



# Catholic University of Health and Allied Sciences

**PROSPECTUS**  
**2022/2023-2024/2025**

**BUGANDO MEDICAL CENTRE  
AND  
CATHOLIC UNIVERSITY OF HEALTH AND ALLIED SCIENCES**



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## **MEMBERS OF BOARD OF TRUSTEES**

| <b>NAME</b>                          | <b>TITLE</b>                                       |
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| 1. Most Rev. Jude Thaddeus Ruwa'ichi | Archbishop of Dar es Salaam                        |
| 2. Most Rev. Gervas Nyaisonga        | Archbishop of Mbeya (President TEC/<br>Chancellor) |
| 3. Most Rev. Damian Denis Dallu      | Archbishop of Songea                               |
| 4. Most Rev. Paul Ruzoka             | Archbishop of Tabora                               |
| 5. Most Rev. Isaack Amani            | Archbishop of Arusha                               |
| 6. Most Rev. Beatus Kinyaiya         | Archbishop of Dodoma                               |
| 7. Most Rev. Renatus Nkwande         | Archbishop of Mwanza                               |
| 8. Rev. Fr. Augustin Van Baelen, SDS | General Mission Secretary, Member                  |

## **INVITED MEMBERS**

|                                   |                         |
|-----------------------------------|-------------------------|
| 9. Rt. Rev. Severine NiweMugizi   | Bishop of Rulenge-Ngara |
| 10. Rt. Rev. Rudovick Minde       | Bishop of Moshi         |
| 11. Rt. Rev. Desderius Rwoma      | Bishop of Bukoba        |
| 12. Rt. Rev. Titus Mdoe           | Bishop of Mtwara        |
| 13. Rt. Rev. Salutaris M. Libena  | Bishop of Ifakara       |
| 14. Amb. Prof. Costa Ricky Mahalu | Vice Chancellor, SAUT   |
| 15. Prof. Paschalis Rugarabamu    | Vice Chancellor, CUHAS  |
| 16. Rev. Dr. Philbert Vumilia     | Vice Chancellor, MWECAU |
| 17. Rev. Prof. Pius Mgeni         | Vice Chancellor, RUCU   |

- |     |                                 |                              |
|-----|---------------------------------|------------------------------|
| 18. | Prof. Method M. Kilasara        | Principal, STEMMUCO          |
| 19. | Rev.Prof. Juvenalis Asantemungu | Principal, AMUCTA            |
| 20. | Prof. Erasmus Kamugisha         | Principal, SFUCHAS           |
| 21. | Prof. Bertram Mapunda           | Principal, JUCO              |
| 22. | Prof. Ralph Peter Masenge       | Principal, MARUCO            |
| 23. | Prof. Romuald Haule             | Principal, CUCom             |
| 24. | Rev.Dr. Charles Gervas Rufyiza  | Director, SAUT-Arusha Centre |
| 25. | Fr. Claudius Nkwera             | Corporate Counsel (SAUT)     |

## **MEMBERS OF CUHAS- UNIVERSITY COUNCIL**

- |     |                                   |                                            |
|-----|-----------------------------------|--------------------------------------------|
| 1.  | Rt. Rev. Severine NiweMugizi      | Bishop of Rulenge Ngara-Chairman           |
| 2.  | Most Rev. Renatus Nkwande         | Archbishop of Mwanza                       |
| 3.  | Rt. Rev. Eusebius Alfred Nzigilwa | Bishop of Mpanda                           |
| 4.  | Amb. Prof. Costa Ricky Mahalu     | Vice-Chancellor, SAUT                      |
| 5.  | Fr. Dr. Charles Kitima            | General Secretary, TEC                     |
| 6.  | Dr. Fabian Massaga                | Director General, BMC                      |
| 7.  | Mr. Florian John Gaare            | For Director, Higher Education, MoEST      |
| 8.  | Dr. Loishooki Saitore Laizer      | Director, Human Resources Development, MoH |
| 9.  | Mr. Erick Mwelulila               | Male Representative of the Laity           |
| 10. | Sr. Prof. Chrispina Lekule        | Appointee, CUHAS Senate                    |
| 11. | Prof. Obadia Venance Nyogole      | Renowned Medical Doctor                    |
| 12. | Prof. Paschalis G. Rugarabamu     | Vice Chancellor, CUHAS                     |
| 13. | Dr. Marina Njelekela              | Female Representative of the Laity         |
| 14. | Prof. Apollinary Kamuhabwa        | Appointee of VC from MUHAS                 |
| 15. |                                   | CUHASSO President                          |
| 16. | Fr. Pantaleon Rutambuka           | Corporate Counsel CUHAS/Secretary          |

**In Attendance:**

- |    |                      |                              |
|----|----------------------|------------------------------|
| 1. | Prof. Peter Rambau   | Deputy Vice Chancellor (ARC) |
| 2. | Prof. Stephen Mshana | Deputy Vice Chancellor (PFA) |

**MEMBERS OF THE CUHAS SENATE**

- |     |                               |                                        |
|-----|-------------------------------|----------------------------------------|
| 1.  | Prof. Paschalis G. Rugarabamu | Vice Chancellor/Chairman               |
| 2.  | Fr. Pantaleon Rutambuka       | Corporate Counsel/Secretary.           |
| 3.  | Prof. Peter Rambau            | Deputy Vice Chancellor (ARC)           |
| 4.  | Prof. Stephen Mshana          | Deputy Vice Chancellor (PFA)           |
| 5.  | Dr. Haruna Dika               | Dean, Weill Bugando School of Medicine |
| 6.  | Prof. Jeremiah Seni           | Director, Postgraduate Studies         |
| 7.  | Sr. Dr. Chrispina Lekule      | Appointee of the Owner                 |
| 8.  | Sr. Mary Auxilia Mtuy         | Dean of Students                       |
| 9.  | Prof. Domenica Morona         | Director, Research and Innovations     |
| 10. | Mr. Gratian R. Tibaijuka      | Director IAHS                          |
| 11. | Dr. Adolfine Hokororo         | Ag. Director of Quality Assurance      |
| 12. | Mr. Yanga. Machimu            | Representing Director Library Services |
| 13. | Mr. Ismael.M. Khangane        | Director ICT                           |
| 14. | Prof. Rose M. Laisser         | Dean AAMSoN                            |
| 15. | Prof. Gilbert W. Kongola      | Dean School of Pharmacy                |
| 16. | Prof. Zablon. E. Masesa       | Appointee of the VC/Admissions Officer |
| 17. | Prof. Mariam Mirambo          | Associate Professor, Appointee of VC   |
| 18. | Prof. Humphrey Mazigo         | Associate Professor, Appointee of VC   |
| 19. | Sr. Dr. Alicia Massenga       | Director of Surgical Services BMC      |
| 20. | TBN                           | Undergraduate Students' representative |
| 21. | TBN                           | IAHS Students representative           |
| 22. | TBN                           | Postgraduate Students representative   |

## SENIOR OFFICERS OF CUHAS

### *The Chancellor*

Most. Rev. Gervas Nyaisonga

Archbishop of Mbeya 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. Peter Rambau,

MD (UDSM), MMed (Makerere), PhD (Calgary)

### *Deputy Vice Chancellor Finance, Planning and Administration (PFA)*

Prof. Stephen E. Mshana,

MD (UDSM); MMed (Makerere); PhD (SAUT), Fell.  
Med. Edu (SA)

### *Dean: Weill Bugando School of Medicine*

Dr. Haruna Dika,

MD (UDSM); MSc. (Makerere), PhD (Calgary)

### *Associate Deans: Weill Bugando School of Medicine*

Prof. Mariam Mirambo,

BVM (SUA), MSc. (LSHTM), PhD (CUHAS)

Dr. Semvua Kilonzo

MD (Tumaini), MMed (CUHAS), PhD (HUST, China)

### *Ag. Dean: School of Pharmacy*

Dr. Haule Ambrose,

MSc. (Romania), PhD (Sunderland-UK)

### *Dean, Archbishop Anthony Mayala School of Nursing*

Prof. Rose M. Laisser

ADNE (MUHAS); MSc (Leeds), PhD (Sweden)

### *Director: Institute of Allied Health Sciences*

Mr. Gratian R. Tibaijuka,

B. Pharmacy (UDSM), MSc (Ukraine)

### *Director: Postgraduate Studies*

Prof. Jeremiah Seni,

MD (UDSM); MMed. (Makerere), PhD (Calgary)

### *Associate Director: Postgraduate Studies*

Dr. Dismas Matovelo,

MD (UDSM); MMed. (SAUT)

***Dean: School of Public Health***

Prof. Humphrey Mazigo

*BVM(SUA), MSc (Jomo Kenyatta) MPH (CUHAS),  
PhD (Makerere)*

***Director: Research and Innovations***

Prof. Domenica Morona

*MSc (Switzerland) MSc. (UK), PhD (Switzerland),  
Post-Doc (Ifakara)*

***Director: Quality Assurance***

*Vacant*

***Associate Director: Quality Assurance***

Dr. Adolfine Hokororo

*MD (Russia), MMed (Makerere), MSc (USA)*

***Dean of Students***

Sr. Mary Auxilia Mtuy

*BA (USA), MSc. (USA), PhD(Cleveland)*

***Bursar***

Mr. Boniface M. Kwiyea

*ADCA (Mzumbe); CPA (NBAA)*

***Internal auditor***

Ms. Bahati Michael Kilungu

*ADA (SAUT), CPA (NBAA), MSc (Mzumbe)*

***Chaplain***

Rev. Fr. Christopher Matunda Dinho

*BA (Rome), MA (Rome)*

***Corporate Counsel***

Fr. Pantaleon Rutambuka

*BA(Rome), LLB (SAUT), Postgraduate Diploma (LST)*

**ADDRESS/CONTACTS**

|                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                       |
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| <b>Chairman of Council</b><br>Archdiocese of Zanzibar<br>P.O. Box 3132<br>Zanzibar                                                                                                                                                                                                                                                                                              | <b>CUHAS Students' Organisation (CUHASSO)</b><br>Catholic University of Health and Allied Sciences<br>P.O. Box 1464, Mwanza.<br>Tanzania                                                                                              |
| <b>University Bankers</b><br>CRDB<br>Bugando Branch<br>P. O. Box 1330, Mwanza,<br>Tanzania<br>Tel: 255-28-2500053, 255-28-2500050<br>Fax: 255-28-2500040                                                                                                                                                                                                                        | <b>University Advocates</b><br>Nasimire & Company Advocates<br>P. O. Box 261, Mwanza<br>Tanzania.<br>Tel: 028-2550048<br>Mobile: 0754 389820<br>Email: <a href="mailto:nasimire_advocates@yahoo.com">nasimire_advocates@yahoo.com</a> |
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## PREAMBLE



CUHAS evisions to becoming an outstanding Tanzanian Catholic University, leading in health care, training, research and consultancies, while advocating moral and ethical values in responding to societal needs.

For the next three academic years 2022/2023 to 2024/2025, The University's Management's focus will be to make further investment in facilitating high quality training, relevant and impactful research and consultancy services that continue to drive us towards realising our Mission. Our Rolling Strategic Plan aims to continue improving the learning and social environment for our students including investing in a modern Students' Hostel and a Post-graduate Block. We will continue to recruit the much needed qualified faculty and support staff to increase our capacity in quality service delivery and comply with our regulators.

CUHAS is a place where students are educated to become responsible, caring professionals and law-abiding citizens, during and after training. All students should expect this as part and parcel of your everyday professional upbringing, as you diligently work to attain good grades. Discipline, Diligence and Excellence should be aspirational qualities for every student who chooses to study at CUHAS.

We hope that your time at CUHAS will be a productive, positively memorable and a worthwhile investment in your future career and life in general.

