2016/2017 PROSPECTUS

Catholic University of Health and Allied Sciences [CUHAS]

Catholic University of Health and Allied Sciences

PROSPECTUS 2016/2017

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MEMBERS OF BOARD OF TRUSTEES

	NAME	TITLE/PLACE
1.	His Eminence Polycarp Cardinal Pengo	Archbishop of Dar es Salaam
2.	Most Rev. Jude Thaddeus Ruwa'ichi	Archbishop of Mwanza
3.	Most Rev. Damian Denis Dallu	Archbishop of Songea
4.	Most Rev. Paul Ruzoka	Archbishop of Tabora
5.	Most Rev. Josaphat Lebulu	Archbishop of Arusha
6.	Most Rev. Beatus Kinyaiya	Archbishop of Dodoma
7.	Rt. Rev. Tarcisius Ngalalekumtwa	Bishop of Iringa (President TEC/ Chancellor).
8.	Rev. Fr. Augustin Van Baelen, SDS	General Mission Secretary, Member

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9.	Rt. Rev. Augustine Shao	Bishop of Zanzibar
10.	Rt. Rev. Isaac Amani Masawe	Bishop of Moshi
11.	Rt. Rev. Desderius Rwoma	Bishop of Bukoba
12.	Rt. Rev. Titus Mdoe:	Bishop of Mtwara
13.	Rt. Rev. Salutarius M. Libena	Bishop of Ifakara
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15.	Prof. Paschalsi Rugarabamu	Vice Chancellor Catholic University of Health and Allied Sciences
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17.	Rev. Dr. Cephas Mgimwa	Vice Chancellor, Ruaha Catholic University
18.	Rev. Dr. Charles Kitima	Ag. Principal, Stella Maris University College.
19.	Rev. Dr. Jevenalis Asantemungu	Principal, Archbishop Mihayo University College.
20.	Prof. Cassian Magori	Principal, SFUCHAS
21.	Rev. Fr. Bernard Witek SDC	Principal, Jordan University College

22.	Rev. Dr. Longino Kamuhabwa	Principal, Archbishop James University College.
23.	Rev. Dr. Frowin Mlengule	Principal, Cardinal Rugambwa Memorial University College.
24.	Prof. Stelyus L. Mkoma	Ag. Principal Marian University College
25.	Prof. Haule Romuald	Director, SAUT-Mbeya Centre
26.	Dr. Desdelardus Kilangi	Director, SAUT-Arusha Centre
27.	Fr. Claudius Nkwera	Corporate Counsel (SAUT)

MEMBERS OF CUHAS- UNIVERSITY COUNCIL

1.	The Rt. Rev. Augustine Shao	Bishop of Zanzibar- Chairman
2.	Most Rev. Jude Thaddeus Ruwa'ichi	Archbishop of Mwanza
3.	The Most Rev. Archbishop Paul Ruzoka:	Archbishop Tabora
4.	Rev. Dr. Thadeus Mkamwa	Ag. Vice-Chancellor, SAUT
5.	Fr. Raymond Saba	TEC Secretary General
6.	Prof. Samwel Y. Maselle	MUHAS
7.	Prof. Kien Alfred Mteta	Director General, BMC
8.	Prof. Silvia Shayo Temu	Director, Higher Education, MEVT
9.	Olivia 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. Apollinaria E. Pereka	Appointee CUHAS Senate
12.	Dr. Fredrick Kigadye	Renowned Medical Doctor
13	Prof. Paschalis G. Rugarabamu	Vice Chancellor CUHAS
14.	Ms. Olive Luena	Female representative of the Laity
15.	Fr. Alphonce Raraiya	TEC Executive Secretary, Education Department
16.	Rev. Fr. Paul Nhindilo	Corporate Counsel CUHAS/Secretary

In Attendance:

1.	Prof. Stephen Mshana	CUHAS-Deputy Vice Chancellor (ARC)
2.	Rev. Dr. Agapit Mroso, OFMCap	CUHAS-Deputy Vice Chancellor (PFA)
3.	Mr. Boniface Kwiyeya	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, OFMCap	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.	Prof. Apollinaria E. Pereka	Appointee CUHAS Senate
7.	Mr. Kaspar Mapunda	Dean of Students
8.	Prof. Samuel. E. Kalluvya	Dean School of Graduate Studies
9.	Prof. Gilbert W. Kongola	Director Research and Innovations
10.	Mr. Gratian R. Tibaijuka	Director IAHS
11.	Mr. Yanga. Machimu	Representing Director Library Services
12.	Mr. Ismael .M. Khangane	Director ICT
13.	Dr. Rose M. Laisser	Dean AAMSoN
14.	Prof. Mary. Jande	Dean School of Pharmacy
15.	Dr. Sospatro.E. Ngallaba	Dean School of Public Health
16.	Prof Zablon. E. Masesa	Admissions Officer
17.	Dr. Negussie AndreDominic	DVC Academic Affairs SAUT
18.	Sr Dr Hellen Bandiho	Appointee Council
19.	Mr. Boniface Nyanda	Undergraduate students representative
20.	Ms. Grace Mganga	IAHS Students representative
21.	Dr. T. Chaula	Postgraduate Students representative
22.	Dr. Jeremiah. Seni	Examinations Officer, Representing Departments of Pathology, Microbiology, Pharmacology and Parasitology.
23.	Dr. Aldofine. Hokororo	Representing Departments of Internal Medicine, Psychiatry Paediatrcs and Medical Ethics.
24.	Dr. Leonard Washington Amango	Representing Departments of Surgery, Orthopaedics & Trauma, ENT and Anaesthesia.

25.	Prof. Balthazar Gumodoka	Representing Departments of Obstetrics & Gynaecology, and Community Health.
26.	Mr. Omary Mejjah	Representing IAHS schools of Radiography, Pharmacy, Medical Lab, Nursing, Anaesthesia and AMO.
27.	Rev. Fr. Paul Nhindilo	Corporate Counsel CUHAS.

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

Deputy Vice Chancellor Finance, Planning and Administration (PFA)
Rev. Dr. Agapit Mroso, OFMCap 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)*

Ag. Associate Dean: Weill Bugando School of Medicine
Dr. Haruna Dika, *MD (MUHAS); M.Sc. (Makerere), PhD (Calgary)*

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

Dean, Archbishop Anthony Mayala School of Nursing
Dr. Rose M. Laisser *ADNE (MUHAS);M.Sc (Leeds Metropolitan University), PhD (University of Umea – Sweden)*

Director: Institute of Allied Health Sciences
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Associate Director: Research and Innovations	
Dr. Domenica Morona	*M.Sc. (LSTMH), PhD*
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Dean of Students	
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Internal auditor	
Mrs Bahati Michael Kilungu	*ADA(SAUT), CPA (NBAA)*
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Rev. Fr. Dr Vincent Mhina	*BA (Ed) Rome; MA (Ed) Rome; PhD (Rome)*
Corporate Counsel	
Rev. Fr. Dr. Paul Nhindilo	*Dipl. Philosophy B.A Theology (Pontifical Urbanian University) PhD in Canon Law (Pontifical Luteran University)*

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PREAMBLE

The University Management is still committed to ensuring that CUHAS realises it's vision of being an Outstanding Catholic University excelling in health care, training and research while being responsive to societal needs. In the academic year 2016/17, we plan to launch our new rolling strategic plan and continue to enhance the quality of our services, through targeted initiatives. As we usher in a new academic year, the University Leadership team continues to work closely with our sister institution, BMC, in building a stronger Bugando community and strengthen our relevance to the Lake Zone community.

Our continuing and new students should be assured that we are sensitive to their need for quality education, delivered in an ideal learning environment, thus we strive to provide that by improving each year, 2016/17 being no exception.

We hope that your time at CUHAS will prove to be a productive learning experience.

We wish you the best of success.

Prof. Paschalis G. Rugarabamu
Vice Chancellor, CUHAS.

MISSION AND VISION OF THE CUHAS

Vision of the University

To become an outstanding Tanzanian Catholic University excelling in health care, training and research 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)	3 years
[Internal Medicine, Obstetrics and Gynaecology, Surgery, Paediatrics, Anaesthesia, Orthopaedics and Trauma, ENT, and Urology]	
Master of Public Health (MPH)	1year
Master of Science in Paediatric Nursing	2 years
Doctor of Philosophy (Ph. D)	3years

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 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

SCHOOLOF 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 "D" grade or higher in CHEMISTRY, BIOLOGY and PHYSICS, at ADVANCED ("A") level. Preference will be given to applicants with "C" grade or above in CHEMISTRY or BIOLOGY. THOSE without Physics should have Principal pass at "C" grade or higher in CHEMISTRY or BIOLOGY and a "D" grade or higher in CHEMISTRY or BIOLOGY [Five points or higher (C + D = 5 points) from two subjects]. For those who completed "A" Level in 2014 and 2015 (B + C = 5 points from two subjects)

(ii) Holders of Bachelor of Science (BSc) Degrees, from recognized institutions, majoring in BIOLOGY or CHEMISTRY.

(iii) Equivalent Qualifications: Holders of Diploma in Clinical Medicine with a B+ average in the Diploma.

Entry Requirement for Bachelor of Medical Laboratory Sciences

Direct entrants:
Two Principal passes at "D" grade or higher in Chemistry, Biology or Physics/Mathematics [A minimum of 4 points (D + D = 4 points) from two subjects]

Equivalent Qualification
Holder Diploma/Advanced Diploma with an average of "B+" 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)

(iv) Principal PASS at "D" grade or higher in CHEMISTRY, BIOLOGY and PHYSICS, at ADVANCED ("A") level. Preference will be given to applicants with "C" Passes or above in CHEMISTRY or BIOLOGY, in that order. THOSE without Physics should have Principal pass at "C" grade or higher in CHEMISTRY or BIOLOGY and a "C" grade or higher in CHEMISTRY or BIOLOGY [Five points or higher (C + D = 5 points) from two subjects]. For those who completed "A" Level in 2014 and 2015 (B + C = 5 points from two subjects)

Equivalent qualifications:

(i) Holders of Bachelor of Science (BSc) degrees from recognized institutions majoring in BIOLOGY or CHEMISTRY.
(ii) Holder of a Diploma in Pharmacy from a recognized and accredited Institution by NACTE with an average of "B+" in the Diploma

ARCHBISHOPANTHONYMAYALASCHOOL 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 "D" or higher [Minimum of 4 points (D + D = 4 points) from two subjects]. For those who finished "A" Level in 2014 and 2015 [minimum of 4 points (C + C = 4 points) from two subjects]

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

Equivalent Qualification:
Equivalent Qualifications: Holders of Diploma in Nursing with a B+ average in the Diploma preference will be given for those who have attempted A level.

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. With a B grade at Advanced Diploma preference will be given for those who have attempted A level.

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 "D" grade or above in CHEMISTRY, BIOLOGY or PHYSICS in that order of preference (i.e: minimum of D, D = 4 points from two subjects). For those who finished "A" Level in 2014 and 2015 (minimum of C, C = 4 points from two subjects)

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 Graduate Studies is currently offering Master of Medicine (MMED) programmes in the clinical disciplines of Internal Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics and Anaesthesiology. The School also offers MPH programme. And 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.

Entry Requirements for MSc.PN Program

i. A GPA of at least 2.7 in Bachelor of Science in Nursing (BScN), or Bachelor of Science in Nursing education (BScNE) or Bachelor of Science in Mental Health Nursing (BScM) or Bachelor of Science in Midwifery (BScMid) or Bachelor of Science in Nursing Management from a recognized University

ii. Graduates from the other recognised Universities with at least a GPA of 2.7 in their first degrees mentioned above are eligible for selection when **they have fulfilled the following criteria** specified under item iii. and iv, below.

iii. Graduates mentioned in item i. above should have a minimum of 2 years work experience

iv. Graduates should have a valid license to practice as registered nurses and midwives with the Tanzania Nurses and Midwives Council (TNMC) before their enrolment to the program

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.** ***Any refund if necessary will attract a processing fee of 50,000/= Tsh.***

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 (HESLB) 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 **2016/2017** academic year:

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

Fees Payable to the University

Figures in TSh '000	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Tuition	4,300	4,150	4,150	4,010	**4,010**
Exam fee	160	160	160	160	**160**
Graduation Fee	0	0	0	0	**50**
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	15	15	15	15	**15**
ID card	10	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**
Student Union	20	20	20	20	**20**
Total Cost to University	**5,435**	**5,225**	**5,225**	**5,085**	**5,135**

NB: 1) GRADUATION FEE (50,000/=) is payable by all finalist at the beginning of the year.

2) *The University has limited accommodation. Accommodation will be charged as follows: 960,000/= 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.*
3) **** Medical Capitation: Students with recognized and valid Health Insurance Schemes will be refunded 50,400/=*

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

Student Cost (figures in Tsh, '000	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
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**
Total Cost to Student	**1150**	**1430**	**1430**	**1990**	**1150**
GRAND TOTAL	**6,585**	**6,655**	**6,655**	**7,075**	**6,285**

(B) Money payable to students doing BMLS Course

Student Cost (figures in Tsh, '000	*Year 1*	*Year 2*	*Year 3*
Stationery	100	100	100
Books	300	300	300
Elective &Field	0	0	560
Fieldwork	0	0	280
Meals	750	750	750
Total Cost to Student	**1150**	**1150**	**1990**
GRAND TOTAL	**6,585**	**6,375**	**7,265**

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

Student Cost (figures in Tsh, '000	*Year 1*	*Year 2*	*Year 3*	*Year 4*
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
Total Cost to Student	**1150**	**1430**	**1430**	**1710**
GRAND TOTAL	**6,585**	**6,655**	**6,655**	**6,845**

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

BSc. NED Conversion programme

Student Cost (figures in Tsh, '000	*Year 1*	*Year 2*
Stationery	100	100
Books	300	300
Elective &Field	0	0
Fieldwork	280	280
Meals	750	750
Total Cost to Student	**1430**	**1430**
GRAND TOTAL	**6,865**	**6,705**

BScNED 3 & 4 year programme

Student Cost (figures in Tsh, '000	*Year 1*	*Year 2*	*Year 3*	*Year 4*
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
Total Cost to Student	**1150**	**1430**	**1710**	**1150**
GRAND TOTAL	**6,585**	**6,655**	**6,935**	**6,285**

BSc. N 3 year programme

Student Cost (figures in Tsh, '000	*Year 1*	*Year 2*	*Year 3*
Stationery	100	100	100
Books	300	300	300
Elective &Field	0	0	0
Fieldwork	0	280	560
Meals	750	750	750
Total Cost to Student	**1150**	**1430**	**1710**
GRAND TOTAL	**6585**	**6655**	**6985**

BSc. N 4 year programme

Student Cost (figures in Tsh, '000	*Year 1*	*Year 2*	*Year 3*	*Year 4*
Stationery	100	100	100	100
Books	300	300	300	300
Elective &Field	0	0	0	0
Fieldwork	0	0	280	280
Meals	750	750	750	750
Total Cost to Student	**1150**	**1150**	**1430**	**1430**
GRAND TOTAL	**6585**	**6375**	**6655**	**6,565**

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

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**
Graduation fee	0	0	0	0	**25**
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**	**6,235**

NB: 1) GRADUATION FEE (25 US $) is payable by all finalist at the beginning of the year.

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	250	250	**250**
Graduation Fee	0	0	**50**
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**
Student union	20	20	**20**
Total Cost to University	**7,005**	**6,945**	**6,995**

NB: 1) GRADUATION FEE (50,000/=) is payable by all finalist at the beginning of the year.

NB: 2) There is limited accommodation at CUHAS at a cost of 1,200,000/= Tshs. without utility (electricity and water) charges. Utility can cost up to 500,000/= Tshs. per year.

Moneys Payable to the Student

Student Cost(Figures in TSh '000)	*Year 1*	*Year 2*	*Year 3*
Stationery	250	250	**250**
Books	600	600	**600**
Research	0	2,500	**0**
Dissertation	0	500	**0**
Fieldwork	0	0	**0**
Meals/ Stipend	3,600	3,600	**3,600**
Total Cost to Student	**4,450**	**7,450**	**4,450**

Total Costs

Total Cost (in TSh '000)	*Year 1*	*Year 2*	*Year 3*
Money Payable to University	**7,005**	**6945**	**6,995**
Money Payable to Students	**4,450**	**7,450**	**4,450**
GRAND TOTAL	**11355**	**14,395**	**11,445**

MMED Fee Structure (Foreign)

Fees Payable to the University

Figures in US$	*Year 1*	*Year 2*	*Year 3*
Tuition	5,500	5,500	**5,500**
Exam fee	250	250	**250**
Graduation Fee	0	0	**25**
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**	**7,700**

NB: 1) GRADUATION FEE (25 US $) is payable by all finalist at the beginning of the year

Moneys Payable to the Student

Student Cost (US $)	*Year 1*	*Year 2*	*Year 3*
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**

Master of Science in Paediatric Nursing (MSc.PN) Fee Structure (National)

Fees Payable to the University

Figures in TSh '000	*Year 1*	*Year 2*
Tuition	5,000	5,000
Exam fee	250	250
Graduation Fee	0	50
Admission/Administrative	0	0
Sustainability	30	30
TCU Quality Assurance Fee	20	20
Registration	25	25
ID card	10	0
Medical	0	0
Caution Money	50	0
Accommodation	1,200	1,200
Equipment/Special Faculty Requirement	200	200
Student union	20	20
Total Cost to University	**6,805**	**6,795**

NB: 1) GRADUATION FEE (50,000/=) is payable by all finalist at the beginning of the year.

NB: 2) There is limited accommodation at CUHAS at a cost of 1,200,000/= Tshs. without utility (electricity and water) charges. Utility can cost up to 500,000/= Tshs. per year.

Moneys Payable to the Student

Student Cost(Figures in TSh '000)	*Year 1*	*Year 2*
Stationery	250	250
Books	600	600
Research	0	3000
Dissertation	0	500
Fieldwork	0	0
Meals/ Stipend	3,600	3,600
Total Cost to Student	**4,450**	**7,950**

Total Costs

Total Cost (in TSh '000)	*Year 1*	*Year 2*
Money Payable to University	**6,805**	**6,795**
Money Payable to Students	**4,450**	**7,950**
GRAND TOTAL	**11,255**	**14,745**

MPH Fee Structure (National)

Fees Payable to the University

Figures in TSh '000	*Year 1*
Tuition	7,050
Exam fee	350
Graduation Fee	50
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
Student Union	20
Total Cost to University	**9,005**

NB: There is limited accommodation at CUHAS at a cost of 1,200,000/= Tshs. without utility (electricity and water) charges. Utility can cost up to 500,000/= Tshs. per year.

