	15	1.0	15	1.0
Total			85	5.6	85	5.6

BC 600: CLINICAL BIOCHEMISTRY (5.3 Units)

Aim

To provide students specializing in medicine with knowledge of diseases at a molecular level, so that they can correlate it with clinical features and different diagnostic tests and lastly make a rational treatment.

Objectives

At the end of the course the student must be able:

1. To describe molecular and metabolic basis of diseases
2. To describe the basis of different biochemical tests and be able to tell when there is deviation from normal

- To describe different advances in molecular biology regarding causes, diagnosis and treatment of diseases

Course Content

Module	Code	Name	Lectures		Total	
			Hrs	Units	Hrs	Units
I	BC 601	Biochemistry of Genetics	20	1.3	20	1.3
II	BC 602	Biochemistry of Blood, blood gases and Buffers	10	0.7	10	0.7
III	BC 603	Biochemistry of inflammation	15	1.0	15	1.0
IV	BC 604	Biochemistry of Hormones	15	1.0	15	1.0
V	BC 605	Biochemistry of Metabolic disorders	20	1.3	20	1.3
Total			80	5.3	80	5.3

MM 600: MICROBIOLOGY & IMMUNOLOGY (7.0 Units)

Aims

To provide the students with knowledge of Medical Microbiology and scientific basis for laboratory diagnosis of infectious diseases and how to use the knowledge in the management of infectious diseases.

Objectives

- To describe basic principles in the diagnosis and management of infectious diseases
- To describe major clinical syndromes and their etiological agents
- to describe the immunology of infectious diseases

Course content:

Module	Code	Name	Lectures		Total	
			Hrs	Units	Hrs	Units
I	MM 601	Bacteriology	30	2.0	30	2.0
II	MM 602	Virology	20	1.3	20	1.3
III	MM 603	Mycology	10	0.7	10	0.7
IV	MM 604	Parasitology	10	0.7	10	0.7
V	MM 605	Principles of Immunology	10	0.7	10	0.7
VI	MM 606	Host Parasite Interaction	8	0.5	8	0.5
VII	MM 607	Autoimmune diseases, Immunodeficiency states	16	1.1	16	1.1
Total			104	7	104	7

CP 600: CLINICAL PHARMACOLOGY (7.1 Units)

Aim: to provide medical specialist with the basic principles of drug action so that he/she can apply them in making rational drug prescription during clinical practice

Objectives

At the end of the course, the medical specialist should be able to:

- Prescribe drugs to patients in a rational way
- Detect and remedy any adverse reactions to drugs that may occur in patients
- Enhance his/her knowledge in new drug development in the field of therapeutics

Course contents

Module	Code	Name	Lectures		Total	
			Hrs	Units	Hrs	Units
I	CP 601	Drugs Disposition	14	0.9	14	0.9
II	CP602	Systemic Pharmacology	45	3.0	45	3.0
III	CP 603	Anti-parasitic Chemotherapy	24	1.6	24	1.6
IV	CP 604	Miscellaneous topics	24	1.6	24	1.6
Total			107	7.1	107	7.1

MS 600: MISCELLENEOUS SUBJECTS (8.0 Units)

(Research methodology, teaching methodology, Biostatistics and Epidemiology, Medical legal and Medical ethics)

Objective

At the end of the course the student should be able to

- 1 Apply knowledge in biostatics, epidemiology and computer in planning and implementing a scientific research proposal
- 2 Utilize proper teaching methodology skills
- 3 Offer expert medical opinion in medical legal matters
- 4 Demonstrate high ethical standard in his or her professional practice

Course content

Module	Code	Name	Lectures	Practical/Seminar	Total
			Hrs	Hrs	Hrs
I	MS 101	Biostatistics	16	0	16
II	MS 102	Epidemiology	8	0	0
III	MS 103	Research Methodology	12	12	24
IV	MS 104	Teaching methodology & Communication skills	12	12	24
V	MS 105	Computer applications	0	24	24
VI	MS 106	Medical Ethics & Medical legal	8	0	8

MMED PART II

SEMESTERS 2 TO 6 (CLINICAL APPRENTICESHIP)

Summary of the subjects taught in the different clinical specialties

MMED Course	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Anaesthesiology	Total (Hrs 166) <ul style="list-style-type: none"> • Gen.Anaesthesia • Spinal anaesthesia • Local techniques • Trauma Anaesthesia • Emergencies in anaesthesia 	Total Hrs 162 <ul style="list-style-type: none"> • Principles of critical care • Basics of artificial ventilation • Special critical care • Invasive techniques in ICU • Infectious diseases in critical care medicine 	Total Hrs 80 <ul style="list-style-type: none"> • The cardiovascular system • The haematological system • Fluid management and blood transfusion • Physics 	Total Hrs 67 <ul style="list-style-type: none"> • Anaesthesia in common diseases • Anaesthesia in uncommon diseases • Obstetrics anaesthesia • Orthopaedic and trauma anaesthesia • Paediatrics anaesthesia • Geriatric anaesthesia • Special anaesthesia • Production of infusion solutions 	Total Hrs 40 <ul style="list-style-type: none"> • Cardiothoracic anaesthesia • Neuroanaesthesia
			Dissertation <ul style="list-style-type: none"> • Choice of relevant topic and literature search 	Dissertation <ul style="list-style-type: none"> • Choice of relevant topic and literature search • Data collection and write up 	Dissertation <ul style="list-style-type: none"> • Data collection and write up
Paediatrics	Total Hrs 87 <ul style="list-style-type: none"> • General paediatrics and Child Health • Preventive paediatrics • Neonatology • Emergencies in paediatrics 	Total Hrs 110 <ul style="list-style-type: none"> • Developmental paediatrics • Nutrition and malnutrition • The nervous system • The respiratory tract 	Total Hrs 85 <ul style="list-style-type: none"> • The cardiovascular system • Diseases of blood • Paediatric oncology • 	Total Hrs 105 <ul style="list-style-type: none"> • The digestive system • Metabolic disorders and storage diseases • Nephrology • The endocrine system • Paediatric dermatology 	Total Hrs 85 <ul style="list-style-type: none"> • Immune system • Infectious diseases and tropical paediatrics
			Dissertation	Dissertation	Dissertation

MMED Course	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Surgery		<ul style="list-style-type: none"> Choice of relevant topic and literature search 	<ul style="list-style-type: none"> Choice of relevant topic and literature search Data collection and write up 	Data collection and write up	<ul style="list-style-type: none"> Final write up and submission Defense of thesis
	Total Hrs 192 <ul style="list-style-type: none"> Principles of Surgery Urology 	Total Hrs 168 <ul style="list-style-type: none"> Abdominal Surgery Paediatric Surgery 	Total Hrs 168 <ul style="list-style-type: none"> Orthopaedics and Traumatology Principles of anaesthesiology 	Total Hrs 168 <ul style="list-style-type: none"> Thoracic surgery Head and neck surgery Gynaecological surgery 	Total Hrs 193 <ul style="list-style-type: none"> Neurosurgery Recent advances in surgery Revision
Obstetrics and Gynaecology		Dissertation <ul style="list-style-type: none"> Choice of relevant topic and literature search 	Dissertation <ul style="list-style-type: none"> Choice of relevant topic and literature search Data collection and write up 	Dissertation <ul style="list-style-type: none"> Data collection and write up 	Dissertation <ul style="list-style-type: none"> Final write up and submission Defense of thesis
	Total Hrs 75 <ul style="list-style-type: none"> Clinical approach to gynaecologic and obstetric patients Preventive obstetrics Breast function and its disorders 	Total Hrs 85 <ul style="list-style-type: none"> General gynaecology Gynaecologic neoplasia /oncology 	Total Hrs 75 <ul style="list-style-type: none"> Problems of sex and marriage & pregnancy 	Total Hrs 80 <ul style="list-style-type: none"> Abnormalities of pregnancy and labour Common complications of pregnancy 	Total Hrs 65 <ul style="list-style-type: none"> Other obstetrical problems Ethics in obstetrics and gynaecology
Internal Medicine		Dissertation <ul style="list-style-type: none"> Choice of relevant topic and literature search 	Dissertation <ul style="list-style-type: none"> Choice of relevant topic and literature search Data collection and write up 	Dissertation <ul style="list-style-type: none"> Data collection and write up 	Dissertation <ul style="list-style-type: none"> Final write up and submission Defense of thesis
	Total Hrs 786 <ul style="list-style-type: none"> Infectious diseases Cardiology Respiratory diseases Clinical apprenticeship 	Total Hrs 764 <ul style="list-style-type: none"> Dermatology Haematology Nutrition and metabolic diseases Clinical apprenticeship 	Total Hrs 921 <ul style="list-style-type: none"> Rheumatology Gastroenterology Neurology Clinical apprenticeship 	Total Hrs 709 <ul style="list-style-type: none"> Nephrology Geriatrics Clinical apprenticeship 	Total Hrs 768 <ul style="list-style-type: none"> Chronic disorders and terminal care Paediatrics Psychiatry Clinical apprenticeship
		Dissertation	Dissertation	Dissertation	Dissertation

<i>MMED Course</i>	<i>Semester 2</i>	<i>Semester 3</i>	<i>Semester 4</i>	<i>Semester 5</i>	<i>Semester 6</i>
		<ul style="list-style-type: none">• Choice of relevant topic and literature search	<ul style="list-style-type: none">• Choice of relevant topic and literature search• Data collection and write up	Data collection and write up	<ul style="list-style-type: none">• Final write up and submission• Defense of thesis

MMED Dissertation Guidelines

After the end of semester I candidates must consult with their supervisors to advise them on the type of research work leading to dissertation.