**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, that espouses moral and ethical values and are 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 our academic programmes:

### A) CURRENT PROGRAMMES

#### i. Diploma Programmes

|                                        |         |
|----------------------------------------|---------|
| Diploma in Pharmaceutical Sciences     | 3 years |
| Diploma in Medical Laboratory Sciences | 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 (BMLS)                     | 3 years         |
| Bachelor of Science in Nursing (B.Sc.N)                            | [3,4] years     |
| Bachelor of Science in Medical Imaging and Radiotherapy (B.Sc.MIR) | 4 years         |

#### iii. Postgraduate Programmes

|                                                                                                                                                                            |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Master of Medicine (MMed)<br><i>[Internal Medicine, Obstetrics and Gynaecology, Surgery,<br/>Paediatrics, Orthopedic and Trauma, ENT, Anatomical Pathology, Radiology]</i> | [3,4] years |
| Master of Public Health (MPH)                                                                                                                                              | 1 year      |
| Master of Science in Paediatric Nursing                                                                                                                                    | 2 years     |
| Master of Science in Clinical Microbiology and Diagnostic Molecular Biology                                                                                                | 2 years     |
| Master of Science in Epidemiology and Biostatistics                                                                                                                        | 2 years     |
| Doctor of Philosophy (Ph. D)                                                                                                                                               | 3 years     |

### B) PROPOSED PROGRAMMES

|                                                                        |         |
|------------------------------------------------------------------------|---------|
| i Master in Occupational and Environmental Health                      | 3 years |
| ii Master of Medicine in Clinical Microbiology and Infectious diseases | 4 years |
| iii Master of Medicine in Psychiatry                                   | 3 years |
| iv Master of Medicine in Emergency Medicine                            | 3 years |

## Students' Admission Criteria



## UNDERGRADUATE PROGRAMMES

### DOCTOR OF MEDICINE (MD)

#### Entry Requirements

##### Direct Entry

Three principal passes in Physics, Chemistry and Biology with a minimum of 6 points: A minimum of D grade in Chemistry, Biology and Physics.

##### Equivalent qualifications

Diploma in Clinical Medicine with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have a minimum of “D” grade in the following subjects: Mathematics, Chemistry, Biology, Physics and English at O-Level.

### BACHELOR OF MEDICAL LABORATORY SCIENCES (BMLS)

#### Entry Requirement

##### Direct Entry

Three principal passes in Physics, Chemistry and Biology with a minimum of 6 points: A minimum of C grade in Chemistry and D grade in Biology and at least E grade in Physics.

##### Equivalent Qualifications

Diploma in Medical Laboratory Sciences with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have a minimum of “D” grade in the following subjects: Mathematics, Chemistry, Biology, Physics and English at O-Level.

### BACHELOR OF PHARMACY (B. PHARM)

#### Entry Requirements

##### Direct Entry (Form Six)

Three principal passes in Physics, Chemistry and Biology with a minimum of 6 points: A minimum of D grade in Chemistry, Biology and Physics.

##### Equivalent qualifications:

Diploma in Pharmaceutical Sciences with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have a minimum of “D” grade in the following subjects: Mathematics, Chemistry, Biology, Physics and English at O-Level.

### BACHELOR OF SCIENCE IN NURSING EDUCATION (3 YRS COURSE)

#### Entry Requirements

##### Equivalent Qualifications

Diploma in Nursing or Advanced Diploma in Nursing Education with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have a minimum of “D” grade in the following subjects: Mathematics, Chemistry, Biology, Physics and English at O-Level.

### **BACHELOR OF SCIENCE IN NURSING (4 YRS. COURSE)**

#### **Entry Requirements**

Three principal passes in Chemistry, Biology and either Physics or Advanced Mathematics or Nutrition with a minimum of 6 points: A minimum of C grade in Chemistry and D grade in Biology and at least E grade in Physics or Advanced Mathematics or Nutrition.

#### **Equivalent Qualifications**

Diploma in Nursing with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have a minimum of “D” grade in the following subjects: Mathematics, Chemistry, Biology, Physics and English at O-Level.

### **BACHELOR OF SCIENCE IN MEDICAL IMAGING AND RADIOTHERAPY**

#### **Entry requirements**

Three principal passes in Physics, Chemistry and Biology with a minimum of 6 points: A minimum of D grade in Chemistry, Biology and Physics.

#### **Equivalent Qualifications**

Diploma in Medical Imaging or Radiography with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have a minimum of “D” grade in the following subjects: Mathematics, Chemistry, Biology, Physics and English at O-Level.

## POSTGRADUATE PROGRAMMES

CUHAS is currently offering Master of Medicine (MMED) programmes in the clinical disciplines of Internal Medicine, Surgery, Obstetrics and Gynaecology, and Paediatrics and Child Health, ENT, Orthopedic and Trauma, Anatomical Pathology and Radiology. We also offer Master of Public Health, Master of Science in Paediatric Nursing, Master of Science in Clinical Microbiology and Diagnostic Molecular Biology, Master of Science in Epidemiology and Biostatistics and PhD programmes in various specialties.

### MASTER OF MEDICINE

#### Entry requirements

- i) A holder of **MD degree or its equivalent** from a recognized institution of higher learning with an **average of "B" or a minimum GPA of 2.7**
- ii) Must have a valid license to practice as a registered medical practitioner with the Medical Council of Tanganyika (MCT) (or accredited equivalent authority outside Tanzania approved by the MCT) before their enrolment to the programme

### MASTER OF PUBLIC HEALTH

#### Entry Requirements

- 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.
- v) A GPA of at least 2.7 during undergraduate training

### MASTER OF SCIENCE IN PAEDIATRIC NURSING

#### Entry Requirements

- 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 recognized 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

## **MASTER OF SCIENCE IN CLINICAL MICROBIOLOGY AND DIAGNOSTIC MOLECULAR BIOLOGY**

### **Entry Requirements**

- i) Holders of First degree in Medical Laboratory Sciences OR its equivalent with overall GPA not less than 2.7.
- ii) Holders of first degree in Health Sciences with overall GPA not less than 2.7 or B grade for unclassified degrees provided they passed with at least B grade or above in Microbiology/Immunology, Molecular Biology or Biochemistry or Cell biology with at least 200 hrs.
- iii) Holders of Bachelor of Science degree in Biomedical Sciences (Microbiology or Molecular Biology or Immunology or Parasitology or Bachelor in Laboratory Sciences) with an overall GPA not less than 2.7 provided they passed with at least B grade or above in Microbiology/Immunology, Molecular Biology or Biochemistry or Cell Biology.

## **MASTER OF SCIENCE IN BIOSTATISTICS AND EPIDEMIOLOGY**

### **Entry Requirements**

- i. Holders of first degree in Health Sciences (Medicine, Medical laboratory Sciences, Nursing, Pharmacy, Dentistry, Nutrition, Veterinary, etc) with overall GPA not less than 2.7 or B grade for unclassified degrees. The candidate must have credit pass in Mathematics at undergraduate level and pass in Basic applied Mathematics (BAM)
- ii. Holders of First degree in Statistics, Applied Statistics, Mathematics, Biometrics, or its equivalent with overall GPA not less than 2.7 or at least B grade for unclassified degrees.
- iii. Holders of First degree in Medicine with at least B in “Epidemiology and Biostatistics subjects”
- iv. Holders of Health-related Masters with at least B grade for unclassified degrees or overall GPA not less than 2.7

## **DOCTOR OF PHILOSOPHY**

### **Requirement for PhD 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, MPH or MMed) of CUHAS-Bugando or any other recognized institution of higher learning within or outside Tanzania.
- (iii) Doctor of Medicine or BVM/DVM under special MD-PhD or BVM/DVM-PhD Programmes

## **DIPLOMA PROGRAMMES (3 YEARS)**

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**

- 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 FIVE PASSES with at least a D grade in the following subjects; Biology, Chemistry, Physics, Mathematics and English.

### **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 or four equal instalments. All payments must be done by using CONTROL NUMBERS. **Failure of payment of required Fees by the end of week two of the second semester will attract a penalty of 50,000/=.** The fourth and final instalment must be paid two weeks on/or before Examination, another penalty of 50,000/= will be charged for non-payment of the final instalment. 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 Tsh. 50,000/=.**

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 **2023/2024** academic year:

#### FEE STRUCTURE FOR NATIONAL STUDENTS - UNDERGRADUATE PROGRAMMES (MD, BPHARM, BScNED, BScN, and BScMIR)

| CUHAS FEE STRUCTURE 2023/24 in '000'   |                 |                 |                 |                 |                 |
|----------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Figures in TSh '000                    | Year 1          | Year 2          | Year 3          | Year 4          | Year 5          |
| <b><u>A. Payable to University</u></b> | -               | -               | -               | -               | -               |
| Tuition                                | 5,200.00        | 4,800.00        | 4,700.00        | 4,600.00        | 4,600.00        |
| Special Faculty Requirement            | 150.00          | 150.00          | 150.00          | 150.00          | 150.00          |
| Exam fee                               | 300.00          | 300.00          | 300.00          | 230.00          | 230.00          |
| Sustainability Fund                    | 30.00           | 30.00           | 30.00           | 30.00           | 30.00           |
| TCU Quality Assurance Fee              | 20.00           | 20.00           | 20.00           | 20.00           | 20.00           |
| Registration <sup>1</sup>              | 15.00           | 15.00           | 15.00           | 15.00           | 15.00           |
| ID card                                | 10.00           |                 |                 |                 |                 |
| Graduation Congregation Fee            |                 |                 |                 |                 | 70.00           |
| Caution Money                          | 50.00           |                 |                 |                 |                 |
| Development Levy                       | 100.00          | 100.00          | 100.00          | 100.00          | 100.00          |
| Student Union                          | 20.00           | 20.00           | 20.00           | 20.00           | 20.00           |
| Field Supervision                      | 50.00           | 50.00           |                 |                 |                 |
| Transcript Fee                         |                 |                 |                 |                 | 30.00           |
| <b>Total Cost to University</b>        | <b>5,945.00</b> | <b>5,485.00</b> | <b>5,335.00</b> | <b>5,165.00</b> | <b>5,265.00</b> |
| <b><u>B. Payable to NHIF</u></b>       |                 |                 |                 |                 |                 |
| Medical Capitation                     | 50.40           | 50.40           | 50.40           | 50.40           | 50.40           |

**FEE STRUCTURE FOR NATIONAL STUDENTS - UNDERGRADUATE PROGRAMMES -BMLS**

| <i>Figures in Tsh '000</i>             | <b>Year 1</b>   | <b>Year 2</b>   | <b>Year 3</b>   |
|----------------------------------------|-----------------|-----------------|-----------------|
| <b><u>A. Payable to University</u></b> | -               | -               | -               |
| Tuition                                | 5,100.00        | 4,750.00        | 4,650.00        |
| Special Faculty Requirement            | 150.00          | 150.00          | 150.00          |
| Exam fee                               | 300.00          | 300.00          | 300.00          |
| Sustainability Fund                    | 30.00           | 30.00           | 30.00           |
| TCU Quality Assurance Fee              | 20.00           | 20.00           | 20.00           |
| Registration <sup>1</sup>              | 15.00           | 15.00           | 15.00           |
| ID card                                | 10.00           |                 |                 |
| Graduation Congregation Fee            |                 |                 | 70.00           |
| Caution Money                          | 50.00           |                 |                 |
| Development Levy                       | 100.00          | 100.00          | 100.00          |
| Student Union                          | 20.00           | 20.00           | 20.00           |
| Field Supervision                      | 50.00           | 50.00           |                 |
| Transcript Fee                         |                 |                 | 30.00           |
| <b>Total Cost to University</b>        | <b>5,845.00</b> | <b>5,435.00</b> | <b>5,385.00</b> |
| <b><u>B. Payable to NHIF</u></b>       |                 |                 |                 |
| Medical Capitation                     | 50.40           | 50.40           | 50.40           |

NB: 1) GRADUATION CONGREGATION FEE (70,000/=) is payable by all finalist at the beginning of the year.