Moneys Payable to the Student

B. Student Cost(Figures in TSh '000)	*Year 1*
Stationery	250
Books	600
Research	2,500
Dissertation	500
Fieldwork	0
Meals/ Stipend	3,600
Total Cost to Student	**7,450**

Total Costs

Total Cost (in TSh '000)	*Year 1*
Money Payable to University	**9,005**
Money Payable to Students	7,,450
GRAND TOTAL	**16,455**

MPH Fee Structure (Foreign)

Fees Payable to the University

Figures in US $	*Year 1*
Tuition	6500
Exam fee	150
Graduation Fee	25
Admission/Administrative	75
Sustainability	30
Registration	25
ID card	10
Medical	0
Caution Money	50
Accommodation	1,200
Total Cost to University	**8,065**

Moneys Payable to the Student

B. Student Cost(Figures in US $)	*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

Total Cost (US $)	*Year 1*
Money Payable to University	**8,040**
Money Payable to Students	4,520
GRAND TOTAL	**12,560**

PhD Fee Structure

Fees Payable to the University

Figures in Tshs '000'	*Year 1*	*Year 2*	*Year 3*
Tuition	6,250	6,250	**6,250**
Exam fee	250	250	**250**
Graduation Fee	0	0	**50**
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**
Student Union	35	35	**35**
Total Cost to University	**8,670**	**8,460**	**8,510**

Moneys Payable to the Student

Student Cost (Tsh '000')	*Year 1*	*Year 2*	*Year 3*
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	**15,940**	**15,940**	**15,940**

Total Costs

Total Cost (Tshs '000')	*Year 1*	*Year 2*	*Year 3*
Money payable to University	**8,670**	**8,460**	**8,510**
Money payable to students	**15,940**	**15,940**	**15,940**
GRAND TOTAL	**24,610**	**24,400**	**24,450**

IAHS Fee Structure

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

Fees Payable to the University

DDR, DMLS & DPS			
Figures in TSh '000	Year 1	Year 2	Year 3
Tuition	1,400	1,400	1,400
Exam fee	50	50	50
Graduation Fee	0	0	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	10	0	0
Medical	200	200	200
Equipment/ Special Faculty Requirement	150	150	150
Caution Money	50	0	0
Student Union	20	20	20
Total Cost to University	**1,940**	**1,880**	**1,930**

Moneys Payable to the Student

Figures in TSh '000	*Year 1*	*Year 2*	*Year 3*
Stationery	50	50	50
Books	150	150	150
Meals	600	600	600
Fieldwork	0	0	280
Accommodation	480	480	480
Total Cost to Student	**1280**	**1280**	**1560**

Total Costs

Total Cost	*Year 1*	*Year 2*	*Year 3*
Money payable to University	**1,940**	**1,880**	**1,930**
Money payable to students	**1280**	**1280**	**1280**
GRAND TOTAL	**3220**	**3160**	**3210**

***NB**: 1) Limited accommodation is available at BMC at a cost of 480,000/= Tshs per year payable in full or in instalments at the beginning of the academic year.*

2) The University does not provide meals to students, however,there areseveral cafeteria within the compound for reasonable prices

3) The cost of accommodation and meals is about 7,500/= Tshs. per day

Supplementary Fees

From the academic year 2015/2016 candidates appearing for supplementary examinations will be required to pay supplementary fee as shown on the table below:

SN	*Course*	*Fees per Subject (Tshs)*	*Year Cost per subject (Tshs)*
1	MD1	45,000	600,000.00
2	MD2	30,000	400,000.00
3	MD3	80,000	1,065,000.00
4	MD4	65,000	865,000.00
5	MD5	40,000	530,000.00
6	BMLS 1	30,000	400,000.00
7	BMLS2	40,000	530,000.00
8	BMLS3	40,000	535,000.00
9	BPHARM 1	40,000	535,000.00
10	BPHARM 2	40,000	535,000.00
11	BPHARM 3	55,000	735,000.00
12	BPHARM 4	55,000	735,000.00
13	BSN 1	40,000	535,000.00
14	BSN 2	30,000	400,000.00
15	BSN 3	55,000	735,000.00
16	BSN 4	45,000	600,000.00
17	DDR1	10,000	135,000.00
18	DDR2	10,000	135,000.00
19	DDR3	15,000	200,000.00
20	DPS1	15,000	200,000.00
21	DPS2	10,000	135,000.00
22	DPS3	10,000	135,000.00
23	DMLS1	15,000	200,000.00
24	DMLS2	10,000	135,000.00
25	DMLS3	10,000	135,000.00
26	MMED1	160,000	1,600,000.00
27	MMED2	160,000	1,600,000.00
28	MMED3	160,000	1,600,000.00
29	MPH	215,000	2,150,000.00

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 85% of the classes** to be allowed to sit for final examination in a given subject.

1.4.2 Unless otherwise specified a candidate must do a minimum of two continuous assessment tests for subjects with less than three modules and a minimum of three tests for subjects with three or more modules before the end of semester examination in the respective subject.

1.4.3 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

Absence from examination includes not reporting for a scheduled examination at the time, day and place specified without prior permission. It also includes going out of the examination room, temporarily or otherwise without authorization or permission of the invigilator or one of the invigilators for the examination in question. It also includes staying out of the examination room for a longer period than the one specified by the invigilator or one of the invigilators for the examination in question.

A candidate who fails to appear for a scheduled examination without a known 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 deliberately or without a valid reason, the affected student will be discontinued from the studies.

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 supplementary examination and will be awarded a minimum passing grade of 'C'.

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 she or he has attained a GPA specified by the respective school or institute. GPA calculation should base on subject weights. 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** *(This also applies to continuous assessment tests)*

(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; inside the examination room or in the premises surrounding the examination room. The premises surrounding the examination room include the examination room, toilets and areas within 20 meters.

(ii) A candidate with written or drawn examination related materials on his or her body, shoes and clothes.

(iii) A candidate copying from another candidate's work.

(iv) A candidate cheating by using or copying from unauthorized material.

(v) A candidate cheating or plagiarizing in research dissertation/thesis or report (eg elective field report, case study report etc).

(vi) A candidate communicating with another candidate by giving or obtaining unauthorized assistance or attempting to do so.

(vii) A candidate doing or attempting to do an examination on behalf of another candidate.

(viii) A candidate requesting or buying or stealing examination questions from examiners or from examination office or fellow students, or attempting to do so. In clinical examinations, this includes getting to know cases or patients set for examination.

(ix) A candidate colluding with another candidate who is involved in examination irregularities. This includes refusing to disclose the irregularity incident he or she witnessed eg refusing to sign the incidence form.

(x) A candidate refusing to obey a lawful order by an invigilator.

(xi) A candidate behaving in such manner as would disrupt the examination process.

(xii) Submitting or attempting to submit answer sheet(s) or booklet(s) which were not written in the examination room.

(Xiii) An invigilator or examiner violating examination regulations.

(c) Any candidate who is found guilty of deliberately involved in examination irregularities or dishonest shall be discontinued from studies.

2 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 final Examination Time Tables for any changes. Failure to sit examination(s) for a reason of changes in timetable will not be entertained.

2.3 Candidates shall be seated 30 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 who will not observe CUHAS-Dress Code will not be allowed to enter examination room.

2.7 Candidates are **not allowed to enter the examination room**, with books, cellular or mobile phone, handbags, clipboards, purses, papers, magazines, radios, radio cassette or other types of cassette players, digital watches, computers, soft and alcoholic drinks and any other material as may be specified from time to time by the Deputy Vice Chancellor responsible for Academic Affairs.

2.8 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.

2.9 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.

2.10 All candidates shall observe silence in the examination room

2.11 No food or drink shall be allowed into the examination room

2.12 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 examination office and head of Department.

2.13 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.

2.14 A candidate caught contravening the Examination Regulations shall not be allowed to continue with the examination for which he/she is scheduled.

2.15 Candidates are strongly warned that cheating or being caught with unauthorized material contravenes the University General Examination Regulations and leads to discontinuation from studies.

2.16 All candidates shall sign the Attendance Form at the beginning and the Submission Form at the end of every examination.

2.17 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 (2.18).

2.18 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.

2.19 A candidate who walks out of an examination in protest shall be disqualified from that particular examination.

2.20 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.

2.21 Candidates are not allowed to take any examination material out of the examination room, unless specifically permitted by the invigilator of the respective examination. (This also applies to Continuous Assessment Tests)

2.22 Detailed instructions on the question papers should be followed.

2.23 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 contacts such as telephone numbers or e-mails to facilitate communication.

2.24 Students must understand that the ultimate responsibility for taking the supplementary examination precisely at the time when they are given rests with the student.

GUIDANCE FOR INVIGILATORS

2.25 Before the Examination

2.25.1 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

2.25.2 Invigilators shall be present in the examination room at least twenty minutes before the commencement of the examination,

2.25.3 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.

2.25.4 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.

2.26 During the Examination

2.26.1 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.

2.26.2 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.

2.26.3 Invigilators should ensure that only one answer-book is provided for each candidate.

2.26.4 Candidate may be permitted to do rough work in the examination booklet on the understanding that rough work is crossed out.

2.26.5 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 1.18above

2.26.6 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.

2.26.7 The Head of the Department through the School Dean will submit a full written report on the incident to the Examinations Committee.

2.26.8 The processing of an alleged case of cheating or other irregularity shall be carried out as expeditiously as possible.

2.27 At the End of Examination

2.27.1 Invigilators shall tell the candidates to stop writing and assemble their examination scripts.

2.27.2 Invigilators shall not permit the candidates to leave their places before their scripts have been collected.

2.27.3 Candidates shall sign the Examination Attendance Sheet when they turn in their script.

2.27.4 Invigilators shall enter the number of candidates' scripts collected and/or received on the Attendance Sheet and sign it.

3 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. 10,000/=) for Diploma students for each course, and of ten thousand shillings (Tshs. 20,000/=) 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 20,000/=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 50,000/= 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.

4 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 a 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 or after repeating a year in academic grounds shall be a "C" in the respective subject(s).

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 an Elective Field Project.

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 Specific 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 School/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 an audit year during the first or second year of study shall be discontinued from studies.

6.8. During the third or fourth year of study, a candidate who obtains an overall GPA of less than 1.6 but greater or equal to 1.5 shall be allowed to repeat a year; and a candidate who obtains an overall GPA of less than 1.5 shall be discontinued from studies.

6.9. 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.

6.10. A candidate who fails the first supplementary with an overall GPA of less than 1.8 shall be discontinued from studies.

6.11. 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.

6.12. The highest grade a candidate can obtain after a supplementary examination or after repeating a year on academic grounds shall be a "C" in the respective subject(s).

6.13. A candidate who fails to attend at least 85% 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.

6.14. 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.

6.15. 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.

6.16. 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.

6.17. A candidate failing the final research project shall be given three months to supplement the project starting from the new academic year.

6.18. 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.

6.19. 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.

6.20. GRADING OF THE BACHELOR OF PHARMACY DEGREE

The following grading system shall apply:

Numerical Mark (%)	*Grade*	*Points*
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:

CLASS	*GRADE*	*GPA(RANGE)*	*RANGE OF MARKS*
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**

7.0 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 BMLS programme is a 6 semester programme and the maximum allowable period for registration shall be 10 semesters

7.2 The examination regulation and disposal of students will follow CUHAS examination regulations. The BMLS degree will be classified.

7.3 The registration of students shall be once at the beginning of each Academic year.

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 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.

7.8 A candidate who obtains an overall GPA of 1.5 at the end of an audit year shall be allowed to repeat a year.

7.9 A candidate who obtains an overall GPA of less than 1.5 at the end of an audit year shall be discontinued from studies.

7.10 Supplementary in any clinical subject will include a laboratory rotation of at least 4 weeks

7.11 A candidate who fails the first supplementary examination with an overall GPA of less than 1.8 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 examination or after repeating a year on academic grounds shall be a "C" in the respective subject(s).

7.15 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**

BMLS degree shall be graded as follows:

CLASS	*GRADE*	*GPA(RANGE)*	*RANGE OF MARKS*
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**

8.0 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

Examination Regulations Specific for Bachelor of Science in Nursing Education (BScNED) and Bachelor of Science in Nursing (BSc N)

8.1 Registration of full time students shall be done at the beginning of each academic audit year.

8.2 For every course taught there shall be at least two continuous assessment examinations and an end of semester University Examination. The continuous assessment shall constitute 50% of the end of semester examination grade.

8.3 For clinical subjects, a candidate shall be eligible for examination after completion of 85% of the clinical practice schedules allocated in that semester.

8.4 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 shall be allowed to proceed to the next year of study.

8.5 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 School/Institute and Academic Committee.

8.6 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.

8.7 A candidate who obtains an overall GPA of 1.5 at the end of an audit year shall repeat a year.

8.8 A candidate who obtains an overall GPA of less than 1.5 at the end of an audit year shall be discontinued from studies.

8.9 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.

8.10 A candidate who fails the first supplementary with an overall GPA of less than 1.8 shall be discontinued from studies.

8.11 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.

8.12 The highest grade a candidate can obtain after a supplementary examination or after repeating a year on academic grounds shall be a "C" in the respective subject(s).

8.13 A candidate will not pass the final examination in any clinical subject unless and until he/she has passed the clinical part.

8.14 A candidate failing the end of the year clinical examination will be required to sit for a supplementary examination after repeating four weeks rotation in the respective subject(s).

8.15 A candidate failing the final University Examination will be required to appear for a supplementary examination in the failed subjects within three months if he/she has failed one or two subjects or six months if he/she has failed in three subjects.

8.16 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.

8.17 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.

8.18 No candidate shall be allowed to graduate without passing a research project.

8.19 BScNED and BScN degrees shall not be classified

8.20 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

9.0 EXAMINATION REGULATIONS FOR MASTER OF MEDICINE (MMED)

The General University Examination Regulations Also Apply

Specific Postgraduate School Examination regulations for MMED

9.1 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

9.2 During each semester there will be at least two continuous assessment tests and an end of semester examination consisting of a written paper and clinical examination (except for semester 1).

9.3 The mode and manner of the clinical examination will be determined by the departments concerned and approved by the relevant boards.

9.4 The continuous assessment tests will constitute 50% of the end of semester examination grade.

9.5.1 At the end of semester 6 (end of 3rd year) candidates will have to appear for a final university examination consisting of: Written paper and Clinical examination (long case, short cases and oral)

9.5.2 Written paper shall carry 40% of the marks, the clinical 50% and oral 10%.

9.5.3 Candidates must pass both the written and clinical components of the examination.

9.6 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

The pass mark shall be B grade

Disposal of students

9.7 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

9.8 A candidate who fails in 3 or more biomedical subjects during semester 1 shall be required to repeat a year

9.9 A candidate who fails the supplementary examination will be required to repeat a year.

9.10 A candidate who fails the supplementary examination after repeating a year will be discontinued from the course.

9.11 The highest grade a candidate can obtain after a supplementary examination or after repeating a year on academic grounds shall be a "B" in the respective subject(s).

9.12 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)

9.13 A candidate who fails any of the component will have to appear for a supplementary examination within three months

9.14 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.

10.0 EXAMINATION REGULATIONS FOR MASTER OF PUBLIC HEALTH (MPH)

The General University Examination Regulations Also Apply

MPH Specific Examination regulations

ASSESSMENT:

10.1 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

10.2 All students registered for MPH shall present their dissertation to the panel of expertise on that topic / subject; after completing all modules.

EVALUATION SCHEME

10.3 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

10.4 All students registered for MPH shall present their dissertation to the panel of expertise on that topic / subject; after completing all modules.

10.5 Evaluation of candidates will include course work, field work assessment and dissertation with viva voce defence at the end of the course.

10.6 **During each semester there will be.**

(i) At least one continuous assessment test and an end of module examination consisting of a written paper and oral examination

(ii) The continuous assessment tests will constitute 50% of the end of module examination grade

DISPOSAL OF STUDENTS

10.7 A candidate who fails in one or two module(s) shall be allowed to continue to other modules and repeat the specific module(s) in the subsequent academic year.

10.8 A candidate who fails in 3 or more modules shall be required to repeat a year.

10.9 A candidate who fails the repeated module will be required to repeat a year.

10.10 A candidate who fails the repeated module after repeating a year will be discontinued from the course.

10.11 The highest grade a candidate can obtain after repeating a module or after repeating a year on academic grounds shall be a “B” in the respective subject(s).

10.12 The grading system in MPH programme 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**

MPH degree shall be classified as follows:

CLASS	*GRADE*	*GPA(RANGE)*	*RANGE OF MARKS*
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**

Pass mark shall be a B grade

11.0 EXAMINATION REGULATIONS FOR MASTER OF SCIENCE IN PAEDIATRIC NURSING (MSc.PN)

The General University Examination Regulations Also Apply

Examination Regulations for Master of Science in Paediatric Nursing (MSc.PN)

CONTINUOUS ASSESSMENT:

11.1 Continuous assessment will be conducted at the end of each module/semester and the pass mark will be 50% or higher.

11.2 All students registered for MSc.PN shall present their dissertation to the panel of expertise on that topic / subject at the time scheduled during the third semester

11.3 Evaluation of candidates will include course work, field work assessments and dissertation with viva voce defence at the end of the course.

11.4 During each semester there will be.

(i) At least one continuous assessment test and an end of module /semester examination consisting of a written paper and or /clinical examination

(ii) The continuous assessment tests will constitute 50% of the end of module/semester examination grade

11.5 Regulations on Dissertations

i. The dissertation shall consist of a topic that will be relevant to health and pediatrics field; the overall regulation of the University regarding proposal and dissertation writing will also apply to MSc.PN dissertation

ii. The topic will be determined by the student and approved by the school

iii. Four loosely bound copies of the dissertation shall be submitted to the Directorate of Postgraduate not less than three months before dissertation defense

iv. A candidate who fails to submit a dissertation at this period without approval will be barred from defending her/his thesis in that year

v. A candidate who fails to submit his/her dissertation as per immediate bullet item above will be required to submit loosely bound copies of the dissertation not less than three months prior to the examination when next offered provided his her maximum tenure for MSc.PN degree (6 semesters since first registration) allows Oral defense of the dissertation shall be conducted during the end of third semester.

vi. The Thesis will be assessed by the recommended internal and external examiners. All examiners must be approved by the Senate

vii. 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

viii. A candidate, having successfully defended the dissertation, will be required to submit error-free dissertation within 3 months in the case of minor corrections and within 6 months if there are major corrections

ix. In case of resubmission or outright rejection, a dissertation may be resubmitted for examination after 9 months

x. Dissertation rejected by examiners after a resubmission shall not be accepted for re-examination at CUHAS

xi. A candidate shall be awarded MSc.PN degree after he/she has passed all the examinations in prescribed courses in the program and submitting an error free dissertation

11.6 DISPOSAL OF STUDENTS

i. A candidate who fails in one or two module(s) shall be allowed to continue to other modules and repeat the specific module(s) in the subsequent academic year.

ii. A candidate who fails in 3 or more modules shall be required to repeat a year.

iii. A candidate who fails the repeated module will be required to repeat a year.

iv. A candidate who fails the repeated module after repeating a year will be discontinued from the course.

v. The highest grade a candidate can obtain after repeating a module or after repeating a year on academic grounds shall be a "B" in the respective subject(s).