Candidates must develop research proposals which have to be approved by the relevant Department, Schools, The Senate Higher Degree Research and Publication Committee, and Senate. The candidate can then proceed on to data collection.

The School Board on recommendation by the relevant department will propose two competent supervisors in the areas of the candidate's research. These will have to be approved by the relevant Boards

Organization of the MMED Dissertation

CUHAS-BUGANDO MMED dissertation should be written on size A4 paper using clearly readable fonts with double line spacing. There should be a 1" margins on top and bottom. There should be 1½" margin spacing on the left margins (to give space for binding) and 1" space on the right margin.

Generally a well-organized Dissertation should have the following structure:

i) *Title page* which should include

- Title of the study (including subtitle)
- Author
- Dissertation submitted in partial fulfillment for the award of Master of Medicine (MMED) degree of the Catholic University of Health and Allied Sciences-Bugando
- Date of submission

ii) *Declaration page*

- By the author and supervisors that the work presented is original and has not been published elsewhere.

iii) *Dedication and acknowledgements*

- i) *Table of contents*
- ii) *List of Figures*
- iii) *List of Tables*
- iv) *Abstract*
- v) *Introduction*
- vi) *Literature review*
- vii) *Materials and Methods*
- viii) *Results*
- ix) *Discussions*
- x) *Conclusions*
- xi) *Recommendations*
- xii) *References*
- xiii) *Appendices*

Submission of the Dissertation

When the candidate and supervisors are satisfied by the progress of the dissertation and are ready to submit the thesis for evaluation.

The candidate must notify the Sand the Directorate of Postgraduate Studies by a letter, the intention to submit the Dissertation for evaluation at least 2 months before.

- This will give time for the School and the Directorate of Postgraduate studies to nominate examiners (Internal and External)
- Upon receiving the letter of intention to submit the Department will propose to the Directorate of Post-graduate 2 internal and one external examiners.
- The supervisors will have to declare and sign that they are satisfied with the standard of the dissertation to be submitted for assessment and evaluation by the examiners
- The candidate will then submit the dissertation in partial fulfillment of the requirement for the degree of Master of Medicine of the Catholic University of Health and Allied Sciences.
- Candidates must submit 4 copies of loosely bound copies of the Dissertation at least three months before appearing for the final university examinations.
- The Dissertation will be assessed by the recommended internal and external examiners.
- Both external and Internal examiners will have to fill in the approved form (see appendix iii)

If the external examiner is satisfied by the standard of the dissertation, the candidate will have to appear for the oral defense (viva voce) at a panel of examiners as recommended by the faculty.

Viva voce Panel

The viva voce panel will consist of

- The Chairman appointed by the Dean Faculty of Medicine
- Members of the department
- The external Examiner
- The 2 internal examiners
- 2 members appointed by the Dean
- Any other co-opted members

MASTER OF PUBLIC HEALTH (MPH)

SCHOOL OF PUBLIC HEALTH

MASTER OF PUBLIC HEALTH

1.0 BACKGROUND

The decision by TEC to establish a medical University at Bugando Hospital was a deliberate move by the Catholic Church aiming to produce doctors who on qualifying would be the health delivery work force in the country. The recent (2008) graduation of ten student doctors is a clear success of TEC's initiatives.

In 2006/2007 WBUCHS currently named the Catholic University of Health and Allied Sciences (CUHAS) was granted permission to start conducting postgraduate programmes. The programmes which have already started are in the disciplines of Anaesthesia, Internal Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology.

The Catholic University of Health and Allied Sciences (CUHAS) was launched with a mission to provide skilled competent human resource in the health sector, a human resource which is vested with moral and ethical values; search, discover and communicate the truth to advance the frontiers of knowledge; and provide quality service to the community. To this end the 2010/11-2014/15 Five Years Rolling Strategic Plan provides as one of its priority areas, expand access to education at both undergraduate and postgraduate level by expanding student enrolment and expanding the range of relevant academic programmes.

It has been observed by interested parties that there is a great need to add more programmes at both undergraduate and postgraduate levels. Looking at the present needs in the country both at central level and at the private sector demands for public health specialists, it prompts CUHAS to start a Master of Public Health Programme (MPH). This initiative has been triggered by the National Health Policy through the Health Sector Reform. The Reform demands having highly qualified public health manpower to man and run District and Regional health services. These demands are not only in the governing institutions but also the NGO's and community health programmes and projects; all of these are expressing need to have well trained manpower in the health sector.

As a result of the above demands WBUCHS now CUHAS with effect from 2010/2011 started a one year general MPH programme. This programme will be conducted in three (3) semesters.

2.0 GOALS OF THE PROGRAM

Is to provide and develop knowledge and skills necessary in promoting public health with a focus on Public Health in developing countries. The programme is suitable for District, regional, and health managers at different levels, it will also serve for Health Managers working with NGOs, training institutions and those managing Health programs and Health projects in developing countries.

3.0 OBJECTIVES

3.1 Broad Objectives

1. At the end of the course the candidates are expected to be conversant with the acquired skills and knowledge and be able to deliver the same material as needed in Health Service Delivery.
2. Develop health Programs and Projects, which aim at promoting and improving public health.
3. The candidates shall be able to control epidemic in their area of work and when asked to do so.
4. Be able to train in the area of Public Health all those who need specialization.

3.2 Specific Objectives:

In order to achieve the above objectives the candidate should be able to:

- I. Apply epidemiological and statistical skills in analysing and planning health needs for the community.
- II. Evaluate different health strategies and interventions used in the control of diseases.
- III. Describe and analyse health services and organizational structures for an effective health management system
- IV. Manage or participate in environmental health control programs and Disaster management
- V. Train health staff at different levels ie medical and paramedical schools
- VI. Develop cost effective health intervention programs
- VII. Develop research proposal and Projects which focus on specific Health problems
- VIII. Design appropriate methodology in the control of communicable diseases and epidemics.

4.0 ORGANISATION OF THE PROGRAMME

The MPH degree programme offered at CUHAS will be by course work and dissertation. The programme will be for one year, divided into two semesters. The first semester will take six (6) months and the second semester will take six (6) months and the last 3 months will concentrate mainly on research and field work. The course work will be divided into 9 modules and the field and dissertation work will constitute the tenth module.

5.0 STRUCTURE OF THE PROGRAMME

SEMESTER 1

Course Code	Course Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
MPH 601	Epidemiology /Biostatistics and determinants of disease	90	6	45	1	135	7
MPH 602	Review of communicable diseases / control and Nutrition	90	6	30	0.6	120	6.6
MPH 603	Environmental Health and occupational health and Disaster Preparedness	60	4	90	2	150	6

Course Code	Course Title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
MPH 604	Reproductive Health and foundation of populations	37.	2.5	22	5	60	3
Total						465	22.6

SEMESTER 2

Course code	Course title	Theory		Practical		Total	
		Hours	Units	Hours	Units	Hours	Units
MPH 605	Health Planning and Management	75	5	45	1	120	6
MPH 606	Health System delivery and HMIS	45	3	16	0.3	61	3.3
MPH 607	International and Family Health and needs assessment	56	3.7	34	0.75	90	4.45
MPH 608	Research Methodology and Project writing	75	5	45	1	120	6
MPH 609	Health Promotion / Ethics	30	2	-	-	30	2
MPH 610	Field and dissertation work	35	2.3	250	5.5	285	7.8
Total						706	29.55

SEMESTER I

COURSE CONTENT:

EPIDEMIOLOGY, BIostatISTICS, DEMOGRAPHY AND DETERMINANTS OF DISEASES- MPH 601

Objectives: At the end of this module the student shall be able to:

- Describe basic concept of epidemiology, biostatistics and demography.
- Apply epidemiological knowledge in describing disease patterns and distribution in their area of work.
- Interpret demographic distribution within their area of work
- Use statistical knowledge in interpreting descriptive and inferential findings of studies

CONTENTS OF MODULES AND HOURS

Module	Course contents	Lectures		Practicals		Total	
		HRS	UNITS	HRS	UNITS	HRS	UNITS
I	Epidemiology	40	2.6	10	0.2	50	2.7
II	Biostatistics	35	2.3	10	0.2	45	2.5
III	Demography and geriatric	30	2.0	10	0.2	25	1.2
Total		90	7	30	0.6	120	6.4

BURDEN OF DISEASE (BOD), COMMUNICABLE DISEASE CONTROL AND NUTRITION MPH 602

AIM: The impact or effect of a disease can be reflected to the failure of individual to work or produce in other words dying prematurely or failure to produce accounts for number of working days lost

Objectives:

At the end of this module the students shall be able to:

1. Define the concept of BOD
2. Understand the common causes of BOD
3. Develop indicators for BOD
4. Calculate BOD using the available formula
5. Describe the concept of communicable diseases and control
6. Describe different modes of disease transmission
7. Understand the principal of disease control
8. Understand the role of the community in disease control

Module	Course Contents	Lectures		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
I	Burden of disease	30	2.0	15	0.3	45	2.3
II	Communicable disease control	30	2.0	7.5	0.15	35	2.0
III	Nutrition	30	2.0	7.5	0.15	40	2.3
	Total	90	6.0	30	0.6	120	6.6

ENVIRONMENTAL HEALTH, OCCUPATIONAL HEALTH AND DISASTER PREPAREDNESS MPH 603

AIM

Since disaster do occur in the environment in which the human being live , some of the disaster are natural and some are MAN- MADE therefore man must handle the environment with care in a friendly manner.