- 2) The University has limited accommodation. Accommodation will be charged as follows: 1,200,000/= per year for a single room, 600,000/= per year for each of two students sharing a room. **NOTE Full Payment should be done after consultation with the WARDEN to guarantee the availability of the rooms.**
- 3) \*\*\* **Medical Capitation:** All Students are required to pay medical capitation of Tsh. 50,400/= to NHIF using control number obtained from OSIM. Students **with recognized and valid Health Insurance Schemes will NOT be required to pay Tsh. 50,400/=**

**Moneys Payable to the Student (MD, BPharm, BScNED, BMLS, BScN and BScMIR) 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**

| <b><i>Student Cost (figures in Tsh, '000)</i></b> | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> | <b>Year 5</b> |
|---------------------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Stationery                                        | 100           | 100           | 100           | 100           | 100           |
| Books                                             | 300           | 300           | 300           | 300           | 300           |
| Elective & Research                               | 0             | 0             | 0             | 560           | 0             |
| Dissertation                                      | 0             | 0             | 0             | 0             | 0             |
| Fieldwork                                         | 0             | 280           | 280           | 280           | 0             |
| Meals                                             | 2,618         | 2,618         | 2,618         | 2,618         | 2,618         |
| <b>Total Cost to Student</b>                      | <b>3,018</b>  | <b>3,298</b>  | <b>3,298</b>  | <b>3,858</b>  | <b>3,018</b>  |

**(B) Money payable to students doing BMLS, BSc.MIR Course**

| <b><i>Student Cost (figures in Tsh, '000)</i></b> | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> |
|---------------------------------------------------|---------------|---------------|---------------|
| Stationery                                        | 100           | 100           | 100           |
| Books                                             | 300           | 300           | 300           |
| Elective & Field                                  | 0             | 0             | 560           |

|                              |              |              |              |
|------------------------------|--------------|--------------|--------------|
| Fieldwork                    | 0            | 0            | 280          |
| Meals                        | 2,618        | 2,618        | 2,618        |
| <b>Total Cost to Student</b> | <b>3,018</b> | <b>3,018</b> | <b>3,858</b> |

**(C) Money payable to students doing BPharm Course**

| <b>Student Cost (figures in Tsh, '000)</b> | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> |
|--------------------------------------------|---------------|---------------|---------------|---------------|
| Stationery                                 | 100           | 100           | 100           | 100           |
| Books                                      | 300           | 300           | 300           | 300           |
| Elective &Field                            | 0             | 0             | 0             | 560           |
| Fieldwork                                  | 0             | 280           | 280           | 0             |
| Meals                                      | 2,618         | 2,618         | 2,618         | 2,618         |
| <b>Total Cost to Student</b>               | <b>3,018</b>  | <b>3,298</b>  | <b>3,298</b>  | <b>3,578</b>  |

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

| <b>Student Cost (figures in Tsh, '000)</b> | <b>Year 1</b> | <b>Year 2</b> |
|--------------------------------------------|---------------|---------------|
| Stationery                                 | 100           | 100           |
| Books                                      | 300           | 300           |
| Elective &Field                            | 0             | 0             |
| Fieldwork                                  | 280           | 280           |
| Meals                                      | 2,618         | 2,618         |
| <b>Total Cost to Student</b>               | <b>3,298</b>  | <b>3,298</b>  |

**BScNED 3 & 4-year programme**

| <b>Student Cost (figures in Tsh, '000)</b> | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> |
|--------------------------------------------|---------------|---------------|---------------|---------------|
| Stationery                                 | 100           | 100           | 100           | 100           |
| Books                                      | 300           | 300           | 300           | 300           |
| Elective &Field                            | 0             | 0             | 0             | 0             |
| Fieldwork                                  | 0             | 280           | 560           | 0             |
| Meals                                      | 2,618         | 2,618         | 2,618         | 2,618         |
| <b>Total Cost to Student</b>               | <b>3,018</b>  | <b>3,298</b>  | <b>3,578</b>  | <b>3,018</b>  |

**BSc. N 3-year programme**

| <b>Student Cost (figures in Tsh, '000)</b> | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> |
|--------------------------------------------|---------------|---------------|---------------|
| Stationery                                 | 100           | 100           | 100           |
| Books                                      | 300           | 300           | 300           |
| Elective &Field                            | 0             | 0             | 0             |
| Fieldwork                                  | 0             | 280           | 560           |
| Meals                                      | 2,618         | 2,618         | 2,618         |
| <b>Total Cost to Student</b>               | <b>3,018</b>  | <b>3,298</b>  | <b>3,578</b>  |

**BScN 4-year programme**

| <b>Student Cost (figures in Tsh, '000)</b> | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> |
|--------------------------------------------|---------------|---------------|---------------|---------------|
| Stationery                                 | 100           | 100           | 100           | 100           |
| Books                                      | 300           | 300           | 300           | 300           |
| Elective &Field                            | 0             | 0             | 0             | 0             |
| Fieldwork                                  | 0             | 0             | 280           | 280           |
| Meals                                      | 2,618         | 2,618         | 2,618         | 2,618         |
| <b>Total Cost to Student</b>               | <b>3,018</b>  | <b>3,018</b>  | <b>3,298</b>  | <b>3,298</b>  |

**FEE STRUCTURE FOR FOREIGN STUDENTS- UNDERGRADUATE PROGRAMMES  
(MD, BPHARM, BScNED, BMLS, BScN, BScMIR)**

**Fees Payable to the University**

| <b>Figures in US\$</b>       | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> | <b>Year 5</b> |
|------------------------------|---------------|---------------|---------------|---------------|---------------|
| Tuition                      | 3,500         | 3,500         | 3,500         | 3,500         | 3,500         |
| Exam fee                     | 120           | 120           | 120           | 120           | 120           |
| Graduation fee               | 0             | 0             | 0             | 0             | 25            |
| Admission/Administrative fee | 0             | 0             | 0             | 0             | 0             |
| Sustainability Fund          | 15            | 15            | 15            | 15            | 15            |
| Registration                 | 10            | 10            | 10            | 10            | 10            |
| ID card                      | 10            | 0             | 0             | 0             | 0             |
| Medical                      | 100           | 100           | 100           | 100           | 100           |

|                                        |              |              |              |              |              |
|----------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Caution Money                          | 25           | 0            | 0            | 0            | 0            |
| Equipment/ Special Faculty Requirement | 75           | 75           | 75           | 75           | 75           |
| Accommodation                          | 400          | 400          | 400          | 400          | 400          |
| <b>Total Cost to University</b>        | <b>4,255</b> | <b>4,220</b> | <b>4,220</b> | <b>4,220</b> | <b>4,245</b> |

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

#### **Moneys Payable to the Students MD course**

| <i>Figures in US\$</i>       | <i>Year 1</i> | <i>Year 2</i> | <i>Year 3</i> | <i>Year 4</i> | <i>Year 5</i> |
|------------------------------|---------------|---------------|---------------|---------------|---------------|
| 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         |
| <b>Total Cost to Student</b> | <b>1,990</b>  | <b>2,690</b>  | <b>2,690</b>  | <b>2,990</b>  | <b>1,990</b>  |

#### **Total Costs**

| <i>Figures in US\$</i>          | <i>Year 1</i> | <i>Year 2</i> | <i>Year 3</i> | <i>Year 4</i> | <i>Year 5</i> |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|
| Money payable to the University | 4,210         | 4,175         | 4,175         | 4,175         | 4,200         |
| Money payable to Students       | 1,990         | 2,690         | 2,690         | 2,990         | 1,990         |
| <b>GRAND TOTAL</b>              | <b>6,200</b>  | <b>6,865</b>  | <b>6,865</b>  | <b>7,165</b>  | <b>6,190</b>  |

#### **FEE STRUCTURE FOR POSTGRADUATE PROGRAMMES**

##### **MMED Fee Structure (National)**

| <b>CUHAS FEE STRUCTURE 2023/24 MMED '000'</b> |               |               |               |
|-----------------------------------------------|---------------|---------------|---------------|
| <i>Figures in Tsh '000</i>                    | <i>Year 1</i> | <i>Year 2</i> | <i>Year 3</i> |
| <b><u>A. Payable to University</u></b>        | -             | -             | -             |
| Tuition                                       | 6,200         | 5,800         | 5,600         |
| Equipment/ Special Faculty Requirement        | 200           | 200           | 200           |
| Exam fee                                      | 350           | 350           | 280           |
| Sustainability Fund                           | 30            | 30            | 30            |
| TCU Quality Assurance Fee                     | 20            | 20            | 20            |
| Registration                                  | 25            | 25            | 25            |
| ID card                                       | 10            |               |               |
| Graduation Congregation Fee                   |               |               | 70            |
| Caution Money                                 | 50            |               |               |
| Student Union                                 | 20            | 20            | 20            |
| Transcript Fees                               |               |               | 30            |
| Development Levy                              | 100           | 100           | 100           |
| <b>Total Cost to University</b>               | <b>7,005</b>  | <b>6,545</b>  | <b>6,375</b>  |
| <b><u>B. Payable to Students</u></b>          |               |               |               |
| Accommodation                                 | 1,200         | 1,200         | 1,200         |
| Stationery                                    | 250           | 250           | 250           |
| Books                                         | 600           | 600           | 600           |
| Elective & Research                           | -             | 2,500         | -             |
| Dissertation                                  | -             | 500           | -             |
| Stipend                                       | 9,600         | 9,600         | 9,600         |
| <b>Total Cost to Student</b>                  | <b>11,650</b> | <b>14,650</b> | <b>11,650</b> |

NB: 1) GRADUATION FEE (70,000/=) is payable by all finalist at the beginning of the year.

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

### **MMED Fee Structure (Foreign)**

| CUHAS FEE STRUCTURE 2023/24 MMED ( US Dollars) |              |              |              |
|------------------------------------------------|--------------|--------------|--------------|
| <i>Figures in USD</i>                          | Year 1       | Year 2       | Year 3       |
| <b><u>A. Payable to University</u></b>         | -            | -            | -            |
| Tuition                                        | 3,100        | 3,100        | 3,100        |
| Equipment/ Special Faculty Requirement         | 100          | 100          | 100          |
| Exam fee                                       | 150          | 150          | 150          |
| Sustainability Fund                            | 15           | 15           | 15           |
| TCU Quality Assurance Fee                      | 10           | 10           | 10           |
| Registration                                   | 20           | 20           | 20           |
| ID card                                        | 10           |              |              |
| Graduation Congregation Fee                    |              |              | 40           |
| Caution Money                                  | 25           |              |              |
| Student Union                                  | 10           | 10           | 10           |
| Accommodation                                  | 800          | 800          | 800          |
| <b>Total Cost to University</b>                | <b>4,240</b> | <b>4,205</b> | <b>4,245</b> |
| <b><u>B. Payable to Students</u></b>           |              |              |              |
| Stationery                                     | 240          | 240          | 240          |
| Books                                          | 750          | 750          | 750          |
| Elective & Research                            | -            | 1,750        | -            |
| Dissertation                                   | -            | 450          | -            |
| Meals                                          | 4,500        | 4,500        | 4,500        |
| <b>Total Cost to Student</b>                   | <b>5,490</b> | <b>7,690</b> | <b>5,490</b> |

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

### **MMED Radiology Fee Structure (National)**

| CUHAS FEE STRUCTURE 2023/24 MMED '000' |              |              |              |              |
|----------------------------------------|--------------|--------------|--------------|--------------|
| <i>Figures in TSh '000</i>             | Year 1       | Year 2       | Year 3       | Year 4       |
| <b><u>A. Payable to University</u></b> | -            | -            | -            |              |
| Tuition                                | 6,200        | 5,800        | 5,600        | 5,800        |
| Equipment/ Special Faculty Requirement | 200          | 200          | 200          | 200          |
| Exam fee                               | 350          | 350          | 280          | 350          |
| Sustainability Fund                    | 30           | 30           | 30           | 30           |
| TCU Quality Assurance Fee              | 20           | 20           | 20           | 20           |
| Registration                           | 25           | 25           | 25           | 25           |
| ID card                                | 10           |              |              |              |
| Graduation Congregation Fee            |              |              |              | 70           |
| Caution Money                          | 50           |              |              |              |
| Student Union                          | 20           | 20           | 20           | 20           |
| Transcript Fees                        |              |              |              | 30           |
| Development Levy                       | 100          | 100          | 100          | 100          |
| <b>Total Cost to University</b>        | <b>7,005</b> | <b>6,545</b> | <b>6,375</b> | <b>6,645</b> |
| <b><u>B. Payable to Students</u></b>   |              |              |              |              |

|                              |               |               |               |               |
|------------------------------|---------------|---------------|---------------|---------------|
| Accommodation                | 1,200         | 1,200         | 1,200         | 1,200         |
| Stationery                   | 250           | 250           | 250           | 250           |
| Books                        | 600           | 600           | 600           | 600           |
| Elective & Research          | -             | 2,500         | -             | -             |
| Dissertation                 | -             | 500           | -             | -             |
| Stipend                      | 9,600         | 9,600         | 9,600         | 9,600         |
| <b>Total Cost to Student</b> | <b>11,650</b> | <b>11,650</b> | <b>14,650</b> | <b>11,650</b> |

NB: 1) GRADUATION FEE (70,000/=) is payable by all finalist at the beginning of the year.