11.7 The grading system in MSc.PN programme 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**

12 EXAMINATION REGULATIONS FOR IAHS DIPLOMA PROGRAMMES

The General University Examination Regulations Also Apply

12.1 The IAHS programmes are 6 semester programmes and the maximum allowable period for registration shall be 10 semesters.

12.2 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.

12.3 Candidates who obtain "C" grade and above in all subjects will be deemed to have passed the examination.

12.4 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)

DISPOSAL OF STUDENTS

12.5 The fate of a candidate is determined following the General University Examination regulations. Regulations 12.6 to 12.10 specifically deal with how to handle candidates using GPA namely:

12.6 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.

12.7 A candidate who obtains an overall GPA of less than 1.6 at the end of an audit year during the first year shall be discontinued from studies.

12.8 During the second or third year of study, a candidate who obtains an overall GPA of less than 1.6 but greater or equal to 1.5 shall be allowed to repeat a year; and a candidate who obtains an overall GPA of less than 1.5 shall be discontinued from studies.

12.9 A candidate who fails the supplementary with an overall GPA of less than 1.8 shall be discontinued from studies.

12.10 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.

12.11 The highest grade a candidate can obtain after a supplementary examination or after repeating a year on academic grounds shall be a "C" in the respective subject(s).

12.12 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	0.00 – 1.4

IAHS diplomas shall be classified as follows:

CLASS	*GRADE*	*GPA(RANGE)*	*RANGE OF MARKS*
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**

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.

3.0 CURRICULUM TEACHING AND LEARING 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.

4.0 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

Code	*Course Title*	*Theory*		*Practical/seminars*		*Total*	
		Hrs	*Units*	*Hrs*	*Units*	*Hrs*	*Units*
EF 201-202	Nutrition Field Project	50	3.3	90	2.0	140	5.3
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	0.0.4	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

SCHOOLOF 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*	
			Hrs	*Units*	*Hrs*	*Units*	*Hrs*	***Units***
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
L	DS 101	Social Development and Health	25	1.7	10	0.2	35	1.9
LI	DS 102	Education, Rural Development, Gender and Health.	15	1.0	10	0.2	25	1.2
LII	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
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
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 andLympho-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
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
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 Opthalmology) 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
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 psycho-social 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, venepunture, 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 successfully 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 carter 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 TITTLE*	*THEORY*		*PRACTICAL*			*Total*
		Hrs	Units	Hrs	Units	HRS	Units
YEAR I: SEMESTER I							
BC 140	Biochemistry	148	9.9	41	0.8	189	10.7
AN 140	Functional Anatomy and Histology	90	6	44	1.0	134	7.0
LT 240	Laboratory Practice Informatics	20	1.3	40	1.3	60	2.6
LP 140	Medical laboratory practices	40	2.6	76	1.7	116	4.3
		298	**19.8**	**201**	**8.2**	**499**	**28**
YEAR I: SEMESTER II							
PH 140	Basic Physiology	100	6.7	20	0.4	120	7.1
MB 140	Molecular Biology	100	6.7	43	1	143	7.7
DS 140	Development studies 1	60	4	30	0.6	90	4.6
ER 140	Bio-statistics and Epidemiology	90	6	30	0.6	120	6.6
		350	**23.4**	**123**	**2.6**	**473**	**26**
YEAR II SEMESTER III							
PE 140	Parasitology and Entomology	91	6.1	61	1.4	152	7.5
MM 240	Microbiology/Immunology	114	7.6	76	1.7	190	9.4
DS 240	Development studies 2	60	4	30	0.7	190	4.6
GN 240	Pharmacogenomics	60	4	45	1	105	5
		325	**21.7**	**212**	**4.8**	**537**	**26.6**
YEAR II: SEMESTER IV							
SM 240	Clinical Microbiology	46	3.1	200	4.5	246	7.6
CC 240	Clinical Chemistry	46	3.1	200	4.5	246	7.6
PM 240	Public Microbiology	22	1.5	80	1.8	102	3.3
MP 140	Principles of Pathology and Hematology	95	6.3	25	0.6	120	7.0
		114	**7.7**	**594**	**13.3**		**21**
YEAR III SEMESTER V							
HT 340	Cytology and Histotechnology	89	5.9	248	5.5	337	11.4
SH 340	Clinical Serology, Haematology and blood transfusion	50	3.3	137	3.0	187	6.3
DT 340	Molecular diagnostics techniques	50	3.3	137	3.0	187	6.3
		189	**12.5**	**522**	**11.5**	**711**	**24**
YEAR III SEMESTER VI							
MG 340	Laboratory Management and Planning	24	1.6	10	0.2	34	1.6
EF 340	**Elective Field Research Project**	54	3.6	592	13.2	646	17.8
ES 340	Entrepreneurship	34	2.3	0	0	34	2.3
		112	**7.6**	**602**	**13.2**	**714**	**22**

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: 10.8 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 includes structural organization, energy interconvertion, 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
BC141	Introduction of Biomolecules	25	1.7	-	-	25	1.7
BC142	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**	**10.8**

AN 140: FUNCTIONAL ANATOMY AND HISTOLOGY (7.0 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**
AN141	The Human Body, Cell Biology &Genetics	19	1.2	-	-	19	**1.2**
AN142	Regional Anatomy	20	1.3	20	0.4	40	**1.7**
AN143	General and Systemic Histology	35	2.3	54	1.2	64	**3.5**
AN144	Applied Developmental Biology	16	1.0	-	-	16	**1.0**
Total		**90**	**6**	**64**	**1.6**	**134**	**7.0**

IT140: LAB PRACTICE INFORMATICS: 2.6 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**
IT141	Computers and Internet Browsing	10	0.7	40	0.8	40	**1.5**
IT142	Office Applications	4	0.3	10	0.2	14	**0.5**
IT143	Data Base Management	8	0.6	30	0.6	38	**1.2**
Total		**22**	**1.6**	**80**	**1.6**	**102**	**2.6**

LP 140: MEDICAL LABORATORY PRACTICE: 4.3 Units

Course Description

During this course the trainee will learn the organization of the health Laboratory, ethical issues, Laboratory practices and 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 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
- Use a microscope in the examination of stained and unstained preparations

Course content

Code	*Name*	*Lectures*		*Practical*		*Total*	
		Hrs	Units	Hrs	Units	Hrs	**Units**
LP141	Laboratory Structure and Organization	14	0.9	18	0.34	32	**1.24**
LP142	Laboratory Practices and Ethics	16	1.1	4	0.08	20	**1.18**
LP143	Specimen collection, transportation and documentation	7	0.5	50	1.0	30	**1.5**
LP144	Microscopy and staining techniques	7	0.5	40	0.8	40	**1.3**
	Total	**44**	**3.0**	**72**	**2.2**	**122**	**4.3**

SEMESTER TWO:

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/seminar*		*Total*	
		Hrs	Units	Hrs	Units	Hrs	**Units**
PH141	Fluid and circulation	34	2.3	7	0.15	41	**2.5**
PH142	Metabolism and Excretion	32	2.1	7	0.15	39	**2.3**
PH143	Neuro-Endocrine Physiology	34	2.3	6	0.13	40	**2.4**
	Total	**100**	**6.7**	**20**	**0.4**	**120**	**7.2**

MB140: 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**
MB141	Cell Biology and Mutations	30	2.0	10	0.2	40	**2.2**
MB142	DNA Transfer, Recombination and Inheritance	20	1.3	9	0.2	29	**1.5**
MB143	Gene expression and arrangement	20	1.3	12	0.3	32	**1.6**
MB144	Nucleic acid techniques	30	2.0	12	0.3	32	**2.3**
	Total	**100**	**6.6**	**43**	**1.0**	**143**	**7.6**

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
DS141	Social Development and Health	25	1.7	10	0.2	35	1.9
DS142	Education, Rural Development, Gender and Health	15	1.0	10	0.2	25	1.2
DS143	Population, Poverty and Health	20	1.3	10	0.2	30	1.5
TOTAL		**60**	**4.0**	**30**	**0.6**	**90**	**4.6**

ER140: 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**
ER141	Biostatistics	40	2.6	10	0.2	50	**2.8**
ER142	Epidemiology	50	3.4	10	0.4	50	**3.8**
Total		**90**	**6**	**30**	**0.6**	**120**	**6.6**

SEMESTER THREE

PE 240: PARASITOLOGY/MEDICAL ENTOMOLOGY: 7.5 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, molluscicide general sanitation etc.
- Describe the advantages and disadvantages of each method.

Course Contents

Code	Course Name	Lectures		Practicals		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
PE241	Protozology & Immuno-Parasitology	35	2.3	19	0.4	54	2.7
PE242	Helminthology	36	2.4	29	0.6	65	3.0
PE243	Entomology	20	1.3	13	0.3	33	1.6
TOTAL		**91**	**6.0**	**61**	**1.3**	**152**	**7.5**

MM 240: MICROBIOLOGY/IMMUNOLOGY: 9.4 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**	**9.4**

DS 240: DEVELOPMENT STUDIES 240: 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.

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
DS241	Globalization Environment and Health	20	1.3	10	0.2	30	1.5
DS242	Human Rights/ Governance	30	2.0	20	0.4	50	2.4
DS243	Entrepreneurship	**15**	**1.0**			**15**	**1.0**
TOTAL		**65**	**4.3**	**30**	**0.6**	**95**	**4.6**

SEMESTER FOUR

SM240: 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

Code	*Name*	*Lectures*		*Practical/Seminar*		*Total*	
		Hours	Credits	Hours	Credits	Hours	**Credit**
SM241	Sample Collection and processing	26	1.7	90	2	30	**3.8**
SM242	Lab Equipments and Supplies	10	0.6	20	0.4	30	**1.0**
SM243	Pathogen Identification	10	0.7	90	2	20	**2.6**
Total		**46**	**3.0**	**200**	**4.4**	**246**	**7.6**

CC240: CLINICAL CHEMISTRY: 7.6 Units

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*
CC241	Analytical Methods	12	0.8	40	0.8	52	**1.6**
CC242	Tests of Organ Failure	12	0.8	60	1.4	72	**2.2**
CC243	Nitrogenous Metabolites	6	0.4	20	0.4	26	**0.8**
CC244	Clinical Enzymology and Biomarkers	10	0.7	50	1.1	60	**1.8**
CC245	Analysis of Urine. CSF and Stool	6	0.4	30	0.7	36	**1.1**
TOTAL		**46**	**3.1**	**200**	**4.4**	**246**	**7.6**

PM 240: PUBLIC MICROBIOLOGY: 3.3 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**	**Hrs**	**Units**	**Hrs**
PM241	Water sanitation	6	0.4	25	0.5	22	**0.7**
PM242	Food sanitation	8	0.5	25	0.6	30	**0.9**
PM243	Role of Laboratory during outbreaks	8	0.5	30	0.7	40	**1.2**
Total		**22**	**1.4**	**80**	**1.8**	**102**	**3.2**

MP240: PRINCIPLES OF PATHOLOGY AND HAEMATOLOGY: 7.0 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**
MP241	Principles of Pathology	70	4.6	20	0.5	90	**5.1**
MP242	Haematology	25	1.6	5	0.1	30	**1.7**
TOTAL		**95**	**6.2**	**25**	**0.6**	**120**	**7.0**

SEMESTER FIVE

HT340: CYTOTECHNOLOGY AND HISTOTECHNOLOGY: 11.4 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. 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

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.

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:

- 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
- 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	Units	Units	Units
HT341	Microscopy Tissue Fixation, and Processing	10	0.6	30	0.6	40	**0.8**
HT342	Laboratory Methods in Histotechnology	14	1	46	1.0	60	**2.0**
HT343	Molecular Pathology Methods	10	0.7	20	0.4	30	**1.0**
HT344	Cytology	5	0.3	15	0.3	20	**0.4**
HT345	Museum Techniques and practice	20	1.3	40	0.9	60	**2.2**
HT346	Laboratory Quality System	-	-	**40**	**0.9**	**40**	**0.9**
HT347	Histotechnology II	-	-	**20**	**0.5**	**20**	**0.5**
HT348	Histochemistry/Immunohistochemistry II	-	-	**20**	**0.5**	**20**	**0.5**
HT349	Molecular Methods II	-	-	**20**	**0.5**	**20**	**0.5**
HT330	Cytology II	-	-	**27**	**0.6**	**27**	**0.6**
Total		**59**	**3.9**	**278**	**6.2**	**337**	**11.4**

SH340: CLINICAL SEROLOGY, HAEMATOLOGY AND BLOOD TRANSFUSION: 6.3 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	Clinical Haematology	25	1.7	67	1.5	20	**3.2**
SH342	Serological techniques	25	1.7	70	1.6	30	**3.1**
Total		**50**	**3.4**	**137**	**3.1**	**187**	**6.3**

DT 340: MOLECULAR DIAGNOSTIC TECHNIQUES: 6.5 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**
DT341	Nucleic Acid and Protein Extraction	15	1.0	45	1.0	60	**2.0**
DT342	Analytical Methods	35	2.3	92	2.0	127	**4.3**
Total		**50**	**3.3**	**137**	**3.0**	**187**	**6.5**

SEMESTER SIX

MG340: LABORATORY MANAGEMENT AND PLANNING: 1.6 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*
MG341	Laboratory management	10	0.6	5	0.1	15	**0.7**
MG342	Laboratory planning	10	0.6	5	0.1	15	**0.7**
Total		**24**	**1.2**	**10**	**0.2**	**34**	**1.6**

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**	54	3.6	592	13.2	646	16.8
	Total	54	3.6	592	13.2	280	**16.8**

ES340: 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
ES341	Entrepreneurship	11	0.7	-	-	11	0.7
ES342	Innovation Creativity and Marketing	13	0.9	-	-	13	0.9
ES343	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

(i) 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.

(ii) 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.

(iii) 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**
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 affection 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**

PP120: 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

BC120: 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**
BC121	Chem. Of Biomolecules	25	1.7	15	0.3	40	**2.0**
BC122	Enzymology	20	1.3	15	0.3	35	**1.7**
BC123	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

CH120: 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 from 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

Course Code	*Course Name*	*Theory*		*Practical*		*Total*	
		Hours	**Units**	**Hours**	**Units**	**Hours**	**Units**
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**
PC122	Unit Processes	20	1.3	19	0.4	39	**1.8**
PC123	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 an 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**
PP221	Pharmacy ethics & Pharmaceutical society	20	1.3	19	0.4	39	**1.7**
PP222	Essential drug policy &health care and nutrition	30	2	19	0.4	49	**2.4**
PP223	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, pyrolles, indoles, purines and xanthines.
3. Define and explain the terms optical activity, diastereomers, resolution, racemisation, geometric and conformational isomerism, symmetry and dissymmety, 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 techniquew 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 band provision of medical and health care services.
3. To introduce the student tot 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

CP320: 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	**CP321**	Drug Classification and disposition	38	2.5	10	0.2	48	**2.8**
II	**CP322**	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	**CP323**	Drugs acting on the cardiovascular system and blood, the autonomic nervous system, local and general anaesthetics	36	2.4	10	0.2	46	**2.6**
IV	**CP324**	Chemical transmission and drugs acting on the CNS; the non-steroidal anti-inflammatory agents	38	2.5	10	0.2	48	**2.8**
V	**CP325**	Chemotherapeutic agents	30	2.0	10	02	40	**2.2**
		Total	**178**	**11.9**	**50**	**1.1**	**228**	**13.0**

MM220: 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	PT321	Isolation of bioactive compounds	20	1.3	41	0.9	61	**2.2**
II	PT322	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**
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	PP321	Prescription and over the counter departments	40	2.7	38	0.8	78	**3.5**
II	PP322	Patient record system, medical returns and drug information	15	1.0	39	0.9	54	**1.9**
II	PP323	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**

PP420: 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 Pharmcy 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**

PG420: 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**
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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hours	*Units*	*Hours*	*Units*	*Hours*	*Units*
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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hours	Units	Hours	Units	Hours	**Units**
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
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 interconvention, 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

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 in 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

Code	*Module Name*	*Theory*		*Practical*		*Total*	
		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

Code	*Module Name*	*Theory*		*Practical*		*Total*	
		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			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**

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

Code	*Module Name*	*Theory*		*Practical*		*Total*	
		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 leaner 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. Discus 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

Code	*Module Name*	*Theory*		*Practical*		*Total*	
		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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hrs	Units	Hrs	Units	Hrs	**Units**
AN100	Anatomy	129	8.6	232	5.2	342	**3.8**
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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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**
ER204	**FIELD WORK (RESEARCH)**	0	0	70	1.6	70	**1.6**
TOTAL		**422**	**28.2**	**370**	**8.3**	**792**	**38.5**

Semester 5

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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

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 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**

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 interconvention, 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:

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 (9.1units)

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 in 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

Code	*Module Name*	*Theory*		*Practical*		*Total*	
		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 leaner 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. Discus 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

Code	*Name*	*Theory*		*Practicals*		*Total*	
		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
    - Seeking ways to promote and maintain the health of the family, understanding that it is better to prevent than cure disease.
    - 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:
    - Gathering data and analysing it in an epidemiological manner.
    - Communicating with patients and their families, and visiting homes.
    - adapting preventive and curative measures to psychosocial, cultural and economic background of patients and their families
    - Analysing the stressful or health promotive factors operating within a family group, including observations of environmental factors.
    - 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
ER201	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*
BN201	Nutrition	19	1.3	-	-	19	1.3
BN202	Human growth and Development	31	2.1	-	-	31	2.1
BN203	Communication Skills	40	2.7	-	-	40	2.7
BN204	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 biopsycho-social 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
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

Code	*Module Name*	*Theory*		*Practical*		*Total*	
		Hrs	*Units*	*Hrs*	*Units*	*Hrs*	*Units*
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
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**

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

10. 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.
11. 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
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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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 ,advocacy and counselling	45	4.5		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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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	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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER 200	Epidemiology and Research Methodology I	60	6.0	20	2.0	80	8.0
MW200	Midwifery	90	9.0	-	-	90	9.0
AD200	Advanced concepts in Nursing	90	9.0	150	15.0	240	24.0
CH 200	Community Health Nursing	40	4.0	-	-	40	4.0
NT 200	Nutrition	80	8.0	35	3.5	115	11.5
TOTAL		**360**	**36.0**	**250**	**20.5**	**610**	**61.0**

Semester 5

Code	*Name of Course*	*Theory*	*Practice*			*Total*	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CP300	Clinical Pharmacology	167	16.7	16	1.6	183	18.3
MS 300	Medical Surgical Nursing	140	14.0	140	14.0	280	28.0
ER 300	Epidemiology & Research FIELD	-	-	35	3.5	35	3.5
TI 300	Trends and Issues in Nursing	35	3.0	-	-	30	3.0
MP 300	Mental health and Psychiatric Nursing	70	7.0	70	-	140	14.0
TOTAL		**407**	**40.7**	**166.5**	**16.65**	**668**	**66.8**

Semester 6

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hrs	*Credits*	*Hrs*	*Credits*	*Hrs*	*Credits*
LM 300	Leadership and Management	70	7.0	105	10.5	175	17.5
PL 300	Principles of Learning and Teaching	60	6.0	-	-	60	6.0
CH 300	Community health nursing	-	-	140	14	140	14.0
PD 300	Paediatric Nursing	85	8.5	135	13.5	220	22.0
EP 300	Entrepreneurship	30	3.0	4.5	4.5	75	7.5
TOTAL		**245**	**24.5**	**385**	**38.5**	**640**	**64.0**

Semester 7

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PN 400	Principles of Nursing and Paediatrics	-	-	590	59.0	590	59.0
TOTAL		**-**	**-**	**590**	**59.0**	**590**	**59.0**

Semester 8

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MW 400	Midwifery practice	-	-	420	42.0	420	42.0
MA 400	Mental Health and Psychiatric Nursing	-	-	280	28.0	280	28.0
TOTAL						**600**	**60.0**

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

Professional cognitive skills	• 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	• 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
Professional affective skills	• 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	• 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	• 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	• 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 Horrmone 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	• 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	• 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	• 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 Biostatstics. 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 cognitive skills	• 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.
Professional psychomotor skills	• 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	• 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	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. 11. Describe the organisation of the nervous system and the physiological functions, sensory, and motor system, autonomic nervous system; special senses
Professional psychomotor skills	• 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	• 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, ADVOCACY AND COUSELLING(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. This course will also equip students with knowledge, skills and attitudes to manage advocacy for change in health and health related issuesusing effective counselling skills.