Objectives

At the end of this module the student shall be able to:

1. Understand the relationship between Health and Environment.
2. Know the relationship of Water and Health
3. Relate health problems to poor sanitation

Module	Code	Course Contents	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MPH 604.1	Environmental health and occupational health	50	3.0	70	1.4	120	4.4
II	MPH 604.2	Disaster Preparedness	10	0.6	30	0.6	40	1.2
		Total	60	3.6	100	2	160	5.6

4. Know the occupational health hazards as related to their occupation.

5. To understand food control procedures
6. Describe the concept of disaster preparedness
7. Explain the mechanism of common disasters related to environment
8. Describe the different types of disasters and their effects
9. Manage and control of common disasters

MPH 604: REPRODUCTIVE HEALTH AND FOUNDATION OF POPULATIONS (1.8 Units)

AIM

To develop knowledge on how to improve the well-being of pregnant mothers and their children, through different approaches

Objectives

At the end of the module the student shall be able to:-

1. Develop knowledge, skills, and positive attitude essential for the provision of reproductive health care.
2. Establish ANC at the place of work
3. Know the risk factors related to high MMR
4. Know the ways on how to raise the coverage for family planning.

Module	Code	Course Contents	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MPH 604.1	Introduction to reproductive health	25	1.6	-	-	25	1.6
II	MPH 604.2	Maternal mortality	15	1	10	0.2	25	1.2
III	MPH 604.3	ANC services/ TBA's voles	10	0.6	20	0.4	30	1
Total			50	3.2	30	0.6	80	1.8

SEMESTER TWO

MPH 605: HEALTH PLANNING AND MANAGEMENT (5.6 Units)

Introduction

Proper health management depends on effective management of human, material, time, information, drugs and space.

Most of these are inadequately available and they are expensive some are irreversible once they are misused eg time, therefore they need proper management

Objectives

At the end of this topic the students shall be able to:

1. Explain the concept of health planning process
2. Perform planning at their area of work
3. Undertake monitoring and evaluation process of their plans

4. List resources needed and budget of different activities
5. Acquire knowledge on how to manage resources which include human, finance, material, drugs time and space
6. Public relations
7. Acquire skills in mobilizing resources
8. Be able to manage health projects, program and health facility

Module	Code	Course Contents	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MPH 605	Health planning	35	2.3	25	0.5	60	2.8
II	MPH 605.1.2	Health management and leadership	40	2.6	20	0.4	60	3.0
Total			75	4.9	45	0.9	120	5.8

MPH 606: HEALTH SYSTEM DELIVERY (3.2 Units)

Introduction

Health policy in Tanzania recognizes that the districts is the most important operational level for implementation PHC strategies,

Managerial and financial responsibilities are therefore decentralized to the district level thus the managers at that level plays a crucial role and they are responsible for planning, managing, implementing and monitoring, so they need skills in planning, monitoring and they should manage in accordance to the national health policy.

Objectives

At the end of the module the students should be able to:

1. Explain the structure of Health System Delivery in Tanzania
2. Aware of the basic health support needed at each level of health delivery
3. Know the role of CHMT:

Module	Course Contents	Lectures		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
I	Introduction to health system delivery	5	0.3	-	-	5	0.3
II	Health facility committees	15	1.0	6	0.1	21	1.1
III	Cascade of health system delivery	25	1.6	10	0.2	35	1.8
Total		45	2.9	16	0.3	61	3.2

MPH 607: INTERNATIONAL, FAMILY HEALTH AND NEEDS ASSESSMENT (3.1 Units)

Objectives:

At the end of this topic on family health the students shall be able to:

1. To develop the knowledge, skills and attitudes essential for the provision of health care to external /international support agencies
2. To provide opportunities for communities to participate in health care in collaboration with international support agencies.
3. Learn and to implement through cross cultural and cross national interaction with health professionals and community leaders the principals and approaches of Primary Health Care
4. To provide students with knowledge and skills on international sanitary regulations.
5. To equip the student with knowledge on early detection of both communicable and non-communicable diseases.
6. To promote family level ownership of the response and capacity to manage public health problems
7. To promote counselling and testing services for HIV and other diseases.
8. To improve quality and access to health care and treatment.
9. To extend family planning and reproductive health services at family level
10. To strengthen health care systems and protect and support vulnerable children, youth and families

Module	Code	Course Contents	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MPH 607	International health	20	1.2	15	0.9	35	2.1
II	MPH 607	Family health	12	0.8	9	0.2	21	1.0
Total			32	2.0	24	1.1	56	3.1

MPH 608: RESEARCH METHODOLOGY AND PROJECT WRITING (3.0 Units)

Introduction

Research is an academic activity comprising of defining and redefining problems, formulating hypothesis, suggesting solutions, collecting, organizing and evaluating data lastly it tests the conclusion.

Objectives

At the end of the topic students shall be able to:

- Portray accurately the characteristics of a particular individual, situation or group
- Determine the frequency with which it is associated or cause effect relationship
- Test hypothesis of a causal relationship between variables

Objectives

At the end of the module the students should be able to:

1. Develop research proposal
2. Conduct research
3. Write project write up

4. Implement and Manage health project
5. Write and present research report

Module	Code	Course Contents	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MPH 607.1	Introduction to research methodology	10	0.6	5	0.1	15	0.7
II	MPH 607.2	Research design	20	1.3	16	0.3	36	1.6
III	MPH 607.3	Budgeting	10	0.6	5	0.1	15	0.7
Total			40	2.5	26	0.5	66	3.0

MPH 609: HEALTH PROMOTION AND ETHICS (1.3 Units)

Objectives

At the end of the module the student should be able to:

1. Describe the concept of health promotion
2. Develop marketing /advocacy for health program
3. Understand the factors that promote and hinder health intervention programs

Module	Code	Course Contents	Lectures		Practicals		Total	
			Hrs	Units	Hrs	Units	Hrs	Units
I	MPH 609.1	Concept of health promotion	5	0.3	-	-	5	0.3
II	MPH 609.2	Communication skills	5	0.3	-	-	5	0.3
III	MPH 609.3	Cultural barriers in communications	10	0.6	5	0.1	15	0.7
Total			20	1.2	5	0.1	25	1.3

MPH 610: FIELD AND DISSERTATION

Students shall prepare a dissertation on a subject of public health importance, which prevail in their area where they come from or place of work.

So that the recommendations proposed from the results can be applied, when they go back to place of work.

The dissertation shall be in form of research project.

**DOCTOR OF PHILOSOPHY (PhD)
PROGRAMMES**

DOCTOR OF PHILOSOPHY (PhD) PROGRAMMES

CUHAS PhD GUIDELINES

1. INTRODUCTION

The Catholic University of Health and Allied Sciences at Bugando will offer postgraduate programme leading to the award of Doctor of Philosophy (PhD) in all major fields of specialization in Health. The PhD degree will be offered by thesis both in the Monograph format and by Publications.

2. ENTRY QUALIFICATIONS

- 2.1. The prospective candidate must demonstrate the capacity to carry out research independently and ability to pursue the proposed study programme.
- 2.2 A candidate seeking for admission for a PhD must be a holder of a relevant Master Degree (MSc, or MMED) of the Catholic University of Health and Allied Sciences (CUHAS) or any other recognized institution of higher learning within or outside Tanzania.

3. PROGRAMME STRUCTURE

- 3.1 The PhD degree will involve a three years full time research work at the end of which a thesis should be submitted or five years for a part time registered candidate.
- 3.2 Registration for the programme shall be at any time during the academic year. The applicant will be required to fill in the relevant application forms and submitting them to Senate Higher Degrees Committee through the Dean School of Graduate Studies,
- 3.3 Upon registration the candidate will submit a two-page statement of the intended research topic to the University Research and Publication Committee. On the basis of the statement the department will submit a name (s) of supervisor (s) for approval. Applicant should provide copy of undergraduate Degree, Master Degree with relevant transcripts where appropriate and recent CV.
- 3.4 Within four months of the assignment of a supervisor the candidate shall present a comprehensive proposal on the area of interest, through the Faculty/School Board, University Higher Degrees Committee and Academic Committee. The proposal should not exceed 25 pages in length, typing in at least 12 point font and double spaced. The proposal must have at least the following
 - Title; clearly spells out the research questions to be answered
 - Name of the author
 - Names of the supervisors
 - Abstract
 - Background information of the research problems
 - The justification of the study, why the study is important and why it should be done
 - Materials and methodology.
 - How the results would be analyzed.
 - The ethical considerations must be discussed thoroughly.
 - References

This proposal must be approved by the relevant Department, Faculty, University Higher degrees Committee and the Academic Board.

3.5 Supervisors

The department will submit at least 2 names of suitably qualified individuals to act as supervisors for the candidate. The names will have to be approved by the School Board, the Senate Higher Degrees Committee and the Senate.

4 SANDWICH PROGRAMME

4.1 CUHAS will also offer a PhD on a sandwich mode. This will mainly be in areas where facilities and research infrastructure is deemed inadequate. It is expected that most of data collection will be done in Tanzania. Literature Survey, analysis of results could be done at the collaborating institution. The following guidelines will be adhered to:

4.2 Entry requirements are the same as stipulated above.

4.3 The procedure for obtaining full registration will be similar to those stipulated in 2.1, 2.2.

4.4 The degree awarded shall be that of the Catholic University of Health and Allied Sciences/.

5 THE STRUCTURE OF THE PhD THESIS

5.1 Monograph

The PhD thesis manuscript at CUHAS should be written on size A4 paper using clearly readable fonts with double line spacing. There should be a 1" margins on top and bottom. There should be 1½" margin spacing on the left margins (to give space for binding) and 1" space on the right margin.