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

### Master of Science in Paediatric Nursing (MSc.PN) and Master of Science in Clinical Microbiology and Diagnostic Molecular Biology (MScCMDM) Fee Structure (National)

#### Fees Payable to the University

| CUHAS FEE STRUCTURE 2023/24 MScPN/MScCMDM '000' |               |               |
|-------------------------------------------------|---------------|---------------|
| Figures in Tsh '000                             | Year 1        | Year 2        |
| <b><u>A. Payable to University</u></b>          | -             | -             |
| Tuition                                         | 6,000         | 5,600         |
| Equipment/ Special Faculty Requirement          | 200           | 200           |
| Exam fee                                        | 350           | 350           |
| Sustainability Fund                             | 30            | 30            |
| TCU Quality Assurance Fee                       | 20            | 20            |
| Registration                                    | 25            | 25            |
| ID card                                         | 10            |               |
| Graduation Congregation Fee                     | 0             | 70            |
| Caution Money                                   | 50            | 0             |
| Student Union                                   | 20            | 20            |
| Transcript Fee                                  |               | 30            |
| Development Levy                                | 100           | 100           |
| <b>Total Cost to University</b>                 | <b>6,805</b>  | <b>6,445</b>  |
| <b><u>B. Payable to Students</u></b>            |               |               |
| Stationery                                      | 250           | 250           |
| Books                                           | 600           | 600           |
| Elective & Research                             | -             | 3,000         |
| Dissertation                                    | -             | 500           |
| Fieldwork                                       | -             | -             |
| Meals                                           | 9,600         | 9,600         |
| <b>Total Cost to Student</b>                    | <b>10,450</b> | <b>13,950</b> |

NB: 1) GRADUATION FEE (70,000/=) is payable by all finalist at the beginning of the year.

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



### MPH Fee Structure (National)

| CUHAS FEE STRUCTURE 2023/24 MPH '000'  |               |
|----------------------------------------|---------------|
| Figures in TSh '000                    | Year 1        |
| <b><u>A. Payable to University</u></b> | -             |
| Tuition                                | 7,400         |
| Exam fee                               | 450           |
| Sustainability Fund                    | 30            |
| TCU Quality Assurance Fee              | 20            |
| Registration                           | 25            |
| ID card                                | 10            |
| Graduation Fee                         | 70            |
| Caution Money                          | 50            |
| Equipment/ Special Faculty Requirement | 200           |
| Student Union                          | 20            |
| Transcript Fee                         | 30            |
| Field Supervision                      | 100           |
| Development Levy                       | 100           |
| <b>Total Cost to University</b>        | <b>9,505</b>  |
| <b><u>B. Payable to Students</u></b>   |               |
| Stationery                             | 250           |
| Books                                  | 600           |
| Elective & Research                    | 2,500         |
| Dissertation                           | 500           |
| Field/Excursion                        | 600           |
| Stipend                                | 9,600         |
| <b>Total Cost to Student</b>           | <b>14,050</b> |

NB: (i) Additional fee of 700,000/= is charged for evening programme.

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

### MPH Fee Structure (Foreign)

| Figures in US \$                       | Year 1       |
|----------------------------------------|--------------|
| <b><u>A. Payable to University</u></b> |              |
| Tuition                                | 4,000        |
| Exam fee                               | 245          |
| Graduation Congregation Fee            | 40           |
| Field Supervision                      | 100          |
| Sustainability                         | 15           |
| Registration                           | 20           |
| ID card                                | 10           |
| Medical                                | 0            |
| Caution Money                          | 25           |
| Special faculty Requirements           | 100          |
| Accommodation                          | 800          |
| <b>Total Cost to University</b>        | <b>5,355</b> |

### Moneys Payable to the Student

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

### Total Costs

| <b>Total Cost (US \$)</b>          | <b>Year 1</b> |
|------------------------------------|---------------|
| <b>Money Payable to University</b> | <b>5,355</b>  |
| <b>Money Payable to Students</b>   | <b>4,520</b>  |
| <b>GRAND TOTAL</b>                 | <b>9,875</b>  |

### PhD Fee Structure

| <b>CUHAS FEE STRUCTURE 2023/24 PhD '000'</b> |               |               |               |
|----------------------------------------------|---------------|---------------|---------------|
| <i>Figures in TSh '000</i>                   | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> |
| <b><u>A. Payable to University</u></b>       | -             | -             | -             |
| Tuition                                      | 6,900         | 6,900         | 6,700         |
| Equipment/ Special Faculty Requirement       | 300           | 300           | 300           |
| Exam fee                                     | 500           | 500           | 500           |
| Sustainability Fund                          | 30            | 30            | 30            |
| TCU Quality Assurance Fee                    | 20            | 20            | 20            |
| Registration                                 | 40            | 40            | 40            |
| ID card                                      | 10            |               |               |
| Graduation Congregation Fee                  | 0             | 0             | 70            |
| Caution Money                                | 100           | 0             | 0             |
| Student Union                                | 20            | 20            | 20            |
| Transcript Fee                               |               |               | 30            |
| Development Levy                             | 100           | 100           | 100           |
| <b>Total Cost to University</b>              | <b>8,020</b>  | <b>7,810</b>  | <b>7,910</b>  |
| <b><u>B. Payable to Students</u></b>         |               |               |               |
| Stationery                                   | 240           | 240           | 240           |
| Books                                        | 750           | 750           | 750           |
| Research/Field                               | 30,000        | 30,000        | 30,000        |
| Dissertation                                 | 450           | 450           | 450           |
| Stipend                                      | 9,600         | 9,600         | 9,600         |
| <b>Total Cost to Student</b>                 | <b>41,040</b> | <b>41,040</b> | <b>41,040</b> |

## IAHS Fee Structure

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

| CUHAS FEE STRUCTURE 2023/24 '000'      |                 |                 |                 |
|----------------------------------------|-----------------|-----------------|-----------------|
| Figures in TSh '000                    | Year 1          | Year 2          | Year 3          |
| <b><u>Payable to University</u></b>    | -               | -               | -               |
| Tuition                                | 1,900.00        | 1,900.00        | 1,850.00        |
| Equipment/ Special Faculty Requirement | 150.00          | 150.00          | 150.00          |
| Exam fee                               | 240.00          | 240.00          | 170.00          |
| Sustainability Fund                    | 30.00           | 30.00           | 30.00           |
| NACTE Quality Assurance Fee            | 20.00           | 20.00           | 20.00           |
| Registration                           | 10.00           | 10.00           | 10.00           |
| ID card                                | 10.00           | 0.00            | 0.00            |
| Graduation Fee                         |                 |                 | 70.00           |
| Field Supervision                      | 50.00           | 50.00           |                 |
| Transcript Fee                         |                 |                 | 30.00           |
| Caution Money                          | 50.00           | 0.00            | 0.00            |
| Development Levy                       | 100.00          | 100.00          | 100.00          |
| Student Union                          | 20.00           | 20.00           | 20.00           |
| <b>Total Cost to University</b>        | <b>2,580.00</b> | <b>2,520.00</b> | <b>2,520.00</b> |
| <b><u>B. Payable to NHIF</u></b>       |                 |                 |                 |
| Medical Capitation                     | 50.40           | 50.40           | 50.40           |
| <b><u>C. Payable to Students</u></b>   |                 |                 |                 |
| Stationery                             | 50.00           | 50.00           | 50.00           |
| Books                                  | 150.00          | 150.00          | 150.00          |
| Elective & Research                    | 0.00            | 0.00            | 0.00            |
| Accommodation IAHS                     | 480.00          | 480.00          | 480.00          |
| Fieldwork                              | 600.00          | 600.00          | 600.00          |
| Meals                                  | 600.00          | 600.00          | 600.00          |
| <b>Total Cost to Student</b>           | <b>1,880.00</b> | <b>1,880.00</b> | <b>1,880.00</b> |

- NB:**
- 1) Limited accommodation is available at BMC at a cost of Tsh. 480,000/= T per year payable in full or in instalments at the beginning of the academic year. **NOTE Payment should be done after consultation with the WARDEN to guarantee the availability of the rooms.**
  - 2) The University does not provide meals to students, however, there are several cafeterias within the compound for reasonable prices.
  - 3) The cost of meals is about Tsh.7,500/= per day

### Supplementary Examination Fees

Candidates appearing for supplementary examinations will be required to pay supplementary fee as shown on the table below:

| <i>SN</i> | <i>Course</i> | <i>Fees per Subject (Tshs)</i> | <i>Year Cost per subject (Tshs)</i> |
|-----------|---------------|--------------------------------|-------------------------------------|
| 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        | BSMIR 1       | 30,000                         | 400,000.00                          |
| 18        | BSMIR2        | 40,000                         | 530,000.00                          |
| 19        | BSMIR3        | 40,000                         | 535,000.00                          |
| 20        | DDR1          | 10,000                         | 135,000.00                          |
| 21        | DDR2          | 10,000                         | 135,000.00                          |
| 22        | DDR3          | 15,000                         | 200,000.00                          |
| 23        | DPS1          | 15,000                         | 200,000.00                          |
| 24        | DPS2          | 10,000                         | 135,000.00                          |
| 25        | DPS3          | 10,000                         | 135,000.00                          |
| 26        | DMLS1         | 15,000                         | 200,000.00                          |
| 27        | DMLS2         | 10,000                         | 135,000.00                          |
| 28        | DMLS3         | 10,000                         | 135,000.00                          |
| 29        | MMed1         | 160,000                        | 1,600,000.00                        |
| 30        | MMed2         | 160,000                        | 1,600,000.00                        |
| 31        | MMed3         | 160,000                        | 1,600,000.00                        |
| 32        | MPH           | 215,000                        | 2,150,000.00                        |
| 33        | MSPN 1        | 150,000                        | 1,500,000.00                        |
| 34        | MSPN 2        | 150,000                        | 1,500,000.00                        |
| 35        | MSCMDM 1      | 150,000                        | 1,500,000.00                        |
| 36        | MSCMDC 2      | 150,000                        | 1,500,000.00                        |

## Registration Information

### REGISTRATION INFORMATION

- 1 No student shall be allowed to register or attend classes unless the required fees have been paid.
- 2 New students must register within the first two weeks of the academic year. 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.
- 3 Continuing students must complete registration formalities within the first two weeks of the academic year.
- 4 Any late registration is liable to a penalty of Tshs. 100,000/=.
- 5 **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.**
- 6 Student must register for the course programme into which they have been admitted.
- 7 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.
- 8 No student shall be allowed to postpone studies during the two weeks preceding final examinations, but may for valid reasons be considered by DVC-ARC for postponement of examinations.
- 9 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.
- 10 A student discontinued from studies on disciplinary grounds shall not be re admitted to the University.
- 11 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.
- 12 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.
- 13 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.
- 14 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 Tshs10,000/=).
- 15 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.
- 16 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 upon recommendation of the School Board.