The student will be expected to demonstrate professional communication skills, advocacy and counselling competencies with clients, co-workers and the community at large.

Expected competencies

Professional cognitive skills	• 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. • Explain the concepts of advocacy and counselling • Discuss incidences where by advocacy can be a challenge • Discuss values that are basic to the client during advocacy • Review the goals of clients' counselling • Identify the models of counselling • Describe the co values for counselling

	• Discuss the qualities and the characteristics of a good counsellor. • Describe the process of counselling
Professional psychomotor skills	• 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. • 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.
Professional affective skills	• 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 and during counselling. • 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, advocacy and counselling 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	Communication and counselling for 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	• 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	• 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	• 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	• 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	• Design business plan which enhancing the wellbeing of the people in the community you live and foster own self economic development
Professional affective skills	• 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	• 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	• 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.
Professional affective skills	• 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	• 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	• 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	• 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	• 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	• 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	• Use information technology to locate scientific studies related to individual patient's/client's health problems. • Use information technology to access medical information and assimillate 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 (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

Professional cognitive skills	• 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
Professional psychomotor skills	• 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. • Demonstrate effective communication skills when providing nursing care
Professional affective skills	• 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	• 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	• 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	• 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	• 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	• Determine the epidemiological methods in research and assess community health needs • Use the research methods to collect, analyse 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	• 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**

MW 200: MIDWIFERY (9.0 Credits)

Course Description

This course teaches how to take care for the expectant mother, the new-born, 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 new-born.

Expected competencies

Professional cognitive skills	• 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 new-born baby. • Describe the necessary information regarding breastfeeding to new mothers.
Professional psychomotor skills	• 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	• 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	05	0.5	-	-	05	0.5
MW 202	Gender in Health and Gender based violence	05	0.5	-	-	05	0.5
MW 203	Family planning, sexuality and STDs, HIV/AIDS	10	1.0	10	1.0	20	2.0
MW 204	Assessment and Management in the Antepartum, Intrapartum and Postpartum Periods	25	2.5	15	1.5	40	4.0
MW 205	New-born and under-five child assessment and management	10	1.0	10	10	20	2.0
	Total	**55**	**5.5**	**35**	**3.5**	**90**	**9.0**

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 emphasizes 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

Professional cognitive skills	• 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

Professional psychomotor skills	• 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)
Professional affective skills	• 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**

CH 200: COMMUNITY HEALTH NURSING I (4.0 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	• 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	• 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	• 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	20	2.0	-	-	20	2.0
CH 302	Primary Health Care/Health Promotion	10	1.0	-	-	10	1.0
CH 303	Community Health Nurse as an Educator, Developer, Evaluator	10	1.0	-	-	10	1.0
	Total	**40**	**4.0**	**-**	**-**	**40**	**4.0**

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	• 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	• Apply the knowledgeof 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	• 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

Professional cognitive skills	• 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	• 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).
Professional affective skills	• 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**

MS 300: MEDICAL SURGICAL NURSING (28.0 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	• 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. • 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
Professional psychomotor skills	• 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
Professional affective skills	• 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.

Course Content

Code	Module Name	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MS 301	An overview to adult medical surgical nursing	10	1.0	-	-	10	1.0
MS 302	Nursing Management of Patients with Cardiovascular system disorders	25	2.5	25	2.5	50	5.0
MS 303	Nursing Management of Patients with Respiratory, Gastrointestinal and nutritional disorders.	25	2.5	35	3.5	60	6.0
MS 304	Nursing Management of Patients with Renal and genitourinary, Endocrine and metabolic disorders	20	2.0	20	20	40	4.0
MS 305	Nursing Management of Patients with Cardiovascular, Circulatory and Hematologic, Musculoskeletal and Neurological disorders	30	3.0	30	30	60	6.0
MS 306	Nursing Management of Patients with Oncology disorders and Infectious/Communicable Diseases	30	3.0	30	30	60	6.0
	Total	**140**	**14.0**	**140**	**14.0**	**280**	**28.0**

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	• 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	• 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	• 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	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER 301	Writing a research proposal			10	1.0	10	1.0
ER 302	FIELD WORK and Report writing	-	-	25	2.5	25	2.5
	Total	**-**	**-**	**35**	**3.5**	**35**	**3.5**

TI 300: TRENDS AND ISSUES IN NURSING (3.5 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	• 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	• 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	• 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	*Name of Module*	*Theory*		*Practical*		*Total*	
		Hrs	Credits	Hrs	Credits	Hrs	**Credits**
TI 401	Transitions to professional nursing	0.5	0.5	-	-	0.5	**0.5**
TI 302	Dynamics of professional nursing practice	10	1.0	-	-	1.0	**1.0**
TI 303	Impact of policies on the nursing profession	10	1.0	-	-	1.0	**1.0**
TI 304	Educating nurses for the future	10	1.0	-	-	1.0	**1.0**
	Total	**35**	**3.5**	**-**	**-**	**35**	**3.5**

MP 300: 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 biopsycho-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	• 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 biopsycho-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.
Professional psychomotor skills	• 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	• 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	20	2.0	15	1.5	35	3.5
MP 302	Mental disorders and behaviour pathology	20	2.0	30	3.0	50	5.0
MP 303	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**

SEMESTER SIX

LM 300: LEADERSHIP & MANAGEMENT IN NURSING (17.5 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	1. Differentiate leadership and management. 2. Describe effective roles of the leader and the manager 3. Apply critical thinking in leadership and management roles in nursing practice. 4. Describe leadership and management in health care organization. 5. Use appropriate decision making in assisting clients toward recovery and/or improving their health. 6. Employ suitable managerial and planning skills for proper development of human resource necessary for provision of health services in Tanzania. 7. Employ suitable managerial and planning skills for proper

	management of non-human resource necessary for provision of health services in Tanzania.
Professional psychomotor skills	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	• 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	15	1.5	30	3.0
LM 403	Leadership and Management in Nursing Practice	20	2.0	35	3.5	55	5.5
LM 404	Leadership and Management in Health Care Organisations	20	2.0	30	3.0	50	5.0
	Total	**70**	**7.0**	**70**	**7.0**	**140**	**14.0**

PL 300: PRINCIPLES OF LEARNING AND TEACHING (6.0 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

Professional cognitive skills	• 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	• 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	• 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 Content

Code	Name of Module	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
PL 401	Principles of teaching and learning	15	1.5	15	1.5	30	3.0
PL 402	Methods of teaching and learning	15	1.5	15	1.5	30	3.0
	Total	**30**	**3.0**	**30**	**3.0**	**60**	**6.0**

CH 300: 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	• 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	• 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	• 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	10	1.0	-	-	10	1.0
CH 402	FIELD WORK	-	-	130	13	130	13.0
	Total	**15**	**1.5**	**140**	**14.0**	**140**	**140**

PD 300: PAEDIATRIC NURSING (Credits 22.0)

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 • 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 • 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**

EP 300: 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	• 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	• 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	• 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**

SEMESTER 7:

During this semester students will be exposed to practical experience in principles of nursing and paediatrics in the clinical setting

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
401 PN	Principles of Nursing and paediatrics	-	-	590	59.0	590	59.0
	Total	**-**	**-**	**590**	**59.0**	**590**	**59.0**

SEMESTER 8:

During this semester students will be exposed to practical experience in midwifery and mental health in the clinical setting

Code	Name of Module	Theory		Practical		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MW 401	Principles of Nursing and paediatrics	-	-	420	42.0	420	42.0
MA 401	Mental Health and Psychiatric Nursing	-	-	280	28.0	280	28.0
	Total	**-**	**-**	**600**	**60.0**	**600**	**60.0**

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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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, advocacy and counselling	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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		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
BN 200	Basic Nursing	55	5.5	90	9.0	145	14.5
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

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
ER200	Epidemiology & Research Methodology I	60	6.1	20	2.0	80	8.0
MW 200	Midwifery	80	8.0	100	10.0	180	18.0
AD 200	Advanced Concepts in Nursing	65	6.5	130	13.0	195	19.5
CH 200	Community Health Nursing I	40	4.0	-	-	40	4.0
NT200	Nutrition	50	5.0	35	3.5	85	8.5
TOTAL		**325**	**32.5**	**330**	**33.0**	**655**	**65.5**

Semester 5

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
CP 300	Clinical Pharmacology	167	16.7	16	1.6	183	18.3
MS 300	Medical &Surgical Nursing	140	14.0	140	14.0	280	28.0
ER300	Epidemiology and Research Methodology II (FIELD PRACTICE)	-	-	35	3.5	35	3.5
TI 300	Trends and Issues in Nursing	30	3.0	-	-	30	3.0
MP 300	Mental Health & Psychiatric Nursing I	70	7.0	70	7.0	140	17.0
TOTAL		**407**	**40.7**	**261**	**26.1**	**668**	**66.8**

Semester 6

Code	*Name of Course*	*Theory*		*Practice*		*Total*	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
LM 300	Leadership and management	70	7.0	105	10.5	175	17.5
PL 300	Principles of learning and Teaching	60	6.0	-	-	60	6.0
CH300	Community health Nursing FIELD	-	-	140	14.0	140	14.0
PD 200	Paediatric Nursing	85	8.5	135	13.5	220	22.0
EP 300	Entrepreneurship	30	3.0	45	4.5	75	7.5
TOTAL		**250**	**25.2**	**415**	**41.5**	**665**	**66.5**

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	• 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	• 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 •
Professional affective skills	• 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	• 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	• 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	• 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 Horrmone 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	• 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	• 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	• 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 Biostatstics. 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 cognitive skills	• 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.
Professional psychomotor skills	• 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	• 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

Professional cognitive skills	• 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
Professional psychomotor skills	• 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	• 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	12	54	5.4
	Total	**114**	**11.4**	**74**	**7.4**	**188**	**18.8**

PC 100: PROFESSIONAL COMMUNICATION, ADVOCACY AND COUNSELLING 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	• 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	• 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 • 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
Professional affective skills	• 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	• 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	• 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	• 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	• 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	• Design business plan which enhancing the wellbeing of the people in the community you live and foster own self economic development
Professional affective skills	• 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*	
		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

Professional cognitive skills	• 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	• 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.
Professional affective skills	• 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

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	• 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. • Explain the advantages and disadvantages of each method.
Professional psychomotor skills	• 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	• 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	• 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	• 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	• Use information technology to locate scientific studies related to individual patient's/client's health problems. • Use information technology to access medical information and assimillate 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	• 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	• 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	• 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	• 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	• Determine the epidemiological methods in research and assess community health needs • Use the research methods to collect, analyse 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	• 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**

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

Professional cognitive skills	• 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.
Professional psychomotor skills	• 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.
Professional affective skills	• 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**

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 emphasizes 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

Professional cognitive skills	• 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
Professional psychomotor skills	• 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)
Professional affective skills	• 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**

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	• 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	• 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	• 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	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	• 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	• 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	• 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	*Module Name*	*Theory*		*Practical*		*Total*	
		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**

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	• 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	• 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).
Professional affective skills	• 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**

MS 300: MEDICAL SURGICAL NURSING (28.0 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	• 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. • 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
Professional psychomotor skills	• 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
Professional affective skills	• 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.

Course Content

Code	Module Name	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
MS 301	An overview to adult medical surgical nursing	10	1.0	-	-	10	1.0
MS 302	Nursing Management of Patients with Cardiovascular system disorders	25	2.5	25	2.5	50	5.0
MS 303	Nursing Management of Patients with Respiratory, Gastrointestinal and nutritional disorders.	25	2.5	35	3.5	60	6.0
MS 304	Nursing Management of Patients with Renal and genitourinary, Endocrine and metabolic disorders	20	2.0	20	20	40	4.0
MS 305	Nursing Management of Patients with Cardiovascular, Circulatory and Hematologic, Musculoskeletal and Neurological disorders	30	3.0	30	30	60	6.0
MS 306	Nursing Management of Patients with Oncology disorders and	30	3.0	30	30	60	6.0

Code	Module Name	Theory		Practicals		Total	
		Hrs	Credits	Hrs	Credits	Hrs	Credits
	Infectious/Communicable Diseases						
	Total	**140**	**14.0**	**140**	**14.0**	**280**	**28.0**

TI 300: 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	• 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	• 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	• 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	10	1.0	-	-	10	**1.0**
TI 303	Impact of policies on the nursing profession	10	1.0	-	-	10	**1.0**
	Total	**30**	**3.0**	**-**	**-**	**30**	**3.0**

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 biopsycho-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

Professional cognitive skills	• 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 biopsycho-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
Professional psychomotor skills	• 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 • 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	• 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**

SEMESTER SIX

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	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	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	• 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	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**

PL 300: PRINCIPLES OF LEARNING AND TEACHING (6 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	• 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	• 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	• 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	15	1.5	15	1.5	30	3.0
PL 302	Methods of teaching and learning	15	1.5	15	1.5	30	3.0
	Total	**30**	**3.0**	**30**	**3.0**	**60**	**6.0**

CH 300: COMMUNITY HEALTH NURSING II (14.0 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	• 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	• 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	• 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	10	1.0	-	-	10	1.0
CH 402	FIELD WORK	-	-	130	13	130	13.0
	Total	**15**	**1.5**	**140**	**14.0**	**140**	**140**

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**

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	• 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	• 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	• 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**

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**
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
3. 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
1. To describe basic principles in the diagnosis and management of infectious diseases
2. To describe major clinical syndromes and their etiological agents
3. 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)** • Gen.Anaesthesia • Spinal naethesia • Local techniques • Trauma Anaesthesia • Emergencies in anaesthesia	**Total Hrs 162** • Principles of critical care • Basics of artificial ventilation • Special critical care • Invasive techniques in ICU • Infectious diseases in critical care medicine	**Total Hrs 80** • The cardiovascular system • The haematological system • Fluid management and blood transfusion • Physics	**Total Hrs 67** • Anaesthesia in common diseases • Anaesthesia in uncommon diseases • Obstetrics anaesthesia • Orthopaedic and trauma anaesthesia • Paediatrics anaesthesia • Geriatric anaesthesisa • Special anaesthesia Production of infusion solutions	**Total Hrs 40** • **Cardiothoracic anaesthesia** • **Neuroanaesthesia**
		Dissertation • Choice of relevant topic and literature search	**Dissertation** • Choice of relevant topic and literature search • Data collection and write up	**Dissertation** Data collection and write up	**Dissertation** • **Final write up and submission** • **Defense of thesis**
Paediatrics	**Total Hrs 87** • General paediatrics and Child Health • Preventive paediatrics • Neonatology • Emergencies in paediatrics	**Total Hrs 110** • Developmental paediatrics • Nutrition and malnutrition • The nervous system • The respiratory tract	**Total Hrs 85** • The cardiovascular system • Diseases of blood • Paediatric oncology •	**Total Hrs 105** • The digestive system • Metabolic disorders and storage diseases • Nephrology • The endocrine system • Paediatric dermatology	**Total Hrs 85** • **Immune system** • **Infectious diseases and tropical paediatrics**

MMED Course	*Semester 2*	*Semester 3*	*Semester 4*	*Semester 5*	*Semester 6*
		Dissertation • Choice of relevant topic and literature search	**Dissertation** • Choice of relevant topic and literature search Data collection and write up	**Dissertation** Data collection and write up	**Dissertation** • **Final write up and submission** • **Defense of thesis**
Surgery	**Total Hrs 192** • Principles of Surgery • Urology	**Total Hrs 168** • Abdominal Surgery • Paediatric Surgery	**Total Hrs 168** • Orthopaedics and Traumatology • Principles of anaesthesiology	**Total Hrs 168** • Thoracic surgery • Head and neck surgery Gynaecological surgery	**Total Hrs 193** • Neurosurgery • Recent advances in surgery • Revision
		Dissertation • Choice of relevant topic and literature search	**Dissertation** • Choice of relevant topic and literature search Data collection and write up	**Dissertation** Data collection and write up	**Dissertation** • **Final write up and submission** • **Defense of thesis**
Obstetrics and Gynaecology	**Total Hrs75** • Clinical approach to gynaecologic and obstetric patients • Preventive obstetrics Breast function and its disorders	**Total Hrs 85** • General gynaecology • Gynaecologic neoplasia/ oncology	**Total Hrs 75** • Problems of sex and marriage & pregnancy	**Total Hrs 80** • Abnormalities of pregnancy and labour • Common complications of pregnancy	**Total Hrs 65** • **Other obstetrical problems** • **Ethics in obstetrics and gynaecology**
		Dissertation • Choice of relevant topic and literature search	**Dissertation** • Choice of relevant topic and literature search Data collection and write up	**Dissertation** Data collection and write up	**Dissertation** • **Final write up and submission** • **Defense of thesis**
Internal Medicine	**Total Hrs 786** • Infectious diseases • Cardiology • Respirat	**Total Hrs 764** • Dermatology • Haematology • Nutritio	**Total Hrs 921** • Rheumatology • Gastroenterology • Neurology • Clinical	**Total Hrs 709** • Nephrology • Geriatrics • Clinical apprenticeship	**Total Hrs 768** • **Chronic disorders and terminal care** • **Paediatrics**

MMED Course	*Semester 2*	*Semester 3*	*Semester 4*	*Semester 5*	*Semester 6*
	ory diseases • Clinical apprenticeship	n and metabolic diseases • Clinical apprenticeship	apprenticeship		• **Psychiatry** • **Clinical apprenticeship**
		Dissertation • **Choice of relevant topic and literature search**	**Dissertation** • **Choice of relevant topic and literature search** • **Data collection and write up**	**Dissertation** **Data collection and write up**	**Dissertation** • **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.

ii) Dedication and acknowledgements
iii) Table of contents
iv) List of Figures
v) List of Tables
vi) Abstract
vii) Introduction
viii) Literature review
ix) Materials and Methods
x) Results
xi) Discussions
xii) Conclusions
xiii) Recommendations
xiv) References
xv) 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 School and 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
MPH 604	Reproductive Health	37.	2.5	22	5	60	3

Course Code	*Course Title*	*Theory*		*Practical*		*Total*	
		Hours	**Units**	**Hours**	**Units**	**Hours**	**Units**
	and foundation of populations						
					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
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

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**

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 altitudes 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 as per M.Med dissertation guidelines page 277.