Generally a well-organized thesis should have the following structure:

i) *Title page* which should include

- Title of the study (including subtitle)
- Author
- Thesis submitted in partial fulfillment for the award of Doctor of Philosophy (PhD) degree of the Catholic University of Health and Allied Sciences.
- Date of submission

ii) *Declaration page*

By the author and supervisors that the work presented is original and has not been presented for any other degree in any university.

iii) *Dedication and acknowledgements*

iv) *Abstract*

v) *Table of contents*

vi) *List of Figures*

vii) *List of Tables*

viii) *Introduction*

ix) *Literature review*

x) *Materials and Methods*

xi) *Results*

xii) *Discussions*

- xiii) Conclusions
- xiv) Recommendations
- xv) References
- xvi) Appendices

5.2 Thesis by Publication

- 5.2.1 The general specifications on the standard of writing and layout of the PhD thesis by publication at CUHAS should be similar to those laid down in 5.1.
- 5.2.2 A PhD thesis should consist of published materials
 - Papers in peer-reviewed journals with at least impact factor of 1.
 - Peer –reviewed book chapters.
- 5.2.3 At CUHAS about 3 papers should be enough, provided that the scientific material is enough and comparable to that required in a conventional PhD Thesis. The published materials must be prepared after admission to the PhD programme, or they should not have been published more than 2 years before registration.
- 5.2.4 It is expected that the candidate will have played a leading role in the design, carrying out the research work, analysis of data and writing of the papers. Coauthored papers should be accompanied by signed declaration by all the authors of the contribution by the candidate (especially if the candidate is not the first or senior author).
- 5.2.5 The papers should have been published, or accepted for publication or in print at the time of submission of the PhD thesis.
- 5.2.6 The published material must have not been used for an award of another degree.
- 5.2.7 The body of the thesis should comprise of the following sections:
 - a) **A title page**
 - Title of the study (including subtitle)
 - Author
 - Thesis submitted in partial fulfillment for the award of Doctor of Philosophy (PhD) degree of the Catholic University of Health and Allied Sciences-Bugando.
 - Date of submission
 - b) Declaration page; by the author and supervisors that the work presented is original and has not been presented for any other degree in any university.
 - c) An abstract of the entire thesis work (including the submitted papers)
 - d) Table of contents, list of figures and tables
 - e) Acknowledgements
 - f) An introduction which highlights the aims and objectives and the significance of the research work done
 - g) Literature review
 - h) A chapter or section where the candidate will integrate the work done in the submitted papers so that there is a common theme in the thesis.
 - i) Linking section between each publication to introduce the aims and hypothesis of each publication.
 - j) Discussions and conclusion.
 - k) References.

- 5.2.8 The binding of the thesis, submission, assessment by the examiners and defense of the thesis to be done as for the conventional thesis.

Submission of the Thesis

When the candidate and supervisors are satisfied by the progress of the thesis and are ready to submit the thesis for evaluation; the candidate must notify the School and the Directorate of Postgraduate Studies of the intention to submit the thesis for evaluation at least 2 months before.

- This will give time for the School and the Directorate to nominate examiners (Internal and External)
- The supervisors will have to declare and sign that they are satisfied with the standard of the thesis to be submitted for assessment and evaluation by the examiners
- The candidate will then submit the thesis manuscript in partial fulfillment of the requirement for the degree of Doctor of Philosophy (PhD) of the Catholic University of Health and Allied Sciences.
- Candidates must submit 6 loosely bound copies of the thesis at least three months before appearing for the defense
- The thesis will be examined by both external and Internal examiners who will have to fill in the approved form (see appendix VII)
- If the external examiner is satisfied by the standard of the thesis, the candidate will have to appear for the oral defense (viva voce) at a panel of examiners as recommended by the School.

Viva voce Panel

The viva voce panel will consist of

- The Chairman appointed by the Dean of Relevant School
- Member of the department
- The external Examiner
- The 2 internal examiners
- 2 members appointed by the Dean
- Any other co-opted members

The *viva voce* examination process will include

- Presentation by the candidate about his/her works. This could be a power point presentation. It should be brief and cover the main areas of the work (***introduction, justification for the study, main objectives, materials and methodology, main findings and any new contribution to scientific knowledge, discussions, conclusions and suggestions for future studies***)
- This will be followed by questions from the members of the panel to ascertain the competency of the candidate in the work presented
- Any corrections of the thesis have to be done and submission of error free dissertation done before a candidate will be awarded degree.

**THE INSTITUTE OF ALLIED HEALTH
SCIENCES DIPLOMA PROGRAMMES**

THE INSTITUTE OF ALLIED HEALTH SCIENCES

SUMMARY OF THE CURRICULUM FOR DIPLOMA PROGRAMMES

DPS CURRICULLUM SEMESTER MODULES

Code	Subject	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
Semester 1							
PT 107-108	Pharmaceutics Theory - I	75	6.0	-	-	75	5.0
PT 100-101	Hygiene	75	5.0	-	-	75	5.0
PT 102-104	Inorganic Chemistry	97.5	6.5	--	-	97.5	6.5
PT 105-106	Pharmaceutical Calculation - I	90	6.0	-	-	90	6.0
	Total	337.5	22.5	-	-	337.5	22.5
Semester 2							
PT 109-110	Anatomy & Physiology	120	8.0	-	-	120	8.0
PT 111-112	Pharmaceutics Microbiology	90	6.0	-	-	90	6.0
PT 113-114	Pharmaceutical Calculation -II	45	3.0	-	-	45	3.0
PT 115-116	Pharmaceutics Theory - II	75	5.0	-	-	75	3.0
PP100-102	Pharmaceutical Practical - I	-	-	180	4.0	180	4.0
	Total	330	22.0	180	4.0	510	26.0
Semester 3							
PT 200-201	Pharmaceutical Organic Chemistry	105	7.0	-	-	105	7.0
PT 202-203	Drugs & Medical Supplies Management	60	4.0	-	-	60	4.0
PT 204-205	Pharmacology I	60	4.0	-	-	60	4.0
PT 206-208	Pharmaceutical Calculation(III)	105	7.0	-	-	105	7.0
PT 209-210	Pharmaceutics Theory (III)	75	5.0	-	-	75	5.0
PP 200	Pharmaceutical Practical (II)	-	-	90	2.0	495	29.0
	Total	405	27.0	90	2.0	49.5	29.0
Semester 4							
PT 211-213	Pharmacognosy	105	7.0	-	-	105	7.0
PT 214	Forensic Pharmacy I	15	1.0	-	-	15	1.0
PT215-216	Drugs & Medical Supplies Management (II)	52.5	3.5	-	-	52.5	3.5
PT 217-218	Pharmacology (II)	60	4.0	-	-	60	4.0
PT 219-220	Pharmaceutics Theory (IV)	75	5.0	-	-	75	5.0
PP 202	Pharmaceutical Practical (III)	-	2.0	90	2.0	90	2.0
	Total	292.5	26.0	90	2.0	397	28.0
Semester 5							
PT 300	Introduction to entrepreneurship	15	1.0	-	-	15	1.0
PT 301-302	Pharmacology III	30	2.0	-	-	30	2.0
PT 305-304	Pharmaceutics Theory V	45	3	-	-	45	3.0
PT 305	Forensic Pharmacy II	22.5	1.5	-	-	22.5	2.5

CUHAS Prospectus 2014-2015

Code	Subject	Theory		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PP 300	Pharmaceutics Practical IV	-	-	67.5	1.5	67.5	1.5
PP 303	Field Project	-	-	315	7.0	315	7.0
	Total	1125	8.5	382.5	8.5	495	17.0
Semester 6							
PT 314	Community Pharmacy	30	2.0	-	-	30	2.0
PT 305-308	Pharmacology	90	6.0	-	-	90	6.0
PT 309-310	Pharmaceutics Theory VI	90	6.0	-	-	90	6.0
PT 311-313	Drugs & Medical Supplies Management III	105	7.5	-	-	105	7.5
PT 315-316	Forensic Pharmacy III	75	5	-	-	75	5.0
PP 302	Pharmaceutics Practical V	-	-	67.5	1.5	67.5	1.5
	Total	390	26.6	67.5	1.5	457.5	28.0

DDR CURRICULLUM (SEMESTER MODULES)