#### 1.2 Time of Examinations

University Examinations (UEs) 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

Bona fide students shall be entitled to sit for the UEs for the courses in which they are registered unless advised otherwise in writing by the DVC-ARC. 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 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 ESE in each subject.

1.4.2 Unless otherwise specified a candidate must do CAT for each specified module before the ESE in the respective subject.

1.4.3 A candidate whose course work or progress is considered unsatisfactory may be required by Senate, 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

Absconding 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 absconds a scheduled examination deliberately or without a just reason to be determined by the Senate shall be discontinued from studies. When a just 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.

**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 authorized 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 reports late for an examination (more than 30 minutes) will not be allowed to sit for the examination. His/her case will be referred to the Examination Committee by Chief Invigilator through the University Examination Officer. The Examination Committee will forward recommendation to the Senate.
- 1.8.2 A candidate without a valid reason shall be regarded as having failed in that examination but will be allowed to do a supplementary examination. And will be awarded a maximum grade of "C".
- 1.8.3 A candidate with a valid reason will be allowed to sit for a special examination when next offered.

**1.9 Dates of Examinations**

UE in all 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". Examination Regulations from specific programme shall also apply.

**1.11 Repeating the year**

A candidate may be allowed to repeat a year if she or he has attained a Grade Point Average (GPA) specified by the respective programme curriculum. GPA calculation should base on subject weights. No candidate will be allowed to repeat any 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 be given an additional time to complete it following the recommendation of School/Directorate. If the candidate fails to complete the thesis after the additional year, then they shall be required to do a different research provided his/her registration limit will not be exceeded. Examination Regulations from specific programme shall also apply.

**1.13 Conduct of Examinations**

University Examinations shall be conducted under the control of the DVC-ARC, Deans of Schools, and HODs, or such other officer of the University as the DVC-ARC shall appoint.

**1.14 Appointments of Examiners**

The examiners for the University Examinations shall be appointed by the Senate or DVC-ARC, upon recommendation of the Schools.

**1.15 Board of Examiners**

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



- 1) 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.
- 2) Examiners may be appointed from within the University for the supplementary/special examinations under the supervision of a moderator who took no part in teaching the candidates the subjects(s) under examination.

**1.16 External Examiners' Honorarium**

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

**1.17 Examination Irregularities or Academic Dishonesty** *(This also applies to Continuous Assessment Tests)*

- (1) All cases of examination irregularities on the part of students or invigilators or any member of staff shall be referred to the Examinations Committee through the HOD and the respective School Dean. 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.
- (2) 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 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 (e.g. 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 the 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 (e.g., refusing to sign the incidence form).
  - (x) A candidate refusing to obey a lawful order by an invigilator.
  - (xi) A candidate or member of staff who behaves or acts 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.
  - (xiv) Evidence identified by closed circuit television (CCTV)
- 
- (3) Any candidate who is found guilty of deliberately involved in examination irregularities or dishonest shall be discontinued from studies.
  - (4) A member of staff alleged of examination dishonest shall be referred to the University Staff Disciplinary Authority for further measures. Any staff who discloses or cause leakage of examinations shall be terminated from the services of the University and shall in addition thereto be required to make good any loss that may result from such leakage.
  - (5) In the event of leakage of examination, the University shall nullify the examination results and require candidates to re-sit the examination.
  - (6) In all cases of examination irregularity, provisions of natural justice as prescribed in rule 85 of the first Schedule of the Charter of Incorporation are to be adhered to.

## **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 version of Examination Timetables 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 30 minutes after the starting time, except for a compelling reason, without prejudice to Regulation to 7.16 below.
- 2.4 Candidates must not begin writing before they are told to do so by the invigilator.
- 2.5 Candidates are allowed to carry only pens, pencils or other materials explicitly prescribed by the Department.
- 2.6 Candidates are not allowed to enter the examination room, with books, cellular or mobile phone, handbags, clipboards, purses, papers, magazines, radios, radio cassette or other types of cassette players, digital watches, computers, soft and any other material as may be specified from time to time by the DVC-ARC.
- 2.7 In case candidates are allowed to come with specified items into the examination room, no borrowing from one another shall be allowed during the examinations except with invigilator's permission. Items allowed into the examination room shall be liable to inspection by the invigilator.
- 2.7.1 No food shall be allowed into the examination room, except soft drinks not exceeding 500 mls.
- 2.8 Each answer in an examination shall begin on a fresh page of the examination booklet. All rough work must be done in the booklet and crossed out. Candidates are not allowed to sign their names anywhere in the examination booklets.
- 2.9 All candidates shall observe silence in the examination room.
- 2.10 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 HOD.

- 2.11 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 HOD.
- 2.12 A candidate caught contravening the Examination Regulations shall not be allowed to continue with the examination for which he/she is scheduled.
- 2.13 Candidates are strongly warned that cheating or being caught with unauthorized material contravenes the University General Examination Regulations and leads to discontinuation from studies.
- 2.14 All candidates shall sign the attendance form at the beginning and the submission form at the end of every examination.
- 2.15 No candidate will be permitted to enter the examination room after a 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 (7.16).
- 2.16 A candidate wishing to use the toilets may, by permission of the invigilator and under escort, leave the examination room for a reasonable period.
- 2.17 A candidate who walks out of an examination in protest shall be disqualified from that examination.
- 2.18 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.
- 2.19 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 CATs)
- 2.20 Detailed instructions on the question papers should be followed.
- 2.21 Students who are required to do supplementary examinations or special examinations will be officially notified using their respective Examination Number on the University's notice board and website [www.bugando.ac.tz](http://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.
- 2.22 Students must understand that the ultimate responsibility for taking the supplementary examination precisely at the time when they are given rests with the student.

### **3 GUIDANCE FOR INVIGILATORS**

#### **3.1 Introduction**

- 3.1.1 Invigilation of UEs shall be done by academic staff of the University or any other staff who have been appointed by DVC-ARC

#### **3.2 Before the Examination**

- 3.2.1 The University Examination Officer shall prepare an invigilation roster that shall be communicated to all academic staff indicating the name of Chief Invigilator and other invigilators for each venue. The roster shall also indicate time, date and venues for the UEs.
- 3.2.2 Each examination venue shall have reasonable number of invigilators depending on the number of candidates and the size of the room.
- 3.2.3 Chief Invigilators shall be personally responsible for the collection of the sealed envelopes containing examination papers and any other prescribed materials from the examination office, at least an hour before the time stipulated for commencement of the examination. Simultaneously, other invigilators shall collect answer booklets from a designated room and shall sign a special form according to the instructions. Invigilators shall sign again on returning the booklets at the end of the examination.

- 3.2.4 Invigilators collecting examination papers and answer booklets shall sign in a prescribed form indicating the time when examination papers and answer booklets are collected. Invigilators shall sign again on returning the question papers and answer booklets. The special form for signing shall be available at the examination office and invigilators may also be required to sign while in the examination rooms according to instructions or directives given.
- 3.2.5 All invigilators shall be present in the examination room at least 30 minutes before the time for commencement of the examination.
- 3.2.6 Invigilators shall place the question papers facing downwards on the desks as per seating plan and before the candidates enter the examination room.
- 3.2.7 Invigilators should ensure that only one answer booklet is provided to each candidate and an extra sheet(s) may be provided when the booklet is full.
- 3.2.8 Invigilators shall admit candidates to the examination room at least fifteen (15) minutes before the start of the examination and ensure that they take their correct seat.
- 3.2.9 Invigilators shall ensure that candidates enter the examination room by lining up (queue).
- 3.2.10 Invigilator should not admit candidates to the examination room after 30 minutes have elapsed since the start of the examination. Candidates shall not be allowed to leave the examination room during the first hour of writing the examination.
- 3.2.11 **Invigilators shall ensure that candidates: -**
- (a) Do not borrow materials/working tools while in the examination room.
  - (b) Sit according to the scheduled seating plan and there is reasonable distance from one desk/table to another.
  - (c) Sign the attendance register. It shall be the duty of invigilators to circulate attendance sheet where all candidates present in the examination room shall indicate their names, registration number and the serial number of the Booklet. Circulation of the attendance sheet shall be made within thirty (30) minutes from commencement of examination.
  - (d) Hand over the answer booklets as directed and sign a submission form.
- 3.2.12 **Before the start of the examination, the Chief Invigilator shall: -**
- (a) Announce that unauthorised materials are not allowed in the examination room and remove unauthorised materials from the examination room (if any).
  - (b) Announce that candidates should turn the paper and check if they have the correct paper.
  - (c) Inform students to seriously follow the instructions on the front page of the examination paper and the answer booklet.
  - (d) Announce that candidates should not open the question paper until instructed to do so. Candidates will usually be given five (5) minutes to go through the paper and note any issue that might require special attention from the course instructor/examiner.
  - (e) Announce that candidates should enter specific information into fields provided in answer booklets/sheets before being instructed to start answering examination questions.
  - (f) Inform students the time for commencing and finishing the examination.
  - (g) Inform students the time when they can be allowed to leave the examination room after completing the examination.
  - (h) Announce that candidates with questions including ones that should be addressed by course instructor or invigilator should raise their hands and wait until invigilators reach them.
  - (i) Announce that candidates shall abstain from cheating.
  - (j) Announce that no candidate can leave the examination room 30 minutes before the end of the examination.

**3.3 During the Examination**

- 3.3.1 **Invigilators** shall not leave the examination room without a replacement. Replacement should not be the use of other invigilators in the same room.
- 3.3.2 Invigilators shall not allow any candidate to leave the examination within one hour from the beginning of examination.
- 3.3.3 Invigilators shall have the power to specify or change seating arrangements in the examination room, or to require inspection of a candidate, or to confiscate any unauthorised material and shall have power to expel from the examination room any candidate infringing any regulation stipulated herein or who creates a disturbance within the examination room.
- 3.3.4 In the event of alleged examination irregularity, the invigilator shall require the candidate to sign an examination incident report and any other materials pertinent to the incident and confirm they are his/hers. A witness (preferably a nearby student) should also sign the incidence form. The invigilator will collect all candidate material and the candidate should leave the examination room.
- 3.3.5 Invigilators should use examination incident forms to report each incident including student illness or examination irregularity.
- 3.3.6 Invigilators shall report immediately to the examination office any candidate who contravenes these regulations.
- 3.3.7 Five (5) minutes before the end of the examination, the invigilator should announce that 'you have five minutes left until the end of examination'.

**3.4 At the End of Examination**

- 3.4.1 Invigilators shall not permit the candidates to leave their places before their scripts have been collected.
- 3.4.2 Invigilators shall tell the candidates to stop writing and assemble their examination scripts.
- 3.4.3 Invigilators shall enter the number of candidates' scripts collected and/or received on the examination submission sheet and sign it.
- 3.4.4 Invigilators shall return all examination scripts to the examination office immediately after the examination.
- 3.4.5 Invigilators who will fail to appear for invigilation at the time indicated in the invigilation roster without good cause shall be deemed to have absconded and will be liable for disciplinary action.
- 3.4.6 Invigilators are not allowed to eat or drink substances other than water or soft drinks and should not engage in any distractive activities such as (but not limited to) marking papers, reading, mobile phone chatting, listening to music and unnecessary announcements.