MASTER OF SCIENCE IN PAEDIATRIC NURSING

ARCHBISHOP ANTHONY MAYALA SCHOOL OF NURSING
MASTER OF SCIENCE IN PAEDIATRIC NURSING

1.8 BACKGROUND INFORMATION OF THE PROGRAM
1.9 Name of the programme and its expected learning outcomes

The program name is Master degree in Paediatric Nursing (MSc.PN) which offers full time training with one exit level at the end of the program. The main goals of the program is to conduct a course of professionals and scholars concerned with caring of neonates, infants and children who will be responsive to the dynamic and rapidly changing world known to affect children's development. Its' learners are expected have necessary knowledge skills and competencies which enable them to become analytical advisors, scholars and effective managers and leaders in their field of paediatric nursing.

1.2 Expected Learning Outcomes

At the end of the program the MSc.PN graduate will have:-

A. Knowledge

To be able to:

i. Analyse critically theories, concepts and principles of human growth and development in the provision of paediatric nursing care to children.
ii. Integrate effectively basic sciences knowledge and understanding in the care of children with diverse health conditions including those with special needs
iii. Appraise theories and principles of nursing during provision of care to children with medical, surgical conditions; both in acute, chronic and during emergency situations.
iv. Apply theories and models of community paediatric nursing promotion activities for children in healthcare and community settings
v. Adapt appropriate evidences in paediatric nursing profession for provision of quality services to neonates infants and children
vi. Analyse major global health issues, policies and structures that affect children's health and health care
vii. Apply ethical knowledge and understanding when interacting with children and families from diverse social, economic and cultural backgrounds.

B Skills

To be able to

i. Design paediatric nursing care plan models appropriate for nursing of neonates, infants and children with diverse health conditions and situations
ii. Manage effectively implementation of care to neonates infants and children with medical, surgical conditions; both in acute, chronic and during emergency situations including children with special needs.
iii. Coordinate paediatric nursing care activities using available resources in different work settings
iv. Apply scientific principles in designing, conducting, disseminate findings on research related to children's health
v. Use evidence based paediatric nursing practice to solve neonatal, infants and children's health problems
vi. Utilise appropriate measurement tools to measure growth and development of neonates, infants and children

vii. Teach colleagues, junior staff, parents and families on issues pertaining to children's' health promotion and disease prevention
viii. Demonstrate morality and high ethical standards during provision services to children and families from different social, economic and cultural backgrounds

C Competencies

To be able to:

i. Appraise health research for policy advise in provision of quality paediatric nursing care
ii. Present research findings in scientific conferences, policy makers' meetings and in other professional peers 'audiences.
iii. Demonstrate creativity and independency when dealing with care of complex paediatric nursing issues, conditions and situations arising in her /his mandate.
iv. Adapt nursing, medical and research ethical principles in dealing with legal and practical problems facing nursing professionals and the healthcare system
v. Comply with compassionate care principles to the sick and well neonates, infants, children and families from diverse backgrounds
vi. Set quality assurance standards in her /his area of work in line with the existing systems
vii. Demonstrate sensitivity of others' views and opinions in issues related to the pediatric nursing profession

Minimum credits for the program is 190 to be delivered in two years

1.3PURPOSE OF THE PROGRAM

The MSc.PN program purpose is to

i. Develop a specialized professional nurses in the field of pediatric nursing for improved participation and operationalization of health policy
ii. Promote pediatric nursing knowledge skills and competencies among learners for future employers' and community satisfaction.
iii. Entice self-realization, team work, problem solving, analytical and decision making skills that enable graduates to perform efficiently and aspire for lifelong learning
iv. Promote moral, legal and high ethical conduct among pediatric nursing professionals.

2.0 ORGANISATION OF THE PROGRAMME

The MSc.PN degree programme offered at CUHAS will be by course work and dissertation. The programme will be for two years, divided into three semesters of 60/70 credits each. The course work consists of 16 courses/modules as indicated in the structure of the program below

3.0 STRUCTURE OF THE PROGRAMME

SEMESTER 1

Course Code	*Course Title*	*Theory*		*Practical*		*Total*	
		Hours	Credits	Hours	Units	Hours	Credits
BC 600	Principles of Biochemistry	**40**	**4**	**40**	**4**	**80**	**8**
CP 600	Clinical Pharmacology	**40**	**4**	**40**	**4**	**80**	**8**
GD 600	Essentials of growth and development	**70**	**7**	**50**	**5**	**120**	**12**
EP 600	Ethics , Principles and Practices of pediatric nursing	**50**	**5**	**70**	**7**	**120**	**12**
NM 600	Nutrition and Malnutrition	**50**	**5**	**50**	**5**	**100**	**12**
EB 600	Epidemiology and Biostatistics	**60**	**6**	**40**	**4**	**100**	**10**
PH 600	Clinical Physiology	**85**	**8.5**	**-**	**-**	**85**	**8.5**
						700	**70**

SEMESTER 2

Course code	*Course title*	*Theory*		*Practical*		*Total*	
		Hours	*Credits*	*Hours*	*Credits*	*Hours*	*Credits*
PE 600	Paediatric Emergencies	**90**	**9**	**80**	**8**	**170**	**17**
PS 600	Nursing in Paediatric	**60**	**6**	**100**	**10**	**160**	**16**
NP 600	Neuropsychiatry and Clinical Psychology	**70**	**70**	**40**	**4**	**110**	**11**
NN 600	Nursing in Neonatology	**70**	**7**	**90**	**9**	**160**	**16**
Total						**600**	**60**

SEMESTER 3

Course Code	*Course Title*	*Theory*		*Practical*		*Total*	
		Hours	Credits	Hours	Units	Hours	Credits
PD 600	Nursing in Pediatric hematology and Oncology	40	4	40	4	80	8
MI 600	Microbiology and Infections in Children	60	6	40	4	100	10
PD 600	Specific Pediatric Conditions and Diseases	35	3.5	40	4	75	7.5
PR 600	Chronic Diseases and pediatric rehabilitation	45	4.5	40	4	85	8.5
RD600	**Research Design**	70	7	140	14	210	12
Total						700	70

SEMESTER I

COURSE CONTENT:

BC 600: PRINCIPLES OF BIOCHEMISTRY (8 credits)

The course aims to equip learners with adequate concepts and principles of biochemistry knowledge skills and attitudes needed for paediatric nursing practice

Objectives: At the end of this module the student shall be able to:

- Differentiate the mechanisms of principal metabolic disorders of children and adults
- Apply the basic molecular biology concepts of inflammation in managing neonates, infants and older children
- Manage children with hormonal dysfunctions
- Use knowledge of biochemical alteration in embryonic development in the care of neonates, infants and older children with congenital malformations
- Integrate knowledge and skills of blood gases functions in the caring for premature babies, neonates, infants and older children
- Assess the hemostasis status of critically ill neonates, infants and older children
- Design and implement children's care plans according to the biochemical laboratory findings

CONTENTS OF MODULES AND HOURS

Module	***Module code***	***Course contents***	***Theory***		***Practicals***		***Total***	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
1	BC 601	Enzymology, Co-enzymes and Energy Transformation	10	1	10	1	20	**2**
II	BC602	Hormone System and biochemistry of congenital diseases	20	2	10	1	30	**3**
III	BC 603	Biochemistry of blood gases and buffer system	20	2	10	1	30	**3**
	Total		**50**	**5**	**30**	**3**	**80**	**8**

CLINICAL PHARMACOLOGY –CP 600 (8 credits)

Course Aim

At the end of the course the student will be able to apply knowledge skills and competencies of drugs used to neonatology and pediatric nursing management. Emphasis will be on the mechanism of action, adverse side effects of drug used and rationalize drug choices for different conditions and age of the child

Students will be given an opportunity to practice skills in prescription and administration of medicines in the clinical settings to also practice the evaluation of expected therapeutic responses in neonates, infants and older children.

Objectives:

- **At the end of the course the student should be able to**
- Apply the concepts and principles of pharmacodynamics and pharmacokinetics
- Comprehend drugs acting in different body systems and their effects to neonates , infants and children
- Administer precisely the treatments to sick neonates, infants and older children according to their body system
- Manage neonates, infants and older children with adverse effects of drugs in nursing practice
- Prescribe emergency treatments in her/his mandate

Module	*Module code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	Units	Hrs	Units	Hrs	**Units**
I	CP 601	General pharmacological principles and drug administration in pediatric nursing	10	1	10	1	20	**2**
II	*CP 602*	Drugs affecting transmission and function in children	15	1.5	10	1	25	**2.5**
III	*CP 603*	Drugs affecting blood coagulation, fibrinolysis and platelet aggregation.	15	1.5	10	1	25	**2.5**
IV	*CP 604*	Adverse drug events	5	0.5	5	0.5	10	**1**
		Total	**45**	**4.5**	**35**	**3.5**	**80**	**8**

ESSENTIALS OF GROWTH AND DEVELOPMENT –GD 600 (12credits)

AIM

The aim of this course is to ensure that all students are be able to apply knowledge, skills and competencies in human growth and development concepts and principles. The students will be exposed evaluate disorders of growth and development in relation to chronic and severe illnesses occurring to children and adults in the clinical practice

.

Objectives

At the end of this module the student shall be able to:

- Differentiate normal patterns of growth to deviations from normal among neonates, infants and older children .
- Apply the standard benchmarks to evaluate normal growth during assessments of normal and sick neonates, infants and older children.
- Interpret growth charts in different situations when dealing with disorders of growth and development to neonates, infants and older children.
- Perform developmental and behavior surveillance and screening tests according with developmental milestones.
- Teach anticipatory guidance skills to young families on children's injury an, violence prevention to foster optimal development of infants and children.
- Evaluate a well-child to maintain children's health in RCH clinics and in the community settings.
- Evaluate a child with special health care needs at the clinical and community settings

Module	*Module Code*	*Course Contents*	*Theory*		*Practicals*		*Total*	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	GD 601	Human growth and development at different age groups	**30**	**3**	**20**	**2**	**50**	**5**
II	GD 602	Disorders of growth and development	**25**	**2.5**	**20**	**2**	**45**	**4.5**
III	GD 603	Anticipatory Guidance	**15**	**1.5**	**10**	**1**	**25**	**2.5**
		Total	**70**	**7**	**50**	**5**	**120**	**12**

ETHICS PRINCIPLES AND PRACTICES OF PAEDIATRIC NURSING –EP 600 (12 credits)

AIM

The course aims to allow students to have an ability to utilize knowledge, skills and competencies of ethical decision making and advanced pediatric nursing principles and practices at different levels of care settings by using nursing process. The students will be exposed to clinical practice to enhance their ability to assess, write nursing diagnoses, plan, implement care with compassion, and evaluate care given to hospitalized children.

Objectives

At the end of the module/course all learners should be able to:-

- Utilise legal and ethical decision making principles to encounter challenges in the care of neonates, infants and children with their families
- Design appropriate physical facilities of a children's units at the clinics, health centres a hospitals including the rehabilitation units
- Adapt appropriate pediatric nursing care models and procedures to support sick neonates, infants and children
- Conduct comprehensive assessments to the sick neonates, infants and older children
- Plan care for a sick children affected with acute or chronic conditions
- Examine sociocultural, religious and ethical values of families with neonates, infants and normal sick children under care
- Apply compassionate care principles in the care of sick children and their families

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	BP 601	Healthcare adaptations for children and their families	10	1.0	10	1	20	**2**
II	BP 602	Nursing Ethics	25	2.5	35	3.5	70	**7**
III	BP 603	Selected Pediatric Procedures	10	1.0	20	2	30	**3**
IV	BP 604	Facing Death with child and Family	5	0.5	5	0.5		**1.0**
Total			**50**	**5.0**	**70**	**0.6**	**120**	**12**

NUTRITION AND MALNUTRITION-NM 600(100 credits)

Course Aim

The aim of the course is to ensure that students are able to implement skills and competencies related to feeding in neonates, nutritional counseling of parents for their infants and manage children with nutritional disorders

Objectives

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

- Demonstrate precision in nutritional assessments of neonates, infants and older children and
- Contrast the techniques of feeding preterm, full term neonates, infants and old children
- Perform nutritional counselling to parents with infants having difficulties of feeding
- Manage neonates, infants and older children with nutritional disorders and diseases

Course contents:

Module	***Module Code***	***Course Contents***	***Theory***		***Practical***		***Total***	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	NM601	Nutrition Assessment to neonates Infants and children	10	1.0	10	1	20	**2**
II	NM602	Epidemiology of the major nutrition disorders	15	1.5	10	1	25	**2.5**
III	NM 603	*Nursing care of children with nutritional disorders*	25	2.5	30	3.0	55	**5.5**
Total			**50**	**5.0**	**50**	**5.0**	**100**	**10**

EPIDEMIOLOGY AND BIOSTATISTICS –EB 600 (10 credits)

Course Aim

The aim of the course is to analyze epidemiological conditions and apply advanced principles of biostatistics in explaining disease status for policy advice. Learners will be given opportunity to develop studies related to children's conditions with a focus on epidemiological and concepts of biostatistics

Objectives

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

- Conduct and analyse epidemiological studies focusing in children and their families
- Demonstrate precision in variety of calculations relevant to children's care
- Perform data analysis using variety of statistical packages common for epidemiological studies
- Appreciate the importance of evidence based epidemiological information related to

Course content

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	EB601	Principles of Epidemiology	25	2.5	20	2	45	**4.5**
II	NM602	Biostatistics in epidemiological studies	40	4.0	15	1.5	55	**5.5**
Total			**65**	**6.5.**	**35**	**3.5**	**100**	**10**

CLINICAL PHYSIOLOGY - PH 600 (8.5 Credits)

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:

- Describe the normal physiology of various body systems
- Describe the pathophysiology of common disease conditions
- Discuss the physiological basis of diagnosis and treatment

Course content

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	PH 601	Clinical Physiology of fluid, blood and immuneresponse	20	2.0	-	-	20	**2.0**
II	PH602	Clinical physiology of the Cardiorespiratoy and renal system	20	2.0	-	-	20	**2.0**
III	PH603	Clinical Physiology of Metabolism, Endocrinology and reproductive physiology	30	3.0	-	-	30	**3.0**
IV	PH 603	Clinical Neurophysiology	15	1.5	-	-	15	**1.5**
Total			**85**	**8.5.**	**-**	**-**	**85**	**8.5**

SEMESTER TWO

PAEDIATRIC EMERGENCIES AND INTENSIVE CARE -PE 600 (17 credits)

Course Aim
At the end of this course students will be able be manage effectively paediatric emergencies, triage and life support to children in different situations. They will also be exposed to knowledge, skills and competencies of intensive care nursing to neonates, infants and children.

Objectives
At the end of the course students will be able to:

- Perform triage/initial assessment in emergencies occurring to children
- Coordinate the healthcare team and resources in emergency and response involving children
- Utilise the 4 elements of acute care focusing on areas of chief complaints in children's emergencies
- Analyse haemostatic status of a critically ill neonates, infants and older children
- Conduct effective cardiopulmonary and cerebral resuscitation to affected children
- Manage acute fevers, bleeding and pain after an emergency to a child
- Predict and treat for shock in emergency situations in children
- Assemble correctly monitoring devises in emergency situations

Course Contents

Module	***Module Code***	***Course Contents***	***Theory***		***Practical***		***Total***	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	PE 601	General approaches and principles of emergencies and in acute situations	20	2	30	3	50	**5**
II	PE 602	Care of a critical ill child and neonate in the different emergency situations	20	2	30	3	50	**5**
III	PE 603	Pediatric Basic Life Support (PBLS/CPR)	10	1.0	25	2.5	35	**3.5**
IV	PE 604	Management of modern monitoring devices in emergency	15	1.5	20	2.0	35	**3.5**
Total			**65**	**6.5**	**105**	**10.5**	**170**	**17**

NURSING IN PAEDITRIC SURGERY AND ORTHOPAEDICS PS 600 (16 credits)

Course Aim
At the end of this course the students will be able to apply knowledge skills and competencies in surgical nursing and care of injured neonates and infants and children

Objectives

- Manage infants and children with gastro intestinal and genital urinary surgical conditions disorders
- Determine sick neonates and children who require surgical interventions and trauma care
- Design nursing care plan for children with surgical conditions in pre, intra and post-operative phases
- Utilize Glasgow Coma scale to assess neonates' infants and older children's responses
- Interpret laboratory evaluation of a major trauma infants and older children
- Execute appropriate support to children with spinal cord abdominal, thoracic spleen , liver, renal, pancreatic and intestinal injuries

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	*Credits*	*Hrs*	*Credits*	*Hrs*	*Credits*
I	PS 601	Gastrointestinal and genital urinary surgical conditions in children	20	2.0	30	3	50	**5**
II	PS 602	Nursing care in neonates and children with surgical conditions	35	3.5	25	2.5	60	**6**
III	PS 603	Management of surgical devices in children	25	2.5	25	2.5	50	**5**
Total			**80**	**8**	**80**	**8**	**160**	**16**

NEUROPSYCHIATRY AND CLINICAL PSYCHOLOGY (10 credits)

Course Aim

At the end of the course students will be able to manage children with different forms of Psychiatric disorders. Students will gain knowledge, skills and competencies of normal and abnormal neurological development of children including criteria used to diagnose different types of psychiatric disorders.