Summary of the subjects and their code numbers

CODE	SUBJECT	HOURS	UNITS
Semester 1			
DR 111	Radiographic Photography and imaging (I)	75	5
DR 112	Radiographic Technique and procedures (I)	142.5	9.5
DR113	Anatomy, Physiology & Pathology (I)	90	6
DR114	Applied physics	82.5	5.5
DR 115	Care of patients	120	8
	Clinical rotations at X-Ray Department	80	2.7
Total		590	36.7
Semester 2			
DR 121	Radiographic Photography and imaging (II)	60	4
DR 122	Radiographic Technique and procedures (II)	157.5	4
DR 123	Anatomy, Physiology & Pathology (II)	37.5	2.5
DR 124	Radiation physics	60	4
DR 125	Basic ultrasound imaging (I)	90	6
DR 126	Clinical practice at X-Ray department (I)	160	5.3
Total		565	25.8
Semester 3			
DR 231	Radiographic Photography and imaging (III)	60	4
DR 232	Radiographic Technique and procedures (III)	90	6
DR 233	Equipment of diagnostic radiography	150	10
DR 234	Anatomy, Physiology & Pathology (III)	120	8
DR 235	Radiobiology and radiation protection	30	2
DR 236	Clinical practice at X-Ray department (II)	160	5.3
Total		610	35.3
Semester 4			
DR 241	Radiographic technique and procedure (IV)	135	9
DR 242	Anatomy, Physiology and Pathology (IV)	120	8
DR 243	Radiological pathology (I)	105	7
DR 244	Basic Ultrasound imaging (II)	45	3
DR 245	Clinical practice at X-Ray department (III)	160	5.3
Total		565	32.3
Semester 5			
DR 351	Radiographic technique and procedure (V)	127.5	8.5
DR 352	Radiological pathology (II)	105	7
DR 353	Basic Ultrasound imaging (III)	45	3
DR 354	Management and Administration	67.5	4.5
DR 355	Quality Assurance	60	4
DR356	Clinical practice at X-Ray department (IV)	160	5.3
Total		565	32.3
Semester 6			
DR 361	Field work	480	16
DR 362	Equipment for diagnostic radiography (II)	90	6
DR 363	Clinical practice (V)	30	1
Total		600	23

DMLS CURRICULLUM (SEMESTER MODULES)
Summary of the subjects and their code numbers

Code	Course name	Lectures		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
Semester 1							
LS 100-102	Anatomy	108	7.2	-	-	108	7.2
LS 106-108	Biochemistry (I)	96	6.4	-	-	96	6.4
LS 116-117	Basic Sciences	74	4.9	-	-	74	4.9
LS 118-120	Communication skills	54	3.6	-	-	54	3.6
LS 121-122	Introduction to Information Technology	12	0.8	36	0.8	48	1.6
Total		344	22.9	36	0.8	380	23.7
Semester 2							
LS 103-104	Human Physiology	114	7.6	-	-	114	7.6
LS 109-112	Biochemistry (II)	96	6.4	-	-	96	6.4
LS 113-115	Molecular biology	80	5.3	-	-	80	5.3
LS 123-127	Introduction to Health Laboratory Sciences	67	4.4	-	-	67	4.4
Total		357	23.7	-	0.2	357	23.7
Semester 3							
LS 200-202	Blood Transfusion I	34	2.3	32	0.7	66	3.1
LS 206-209	Clinical Chemistry I	72	4.8	10	0.2	82	5.0
LS 214-217	Haematology I	56	3.7	28	0.6	82	4.3
LS 221-224	Health System Research	32	2.1	0	0	32	2.1
LS 225-227	Histopathology/Morbid Anatomy I	58	3.9	14	0.3	72	4.2
LS 230-234	Microbiology/Immunology I	67	4.4	24	0.5	91	4.9
LS 239-241	Parasitology I	56	3.7	18	0.4	74	4.1
LP 244	Practical I	0	0	180	4.0	180	4.0
Total		375	24.9	306	6.7	679	31.7
Semester 4							
LS 203-205	Blood Transfusion II	49	3.2	14	0.3	63	3.5
LS 210-213	Clinical Chemistry II	45	3.0	15	0.3	60	3.3
LS 218-220	Haematology II	45	3	45	1.0	90	4.0
LS 228-229	Histopathology/Morbid Anatomy II	42	2.8	18	0.4	60	3.2
LS 235-238	Microbiology II	56	3.7	15	0.3	71	4.0
LS 242-243	Parasitology II	60	4.0	18	0.4	78	4.4
LP 245	Practical II	0	0	54	1.2	54	1.2
Total		297	19.7	179	3.9	476	23.6
Semester 5							
LS 300-302	Clinical Chemistry III	60	4.0	19	0.4	79	4.4
LS 306-307	Haematology III	64	4.2	14	0.3	78	4.5
LS 310-312	Health Lab. Management	68	4.5	0	0	68	4.5
LS 313-314	Histopathology/Morbid Anatomy III	56	3.7	14	0.3	70	4.0
LS 317-320	Medical Entomology	69	4.6	24	0.4	93	5.0
LS 321-322	Microbiology III	54	3.6	10	0.2	64	3.8
LP 325	Practicals III	0	0	66	1.5	66	1.5
LP 332	Field Practice	0	0	320	7.1	320	7.1
Total		371	24.6	467	10.2	838	34.8
Semester 6							
LS 303-305	Clinical Chemistry IV	74	5.0	14	0.3	88	5.3
LS 308-309	Haematology IV	54	3.6	19	0.4	73	4.0
LS 315-316	Histopathology/Morbid Anatomy IV	70	4.6	19	0.4	89	5.0
LS 323-324	Microbiology IV	43	2.8	10	0.2	53	3.0
LP 326	Practical IV	0	0	113	2.5	113	2.5
Total		241	16	175	3.8	416	19.8

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1. **The Vice Chancellor's Prize:**
For the Academically overall best student in each year of study for all programmes
2. **The CUHAS COUNCIL CHAIRMAN'S Prize:**
For the Best all-round student in each year of the degree programmes
3. **The Thomas L. Smith Prize:**
For the best male student in each year's MD course university Examinations
4. **The Kimiko Ryan Prize:**
For the best female student in each year's MD course university Examinations
5. **Team Tanzania Scholars Award:**
For the academically overall best student in each year of study for the MD programme.

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Head of Computing Center

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Claudia Bracaglia MD, MMD (pediatrics) : Visiting
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Prof. D. Dewey	<i>MD, MSc, PhD (Calgary)</i>	Visiting
Prof. T. Donnon	<i>BSc, Bed, MED, PhD (Calgary)</i>	Visiting
Prof. D. Strong	<i>MD, PhD(Calgary)</i>	Visiting
Prof. L. Baig	<i>MD, PhD</i>	Visiting

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Richard Musto	<i>MD, PhD (Calgary)</i>	Visiting
David Sabapathy	<i>MD, MBA, MPH (Calgary)</i>	Visiting
Rudy Zimmer	<i>MD, PhD (Calgary)</i>	Visiting

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Tutorial Assistant

N. Basinda *MD (SAUT)*

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Prof. T. Beran	<i>BA, MSc, PhD</i>	Visiting

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M. M. Cuodros	<i>MD, MSc (Epi), FACS, FICS</i>	Visiting

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Dr. R. Ponsiano,	<i>MD,(MUHAS), PGD-Mch, MPH</i>	<i>Visiting</i>

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<i>P.M Ndaki</i>	<i>MA (DS) (UDSM); B. Theol (Scott Christian Univ. Kenya)</i>	

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Prof. K. Raimo	<i>MD, MSc, PhD</i>	<i>Visiting</i>
Prof. K. Rasanen	<i>MD, PhD</i>	<i>Visiting</i>
Prof. K. Corbert	<i>MD, PhD</i>	<i>Visiting</i>

Senior Lecturer

S. Allaire	<i>MD, PhD</i>	<i>Visiting</i>
L. McLeod	<i>MD, FRCSC (Calgary)</i>	<i>Visiting</i>
S. Khan	<i>MBBS, MPH, PhD</i>	<i>Visiting</i>

Assistant Lecturer

E. Charles	<i>PHHC(Kuopio), BSc. ESM (SUA), MPH(SAUT).</i>	
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J.M. Bitoro,	<i>Diploma, Pharmaceutical Sciences (UDSM), Diploma, Health Personnel Education (CEDHA – Arusha.)</i>	
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Tutors

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J. Mhoja DDR (SAUT)

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A. Materu, *ADMLT (Clin. Chem) (UDSM)*

A.G. Mujungu, *Dipl. Education (Butimba), B.Sc. (Biotechnology) (SUA)*

Z. Mholya, *DMLS (CUHAS)*

Nabina Golola, *DMLS (CUHAS)*

Betrand Msemwa, *DMLS (CUHAS)*

ADMINISTRATIVE AND TECHNICAL STAFF

Name	Qualification	Title
Administrative		
Rev. Dr. Agapit Mroso	Licentiate in Dogmatic Theology (Gregorian-Rome), M. Spiritual Theology (Angelicum- Rome), PhD (Gregorian- Rome)	Deputy Vice Chancellor (PFA)
Ms Thandiwe Y. Peter	Masters HRM (Wollongong); Masters in Commerce (Wollongong)	Sen. Planning Officer
Ms. Norice Frank	BPA (Mzumbe)	Assistant Human Resource Magt. Officer
Mr. Daniel Nkuba	BPA (Mzumbe)	Assistant Administrative Officer
Ms. Blandina Mahiza	Cert. Rec. Management (TPSC-Tabora); Dipl. Rec. Management (TPSC-Tabora)	Rec. Management Asst.
Mrs Hellen Simon	Dipl. Secretarial Studies (TPSC-Tabora),	Personal Secretary
Ms. Anumie Mtwewe	Dipl. Secretarial Studies (TPSC-Tabora)	Personal Secretary
Ms Agnes Aswile Kayange	Dipl. Mgt & Admin (ESAMI), Secretarial course stage I & II	Personal Secretary I
Ms. Bihana Sekei	Dipl. Mgt & Admin (Shukuru Int. Coll of Business)	Personal Secretary III
Ms. Stella Zenge	Cert. in Typing (VETA); Computer Course (CBCS)	Typist
Ms. Limi B. Lufundisha	Secretarial studies Level 6 TPSC Tabora	Personal secretary
Ms. Grace Masanja	Computer Course	Receptionist
Mrs Victoria Vicent	Form IV	Hostel Attendant
Mr. Alex Msenya Mkome	Std. VII	Hostel Attendant
Mr. Paul Felician	Form VI	Office Attendant
Mr. Joshua Mathayo	Std. VII	Attendant
Mr. Hezron Bassu	Std VII	Attendant
Mr. Juma Katondo	Cert. Driv. Grade II (NIIT)	Sen. Driver II
Mr. Issa Jumanne	Cert. Driv. Grade I (NIIT)	Driver III
Mr. Nazaeli Manase Madale	Form IV	Driver V
Accounts		
Mr. Boniface Makwabi Kwiyea	ADCA (Mzumbe); CPA (NBAA)	Bursar
Ms. Letitia Rutahamibwa	Cert. Acc. Techn (DSA); Cert. Acc (SAUT); ADA (SAUT)	Asst. Accountant I