**4 COMMON ACADEMIC REGULATIONS**

**4.1 Introduction**

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

**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 School Dean, who shall forward it to the Senate with the School 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 scores and grades, 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 should be

forwarded to the Examinations Committee for detailed discussion. The Examinations Committee 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 HOD in which the course was offered. The application should be made not less than one week after the release of the examination grades by the DVC-ARC or the individual instructor. A valid justification for the request must be given in writing. The HOD 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 DVC-ARC or the HOD.
- 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 ten thousand shillings (10,000 TSh) for Diploma students, and of twenty thousand shillings (20,000 TSh) 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**

- 4.4.1 The Dean/Directors 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.
- 4.4.2 Publication and custody of the final approved examination results as approved by the Senate shall be the responsibility of the DVC-ARC.

#### **4.5 Withholding or Cancellation of Results**

- 4.5.1 The Senate may, where a candidate has failed to fulfil 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 fulfil the requirements of the programme will graduate on the day determined by the Senate. Graduation attire will be hired for three days at fifty thousand shillings (50,000 TSh) for degree and for diploma graduands. Any late return of the graduation attire shall be charged at ten thousand shillings (10,000 TSh) a day.

#### **4.7 Certificates and Academic Transcripts**

Persons applying to the DVC-ARC for academic transcript shall be charged a fee of twenty thousand shillings (30,000 TSh). A duly completed clearance form and original transcript fee receipt 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:

- 1) The applicant produces a sworn affidavit testifying to the loss or destruction.

- 2) The applicant must produce evidence that the loss has been adequately publicly announced.
- 3) The replacement certificate will not be issued until 12 months from the date of loss.
- 4) A fee of fifty thousand shillings (50,000 TSh) shall be charged for the copy of the certificate issued.

#### 4.9 Carry over courses

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

## 5 SPECIFIC EXAMINATION REGULATIONS FOR MASTER PROGRAMMES

**(The General University Examination Regulations (6.0) in the Examinations Guidelines and Regulations Book also apply)**

- 5.1 The Master 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 dissertation.
- 5.2 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/practical examination.
- 5.3 The mode and manner of the clinical examination will be determined by the departments concerned, vetted by the respective School Boards and Higher Degree Committee prior to be approved by the Senate.
- 5.4 The continuous assessment tests will constitute 50% of the end of semester examination grade.
- 5.5 Written component shall carry 40% of the marks, and the clinical/practical component shall carry 60% of the total mark for continuous assessment tests and the end-of semester university examinations.

#### 5.6 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 and below | E            | 0.0 – 1.4 |

**The PASS mark shall be B grade**

#### 5.7 Disposal of students

##### 5.7.1 Biomedical subjects

- 1) A candidate who fails in one or more subjects with an overall GPA of 2.0 and above will be required to sit for supplementary examination after the end of the Semester 2.
- 2) A candidate who fails in one or more subjects with a GPA of less than 2.0 will be required to re-take the respective subject(s) in the semester(s) when they are next offered.
- 3) A candidate who fails the supplementary examination will stop proceeding with other subject(s) and re-take the failed subject(s) in the semester when the respective subject is next offered.
- 4) A candidate who fails examination after re-retaking the subject(s) will be discontinued from the course.

5.7.2 **Clinical subjects**

- 1) A candidate who fails any clinical subject will sit for supplementary examination after rotating for a minimum of 4 weeks and maximum of 12 weeks.
- 2) A candidate who fails three or more subjects will stop proceeding with other subject(s) and re-take the respective subjects in the semester(s) when the subjects are next offered.
- 3) A candidate who fails the supplementary examination(s) shall be allowed to sit for 2<sup>nd</sup> supplementary examination(s) after rotating for a minimum of 4 additional weeks and maximum of 12 additional weeks.
- 4) A candidate who fails the 2<sup>nd</sup> supplementary examination(s) will be required to re-take the subject(s) while stop all other subjects in the respective semester and concentrate on the failed subject(s) in a semester when the subject is next offered.
- 5) A candidate who fails examination after re-retaking the subject(s) will be discontinued from the course.
- 6) The highest grade a candidate can obtain after a supplementary examination or after re-taking the subject(s) on academic grounds shall be a 60% ("B") in the respective subject(s).
- 7) The exact duration for supplementary clinical rotation will be discussed and agreed in the Department Meeting based on the content of the respective subject and the strength/weakness of a supplementing student. The proceedings/minutes from the meeting MUST be submitted to the respective School Board and to the Higher Degree Committee (in that order) for vetting prior to be submitted to the Senate for approval.
- 8) Any corrections of the dissertations will have to be done within the stipulated timeframe as indicated in the *"Dissertation and Thesis Scoring and Grading Guidelines."* An error free dissertation must be submitted before a candidate is awarded the degree.



## Weill Bugando School of Medicine (WBSOM)



**Dr. Haruna Dika,**

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

The Weill Bugando School of Medicine (WBSOM) was the first School envisaged and established by the Tanzania Episcopal Conference (TEC) at BUGANDO. The WBSOM offers programmes 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. These programmes are Doctor of Medicine (MD), Bachelor of Medical Laboratory Sciences (BMLS), Bachelor of Science in Medical Imaging and Radiotherapy (BMIR), Master of Science in Clinical Microbiology and Diagnostic Molecular Biology (M.SC CMDMB), Master of Medicine programmes (MMed, Anatomical Pathology, Internal Medicine, Paediatrics and Child Health, Obstetric and Gynaecology, Orthopedic and trauma, General Surgery), Doctor of Philosophy (PhD)

### **VISION**

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

### **MISSION**

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

## DOCTOR OF MEDICINE (MD)



## 1.0 BACKGROUND

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.

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 LEARNING METHODS

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

#### 1.1. SUMMARY OF THE MD COURSES FOR THE SEMESTER SYSTEM

| Semester 1     |                                       |             |                          |                                  |                                  |             |               |
|----------------|---------------------------------------|-------------|--------------------------|----------------------------------|----------------------------------|-------------|---------------|
| Code           | Name of Course                        | Lecture Hrs | Seminars, Assignment Hrs | Practical / Clinical / Field Hrs | Individual study / Research Hrs  | Total Hrs   | Total Credits |
| AN 100         | Anatomy                               | 130         | 16                       | 175                              | 55                               | 376         | 37.6          |
| BC 100         | Biochemistry                          | 118         | 16                       | 46                               | 56                               | 236         | 23.6          |
| ME 100         | Medical Ethics I                      | 18          | 0                        | 0                                | 0                                | 18          | 1.8           |
| <b>Total</b>   |                                       | <b>266</b>  | <b>32</b>                | <b>221</b>                       | <b>111</b>                       | <b>630</b>  | <b>63.0</b>   |
| Semester 2     |                                       |             |                          |                                  |                                  |             |               |
| PH 100         | Medical Physiology                    | 136         | 51                       | 70                               | 68                               | 325         | 32.5          |
| SO 100         | Medical Sociology                     | 45          | 10                       | 5                                | 5                                | 65          | 6.5           |
| PS 100         | Medical Psychology                    | 30          | 20                       | 10                               | 30                               | 90          | 9.0           |
| BD 100         | Biostatistics and Demography          | 60          | 20                       | 20                               | 20                               | 120         | 12.0          |
| <b>Total</b>   |                                       | <b>271</b>  | <b>101</b>               | <b>105</b>                       | <b>123</b>                       | <b>600</b>  | <b>60.0</b>   |
| Semester 3     |                                       |             |                          |                                  |                                  |             |               |
| Code           | Name of Course                        | Lecture Hrs | Seminars Assignment Hrs  | Practical / Clinical / Field Hrs | Independent study / Research Hrs | Total Hrs   | Total Credits |
| MM 200         | Medical Microbiology & Immunology     | 136         | 22                       | 108                              | 20                               | 286         | 28.6          |
| PE 200         | Medical Parasitology & Entomology     | 106         | 16                       | 78                               | 20                               | 220         | 22.0          |
| DS 200         | Development Studies                   | 34          | 25                       | 10                               | 25                               | 94          | 9.4           |
| ME 200         | Medical Ethics II                     | 12          | 6                        | 0                                | 6                                | 24          | 2.4           |
| <b>Total</b>   |                                       | <b>288</b>  | <b>69</b>                | <b>196</b>                       | <b>71</b>                        | <b>624</b>  | <b>62.4</b>   |
| Semester 4     |                                       |             |                          |                                  |                                  |             |               |
| ER 200         | Epidemiology & Research Methodology   | 60          | 40                       | 10                               | 20                               | 130         | 13.0          |
| EO 200         | Environmental and Occupational Health | 15          | 10                       | 15                               | 10                               | 50          | 5.0           |
| MP 200         | Pathology                             | 160         | 40                       | 100                              | 44                               | 344         | 34.4          |
| NU 200         | Nutrition                             | 12          | 6                        | 56                               | 10                               | 84          | 8.4           |
| <b>Total</b>   |                                       | <b>247</b>  | <b>96</b>                | <b>181</b>                       | <b>84</b>                        | <b>608</b>  | <b>60.8</b>   |
| Semester 5     |                                       |             |                          |                                  |                                  |             |               |
| Code           | Name of Course                        | Lecture Hrs | Seminars, Assignment Hrs | Practical / Clinical / Field Hrs | Independent study / Research Hrs | Total Hrs   | Total Credits |
| CP 300         | Clinical Pharmacology                 | 144         | 16                       | 15                               | 34                               | 209         | 20.9          |
| MD 300         | Management of Diseases                | 248         | 19                       | 55                               | 34                               | 356         | 35.6          |
| ME 300         | Medical Ethics III                    | 34          | 10                       | 0                                | 10                               | 54          | 5.4           |
| <b>Total</b>   |                                       | <b>426</b>  | <b>45</b>                | <b>70</b>                        | <b>78</b>                        | <b>619</b>  | <b>61.9</b>   |
| Semester 6 & 7 |                                       |             |                          |                                  |                                  |             |               |
| Code           | Name of Course                        | Lecture Hrs | Seminars Assignment Hrs  | Practical / Clinical / Field Hrs | Independent study / Research Hrs | Total Hrs   | Total Credits |
| IM 300         | Internal Medicine                     | 50          | 50                       | 150                              | 65                               | 315         | 31.5          |
| PC 300         | Paediatrics & Child Health            | 50          | 50                       | 150                              | 65                               | 315         | 31.5          |
| GS 300         | Surgery                               | 25          | 25                       | 200                              | 65                               | 315         | 31.5          |
| OG 300         | Obstetrics & Gynaecology              | 50          | 50                       | 150                              | 65                               | 315         | 31.5          |
| <b>Total</b>   |                                       | <b>175</b>  | <b>175</b>               | <b>650</b>                       | <b>260</b>                       | <b>1260</b> | <b>126.0</b>  |

| <b>Semester 8 &amp; 9</b>         |                            |                    |                                 |                                         |                                         |                  |                      |
|-----------------------------------|----------------------------|--------------------|---------------------------------|-----------------------------------------|-----------------------------------------|------------------|----------------------|
| CM 400                            | Community Medicine         | 65                 | 95                              | 105                                     | 35                                      | 300              | 30.0                 |
| PS 400                            | Psychiatry                 | 50                 | 50                              | 180                                     | 20                                      | 300              | 30.0                 |
| SS 400                            | Surgical Specialities      | 80                 | 16                              | 156                                     | 28                                      | 280              | 28.0                 |
| MS 400                            | Medical Specialities       | 80                 | 34                              | 145                                     | 21                                      | 280              | 28.0                 |
| RP 400                            | Research Project           | 5                  | 0                               | 65                                      | 30                                      | 100              | 10.0                 |
| <b>Total</b>                      |                            | <b>280</b>         | <b>195</b>                      | <b>651</b>                              | <b>134</b>                              | <b>1260</b>      | <b>126.0</b>         |
| <b>Semester 10</b>                |                            |                    |                                 |                                         |                                         |                  |                      |
| <b>Code</b>                       | <b>Name of Course</b>      | <b>Lecture Hrs</b> | <b>Seminars, Assignment Hrs</b> | <b>Practical / Clinical / Field Hrs</b> | <b>Independent study / Research Hrs</b> | <b>Total Hrs</b> | <b>Total Credits</b> |
| IM 500                            | Internal Medicine          | 10                 | 15                              | 105                                     | 10                                      | 140              | 14.0                 |
| PC 500                            | Paediatrics & Child Health | 10                 | 15                              | 105                                     | 10                                      | 140              | 14.0                 |
| GS 500                            | Surgery                    | 10                 | 20                              | 60                                      | 50                                      | 140              | 14.0                 |
| OG 500                            | Obstetrics & Gynaecology   | 15                 | 10                              | 100                                     | 15                                      | 140              | 14.0                 |
| ES 500                            | Entrepreneurship           | 32                 | 4                               | 2                                       | 2                                       | 40               | 4.0                  |
| <b>Total</b>                      |                            | <b>77</b>          | <b>64</b>                       | <b>372</b>                              | <b>87</b>                               | <b>600</b>       | <b>60.0</b>          |
| <b>Grand Total for the course</b> |                            | <b>2030</b>        | <b>777</b>                      | <b>2446</b>                             | <b>948</b>                              | <b>6201</b>      | <b>620.1</b>         |