Students will have an opportunity to practice nursing management for such children and develop case studies after a physical exposure of cases at the psychiatric unit of the main teaching hospital Bugando Medical centre (BMC)

Objectives

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

- Conduct mental health assessment of a child predicted to have a psychiatric disorder
- Utilize appropriate criteria in the diagnosis of
  - Somatoform disorder
  - Conversion disorder
- Anxiety disorders-panic disorder and panic attack, generalized anxiety disorder
  - Post-traumatic stress disorder
  - Specific phobias
  - Major depressive episode
  - Bipolar disorders
  - Obsessive compulsive disorder
  - Autistic disorder
  - Schizophrenia
- Plan and implement nursing care to children with psychiatric /mental health disorders
- Write case studies on different children's' mental health/psychiatric conditions and present to peers
- Prescribe appropriate treatments for children and adolescents with common psychiatric /mental health disorders
- Design health promotion interventions for families with children affected with psychiatric/mental health disorders

Course Contents

Module	***Module Code***	***Course Contents***	***Theory***		***Practical***		***Total***	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	NP 601	Normal neurological development in the children	30	3.0	20	2.0	50	**5**
II	NP602	Diagnoses of psychiatric /mental health disorders	15	1.5	20	2.0	35	**3.5**
III	NP 603	Mental health promotion	7	0.7	8	0.8	15	**1.5**
		Total	**52**	**5.2**	**48**	**4.8**	**100**	**10**

NURSING IN NEONATOLOGY-NN 600 (16 Credits)

Course Aim

At the end of the course the student will be able to apply knowledge, skills and competencies relevant for neonatal nursing care. Students will have ability to differentiate the practices of neonatology for babies at term, pre-term and post-term conditions and diseases.

Expected Course Outcomes

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

- Manage care of the neonates at different stages-at term, preterm and post term
- Conduct late fetal and early neonatal assessment at birth, after 24 hrs and during discharge from the hospital
- Analyse the major causes of perinatal and neonatal mortality worldwide, regional and in Tanzania
- Differentiate problems occurring in intrauterine growth restriction, small for gestational age
- Teach junior staff /students the taking a perinatal history with its importance
- Develop nursing care plans for sick neonates with
  - Birth asphyxia
  - life-threatening congenital anomalies
  - neonatal cyanosis
  - hypocalcaemia
  - and diabetes
  - Hyperthyroidism
  - Systemic lupus erythematosus
  - Asthma and prematurity
  - Anaemia
  - Coagulation disorders
  - Neonatal seizures
  - Intracranial hemorrhage
- Demonstrate compassion and support to families with sick neonates

Course Contents

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	*Credits*	*Hrs*	*Credits*	*Hrs*	*Credits*
I	**NN 601**	Nursing care of the neonates at term, preterm and post term	30	3.0	20	2.0	50	**5**
II	**NN602**	Neonatal conditions and diseases	30	3.0	30	3.0	60	**6**
III	**NN 603**	Prevention of neonatal deaths	30	3.0	20	2.0	50	**5**
		Total	**90**	**9.0**	**70**	**7.0**	**160**	**16**

SEMESTER THREE

PAEDITRIC NURSING IN HAEMATOLOGY AND ONCOLOGY – P0 600(8 credits)

Course Aim

At the end of the course students will have knowledge skills and competencies of blood disorders and cancers. Students will have skills of diagnostic procedures and therapeutic protocols necessary to treat children with haematological and oncological problems

Objectives

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

- Perform haematology and oncology assessment to neonates, infants and children
- Comprehend with examples the presentation of haematological disorders among children
  - Differentiate different types of anaemias to include iron deficiency anaemia, microcytic, normocytic anaemia and the cycle cell syndrome
  - Manage children with haematological disorders such as
  - Anaemias
  - Haemostatic disorders – haemophilia, platelet dysfunction, thrombotic problems, intracranial haemorrhage
  - Manage neonates, infants and older children on blood transfusion
  - Design nursing care interventions to children with oncological disorders
    - Leukaemia
    - Central Nevous system tumors
    - Neuroblastoma
    - Wilms tumor
    - Sarcomas
  - Apply principles and practices of cancer treatment in the care of children under chemotherapy, radiotherapy and bone marrow transplantation

Course Contents

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	PO601	Common haematological disorders	10	1.0	10	1	10	**2**
II	PO602	Common Types of Cancers to children	15	1.5	15	1.5	30	**3**
III	PO 603	Cancer treatments	20	2.0	10	1	30	**3**
Total			**45**	**4.5**	**35**	**3.5**	**80**	**8**

MICROBIOLOGY AND INFECTIOUS DISEASES IN CHILDREN (10 credits)

Course Aim

At the end of the course the student will be able manage children with different types of infectious diseases and have skills to detect microorganisms such as bacteria, viruses, fungi and protozoa for appropriate formulation of nursing diagnoses and write correct drug prescriptions under her mandate to children

Objectives

At the end of the course students will be able to

- Detect different types of micro-organisms of importance to children's, health
- Asses the sick child to exclude /diagnose infections
- Localize manifestations for infections among children
- Manage care to children with different types infections listed below
    - Fever without focus
    - Infections characterized by fever and rash
    - Cutaneous infections
    - Lymphadenopathy
    - Meningitis
    - Encephalitis
    - Upper respiratary tract infections
    - Pertusis syndrome
    - Bronchiolitis
    - Pneumonia
    - Ocular infections
    - Endocarditis
    - Tuberculosis
    - HIV and AIDS
    - Viral hepatitis
    - Urinary Tract Infections
    - Parasitic diseases
- Utilise appropriate skills in using different medical laboratory equipment
- Apply principles and practices of infection prevention

Course Contents

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	*Credits*	*Hrs*	*Credits*	*Hrs*	*Credits*
I	MI 601	General Bacteriology, Virology, mycology and parasitology	10	1.0	10	1.0	10	**2**
II	MI602	Transmission mechanisms, preventive measures and measures of isolation	15	1.5	15	1.5	30	**3**
III	MI 603	Infectious diseases in neonates and children	20	2.0	30	3.0	50	**5**
Total			**45**	**4.5**	**55**	**5.5**	**100**	**10**

SPECIFIC PAEDIATRIC DISEASES _ PD 600 (7.5 credits)

Course Aim

At the end of the course students will be able to apply knowledge skills and competencies of caring to children different paediatric conditions. The students will be able to use their knowledge and skills to prescribe for treatments which are under their mandate, implement nursing care and teach junior staff and student the common procedures of care needed for different paediatric conditions

Objectives

- Manage the care of infants and older children with acute and chronic diseases and conditions by system
- Acute and chronic respiratory diseases, respiratory distress, lung diseases
- Cardio logical congenital and acquired diseases.
- Hepatic and abdominal diseases.
- Acute and chronic renal and urinary tract diseases and malformations.
- Acute and chronic diseases of the central nervous system
- Acute and chronic diseases of the digestive system

Course Contents

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	Credits	Hrs	Credits	Hrs	**Credits**
I	PD 601	Nursing management of acute children diseases	20	2	20	2	40	**4**
II	PD 602	Prevention of specific diseases	20	2.0	15	1.5	35	**3.5**
Total			**40**	**4.0**	**35**	**3.5**	**75**	**7.5**

CHRONIC DISEASES AND PAEDIATRIC REHABILITATION – PR 600- (8.5 credits)

Course Aim:
At the end of the course students will be able to apply knowledge skills and competencies in the care of children with chronic diseases and demonstrate disease rehabilitation skills

Objectives
At the end of the course students will be able to

- Apply knowledge on tertiary prevention to children under rehabilitation management at home and in care centres
- Manage children with severe and chronic conditions and diseases
- Utilise appropriate rehabilitation techniques in the care of children with disabilities
- Teach and counsel children and families with infants and older children with chronic diseases and disability
- Design a nursing care plan for children with disabilities / neurological chronic disease
- Collaborate with other healthcare team in management of children with disabilities/ neurological chronic disease
- Use pain control techniques and educational strategies in palliative care
- Manage reactions to disabled children and their affected families

Course Contents

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	*Credits*	*Hrs*	*Credits*	*Hrs*	*Credits*
I	PR 601	Neuromotorial disability in children	10	1	15	1.5	25	**2.5**
II	PR 602	Congenital and acquired diseases conducting to disability	10	1	15	1.5	25	**2.5**
III	PR 603	Assisting and counseling the child / family with disability	15	1.5	20	2.0	35	**3.5**
Total			**35**	**3.5**	**50**	**5.0**	**85**	**8.5**

PAEDITRIC COMMUNUTY HEALTH NURSING AND HEALTH PROMOTION

Course Aim:

At the end of the course students will be able to apply community health nursing and health promotion models and strategies to manage children's health in their homes/communities

Objectives

- Apply the concepts of epidemiological theories in paediatric community health
- Conduct paediatric community heath surveillance and community needs
- Analyse the population health promotion model
- Integrate health promotion beliefs, principles and measurements in paediatric community health nursing
- Design appropriate IEC materials to promote child health in the community
- Develop tools for assessing health promotion activities for children in the community

Course Contents

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	*Credits*	*Hrs*	*Credits*	*Hrs*	*Credits*
I	PN 701	Epidemiological theories and paediatrics	10	1	10	1	20	**2**
II	PN 702	Health promotion models and actions in relation to	25	2.5	60	6	85	**8.5**

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	*Credits*	*Hrs*	*Credits*	*Hrs*	*Credits*
		paediatric nursing						
III	PN 703	Tools for Community health assessment for children in the community	15	1.5	30	3.0	45	**4.5**
Total			**50**	**5.0**	**100**	**10.0**	**150**	**15.0**

RESEARCH DESIGN- RD 600 (21 Credits)

Course Aim

The aim of the course is to ensure students are able to apply the concepts and skills and competencies of research design; conduct research and disseminate evidences in paediatric nursing to larger community

Objectives

At the end of the course students will be able to

- Use variety of data collection and analysis methods
- Teach research methods to junior staff and students
- Translate research findings into practice
- Advocate research findings to policy makers
- Apply evidence based paediatric nursing at work

Course Contents

Module	*Module Code*	*Course Contents*	*Theory*		*Practical*		*Total*	
			Hrs	*Credits*	*Hrs*	*Credits*	*Hrs*	*Credits*
I	RD 601	Research paradigms	30	3	20	2	50	**5**
II	RD 602	Research methodology	50	5	30	3	80	**8**
III	RD 603	Writing a scientific paper	50	5.0	30	3.0	80	**8.0**
Total			**130**		**80**		**210**	**21.0**

DISSERTATION

Students shall prepare a dissertation on a subject of paediatric nursing related topics. The dissertation shall be in form of research project as per M.Med dissertation guidelines page 277

NOTE:

After semester 3 –Students will be given an opportunity to complete their field work research projects write up and submission of their dissertations before graduation.

A maximum of two months will be allowed before submission of their MSc.PN degree dissertations and defence.

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 4 papers should be enough, provided that the scientific material is enough and comparable to that required in a conventional PhD Thesis. One of the four papers might include review paper on the PhD topic. 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 IIII	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**
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 105-108	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	**3.0**
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	126	2.8	126	**2.8**
Total		**375**	**24.9**	**252**	**5.5**	**625**	**30.4**
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	125	2.8	125	**2.8**
Total		**297**	**19.7**	**250**	**5.5**	**547**	**25.2**
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	0.5	93	**5.1**
LS 321-322	Microbiology III	54	3.6	10	0.2	64	**3.8**
LP 325	Practicals III	0	0	81	1.8	81	**1.8**
LP 332	Field Practice	0	0	320	7.1	320	**7.1**
Total		**371**	**24.6**	**482**	**10.6**	**853**	**35.2**
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	4.7	19	0.4	89	**5.1**
LS 323-324	Microbiology IV	43	2.8	10	0.2	53	**3.0**
LP 326	Practical IV	0	0	62	1.4	62	**1.4**
Total		**241**	**16**	**124**	**2.7**	**365**	**18.8**

STUDENTS PRIZES

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. **Twenty Eleven Team Tanzania Scholars Award:**
   For the academically overall best student in each year of study for the MD programme.

6. **The Hartfield Academic, Research and leadership Award**
   Hartfield award to the best MPH candidate who has shown academic, research and leadership excellence.

STAFF LIST

STAFF LIST

SENIOR STAFF

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Deputy Vice Chancellor Academics, Research & Consultancy
Prof. S. E. Mshana, — *MD (UDSM), MMED (Makerere), PhD (SAUT), Fell.Med.Edu. (FAIMER)*

Deputy Vice Chancellor Finance, Planning and Administration
Rev. Dr. Agapit Mroso, OFMCap — *Licentiate in Dogmatic Theology (Gregorian- Rome), M. Spiritual Theology (Angelicum-Rome), PhD (Gregorian-Rome)*

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

Associate Dean, School of Medicine

Dean, School of Pharmacy
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Internal Auditor
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Chaplain
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Corporate Counsel
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UNIVERSITY-WIDE DEPARTMENTS/UNITS

OFFICE OF DEVELOPMENT & PLANNING
Head: Vacant

COMPUTING CENTER

Head of Computing Center
I. M. Khangane, *BSc (Eng), MSc (I.T.)*

Senior Computer programmer/Analyst
M.J. Magori *Adv. Dipl. ICT (Carlisle, UK); B.Sc.(Hons) in ICT (Glamorgan UK); Post Grad. Dipl in Computer Security (Glamorgan UK)*

Systems and Network Administrator
E. Malisha, *Cert. Comp. Studies; Dipl. IT (UCC), B.Sc (IT) (SAUT)*

Computer Technicians
A. Mihayo *Dipl. I.T (UCC)*
A. Urassa *Cert I.T, Dipl. I.T (UCC)*

UNIVERSITY LIBRARY

Ag. Head University Library
Y. Machimu *Dipl. LADS (Bagamoyo)*

Library Officer
A. Gihega *Dipl. LADS (Bagamoyo), BALIS (Tumaini Univ. Dar)*

Library Assistant
S. Kishosha *Cert.Libr (Bagamoyo)*

O. Joachim *Cert.Libr(Bagamoyo)*

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

Associate Dean

DEPARTMENT OF ANATOMY & HISTOLOGY

Head

Professor

A.P. Gesase,	*M.D. (UDSM), Ph.D (Japan):*	*Visiting*
E.P. Mtui	*MD (UDSM), MSc. PhD*	*Visiting*

Associate Professor
*Mange Manyama, *MD (UDSM), M.Sc(Makerere), PhD(Calgary)*
On Leave
Assistants Lecturer
E. J. Mazyala, *DDS (UDSM), MSc.(Stellenbosch)*

Tutorial Assistant

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N.I. Magele	*MD (HKMU)*
Mary Ndibalema	*MD (CUHAS)*

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DEPARTMENT OF BIOCHEMISTRY

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Senior Lecturer
B. Kidenya, *MD (UDSM), MSc (Makerere), MSc. Clin Epidemiology (Cornell, NY)*

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F. A. Tarimo	*MD (CUHAS)*

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Senior Lecturer

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H. Jaka	*MD (HKMU),MMed (SAUT),MSc. Med. Edu (Maastricht)*

Lecturer

A.H. Kieti	*MD (HKMU), MMED (Nairobi)*
N. Masalu	*MD, MMED*
S.B. Kilonzo	*MD, MMED (CUHAS)*
W. Gunda	*MD, MMED (CUHAS)*
N. Mang'ondi	*MD (MUHAS), MMED (KCMC)*
F.M. Kalokola	*MD (MUHAS), MMED (Makerere)*
E.F.S. Mujuni	*MD (MUHAS,MMED (MUHAS)*
P. Masikini	*MD (SAUT,MMED (CUHAS)*
I. Nkandala	*MD (MUHAS,MMED (MUHAS)*

Tutorial Assistant

S. Matuja	*MD (CUHAS)*

UNIT OF MEDICAL ETHICS & UNIT OF SOCIAL ETHICS

Lecturer and Head

DEPARTMENT OF MICROBIOLOGY/IMMUNOLOGY

Senior Lecturer and Head

J.J. Seni,	*MD (UDSM), MMED (Makerere)*

Professor

S. Mshana,	*MD (UDSM), MMed (Makerere), PhD (SAUT), Fell.Med.Edu. (SA)*

Senior Lecturer

M. Mirambo,	*BVM (SUA), MSc (LSTMH* J.	
Changalucha,	*MSc:*	Visiting
P. Wambura,	*B.Vet (SUA), M.V.M. (SUA), PhD (SUA)*	Visiting

Lecturer

M Majigo	*MD (UDSM), Mmed (UDSM)*	Visiting
M.F. Mushi	*BSc, MSc (Makerere)*	

Tutorial Assistant

N. Moremi MD (SAUT)

DEPARTMENT OF OBSTERTRICS & GYNAECOLOGY

Lecturer and Head
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Senior Lecturer
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R. N. Rumanyika, MD (UDSM), MMed (*Obst & Gynae) (*Nbi)

Lecturer
A. Kajura, *MD (UDSM), MMed (Obst & Gynae)(UDSM)*
N. M. Ng'walida, MD (UDSM), MMed *(Obst & Gynae)(UDSM)*
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O.M. Rwakyendela *MD, MMED*
K.R. Forget *MD (MUHAS), MMED (MUHAS)*
H.I. Mbena Sr. *MD (HKMU), MMED (CUHAS)*
C. Chuma Sr. *MD (HKMU), MMED (CUHAS)*
P.A. Shayo *MD (SAUT), MMED (SAUT)*
B.H. Kitange *MD (HKMU), MMED (CUHAS)*
F. Mujuni *MD (SAUT)*
E.C. Chibwe *MD (SAUT), MMED (CUHAS)*

DEPARTMENT OF OPTHALMOLOGY

Lecturer
S. Hassan, *MD (UDSM), DOMS (UK)*
E. Mgaya *MD (MUHAS), MMED (KCMC)*

DEPARTMENT OF PAEDIATRICS

Senior Lecturer and Head
Hokororo Aldofine *MD (Russia), MMED (Makerere),MSc Clin Epidemiology (WCMC – USA)*

Senior Lecturer
Antke Zuekner *MD (Germany) MMD (Pediatrics), MMD (Neonatology)* : Visiting
Neema Kayange, *MD, MMED (SAUT),MSc Clin Epidemiology (WCMC –USA)*

Lecturer

Mercy Minde	*MD (UDSM); MMED (SAUT)*
Rogatius M. Kabyemela,	*MD (UDSM); MMED (SAUT)*
Epaphura F. Manyama,	*MD (MUCHS), MMED (SAUT)*
D. Mwizamuholya,	*MD*
T. E. Mhada	*MD (MUHAS), MMED (HKMU)*
R. C. Bakalemwa	*MD(MUHAS), MMED(Nairobi)*
F. Mashuda	*MD (MUHAS), MMED (CUHAS)*
Bahati Msaki	*MD, MMED*

Tutorial Assistant

M. Seugendo	*MD (SAUT)*

DEPARTMENT OF PARASITOLOGY/ENTOMOLOGY

Senior Lecturer and Head of Department:

D. Morona	*M. Sc. (LSTMH), PhD*

Senior Lecturer

E. Kweka	*MSc.(Parasitol/Entomol) (Tumaini), PhD (Tumaini) Visiting*
H. Mazigo,	*BVM (SUA), MSc (Med. Parasitology) (Jomo Kenyatta Univ), MPH (CUHAS), PhD (Makerere)*