Name	Qualification	Title
Ms. Alpha Boniface	Cert. Acc.(SAUT); ADA (SAUT), Post. Grad. Dipl. Finance (SAUT)	Asst. Accountant III
Mr. Emmanuel Nyamilonda	BBA in Accounting & Finance	Loans Officer
Ms. Sella Stephen	Cert. in Accountancy (CBE-MWZ), Dipl. Acc.	Typist
Mrs. Epiphania Athanase	BBA (SAUT)	Asst. Accountant III
Ms. Hellen Mathias Labia	BBA (SAUT); MBA-Finance	Asst. Accountant III
<i>Procurement and Supplies</i>		
Mr. Mkufi Ikhala	B.Com (material Management) UDSM; CPSP(T) (NBAA/PSPTB)	Sen. Procurement Officer III
Ms Modesta S. Kabalo	BA_PSM (MUCCoBS), CPSP (T) (PSPTB)	Asst. Purchasing/Supplies Officer
<i>Library</i>		
Mr. Yanga Machimu	Dipl. LADS (Bagamoyo)	PLAsst II
Ms. Aziza Gihega	Dipl. LADS (Bagamoyo)	SLAsst. III
Mr. Oscar Joachim	Cert. Libr. (Bagamoyo)	Libr. Asst.
Mr. Oliver Bondo	Form IV	Libr. Attendant
Mrs Scholastica Kishosha	Cert	Libr. Asst
<i>ICT</i>		
Mr. Ismael M. Khangane	<i>B.Sc. (Eng) (Cuba), M.Sc. (I.T.) (Spain)</i>	Head of Computing Center
Mr. Mataba J. Magori	<i>Adv. Dipl. ICT (Carlisle, UK); B.Sc.(Hons) in ICT (Glamorgan UK); Post Grad. Dipl in Computer Security (Glamorgan UK)</i>	Computer Programmer/Analyst
Mr. Emil Malisha	<i>Cert. Comp. Studies; Dipl. IT (UCC), B.Sc (ICT) SAUT</i>	Comp. Operator I
Mr. Andrew Mihayo	<i>Dipl. I.T (UCC)</i>	Comp. Operator
Ms. Adeline Urassa	<i>Cert I.T, Dipl. I.T (UCC)</i>	Comp. Operator
Mr. Venance Luhemeja	<i>B.Sc. (I.T.) (Tumaini University)</i>	System Analyst II / Computer Programmer
<i>Students' Welfare</i>		
Mr. Kaspar J. Mapunda	Dipl Educ (Chan'gombe), B.A. (Polit. Sc. & Publ. Admin.), MA (DS) UDSM	Dean of Students
Mrs. Christine K. Kabigiza	Dipl. Agr. Nutr. (Ilonga), Dipl. Gender Relat. & Agric (Netherland), B.A. Comm. Devel. (Daystar C.U. Nairobi), MA in Theol. Comm. Devel.	Warden

Name	Qualification	Title
	(Wartburg Theological Seminary, USA)	
Mr. Mtigandi A. Genga	Dipl. In Education (Butimba)	Janitor
<i>Technical</i>		
Mr. Emmanuel Kimwaga	<i>Dipl. Clin. Med, Dipl. In Prosection (UDSM)</i>	Principal prosector II
Ms. Siphahel Msuya	<i>Dipl. In Prosection (UDSM); B. Gen. Sc.(OUT)</i>	Principal prosector II
Ms. Sayyeda Prashant Somaiya	<i>DPS (CUHAS)</i>	Lab. Techn
Mr. Vitus Silago	<i>BMLS (CUHAS)</i>	Laboratory Scientific Officer
<i>Estate</i>		
Mr. Emmanuel Mabula	<i>Adv, Cert in Plumbing (NVTC)</i>	Plumber III
Mr. Apolon J. Arra	<i>Adv. Dipl. Building Econ. (UDSM)</i>	Estate Manager
Mr. Eliamin Jimmy	<i>Dipl. In Electronics (Mbeya Techn. College)</i>	Electrician IV

OCCASIONAL STUDENTS/ELECTIVE STUDENTS

1. An occasional/elective student is one the duration of whose studentship is less than one academic year. Occasional/elective students should normally stay for less than one semester.
2. The entrance qualifications are the same as for admission to Undergraduate degree course or equivalent.
3.
 - a) The applications must be submitted through the applicant's Institute which should, if it supports the application, send a letter of recommendation to this University.
 - c) Applications for occasional studentship at the Catholic University of Health and Allied Sciences (CUHAS- Bugando) should reach the Vice Chancellor at least six months before the date or month for which the applicant seeks admission.

All correspondence should be addressed to:

The Deputy Vice Chancellor (ARC)
Catholic University of Health and Allied Sciences,
P.O. Box 1464
Mwanza.
FAX: 255-28-2502678
Email: vc@bugando.ac.tz
Website: <http://www.Bugando.ac.tz>

4. Non-Tanzanian students are expected to conform to all immigration formalities in force in their countries before they depart for Tanzania. They must also obtain Resident Permit from the nearest Tanzanian Embassy or High Commission before they arrive.
5. Admission is on a semester basis to any year of study.
6. Occasional students will neither sit for exams nor get transcripts or grades except in special circumstances or where regulations allow a special programme could be set up which is recognized by the University.
7. An occasional student will be discontinued on the following grounds:-any serious breach of University regulations, abscondment, or irregular attendance.
8. Occasional students will pay fees like all other students.
9. Non-Tanzanian students will pay fees in foreign currency (US\$) or its equivalent in other acceptable currencies.

UNIVERSITY MANAGEMENT COMMITTEE

1. Prof. PG. Rugarabamu Vice Chancellor/Chairman
2. Prof. SE. Mshana Deputy Vice Chancellor (ARC)/Vice-Chairman
3. Rev. Dr. A. Mroso Deputy Vice Chancellor (PFA)
4. Prof. JB. Kataraihya Dean, Weill Bugando School of Medicine
5. Mr. Massimiliano Pezzole Touch Country Director
6. Dr. SE. Ngallaba Dean School of Public Health
7. Mrs. AD. Pole Ag. Dean, Archbishop Anthony Mayala School of Nursing
8. Mr. K. Mapunda Dean of Students
9. Prof. SE. Kalluvya Director of Postgraduate Studies
10. Prof. GWM. Kongola Director Research and Publications
11. Prof ZE. Masesa Head Admissions
12. Mr. R. Tibaijuka Director IAHS
13. Mr. IM. Khangane: Director ICT
14. Fr. Dr. A. Twimanye IGU
15. Mr. B. Kwiyeza Chief Accountant
16. Mrs. C. Kabigiza Warden
17. Mr. A J. Arra Estate Manager
18. Ms. TY. Peter Senior Planning Officer
19. Ms N. Frank HRMO
20. Mr. Y. Machimu Head, Library
21. Mr. M. Ikhala Senior Procurement Officer

CRITERIA FOR APPOINTMENT AND PROMOTION OF ACADEMIC STAFF

DESIGNATION AND QUALIFICATION (S)

1. Tutorial Assistant

- (i) A Holder of an MD/DDS or equivalent degree and score of at least B in the relevant subject and a GPA of at least 3.5.
- (ii) A Holder of a Bachelor's (Honours) degree at First or Upper Second class level in the relevant subject and scored at least B+ in the relevant subject.

2. Assistant Lecturer

- (i) A Holder of a master's degree (by coursework and dissertation or by Thesis) with overall GPA of 3.5 in the relevant subject provided criteria stated in (1) above are met.
- (ii) By promotion of a tutorial assistant on acquiring a Master's Degree with a GPA of 3.5 in the relevant subject.

3. Lecturer

- (i) A holder of a PhD, M.Med, M.Dent or its equivalent qualification from a recognized institution.
- (ii) By promotion of an Assistant Lecturer with at least 2 year experience coupled with commendable academic service and has either made a satisfactory progress in his/her PhD training or has at least 2 points from publications in a peer reviewed journal.

4. Senior Lecturer

- (i) A holder of a PhD or its equivalent qualification from a recognized institution with at least 6 years of teaching/research experience and has 6 publication points.
- (ii) A holder of M.Med/M.Dent or their equivalent qualifications from a recognized institution with at least 6 years of teaching/research experience and has 6 points (4 from publications and 2 from other sources).
- (iii) By promotion of a lecturer with a PhD and at least 3 years of teaching experience and has acquired 3 publication points since last promotion.
- (iv) By promotion of lecturer with an M.Med degree and at least 3 years of teaching experience and has acquired 4 points since last promotion (2 from publications and 2 from other sources).
- (v) By promotion of a lecturer with either MD or DDS degree and a masters ,has made satisfactory progress in his/her PhD training and has at least 3 years of commendable academic service since last promotion and acquired 4 points (3 from publications and 1 from other sources).
- (vi) By promotion of a lecturer with a Master's Degree in non-clinical subjects, registered for a PhD with satisfactory progress in his/her PhD and has 4 years of commendable academic service since last promotion, and has acquired 4 publication points.