## DOCTOR OF MEDICINE (MD) PROGRAMME (STARTED 2020/21)

| <b>Semester 1 Year 1</b>                           |                                                |            |            |           |            |            |             |              |
|----------------------------------------------------|------------------------------------------------|------------|------------|-----------|------------|------------|-------------|--------------|
| Code                                               | Course name                                    | LH         | TS         | AH        | IS         | PH         | TH          | Credits      |
| BM100                                              | Basics of Clinical & Community Medicine        | 17         | 8          | 0         | 0          | 9          | 34          | 3.4          |
| AN100                                              | Anatomy                                        | 85         | 17         | 19        | 43         | 153        | 317         | 31.7         |
| BC100                                              | Biochemistry                                   | 85         | 34         | 28        | 38         | 51         | 236         | 23.6         |
| EP100                                              | Introduction to Professionalism & Ethics       | 17         | 9          | 4         | 4          | 0          | 34          | 3.4          |
| <b>Total</b>                                       |                                                | <b>204</b> | <b>68</b>  | <b>51</b> | <b>85</b>  | <b>213</b> | <b>621</b>  | <b>62.1</b>  |
| <b>Semester 2 Year 1</b>                           |                                                |            |            |           |            |            |             |              |
| Code                                               | Course name                                    | LH         | TS         | AH        | IS         | PH         | TH          | Credits      |
| NA100                                              | Neuroanatomy                                   | 17         | 17         | 11        | 11         | 34         | 90          | 9.0          |
| HS100                                              | Health Sociology                               | 34         | 17         | 4         | 5          | 0          | 60          | 6.0          |
| HP100                                              | Health Psychology                              | 34         | 17         | 7         | 7          | 0          | 65          | 6.5          |
| PH100                                              | Medical Physiology                             | 119        | 34         | 34        | 52         | 51         | 290         | 29.0         |
| IC100                                              | ICT and Communication skills                   | 17         | 17         | 17        | 6          | 51         | 108         | 10.8         |
| <b>Total</b>                                       |                                                | <b>221</b> | <b>102</b> | <b>73</b> | <b>81</b>  | <b>136</b> | <b>613</b>  | <b>61.3</b>  |
| <b>Semester 3 Year 2</b>                           |                                                |            |            |           |            |            |             |              |
| Code                                               | Course name                                    | LH         | TS         | AH        | IS         | PH         | TH          | Credits      |
| MI200                                              | Microbiology & Immunology                      | 85         | 17         | 10        | 14         | 68         | 194         | 19.4         |
| PE200                                              | Parasitology & Medical Entomology              | 51         | 17         | 10        | 7          | 34         | 119         | 11.9         |
| BE200                                              | Biostatistics & Epidemiology                   | 85         | 34         | 34        | 18         | 34         | 205         | 20.5         |
| DS200                                              | Development Studies                            | 34         | 17         | 14        | 25         | 0          | 90          | 9.0          |
| <b>Total</b>                                       |                                                | <b>255</b> | <b>85</b>  | <b>68</b> | <b>64</b>  | <b>136</b> | <b>608</b>  | <b>60.8</b>  |
| <b>Semester 4 Year 2</b>                           |                                                |            |            |           |            |            |             |              |
| Code                                               | Course name                                    | LH         | TS         | AH        | IS         | PH         | TH          | Credits      |
| CM200                                              | Introduction to Community Medicine             | 17         | 17         | 2         | 4          | 30         | 70          | 7.0          |
| CP200                                              | Clinical Pharmacology                          | 102        | 34         | 17        | 11         | 34         | 198         | 19.8         |
| PA200                                              | Pathology                                      | 153        | 34         | 26        | 44         | 85         | 342         | 34.2         |
| <b>Total</b>                                       |                                                | <b>272</b> | <b>85</b>  | <b>45</b> | <b>59</b>  | <b>149</b> | <b>610</b>  | <b>61.0</b>  |
| <b>Semester 5 Year 3</b>                           |                                                |            |            |           |            |            |             |              |
| Code                                               | Course name                                    | LH         | TS         | AH        | IS         | PH         | TH          | Credits      |
| EP300                                              | Professionalism & Ethics                       | 34         | 9          | 6         | 7          | 12         | 68          | 6.8          |
| MD300                                              | Management of diseases                         | 204        | 34         | 24        | 31         | 51         | 344         | 34.4         |
| DI300                                              | Diagnostic Imaging                             | 17         | 17         | 22        | 15         | 51         | 122         | 12.2         |
| LM300                                              | Leadership & Management                        | 17         | 8          | 6         | 5          | 34         | 70          | 7.0          |
| <b>Total</b>                                       |                                                | <b>68</b>  | <b>58</b>  | <b>54</b> | <b>152</b> | <b>272</b> | <b>604</b>  | <b>60.4</b>  |
| <b>*Semester 6 Year 3 &amp; Semester 7 Year 4</b>  |                                                |            |            |           |            |            |             |              |
| Code                                               | Course name                                    | LH         | TS         | AH        | IS         | PH         | TH          | Credits      |
| GS400                                              | General Surgery                                | 20         | 50         | 20        | 45         | 180        | 315         | 32.5         |
| OG400                                              | Obstetrics and Gynaecology                     | 20         | 50         | 20        | 45         | 180        | 315         | 32.5         |
| PC400                                              | Paediatrics and Child Health                   | 20         | 50         | 20        | 45         | 180        | 315         | 32.5         |
| IM400                                              | Internal Medicine                              | 20         | 50         | 20        | 45         | 180        | 315         | 32.5         |
| <b>Total</b>                                       |                                                | <b>80</b>  | <b>200</b> | <b>80</b> | <b>180</b> | <b>720</b> | <b>1260</b> | <b>126.0</b> |
| <b>**Semester 8 Year 4 &amp; Semester 9 Year 5</b> |                                                |            |            |           |            |            |             |              |
| Code                                               | Course name                                    | LH         | TS         | AH        | IS         | PH         | TH          | Credits      |
| RP500                                              | Research Field Project                         | 0          | 0          | 0         | 35         | 245        | 280         | 28.0         |
| CM500                                              | Community Medicine                             | 64         | 48         | 28        | 35         | 105        | 280         | 28.0         |
| PS500                                              | Psychiatry                                     | 48         | 32         | 12        | 8          | 180        | 280         | 28.0         |
| SS500                                              | Surgical Subspecialties                        | 64         | 16         | 16        | 28         | 156        | 280         | 28.0         |
| MS500                                              | Medical Sub-specialties and Emergency Medicine | 64         | 32         | 16        | 12         | 156        | 280         | 28.0         |
| <b>TOTAL</b>                                       |                                                | <b>240</b> | <b>128</b> | <b>72</b> | <b>118</b> | <b>842</b> | <b>1400</b> | <b>140.0</b> |
| <b>***Semester 10 Year 5</b>                       |                                                |            |            |           |            |            |             |              |
| Code                                               | Course name                                    | LH         | TS         | AH        | IS         | PH         | TH          | Credits      |
| GS500                                              | Advanced General Surgery                       | 4          | 20         | 10        | 12         | 94         | 140         | 14.0         |
| OG500                                              | Advanced Obstetrics and Gynaecology            | 4          | 20         | 10        | 12         | 94         | 140         | 14.0         |

|                    |                                       |             |            |            |            |             |             |              |
|--------------------|---------------------------------------|-------------|------------|------------|------------|-------------|-------------|--------------|
| PC500              | Advanced Paediatrics and Child Health | 4           | 20         | 10         | 12         | 94          | 140         | 14.0         |
| IM500              | Advanced Internal Medicine            | 4           | 20         | 10         | 12         | 94          | 140         | 14.0         |
| EN500              | Entrepreneurship                      | 17          | 6          | 2          | 4          | 5           | 34          | 3.4          |
| <b>Total</b>       |                                       | <b>33</b>   | <b>86</b>  | <b>42</b>  | <b>52</b>  | <b>381</b>  | <b>594</b>  | <b>59.4</b>  |
|                    |                                       | LH          | TS         | AH         | IS         | PH          | TH          | Credits      |
| <b>Grand Total</b> |                                       | <b>1592</b> | <b>821</b> | <b>496</b> | <b>679</b> | <b>2731</b> | <b>6310</b> | <b>631.0</b> |

**KEY:**

**LH** - Lecture hours,  
**TS** - Tutorial/Seminar hours,  
**AH** - Assignment hours,  
**IS** - Independent studies,  
**PH** - Practical hours,  
**TH** - Total hours

\*Students will be rotating for 10 weeks each of the four departments.

\*\*Students will be rotating 8 weeks in each department.

\*\*\*Students will be rotating 4 weeks in each department.

## 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 10<sup>th</sup> 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, venepuncture, etc.
4. Present cases during attending rounds.

### **The Consultant/Attending Specialist is expected to:**

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



6. Observe the student do a comprehensive history and physical on an unknown patient the last week of the rotation.

**The ward resident is expected to:**

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

**The intern is expected to:**

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

### Programme Expected Learning Outcomes and its associated teaching /learning activities and assessment criteria:

| Qualification category |             | Undergraduate                                                                                                                                                     |                                                                                                                                                |
|------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Qualification type     |             | Bachelor's degree                                                                                                                                                 |                                                                                                                                                |
| Levels                 |             | 8                                                                                                                                                                 |                                                                                                                                                |
| Learning outcomes      | Knowledge   | Comprehend sound knowledge regarding medical laboratory sciences                                                                                                  | Assessment criteria                                                                                                                            |
|                        | Skills      | Perform clinical diagnostic tests, Analyze medical laboratory services for planning and management activities<br>Promote quality services in medical laboratories | Written (MCQs, short answer and essay questions) and oral Examinations<br>Practical examinations, case scenarios and assessment using logbooks |
|                        | Competences | Perform clinical diagnostic tests both in hospital and in the research field                                                                                      | Practical examinations, case scenarios and assessment using logbooks                                                                           |