Assistant Lecturer

M. Zinga	*MD (SAUT), MSc (MUHAS)*
D. Ruganuza	*MD (SAUT), M.Sc(Jomo Kenyatta)*

DEPARTMENT OF PATHOLOGY

Associate Professor and Head:

P. Rambau,	*MD (UDSM), MMed (Makerere)*

Professor

F. Callea,	MD *(Cath. Univ. Rome), PhD (Cath. Univ. Leuven)*

Lecturer

K.J. Kahima	*MD (Krasnodar Russia); MMed (Path) (Makerere)*
E. Tebuka	*MD (CUHAS), M.Med(MUHAS)*

Tutorial Assistant

E. Elias	*MD (CUHAS)*

DEPARTMENT OF PHARMACOLOGY

Professor and Head

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

Associate Professor

Joel Baumgart *BA (Psychology)(Missouri), B,Sc, Biochemistry (Missouri), MA (Columbia), PhD. (Virginia) (Visiting)*

Lecturer

K. Marwa, *BPharm (UDSM), M.Sc (Mbarara University)*

A. Liwa, *MD (HKMU., M.Sc (Stellenbosch)*

DEPARTMENT OF PHYSIOLOGY

Lecturer and Head

H. Dika, *MD (UDSM), M.Sc.(Makerere), PhD (Calgary)*

Professor:

Jacob P. Mtabaji *MB. ChB (Makerere); PhD (New Castle Upon Tyne)*

A.E. Pereka *BVSc. (UDSM), MVM (Dublin), PhD (Copenhagen)* Visiting

Z. E. Masesa, *MBChB (Makerere), PhD. (Lond).*

Senior Lecturer

J.H. Ntogwisangu, *MBChB (Makerere), PhD. (Leeds)*: Visiting

M.A. Njelekela, *MD (UDSM), PhD (Japan):* Visiting

Assistant Lecturer

I. Shaban, *BVM (SUA), M.Sc. (Makerere)*

Tutorial Assistant

E. Malindisa *MD (CUHAS)*

DEPARTMENT OF RADIOLOGY

Senior Lecturer

V.G. Makwaruzi *MD (UDSM), MMED*

Lecturer

E. Mkumbo, MD (Leningrad), MMed (Nbi)

DEPARTMENT OF SURGERY

Lecturer and Head

L. W. Amango *MD (UDSM); MMed (Makerere University)*

Professor

W. Mahalu, *MB.ChB (EA), MMed (Surgery) (UDSM), FRCS (UK)*

Associate Professor

J.M. Gilyoma, *MD (UDSM),MMed (Surgery)(Nbi)*

Senior Lecturer

J.B. Mabula,	*MD, MMed (Surgery) (UDSM)*

Lecturer

G. Mtalitinya	*MD (MUHAS), MMED (MUHAS)*
A. Chandika	*MD (UDSM); MMed (Surg) (Makerere)*
R. Dass.,	*MD, MMed (Surgery) (UDSM)*
M.M. Nkinda,	*MD, MMed (UDSM),M.Sc (UDSM)*
G.C. Giiti	*MD (UDSM); MMed (SAUT)*
J. Igenge	*MD (UDSM); MMED (KCMC)*
I.H. Ngayomella	*MD (UDSM); MMed (Orth) (Makerere)*
F. J. Mbunda	*MD (HKMU), MMED (CUHAS)*
A. Masenga Sr.	*MD (SAUT), MMED (KCMC)*
I.L. Akora	*MD (MUHAS), MMED (Makerere)*
P.N. Sama Tehya	*MD (HKMU), MMED (MUHAS)*
G.E. Buname	*MD (MUHAS), MMED (Makerere)*
V. R. Kotecha	*MD (MUHAS), MMED(Nairobi)*

SCHOOL OF PHARMACY

Professor and Dean

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

Professor

Malele Rainalds	*B.Pharm, PhD.*	*Visiting*
Mwangi Julius	*PhD*	*Visiting*

Senior Lecturer

A. Haule	*B.Pharm (Romania), PhD (UK)*	
Chambuso Mhina	*B.Pharm, PhD*	*Visiting*
Sheila Maregesi	*B.Pharm, PhD*	*Visiting*
Sempombe Joseph	*PhD*	*Visiting*
Nelly Mungai	*PhD*	*Visiting*
Kalala Wilbroad	*M.Sc.*	*Visiting*

Lecturer

Dickson Pius	*B.Pharm*	*Visiting*
Sagenda Raphael	*Ph.D*	*Visiting*
Mihale Motobola	*PhD*	*Visiting*

Assistant Lecturer

Kayo Hamasaki	*MSc. Pharmacy; B.Sc. Pharmacy*	
D. Katabalo	*B.Pharm (MUHAS), M.Sc (Nairobi University)*	
S. Mwita	*B. Pharm (MUHAS)M.Sc (MUHAS)*	
Bipa Josephine	M.Sc.	Visiting

Tutorial Assistant

E. Kimaro	*B. Pharm (MUHAS)*
Nancy Kundy	*B.Pharm (CUHAS)*

ARCHBISHOP ANTHONY MAYALA SCHOOL OF NURSING

Lecturer and Dean

Rose Mjawa Laisser	*ADNE (MUHAS), MSc HEHP (Leeds), PhD (Umea, Sweden)*

Lecturer

Asteria Ndomba	*B.ScN (Dalhouse), M.Sc. Nurs (Uppsala)*
Rose Mlawa Laisser	*ADNE (MUHAS), MSc HEHP (Leeds), PhD (Umea, Sweden)*

Assistant Lecturer

Anastazia E. Dinho	*ADNE, M.A.*
F. Sima	*B. ScN, M. N.*
K. Elizabeth	*B.ScN, M. N*
L. Kabakama	*Dipl.N.(BMC), B.Sc.N (HKMU)*
K. Malale	*B.Sc. N (MUHAS), M.Sc (Kenya Methodist University)*
B. Maendeleo	*B.Sc.N (MUHAS)*

Tutorial Assistant

M.J. Kiyumbi	*Dipl.Nurs, ADM, B.Sc.(Midwifery)*
J. S. Mundamushimu	*B.Sc. Nursing (SJUT)*
L. Nsemwa	*B.Sc. Nursing (MUHAS)*

Clinical Instructor

G. L. Omondi	*B. Sc Nursibg (SJUT): Emergency Unit*
T. K. Kajwangya	*B. Sc. Nursing (CUHAS): Emergency Unit*
D. I. Ntutagi	*B.Sc. Nursing (SJUT): Obstetrics & Gynaecology*
P.L. Mvanda	*B.Sc Nursing (SJUT): Obstetrics & Gynaecology*
R. Rakiru	*B.Sc Nursing (KCMC): Paediatrics*
E. P. Rwegasira	*B. Sc. Nursing (SJUT): Surgery*
J. A. Baluhya	*B.Sc. Nursing (CUHAS): Surgery*
R. J. Ongito	*B.Sc. Nursing (SJUT): Orthopaedics*

SCHOOL OF PUBLIC HEALTH

Senior Lecturer and Dean of the School

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

Associate Dean *(Vacant)*

DEPARTMENT OF COMMUNITY MEDICINE

Lecturer and Head

(Vacant)

Professors

Prof. J. Hatfield	*PhD, CPPsych*	Visiting
Prof. W.E. Thurston	MD, PhD (*Calgary*)	Visiting
Prof. D. Dewey	MD, MSc, PhD (*Calgary*)	Visiting
Prof. T. Donnon	BSc, Bed, MED, PhD (*Calgary*)	Visiting
Prof. D. Strong	MD, PhD(*Calgary*)	Visiting
Prof. L. Baig	*MD, PhD*	Visiting

Senior Lecturers

Rose Goldstein	MD, CM, FRCPC (Calgary)	Visiting
Richard Musto	MD, PhD (Calgary)	Visiting
David Sabapathy	MD, MBA, MPH (Calgary)	Visiting
Rudy Zimmer	MD, PhD (Calgary)	Visiting

Lecturers

A. Kapesa,	*MD, (UDSM), MMED (Comm. Med, MUHAS)*
N. Basinda	MD (SAUT), MMED (MUHAS)

DEPARTMENT OF BIOSTATISTICS, EPIDEMIOLOGY AND BEHAVIORAL SCIENCES

Head of Department: (Vacant)

Professor

Prof. R. Sauve	MD, MMED, FRCS	Visiting
Prof. T. Beran	BA, MSc, PhD	*Visiting*

Senior Lecturer

M. Hardy	MB, BS, FRCSC, MSc (*Clin-Epid*)	Visiting
M. M. Cuodros	MD, MSc (Epi), FACS, FICS	Visiting

Lecturer

Fr. R. Kitambo,	*M.DS (UDSM):*	*Visiting*
Dr. R. Ponsiano,	*MD,(MUHAS), PGD-Mch, MPH*	*Visiting*
E. Konje,	*B.Stat (Makerere), MSc. (CEB) (Makerere)*	

Assistant Lecturer

P.M Ndaki	*MA (DS) (UDSM); B. Theol (Scott Christian Univ. Kenya)*

Tutorial assistant

O. Jahanpour	*MD (CUHAS)*

DEPARTMENT OF ENVIRONMENTAL & OCCUPATIONAL HEALTH AND RESEARCH GIS

Head (Vacant)

Professors

Prof. D. Thomas	BSc, PhD-GIS	*Visiting*
Prof. J. Pekkanen	MD, MSc, PhD	*Visiting*
Prof. K. Raimo	MD, MSc, PhD	*Visiting*
Prof. K. Rasanen	MD, PhD	*Visiting*
Prof. K. Corbert	*MD, PhD*	Visiting

Senior Lecturer

S. Allaire	*MD, PhD*	Visiting
L. McLeod	*MD, FRCSC* (*Calgary*)	Visiting
S. Khan	MBBS, MPH, PhD	*Visiting*

Lecturer

E. Charles	*PHHC*(*Kuopio*), BSc. ESM *(SUA),* MPH*(SAUT).*

INSTITUTE OF ALLIED HEALTH SCIENCES

Director

R. Tibaijuka,	*B.Pharm. Zaparozye Medical Institute,USSR*

SCHOOL OF PHARMACEUTICAL SCIENCES

Tutor and Ag. Head

J.M. Bitoro,	*Diploma, Pharmaceutical Sciences (UDSM), Diploma, Health Personnel Education (CEDHA – Arusha.)*

Principal Tutors

O. Mejja,	*B. Pharm. (UDSM), Executive MBA(Maanstrich - ESAMI).Diploma in Materials Management (NBMM),Diploma. In Pharmaceutical Sciences – UDSM*
R. Tibaijuka,	*B.Pharm.Zaparozye Medical Institute,USSR*

SCHOOL OF DIAGNOSTIC RADIOGRAPHY

Tutor and Ag. Head

J. Mhoja	DDR (SAUT), B. Med. Imaging (Kampala)

Tutors

S.M. Nkwenge,	DDR *(UDSM), Diploma in Health Personnel Education (CEDHA, Bachelor of Education (Open University)*
M.E. Nyandigira,	*Dipl. Med. Radiography*0
E.P. Nabugare	DDR (SAUT), B. Med. Imaging (Kampala)

SCHOOL OF MEDICAL LABORATORY SCIENCES & TECHNOLOGY

Tutor and Ag.Head

A.G. Mujungu	*Dipl. Education (Butimba), B.Sc. (Biotechnology) (SUA)*

Tutors

L. Mhando,	*BSc (Chemistry) (UDSM), MPH (CUHAS)*
A. Materu,	*ADMLT (Clin. Chem) (UDSM)*
Z. Mholya	*DMLS (CUHAS)*
Nabina Golola	*DMLS (CUHAS)*
Betrand Msemwa	*DMLS (CUHAS)*
Mercy A.	*DMLS (MUHAS), BMLS (CUHAS)*

ADMINISTRATIVE AND TECHNICAL STAFF

Name	*Qualification*	Title
Administration		
Rev. Dr. Agapit Mroso, OFMCap	Licentiate in Dogmatic Theology (Gregorian-Rome), M. Spiritual Theology (Angelicum- Rome), PhD (Gregorian- Rome)	Deputy Vice Chancellor (PFA)
Rev. Fr. Paul Nhindilo	*Dipl. Philosophy; B.A Theology (Pontifical Urbanian University), PhD in Canon Law (Pontifical Luteran University)*	Corporate Counsel
Rev. Fr. (Dr) Vincent Mhina	*BA (Ed) Rome; MA (Ed) Rome; PhD (Rome)*	Chaplain
Mr. John M. Mayala	*ADLA (Mzumbe), MPA-HRM (Mzumbe)*	Senior Administrative Officer
Ms Thandiwe Y. Peter	B. Com (Wollongong, Aust), Masters StrtHRM (Wollongong, Aust); Masters in Commerce (Wollongong, Aust)	Personal Assistant to the Vice Chancellor
Ms. Norice Frank	BPA (Mzumbe)	Human Resources Officer
Mr. Daniel Nkuba	BPA (Mzumbe)	Administrative Officer
Ms. Blandina Mahiza	Cert. Rec. Management (TPSC-Tabora); Dipl. Rec. Management (TPSC-Tabora)	Senior Rec. Management Asst.
Mrs. Hellen Simon	Dipl. Secretarial Studies (TPSC-Tabora),	Personal Secretary
Ms. Anumie Mtweve	Dipl. Secretarial Studies (TPSC-Tabora)	Personal Secretary
Ms. Agnes Aswile Kayange	Dipl. Mgt & Admin (ESAMI), Secretarial course stage (NABE) I & II	Senior administrative Assistant
Ms. Bibiana Sekei	Dipl. Mgt & Admin (Shukuru Int. Coll of Business)	Personal Secretary
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	Attendant
Mr. Alex Msenya Mkome	Std. VII	I Attendant
Mr. Paul Felician	Form VI	Attendant
Mr. Joshua Mathayo	*Std. VII*	Attendant
Mr. Hezron Bassu	*Std VII*	Attendant
Mr. Juma Katondo	*Cert. Driv. Grade II (NIIT)*	Principal Driver

Name	*Qualification*	Title
Mr. Issa Jumanne	*Form IV Cert. Driv. Grade I (NIIT)*	Driver
Mr. Nazaeli Manase Madale	*Form IV Cert. Driv. Grade I (NIIT)*	Driver
Mr. S. Madard	*Cert. Driv*	Driver
Finance		
Mr. Boniface Makwabi Kwiyeya	ADCA (Mzumbe); CPA (NBAA)	Bursar
Ms. Letitia Rutahamibwa	Cert. Acc. Techn (DSA); Cert. Acc (SAUT); ADA (SAUT)	Asst. Accountant
Ms. Alpha Boniface	Cert. Acc.(SAUT); ADA (SAUT), Post. Grad. Dipl. Finance (SAUT)	Senior Asst. Accountant
Ms. Gracia Tibaijuka	Bachelor of Accountancy (SAUT)	Asst. Accountant
Mr. Emmanuel Nyamilonda	BBA in Accounting & Finance	Loans Officer
Ms. Hellen Mathias Labia	BBA (SAUT); MBA-Finance	Senior Asst. Accountant
Internal Audit		
Mrs Bahati Michael Kilungu	*ADA(SAUT), CPA (NBAA)*	*Internal Auditor*
Procurement and Supplies		
Mr. Mkufi Ikhala	B.Com (material Management) UDSM; CPSP(T) (NBAA/PSPTB)	Sen. Procurement Officer
Ms Modesta S. Kabalo	BA_PSM (MUCCoBS), CPSP (T) (PSPTB)	Procurement/Supplies Officer
Ms. Felister Sebastian Luambano	Cert. PS (PSPTB), Dipl. PS (ZIFA), BPLM (TIA_ DSM)	Asst. Procurement & Supplies Officer
Library		
Mr. Yanga Machimu	Dipl. LADS (Bagamoyo)	PLAsst
Ms. Aziza Gihega	Dipl. LADS (Bagamoyo), BALIS (Tumaini Univ. Dar)	Library officer.
Mr. Oscar Joachim	Cert. Libr. (Bagamoyo)	Libr. Asst.
Mr. Oliver Bondo	Cert. Libr (Bagamoyo)	Attendant
Mrs Scholastica Kishosha	Cert. Libr (Bagamoyo)	Libr. Asst
ICT		
Mr. Ismael M. Khangane	*B.Sc. (Eng) (Cuba), M.Sc. (I.T.) (Spain)*	Head of Computing Center
Mr. Mataba J. Magori	*Adv. Dipl. ICT (Carlisle, UK); B.Sc.(Hons) in ICT (Glamorgan UK); Post Grad. Dipl in Computer Security (Glamorgan UK)*	Senior Computer Programmer
Mr. Emil Malisha	*Cert. Comp. Studies; Dipl. IT*	Systems and Network

Name	*Qualification*	Title
	(UCC), B.Sc (ICT) SAUT	Administrator
Mr. Andrew Mihayo	*Dipl. I.T (UCC)*	Comp. Operator
Ms. Adeline Urassa	*Cert I.T, Dipl. I.T (UCC)*	Comp. Operator
Students' Welfare		
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. (Wartburg Theological Seminary, USA)	Warden
Technical		
Mr. Emmanuel Kimwaga	*Dipl.Clin. Med, Dipl. In Prosection (UDSM)*	Principal prosector
Ms. Siphael Msuya	*Dipl. In Prosection (UDSM); B. Gen. Sc.(OUT)*	Anatomist
Ms. Sayyeda Prashant Somaiya	*DPS (CUHAS)*	Lab. Techn
Mr. Vitus Silago	*BMLS (CUHAS)*	Health Scientist
Ms. Caroline A. Minja	*BMLS (KCMC)*	Health Scientist
Estate		
Ms. Valeria Aloyce Gabriel	*Bachelor of Civil Engineering (DIT)*	Estate Officer
Mr. Emmanuel Mabula	*Adv, Cert in Plumbing (NVTC)*	Plumber
Mr. Eliamin Jimmy	*Dipl. In Electronics (Mbeya Techn. College)*	Electrician

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. Fr. A. Mroso	Deputy Vice Chancellor (PFA)
4.	Rev. Fr. P. Nhindilo	Corporate Counsel
5.	Prof. JB. Kataraihya	Dean, Weill Bugando School of Medicine
6.	Mr. Massimilliano Pezzole	Touch Country Director
7.	Dr. SE. Ngallaba	Dean School of Public Health
8.	Dr. R.M. Laisser	Dean, Archbishop Anthony Mayala School of Nursing
9.	Mr. K. Mapunda	Dean of Students
10.	Prof. S.E. Kalluvya	Director School of Graduate Studies
11.	Prof. G.W.M. Kongola	Director Research and Innovations
12.	Prof ZE. Masesa	Head Admissions
13.	Mr. R. Tibaijuka	Director IAHS
14.	Mr. IM. Khangane:	Director ICT
15.	Mr. B. Kwiyeya	Chief Accountant/Bursar
16.	Ms. Valeria A. Gabriel	Estate Officer
17.	Ms. T.Y. Peter	Personal Assistant to the Vice Chancellor
18.	Mr. J M. Mayala	Senior Administrative Officer
19.	Ms N. Frank	Human Resources Officer
20.	Mr. Y. Machimu	Ag. Head, Library
21.	Mr. M. Ikhala	Senior Procurement Officer
22.	Rev. Fr. Dr Vincent Mhina	Chaplain
23.	Mr. D Nkuba	Adminstrative Officer

CRITERIA FOR RECRUITMENT 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 and above from a recognized University 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 and above from recognized University.