***NB: No candidate shall be promoted beyond Senior Lecturer level
Without PhD or M.Med, M. Dent***

5. Associate Professor

- (i) A senior faculty with a minimum of NINE years of notable academic service and 12 points or more. (At least 9 points should come from publications)

- (ii) By promotion of a senior lecturer with a minimum of three years of notable academic service in that position and has acquired six points since last promotion. (At least 4points from publications and 2 points from other sources).

6. Professor

- (i) A senior faculty with a minimum of TWELVE years of notable academic service and 15 points or more. (At least 12 points should come from publications)
- (ii) By promotion of an Associate Professor with a minimum of three years of distinguished academic service in that position and has acquired six points since last promotion. (At least 4points from publications, 2 from other sources)

LIBRARY STAFF APPOINTMENT & PROMOTION CRITERIA

DESIGNATION

QUALIFICATIONS

- a) ***Library Assistant Grade IV***
Should be a Form IV Leaver with a minimum of 5 credits in Arts subjects. One or these subjects should be English. Three years experience in library work is also required.
- b) ***Library Assistant Grade III***
Should be a Form VI leaver with two principle passes and one subsidiary in Arts subjects plus two years' experience in library work.
- c) ***Library Assistant Grade II***
Should be a holder of a Certificate in Librarianship or Information Sciences from a Recognized institution or University.
- d) ***Library Assistant Grade I***
Should be a holder of a Diploma in Librarianship or Information Sciences from a recognized institution or University.
- e) ***Assistant Librarian***
Should be a holder of a University Degree in first or Upper Second Class Division in Librarianship or Information Science from a recognized University, OR A HOLDER OF A diploma in Librarianship with not less than 3 years experience in an academic/research Library.
- f) ***Librarian***
Holder of a Master Degree in Librarianship with a B performance or a GPA of 4.0 plus a minimum experience of three years in an academic library.
- g) ***Senior Librarian***
Should be a holder of a Masters Degree in Librarianship with at least 3 – 6 years experience in an academic library.
- h) ***Chief Librarian***
Should have a minimum of a Masters Degree in Librarianship/ Information Science from a Recognized University plus more than 6 years-experience of working in an academic Library.

ACADEMIC CALENDAR

A. ACADEMIC YEAR 2014/2015

Starts on 11.10.2014
Ends on 08.08.2015

B. SEMESTER I, III, V, VII & IX

Begin: 11.10.2014
End: 07.03.2015

Mid – Semester breather (X-Mass breather):
20.12.2014 – 03.01.2015 (2 weeks)

End-of Semester Examinations

Start: 23.02.2015
End: 06.03.2015

End of Semester Breather

Start 07.03.2015
Ends 14.03.2015

C. SEMESTER II, IV, VI, VIII & X

Begins: 14.03.2015
Ends: 08.08.2015

Mid-Semester Breather:
23.05.2015 – 30.05.2015 (1WEEK)

End-of Semester Examinations

Start: 27.07.2015
End: 07.08.2015

End of Year (Long) Vacation

Starts: 08.08.2015
Ends: 09.10.2015
(Duration 8 Weeks)

D. KEY FOR SEMESTERS

<i>Semester</i>	<i>Applicable for</i>
Semester I & II	MD I, BMLS I, B.Sc. NED I, B. Sc. N I, B.Pharm I, MPH, MMED I & YR1-IAHS
Semester III & IV	MD II, BMLS II, B.Sc. NED II, B. Sc. N II, B.Pharm II, MMED II & YR2-IAHS
Semester V & VI	MD III, BMLS III, B.Sc. NED III, B. Sc. N III, B.Pharm III, MMED III & YR3-IAHS
Semester VII & VIII	MD IV, B.Sc. NED IV, B. Sc. N IV, B. Pharm IV
Semester IX & X	MD V

**E ACADEMIC YEAR 2015/2016
START ON 12.10.2015**

ALMANAC FOR THE ACADEMIC YEAR 2014/2015

WEEK NO.	DAY	DATE	EVENT
		30	
		31	
SEPTEMBER 2014 47	Monday	1	
	Tuesday	2	
	Wednesday	3	
	Thursday	4	
	Friday	5	Committee of Deans and Directors
	Saturday	6	
	Sunday	7	
48	Monday	8	
	Tuesday	9	
	Wednesday	10	
	Thursday	11	
	Friday	12	Appointments Committee
	Saturday	13	
	Sunday	14	
49	Monday	15	
	Tuesday	16	
	Wednesday	17	
	Thursday	18	Research and Publications Committee
	Friday	19	
	Saturday	20	
	Sunday	21	
50	Monday	22	
	Tuesday	23	
	Wednesday	24	Supplementary Examinations
	Thursday	25	
	Friday	26	
	Saturday	27	
	Sunday	28	
51 October 2014	Monday	29	
	Tuesday	30	
	Wednesday	1	
	Thursday	2	
	Friday	3	
	Saturday	4	Reporting of ALL Students 2014/2015
	Sunday	5	
52	Monday	6	
	Tuesday	7	
	Wednesday	8	
	Thursday	9	
	Friday	10	

CUHAS Prospectus 2014-2015

WEEK NO.	DAY	DATE	EVENT	
1	Saturday	11		
	Sunday	12		
	Monday	13	Academic Year 2014/2015 begins (Semesters I, III, V ,VII and IX) With Holy Eucharist Cerebration for New Academic Year	
	Tuesday	14	Nyerere Day	
	Wednesday	15		
	Thursday	16		
	Friday	17	Planning and Finance Committee	
	Saturday	18		
2	Sunday	19		
	Monday	20		
	Tuesday	21		
	Wednesday	22		
	Thursday	23		
	Friday	24		
	Saturday	25		
	Sunday	26		
3	Monday	27		
	Tuesday	28		
	Wednesday	29		
	Thursday	30	Academic Planning Committee	
	Friday	31	CUHAS SENATE	
	NOVEMBER 2014	Saturday	1	
	Sunday	2		
	4	Monday	3	
Tuesday		4		
Wednesday		5		
Thursday		6		
Friday		7		
Saturday		8		
Sunday		9		
5		Monday	10	
	Tuesday	11	SPH Board Meeting	
	Wednesday	12	Convocation Day	
	Thursday	13	BMC Board of Governors	
	Friday	14	CUHAS COUNCIL	
	Saturday	15	7TH GRADUATION CEREMONY CUHAS	
	Sunday	16		
	6	Monday	17	
Tuesday		18		
Wednesday		19		
Thursday		20	Research and Publications Committee	
Friday		21	SAUT Council Meeting	
Saturday		22	15th Graduation Day SAUT	

WEEK NO.	DAY	DATE	EVENT	
7	Sunday	23		
	Monday	24		
	Tuesday	25		
	Wednesday	26		
	Thursday	27		
	Friday	28		
	Saturday	29		
DECEMBER 2014	Sunday	30		
	Monday	1		
	Tuesday	2		
	Wednesday	3		
	Thursday	4		
	Friday	5		
	Saturday	6		
8	Sunday	7		
9	Monday	8		
	Tuesday	9	Public Holiday (Independence Day)	
	Wednesday	10		
	Thursday	11		
	Friday	12	Research and Publications Committee	
	Saturday	13		
	Sunday	14		
10	Monday	15		
	Tuesday	16		
	Wednesday	17		
	Thursday	18		
	Friday	19		
	Saturday	20	Mid- Semester I and III, V ,VII & IX Breather Starts	
	Sunday	21		
11	Monday	22		
	Tuesday	23		
	Wednesday	24		
	Thursday	25	Christmas Day	
	Friday	26	Boxing Day	
	Saturday	27		
	Sunday	28		
12	Monday	29		
	Tuesday	30		
	Wednesday	31		
	JANUARY 2015	Thursday	1	New Year's Day
	Friday	2		
	Saturday	3	End of mid-Semester I, III, V, VII & IX Breather	
	Sunday	4		
13	Monday	5		
	Tuesday	6		

CUHAS Prospectus 2014-2015

WEEK NO.	DAY	DATE	EVENT
	Wednesday	7	
	Thursday	8	Research and Publication Committee
	Friday	9	CATS
	Saturday	10	
	Sunday	11	
14	Monday	12	Zanzibar Revolution Day (Public Holiday)
	Tuesday	13	
	Wednesday	14	
	Thursday	15	Research and Publications Committee
	Friday	16	Committee of Deans and Directors
	Saturday	17	
	Sunday	18	
15	Monday	19	
	Tuesday	20	
	Wednesday	21	
	Thursday	22	
	Friday	23	
	Saturday	24	
	Sunday	25	
16	Monday	26	
	Tuesday	27	
	Wednesday	28	
	Thursday	29	Appointments committee- Staff Review
	Friday	30	Planning and Finance Committee
	Saturday	31	
	Sunday	1	
FEBRUARY 2015			
17	Monday	2	
	Tuesday	3	
	Wednesday	4	
	Thursday	5	
	Friday	6	
	Saturday	7	
	Sunday	8	
18	Monday	9	
	Tuesday	10	
	Wednesday	11	
	Thursday	12	
	Friday	13	Research and Publications Committee
	Saturday	14	MPH Field Excursion
	Sunday	15	
19	Monday	16	
	Tuesday	17	
	Wednesday	18	
	Thursday	19	
	Friday	20	CUHAS COUNCIL
	Saturday	21	

WEEK NO.	DAY	DATE	EVENT
20	Sunday	22	
	Monday	23	End of Semester I, III, V , VII , IX University Examinations start
	Tuesday	24	
	Wednesday	25	
	Thursday	26	
	Friday	27	
	Saturday	28	
MARCH 2015	Sunday	1	
	Monday	2	
	Tuesday	3	
	Wednesday	4	
	Thursday	5	
	Friday	6	Semester I, III, V , VII , IX University exams end Examiners Board School of Medicine; IAHS; Pharmacy; Nursing
	Saturday	7	End of Semester Breather Begins
21	Sunday	8	
	Monday	9	
	Tuesday	10	
	Wednesday	11	IAHS Board, School of Medicine Board
	Thursday	12	School of Pharmacy Board, School of Nursing Board
	Friday	13	SPH Board (for Exams)
	Saturday	14	End-Semester Breather Finishes; Semester II, IV, VI, VIII & X Starts
	Sunday	15	
22	Monday	16	
	Tuesday	17	
	Wednesday	18	
	Thursday	19	Research and Publications
	Friday	20	Examinations Committee
	Saturday	21	
	Sunday	22	
23	Monday	23	
	Tuesday	24	SPH Board
	Wednesday	25	CATS
	Thursday	26	
	Friday	27	Committee of Deans and Directors
	Saturday	28	
	Sunday	29	
24	Monday	30	
	Tuesday	31	?PFC
	Wednesday	1	Research and Publications Committee
	Thursday	2	
APRIL 2015	Monday	30	
	Tuesday	31	?PFC
	Wednesday	1	Research and Publications Committee
	Thursday	2	

WEEK NO.	DAY	DATE	EVENT
	Friday	3	Good Friday
	Saturday	4	
	Sunday	5	Easter Sunday
26	Monday	6	Easter Monday; Easter vacation ends
	Tuesday	7	Karume Day
	Wednesday	8	
	Thursday	9	Appointments Committee/Staff Review
	Friday	10	CUHAS SENATE
	Saturday	11	
	Sunday	12	
	27	Monday	13
Tuesday		14	
Wednesday		15	
Thursday		16	
Friday		17	
Saturday		18	
Sunday		19	
28		Monday	20
	Tuesday	21	
	Wednesday	22	
	Thursday	23	Admissions Committee. (All admissions to be ready)
	Friday	24	?? CUHAS COUNCIL
	Saturday	25	
	Sunday	26	Union Day (Public Holiday)
29 MAY 2015	Monday	27	
	Tuesday	28	
	Wednesday	29	
	Thursday	30	
	Friday	1	International Workers Day (Public Holiday)
	Saturday	2	
	Sunday	3	
	30	Monday	4
Tuesday		5	
Wednesday		6	
Thursday		7	IAHS Board, School of Medicine Board
Friday		8	School of Pharmacy Board, School of Nursing Board
Saturday		9	
Sunday		10	
31		Monday	11
	Tuesday	12	
	Wednesday	13	
	Thursday	14	Research and Publications Committee
	Friday	15	

CUHAS Prospectus 2014-2015

WEEK NO.	DAY	DATE	EVENT
	Saturday	16	
	Sunday	17	
32	Monday	18	
	Tuesday	19	
	Wednesday	20	
	Thursday	21	
	Friday	22	
	Saturday	23	Mid -Semester II, IV, VI, VIII & X Breather Begins
	Sunday	24	
	33	Monday	25
Tuesday		26	
Wednesday		27	
Thursday		28	
Friday		29	
Saturday		30	Mid- Semester II, IV, VI, VIII & X Breather Ends
Sunday		31	
JUNE 2015 34		Monday	1
	Tuesday	2	
	Wednesday	3	
	Thursday	4	
	Friday	5	
	Saturday	6	
	Sunday	7	
	35	Monday	8
Tuesday		9	
Wednesday		10	
Thursday		11	
Friday		12	CUHAS SENATE
Saturday		13	
Sunday		14	
36	Monday	15	
	Tuesday	16	
	Wednesday	17	
	Thursday	18	Research and Publications Committee
	Friday	19	
	Saturday	20	
	Sunday	21	
37	Monday	22	
	Tuesday	23	
	Wednesday	24	
	Thursday	25	
	Friday	26	
	Saturday	27	
	Sunday	28	

WEEK NO.	DAY	DATE	EVENT	
JULY 2015	Monday	29		
	Tuesday	30		
	38	Wednesday	1	
		Thursday	2	
		Friday	3	Admissions Committee (CAS)
		Saturday	4	
		Sunday	5	
39	Monday	6		
	Tuesday	7	Saba Saba Day (International Trade Fair)	
	Wednesday	8	CATS	
	Thursday	9		
	Friday	10	Committee of Deans and Directors	
	Saturday	11		
	Sunday	12		
40	Monday	13		
	Tuesday	14		
	Wednesday	15		
	Thursday	16	Research and Publications Committee	
	Friday	17		
	Saturday	18		
	Sunday	19		
41	Monday	20	MD 5 University Examinations Begins	
	Tuesday	21		
	Wednesday	22		
	Thursday	23	Appointments Committee	
	Friday	24	Planning and Finance Committee	
	Saturday	25		
	Sunday	26		
	Monday	27	End of Semester II, IV, VI, VIII & X University Examinations Start	
42	Tuesday	28		
	Wednesday	29		
	Thursday	30		
	Friday	31		
	Saturday	1		
	Sunday	2		
AUGUST 2015				
43	Monday	3		
	Tuesday	4		
	Wednesday	5		
	Thursday	6		
	Friday	7	End of Semester II, IV, VI, VIII & X University Examinations FINISHES Examiners Boards Meetings (School of Medicine, School of Pharmacy, School of Nursing, IAHS)	

CUHAS Prospectus 2014-2015

WEEK NO.	DAY	DATE	EVENT
	Saturday	8	Farmers Day (Public Holiday)
	Sunday	9	Long Vacation Starts: Beginning of Field Work MD 2 And MD3 Elective MD4,
44	Monday	10	IAHS Board, School of Medicine Board
	Tuesday	11	School of Pharmacy Board, School of Nursing Board
	Wednesday	12	Examinations Committee
	Thursday	13	Research and Publications Committee
	Friday	14	
	Saturday	15	
	Sunday	16	
45	Monday	17	
	Tuesday	18	
	Wednesday	19	
	Thursday	20	
	Friday	21	CUHAS SENATE
	Saturday	22	
	Sunday	23	
46	Monday	24	
	Tuesday	25	
	Wednesday	26	
	Thursday	27	
	Friday	28	CUHAS COUNCIL
	Saturday	29	
	Sunday	30	
47 SEPTEMBER 2015	Monday	31	
	Tuesday	1	
	Wednesday	2	
	Thursday	3	
	Friday	4	Committee of Deans and directors
	Saturday	5	
	Sunday	6	
48	Monday	7	
	Tuesday	8	
	Wednesday	9	
	Thursday	10	
	Friday	11	Appointments Committee
	Saturday	12	
	Sunday	13	
49	Monday	14	
	Tuesday	15	
	Wednesday	16	
	Thursday	17	Research and Publications Committee
	Friday	18	
	Saturday	19	

WEEK NO.	DAY	DATE	EVENT
50	Sunday	20	
	Monday	21	
	Tuesday	22	
	Wednesday	23	
	Thursday	24	
	Friday	25	
	Saturday	26	
	Sunday	27	
1 OCTOBER 2015	Monday	28	Supplementary Examinations
	Tuesday	29	
	Wednesday	30	
	Thursday	1	
	Friday	2	
	Saturday	3	
	Sunday	4	Reporting New Students; Semester I (2015/2016)
	2	Monday	5
Tuesday		6	
Wednesday		7	
Thursday		8	
Friday		9	
Saturday		10	
Sunday		11	
3		Monday	12
	Tuesday	13	
	Wednesday	14	
	Thursday	15	
	Friday	16	Planning and Finance Committee
	Saturday	17	
	Sunday	18	
	4	Monday	19
Tuesday		20	
Wednesday		21	
Thursday		22	
Friday		23	
Saturday		24	
Sunday		25	
5		Monday	26
	Tuesday	27	
	Wednesday	28	
	Thursday	29	
	Friday	30	
	Saturday	31	CUHAS SENATE

CUHAS Prospectus 2014-2015

WEEK NO.	DAY	DATE	EVENT
NOVEMBER 2015 6	Sunday	1	
	Monday	2	
	Tuesday	3	
	Wednesday	4	
	Thursday	5	
	Friday	6	TEC Plenary Council
	Saturday	7	
	Sunday	8	
7	Monday	9	
	Tuesday	10	SPH Board
	Wednesday	11	Convocation Day
	Thursday	12	BMC Board of Governors
	Friday	13	CUHAS COUNCIL
	Saturday	14	8TH GRADUATION CEREMONY
	Sunday	15	
8	Monday	16	
	Tuesday	17	
	Wednesday	18	
	Thursday	19	
	Friday	20	
	Saturday	21	16 th SAUT Graduation
	Sunday	22	
9	Monday	23	
	Tuesday	24	
	Wednesday	25	
	Thursday	26	
	Friday	27	
	Saturday	28	
	Sunday	29	
	Monday	30	