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 made a satisfactory progress in his/her PhD training AND has at least 2 points from publications in a peer reviewed journals (apart from his/her PhD work).

4. Senior Lecturer

(i) A holder of PhD/M.Med/M.Dent. from a recognized institution with at least 3 years of teaching/research experience and has 5 publication points since the award of PhD/M.Med/M.Dent.

(ii) By promotion of a lecturer with a PhD/M.Med/M.Dent and at least 3 years of teaching experience (of at least B+) and has acquired at least 5 points from scholarly activities since last promotion (at least 4 points should come from publications). At least 25% of publication points should be from diversified journal publications.

5. Associate Professor

(i) A holder of a PhD/M.Med/M.Dent from a recognized institution with a minimum of SIX years of notable academic service since award of PhD/M.Med/M.Dent and at least 12 publication points since award of PhD/M.Med/M.Dent.

(ii) By promotion of a Senior Lecturer with a PhD or MMED who has obtained M.Sc or equivalent as a superspeciality with a minimum of three years of notable academic service (of at least B+) in that position and has acquired at least 8 points from scholarly activities since last promotion (at least 6 points should come from publications). At least 30% of publication points should be from diversified journal publications.

(iii) By promotion of a Senior Lecturer with MMED with a minimum of three years of notable academic service (of at least B+) in that position and has acquired at least 10 points from scholarly activities since last promotion (at least 8 points

should come from publications). At least 30% of publication points an applicant should be first or corresponding author. At least 30% of publication points should be from diversified journal publications

NB: At Professorial rank publications should show focusing in a specific area of specialization in the field

6. Professor

(i) A holder of a PhD/M.Med/M.Dent from a recognized institution with a minimum of NINE years of notable academic service and at least 17 publication points since award of PhD/M.Med/M.Dent.

(ii) By promotion of an Associate Professor with a minimum of three years of distinguished academic service in that position and has acquired at least 10 points from scholarly activities since last promotion (at least 8 points should come from publications). At least 40% of publication points should be from diversified journal publications.

7. Professor Emeritus Or Professor Emerita

(i) The title Professor Emeritus or Professor Emerita (for female staff) shall be conferred to a:-

Renowned Retired Professor who has served the university with distinction over a period of years may be awarded the title of Emeritus or Emerita (for females) upon retirement. He/she must have an outstanding performance and track record for soliciting and attracting research funding for the University. Post holder shall hold office as long as is still active and able to attract research/project funds for the University. Shall be remunerated from the funds that he/she generates/attracts from funders for the University.

(ii) Duties and Responsibilities

To solicit and attract research funds for the University in addition to performing academic duties as professor.

LIBRARY STAFFAPPOINTMENT & 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 Master Degree in Librarianship with at least 3 – 6 years experience in an academic library.

h) ***Chief Librarian***
Should have a minimum of a Master Degree in Librarianship/ Information Science from a Recognized University plus more than 6 years-experience of working in an academic Library.

ACADEMIC CALENDAR 2016/2017

A. ACADEMIC YEAR 2016/2017

Starts on	10.10.2016
Ends on	11.08.2017

B. SEMESTER I, III, V , VII & IX

Begin:	10.10.2016
End:	10.03.2017

Mid – Semester breather (Christmas breather):
17.12.2016 – 01.01.2017 (2 weeks)

End-of Semester Examinations

Start:	27.02.2017
End:	10.03.2017

C. SEMESTER II, IV, VI, VIII & X

Begins:	20.03.2017
Ends:	11.08.2017

Mid – Semester breather
27.05.2017 – 03.06.2017 (1 weeks)

End of Semester Examinations

Start:	31.07.2017
End:	11.08.2017

End of Year (Long) Vacation

Starts:	12.08.2017
Ends:	07.10.2017
(Duration	8 Weeks)

D. KEY FOR SEMESTERS

Semester	*Applicable for*
Semester I & II	**MD I, BMLS I, B.Sc. NED I, B. Sc. N I, B.Pharm I, MPH, MMED I, MSc. Paed Nurs I & YR1-IAHS**
Semester III & IV	**MD II, BMLS II, B.Sc. NED II, B. Sc. N II, B.Pharm II, MMED II, MSc. Paed Nurs 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 2017/2018
START ON 09.10.2017

ALMANAC FOR THE ACADEMIC YEAR 2016/2017

WEEK NO.	DAY	DATE	EVENT
		30	
		31	
	Monday		
SEPTEMBER 2016	Thursday	1	Ethics & Review Committee
	Friday	2	Committee of Deans and directors
	Saturday	3	
	Sunday	4	
	Monday	5	
	Tuesday	6	
	Wednesday	7	
	Thursday	8	Ethics & Review Committee
	Friday	9	Appointments Committee
	Saturday	10	
	Sunday	11	
	Monday	12	
	Tuesday	13	
	Wednesday	14	
	Thursday	15	Ethics & Review Committee
	Friday	16	
	Saturday	17	
	Sunday	18	
	Monday	19	
	Tuesday	20	
	Wednesday	21	
	Thursday	22	
	Friday	23	
	Saturday	24	
	Sunday	25	
	Monday	26	Supplementary Examinations
	Tuesday	27	
	Wednesday	28	
	Thursday	29	
	Friday	30	
OCTOBER 2016	Saturday	1	
	Sunday	2	
	Monday	3	Reporting New Students; Semester I (2016/2017)
	Tuesday	4	
	Wednesday	5	
	Thursday	6	
	Friday	7	Quality Assurance Committee
	Saturday	8	
	Sunday	9	

WEEK NO.	DAY	DATE	EVENT
1	Monday	10	Academic Year 2016/2017 begins (Semesters I, III, V ,VII and IX) **With Holy Eucharist Cerebration for New Academic Year**
	Tuesday	11	
	Wednesday	12	
	Thursday	13	
	Friday	14	Planning and Finance Committee
	Saturday	15	
	Sunday	16	
2	Monday	17	
	Tuesday	18	
	Wednesday	19	
	Thursday	20	
	Friday	21	
	Saturday	22	
	Sunday	23	
3	Monday	24	
	Tuesday	25	
	Wednesday	26	
	Thursday	27	
	Friday	28	CUHAS SENATE
	Saturday	29	
	Sunday	30	
	Monday	31	
NOVEMBER 2016	Tuesday	1	Convocation Day
4	Wednesday	2	Scientific Conference
	Thursday	3	BMC Board of Governors
	Friday	4	**CUHAS COUNCIL; Sports**
	Saturday	5	**9TH GRADUATION CEREMONY**
	Sunday	6	
5	Monday	7	SPH Board
	Tuesday	8	
	Wednesday	9	
	Thursday	10	
	Friday	11	
	Saturday	12	
	Sunday	13	
6	Monday	14	
	Tuesday	15	
	Wednesday	16	
	Thursday	17	
	Friday	18	
	Saturday	19	
	Sunday	20	

WEEK NO.	DAY	DATE	EVENT
7	Monday	21	
	Tuesday	22	
	Wednesday	23	
	Thursday	24	
	Friday	25	
	Saturday	26	
	Sunday	27	
8	Monday	28	
	Tuesday	29	
	Wednesday	30	
DECEMBER 2016	Thursday	1	
	Friday	2	
	Saturday	3	
	Sunday	4	
9	Monday	5	
	Tuesday	6	
	Wednesday	7	
	Thursday	8	Ethics & Review Committee
	Friday	**9**	**Public Holiday (Independence Day)**
	Saturday	10	
	Sunday	11	
10	Monday	12	
	Tuesday	13	
	Wednesday	14	
	Thursday	15	
	Friday	16	
	Saturday	17	(Mid- Semester I and III, V ,VII & IX) Christmas Breather Starts
	Sunday	18	
11	Monday	19	
	Tuesday	20	
	Wednesday	21	
	Thursday	22	
	Friday	23	
	Saturday	24	
	Sunday	25	**Christmas Day**
12	Monday	26	**Boxing Day**
	Tuesday	27	
	Wednesday	28	
	Thursday	29	
	Friday	30	
	Saturday	31	End of (mid-Semester I , III, V,VII & IX) Christmas Breather
JANUARY 2017	Sunday	1	**New Year's Day**,
	Monday	2	

WEEK NO.	DAY	DATE	EVENT
13	Tuesday	3	
	Wednesday	4	
	Thursday	5	
	Friday	6	
	Saturday	7	Ethics & Review Committee
	Sunday	8	
14	Monday	9	
	Tuesday	10	
	Wednesday	11	
	Thursday	12	**Zanzibar Revolution Day (Public Holiday)**
	Friday	13	CATS
	Saturday	14	
	Sunday	15	
15	Monday	16	
	Tuesday	17	
	Wednesday	18	
	Thursday	19	Ethics & Review Committee
	Friday	20	Committee of Deans and Directors
	Saturday	21	
	Sunday	22	
16	Monday	23	
	Tuesday	24	
	Wednesday	25	
	Thursday	26	**Appointments Committee- Staff Review**
	Friday	27	Planning and Finance Committee
	Saturday	28	
	Sunday	29	
	Monday	30	
	Tuesday	31	
FEBRUARY 2017 **17**	Wednesday	1	
	Thursday	2	Ethics & Review Committee
	Friday	3	
	Saturday	4	MPH Field Excursion
	Sunday	5	
18	Monday	6	
	Tuesday	7	
	Wednesday	8	
	Thursday	9	
	Friday	10	
	Saturday	11	
	Sunday	12	
19	Monday	13	

WEEK NO.	DAY	DATE	EVENT
	Tuesday	14	
	Wednesday	15	
	Thursday	16	
	Friday	17	**CUHAS COUNCIL**
	Saturday	18	
	Sunday	19	
20	Monday	20	
	Tuesday	21	
	Wednesday	22	
	Thursday	23	
	Friday	24	
	Saturday	25	
	Sunday	26	
21	Monday	27	**End of Semester I, III, V , VII , IX University Examinations start**
	Tuesday	28	
	Wednesday	1	
MARCH 2017	Thursday	2	
	Friday	3	Quality Assurance Committee
	Saturday	4	
	Sunday	5	
22	Monday	6	
	Tuesday	7	
	Wednesday	8	
	Thursday	9	
	Friday	10	**End of Semester I, III, V , VII , IX University exams Finishes**
	Saturday	11	
	Sunday	12	
23	Monday	13	
	Tuesday	14	
	Wednesday	15	CATS
	Thursday	16	Ethics & Review Committee
	Friday	17	**Committee of Deans and Directors**
	Saturday	18	End of Semester I, III, V, VII, IX Breather finishes
	Sunday	19	
24	Monday	20	**SEMESTER II, IV, VI, VIII & X STARTS**
	Tuesday	21	
	Wednesday	22	
	Thursday	23	
	Friday	24	**Examiners Board School of Medicine; IAHS; Pharmacy; Nursing**
	Saturday	25	

WEEK NO.	DAY	DATE	EVENT
	Sunday	26	
25	Monday	27	
	Tuesday	28	
	Wednesday	29	
	Thursday	30	
	Friday	31	**Examinations Committee**
APRIL 2017	Saturday	1	
	Sunday	2	
26	Monday	3	
	Tuesday	4	
	Wednesday	5	
	Thursday	6	
	Friday	7	**Karume Day**
	Saturday	8	
	Sunday	9	
27	Monday	10	
	Tuesday	11	
	Wednesday	12	
	Thursday	13	
	Friday	14	**GOOD FRIDAY**
	Saturday	15	
	Sunday	16	**EASTER SUNDAY**
28	Monday	17	**EASTER MONDAY**
	Tuesday	18	
	Wednesday	19	
	Thursday	20	**Appointments Committee/Staff Review**
	Friday	21	**Planning and Finance**
	Saturday	22	
	Sunday	23	
29	Monday	24	
	Tuesday	25	
	Wednesday	26	**Union Day (Public Holiday)**
	Thursday	27	
	Friday	28	**CUHAS SENATE**
	Saturday	29	
	Sunday	30	
MAY 2017 **30**	Monday	1	**International Workers Day (Public Holiday)**
	Tuesday	2	
	Wednesday	3	IAHS Board, School of Medicine Board
	Thursday	4	School of Pharmacy Board, School of Nursing Board
	Friday	5	**CUHAS COUNCIL**
	Saturday	6	
	Sunday	7	

WEEK NO.	DAY	DATE	EVENT
31	Monday	8	
	Tuesday	9	
	Wednesday	10	
	Thursday	11	Ethics & Review Committee
	Friday	12	
	Saturday	13	
	Sunday	14	
32	Monday	15	
	Tuesday	16	
	Wednesday	17	
	Thursday	18	
	Friday	19	Quality Assurance Committee
	Saturday	20	
	Sunday	21	
33	Monday	22	
	Tuesday	23	
	Wednesday	24	
	Thursday	25	
	Friday	26	
	Saturday	27	
	Sunday	28	
	Monday	29	
	Tuesday	30	
	Wednesday	31	
JUNE 2017	Thursday	1	
34	Friday	2	MPH Field Research Begins
	Saturday	3	
	Sunday	4	
35	Monday	5	
	Tuesday	6	
	Wednesday	7	
	Thursday	8	
	Friday	9	
	Saturday	10	
	Sunday	11	
36	Monday	12	
	Tuesday	13	
	Wednesday	14	
	Thursday	15	Ethics & Review Committee
	Friday	16	
	Saturday	17	
	Sunday	18	
37	Monday	19	
	Tuesday	20	
	Wednesday	21	

WEEK NO.	DAY	DATE	EVENT
	Thursday	22	
	Friday	23	
	Saturday	24	
	Sunday	25	
38	Monday	26	
	Tuesday	27	
	Wednesday	28	
	Thursday	29	
	Friday	30	
JULY 2017	Saturday	1	
	Sunday	2	Admissions Committee (CAS)
39	Monday	3	
	Tuesday	4	
	Wednesday	5	
	Thursday	6	CATS
	Friday	7	**Saba Saba Day (International Trade Fair)**
	Saturday	8	
	Sunday	9	
40	Monday	10	
	Tuesday	11	
	Wednesday	12	Quality Assurance Committee
	Thursday	13	Ethics & Review Committee
	Friday	14	Committee of Deans and Directors
	Saturday	15	
	Sunday	16	
41	Monday	17	
	Tuesday	18	
	Wednesday	19	
	Thursday	20	Appointments Committee
	Friday	21	Planning and Finance Committee
	Saturday	22	
	Sunday	23	
42	Monday	24	**MD 5 University Examinations Begins**
	Tuesday	25	
	Wednesday	26	
	Thursday	27	
	Friday	28	
	Saturday	29	
	Sunday	30	
	Monday	31	**End of Semester II, IV, VI, VIII & X University Examinations STARTS**
AUGUST 2017	Tuesday	1	
	Wednesday	2	
43	Thursday	3	

WEEK NO.	DAY	DATE	EVENT
	Friday	4	
	Saturday	5	
	Sunday	6	
	Monday	7	
	Tuesday	8	**Farmers Day (Public Holiday)**
	Wednesday	9	
	Thursday	10	
	Friday	11	**End of Semester II, IV, VI, VIII & X University Examinations FINISHES**
	Saturday	12	
	Sunday	13	
	Monday	14	
	Tuesday	15	Examiners Boards Meetings (School of Medicine, School of Pharmacy, School of Nursing, IAHS)
	Wednesday	16	Examinations Committee
	Thursday	17	Ethics & Review Committee
	Friday	18	
	Saturday	19	**Long Vacation Starts: Beginning of Field Work MD 2 And MD3** **Elective MD4,**
	Sunday	20	
	Monday	21	
	Tuesday	22	
	Wednesday	23	
	Thursday	24	
	Friday	25	**CUHAS SENATE**
	Saturday	26	
	Sunday	27	
	Monday	28	
	Tuesday	29	
	Wednesday	30	
	Thursday	31	
SEPTEMBER, 2017	Friday	1	**CUHAS COUNCIL**
	Saturday	2	
	Sunday	3	
	Monday	4	
	Tuesday	5	
	Wednesday	6	
	Thursday	7	
	Friday	8	
	Saturday	9	
	Sunday	10	
	Monday	11	
	Tuesday	12	

WEEK NO.	DAY	DATE	EVENT
	Wednesday	13	
	Thursday	14	
	Friday	15	
	Saturday	16	
	Sunday	17	
	Monday	18	
	Tuesday	19	
	Wednesday	20	
	Thursday	21	
	Friday	22	
	Saturday	23	
	Sunday	24	
	Monday	25	Supplementary Exams
	Tuesday	26	
	Wednesday	27	
	Thursday	28	
	Friday	29	
	Saturday	30	Reporting of New Students, Semester I (2017/2018)
OCTOBER, 2017	Sunday	1	
	Monday	2	
	Tuesday	3	
	Wednesday	4	
	Thursday	5	
	Friday	6	
	Saturday	7	End of Long Vacation
	Sunday	8	
	Monday	9	Academic Year 2017/2018 Begins (Semesters I, III, V, VII, IX) **with Holy Eucharist Cerebrations for the New Academic Year.**
	Tuesday	10	
	Wednesday	11	
	Thursday	12	Appointment Committee
	Friday	13	Planning and Finance
	Saturday	14	
	Sunday	15	
	Monday	16	
	Tuesday	17	
	Wednesday	18	
	Thursday	19	
	Friday	20	CUHAS SENATE
	Saturday	21	
	Sunday	22	
	Monday	23	

WEEK NO.	DAY	DATE	EVENT
	Tuesday	24	
	Wednesday	25	
	Thursday	26	
	Friday	27	
	Saturday	28	
	Sunday	29	
	Monday	30	SPORTS DAY
	Tuesday	31	Convocation Day
NOVEMBER 2017	Wednesday	1	Scientific Conference
5	Thursday	2	BMC Board of Governors
	Friday	3	**CUHAS COUNCIL;**
	Saturday	4	**10TH GRADUATION CEREMONY**
	Sunday	5	
6	Monday	6	
	Tuesday	7	
	Wednesday	8	
	Thursday	9	
	Friday	10	
	Saturday	11	
	Sunday	12	
7	Monday	13	
	Tuesday	14	
	Wednesday	15	
	Thursday	16	
	Friday	17	
	Saturday	18	
	Sunday	19	
8	Monday	20	
	Tuesday	21	
	Wednesday	22	
	Thursday	23	
	Friday	24	
	Saturday	25	
	Sunday	26	
	Monday	27	
	Tuesday	28	
	Wednesday	29	
	Thursday	30	
	Friday	31	

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