### ORGANIZATION OF THE PROGRAMME

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

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

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

### Summary of the Six semester Modules for BMLS Programmes

| Course code                  | COURSE TITTLE                                    | LH  | TH  | AH  | ISH | PH  | Total       | CU           |
|------------------------------|--------------------------------------------------|-----|-----|-----|-----|-----|-------------|--------------|
| <b>SEMESTER I: YEAR I</b>    |                                                  |     |     |     |     |     |             |              |
| BC 140                       | Biochemistry                                     | 160 | 50  | 40  | 20  | 30  | 300         | 30.0         |
| AN 140                       | Functional Anatomy and Histology                 | 100 | 40  | 20  | 30  | 40  | 230         | 23.0         |
| IT 140                       | Laboratory practice informatics                  | 30  | 20  | 25  | 10  | 25  | 110         | 11.0         |
| LP 140                       | Medical laboratory practices                     | 30  | 20  | 20  | 10  | 30  | 110         | 11.0         |
| TOTAL                        |                                                  | 320 | 130 | 105 | 70  | 125 | <b>750</b>  | <b>75.0</b>  |
| <b>SEMESTER II: YEAR I</b>   |                                                  |     |     |     |     |     |             |              |
| PH 140                       | Basic Physiology                                 | 100 | 30  | 20  | 20  | 20  | 190         | 19.0         |
| MB 140                       | Molecular Biology                                | 120 | 50  | 20  | 25  | 35  | 250         | 25.0         |
| ER 140                       | Bio-statistics and Epidemiology                  | 90  | 20  | 20  | 30  | 30  | 190         | 19.0         |
| DS 140                       | Development studies 1                            | 50  | 20  | 20  | 20  | 10  | 120         | 12.0         |
| TOTAL                        |                                                  | 360 | 120 | 80  | 95  | 95  | <b>750</b>  | <b>75.0</b>  |
| <b>SEMESTER I: YEAR II</b>   |                                                  |     |     |     |     |     |             |              |
| PE 240                       | Parasitology and Entomology                      | 100 | 20  | 30  | 40  | 80  | 270         | 27.0         |
| MM 240                       | Microbiology/Immunology                          | 110 | 20  | 30  | 70  | 80  | 310         | 31.0         |
| DS 240                       | Development studies 2                            | 70  | 30  | 30  | 30  | 10  | 170         | 17.0         |
| TOTAL                        |                                                  | 280 | 70  | 90  | 140 | 170 | <b>750</b>  | <b>75.0</b>  |
| <b>SEMESTER II: YEAR II</b>  |                                                  |     |     |     |     |     |             |              |
| SM 240                       | Clinical Microbiology                            | 30  | 10  | 15  | 15  | 130 | 200         | 20.0         |
| CC 240                       | Clinical Chemistry                               | 30  | 10  | 15  | 15  | 130 | 200         | 20.0         |
| PM 240                       | Public Microbiology                              | 20  | 5   | 5   | 5   | 65  | 100         | 10.0         |
| MP 240                       | Pathology, Hematopathology and Blood transfusion | 115 | 15  | 15  | 25  | 80  | 250         | 25.0         |
| TOTAL                        |                                                  | 195 | 40  | 50  | 60  | 405 | <b>750</b>  | <b>75.0</b>  |
| <b>SEMESTER I: YEAR III</b>  |                                                  |     |     |     |     |     |             |              |
| HT 340                       | Histotechnology and Cytology                     | 80  | 15  | 15  | 30  | 160 | 300         | 30.0         |
| SH 340                       | Hematology and Blood transfusion                 | 45  | 15  | 10  | 10  | 100 | 180         | 18.0         |
| DT 340                       | Molecular diagnostics techniques                 | 60  | 15  | 15  | 20  | 110 | 220         | 22.0         |
| TOTAL                        |                                                  | 185 | 45  | 40  | 60  | 370 | <b>700</b>  | <b>70.0</b>  |
| <b>SEMESTER II: YEAR III</b> |                                                  |     |     |     |     |     |             |              |
| EF 340                       | Elective Laboratory Rotation and Field Project   | 10  | 15  | 15  | 20  | 580 | 640         | 64.0         |
| ES 340                       | Entrepreneurship                                 | 40  | 10  | 8   | 7   | 5   | 70          | 7.0          |
| MG 340                       | Laboratory Management and Planning               | 30  | 20  | 10  | 20  | 10  | 90          | 9.0          |
| TOTAL                        |                                                  | 80  | 45  | 33  | 47  | 595 | <b>800</b>  | <b>80.0</b>  |
|                              |                                                  |     |     |     |     |     | <b>4500</b> | <b>450.0</b> |

**KEY:** LH:Lecture Hours TH:Tutorial Hours AS: Assignment hours PH:Practical or Field work hours  
ISH: Independent studies hours CU:10 Notional Hours= 1 Credit Unit

## **BACHELOR OF SCIENCE IN MEDICAL IMAGING AND RADIOTHERAPY (BScMIR) PROGRAMME**



**BACHELOR OF SCIENCE IN MEDICAL IMAGING AND RADIOTHERAPY (BScMIR)****Programme Objectives**

The BSc MIR programme is intended to produce graduates with:

- Sound knowledge in medical imaging and radiotherapy sciences
- High quality competencies in medical imaging and radiation cancer treatment. radiotherapy
- Competence to implement and promote quality services in medical imaging and radiotherapy.
- Highly vested with ethical and moral values in provision of medical imaging and radiotherapy.
- Ability to translate the national medical imaging and radiotherapy policies into programme, planning and management activities.

**Programme Learning Outcomes:**

- Programme expected learning outcomes and its associated teaching/learning activities and assessment criteria (learning outcomes should include knowledge, skills and competences as per UQF level descriptions).

**Programme learning outcomes**

| Qualification category |                   | Undergraduate                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                        |
|------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Qualification type     |                   | Bachelor's Degree                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                        |
| Levels                 |                   | 8                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                        |
|                        | Competence Domain | Learning outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                | Assessment criteria                                                    |
| Learning outcomes      | Knowledge         | At the end of the programme the student should be able to: <ul style="list-style-type: none"> <li>• Discuss biomedical sciences in relation to medical imaging and radiotherapy techniques</li> <li>• Discuss clinical pathology in relation to medical imaging and radiotherapy techniques</li> <li>• Illustrate the organization of Imaging units in different levels of the hospital</li> <li>• Describe the plan of Imaging units</li> </ul> | Written (MCQs, short answer and essay questions) and oral Examinations |
|                        | Skills            | At the end of the programme the student should be able to: <ul style="list-style-type: none"> <li>• Demonstrate quality medical imaging and radiotherapy procedures independently both in hospital and in the research field</li> <li>• Document imaging findings systematically</li> </ul>                                                                                                                                                      | Practical examinations, case scenarios and assessment using logbooks   |



|  |                    |                                                                                                                                                                                                                                                                                                                     |                                                                                                                  |
|--|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
|  |                    | and accurately <ul style="list-style-type: none"> <li>• Perform quality services in relation to</li> <li>• medical imaging and radiotherapy</li> <li>• Collect imaging data in systematic way</li> </ul>                                                                                                            |                                                                                                                  |
|  | <b>Competences</b> | At the end of the programme the student should be able to: <ul style="list-style-type: none"> <li>• Perform medical imaging and radiotherapy tests both in hospital and in the research field</li> <li>• Provide mentorship to Junior in relation to medical imaging and radiotherapy</li> </ul>                    | Practical examinations, case scenarios                                                                           |
|  | <b>Attitude</b>    | At the end of the programme the student should be able to: <ul style="list-style-type: none"> <li>• Practice quality medical imaging and radiotherapy procedures with integrate, reliability and in a friendly manner to patients</li> <li>• Demonstrate high level of professionalisms during practices</li> </ul> | Observe elements of temper, reliability, patience, friendly behaviour during training and practical examinations |

### Normal Learning and Course Matrix

All courses in this programme are Core Courses:

| CODE                        | COURSE TITLE                                        | LH  | TH  | AH | IS | PH  | Total      | Credit |
|-----------------------------|-----------------------------------------------------|-----|-----|----|----|-----|------------|--------|
| <b>YEAR 1: SEMESTER I</b>   |                                                     |     |     |    |    |     |            |        |
| AN 150                      | Anatomy                                             | 72  | 36  | 18 | 24 | 90  | 240        | 24     |
| BC 150                      | Biochemistry                                        | 54  | 18  | 9  | 12 | 27  | 120        | 12     |
| DS 150                      | Development Studies                                 | 36  | 18  | 9  | 8  | 9   | 80         | 8      |
| ME 150                      | Medical Ethics                                      | 18  | 18  |    | 14 | 0   | 50         | 5      |
| MI 150                      | Medical Imaging and Radiotherapy Informatics        | 36  | 18  | 18 | 16 | 72  | 160        | 16     |
|                             | <b>Semester Total</b>                               | 216 | 108 | 54 | 74 | 198 | <b>650</b> | 65     |
| <b>YEAR 1: SEMESTER II</b>  |                                                     |     |     |    |    |     |            |        |
| PH 150                      | Basic Physiology                                    | 72  | 18  | 18 | 24 | 18  | 150        | 15     |
| SP 150                      | Medical Sociology and Psychology                    | 36  | 18  | 9  | 8  | 9   | 80         | 8      |
| MP 150                      | Medical Physics, Imaging and radiotherapy Equipment | 54  | 18  | 9  | 14 | 45  | 140        | 14     |
| RR 150                      | Radiobiology and Radiation Protection               | 54  | 18  | 18 | 14 | 36  | 140        | 14     |
| IM 150                      | Image management                                    | 54  | 18  | 18 | 14 | 36  | 140        | 14     |
|                             | <b>Semester Total</b>                               | 270 | 90  | 72 | 74 | 144 | <b>650</b> | 65     |
| <b>YEAR 2: SEMESTER III</b> |                                                     |     |     |    |    |     |            |        |
| CP 250                      | Pharmacology                                        | 72  | 36  | 18 | 26 | 18  | 170        | 17     |
| XR 250                      | X-ray Imaging and Techniques                        | 72  | 36  | 36 | 22 | 144 | 310        | 31     |
| NE 250                      | Nursing Procedures and Emergency care               | 36  | 18  | 18 | 16 | 72  | 160        | 16     |
|                             | <b>Semester Total</b>                               | 180 | 90  | 72 | 64 | 234 | <b>640</b> | 64     |
| <b>YEAR 2: SEMESTER IV</b>  |                                                     |     |     |    |    |     |            |        |
| PP 250                      | Principles of Pathology                             | 54  | 18  | 18 | 14 | 36  | 140        | 14     |
| US 250                      | Ultrasound Imaging and Techniques                   | 90  | 36  | 36 | 50 | 288 | 500        | 50     |
|                             | <b>Semester Total</b>                               | 144 | 54  | 54 | 64 | 324 | <b>640</b> | 64     |
| <b>YEAR 3: SEMESTER V</b>   |                                                     |     |     |    |    |     |            |        |

| CODE                         | COURSE TITLE                                       | LH         | TH        | AH        | IS        | PH         | Total       | Credit     |
|------------------------------|----------------------------------------------------|------------|-----------|-----------|-----------|------------|-------------|------------|
| CM 350                       | CT / MR Imaging and Techniques                     | 90         | 36        | 18        | 36        | 270        | 450         | 45         |
| ER 350                       | Biostatistics, Epidemiology & Research Methodology | 72         | 18        | 18        | 26        | 36         | 170         | 17         |
|                              | <b>Semester Total</b>                              | <b>162</b> | <b>54</b> | <b>36</b> | <b>62</b> | <b>306</b> | <b>620</b>  | <b>62</b>  |
| <b>YEAR 3: SEMESTER VI</b>   |                                                    |            |           |           |           |            |             |            |
| NM 350                       | Nuclear Medicine Imaging and Techniques            | 36         | 18        | 18        | 28        | 90         | 190         | 19         |
| RO 350                       | Radiation Oncology                                 | 54         | 18        | 18        | 14        | 36         | 140         | 14         |
| RP 350                       | Radiological and imaging Pathology                 | 72         | 36        | 18        | 14        | 180        | 320         | 32         |
|                              | <b>Semester Total</b>                              | <b>162</b> | <b>72</b> | <b>54</b> | <b>56</b> | <b>306</b> | <b>650</b>  | <b>65</b>  |
| <b>YEAR 4: SEMESTER VII</b>  |                                                    |            |           |           |           |            |             |            |
| RT 450                       | Radiotherapy                                       | 54         | 18        | 18        | 14        | 126        | 230         | 23         |
| EC 450                       | Echocardiography                                   | 36         | 9         | 9         | 12        | 144        | 210         | 21         |
| US 450                       | Specialized Ultrasound Imaging and Techniques      | 36         | 9         | 9         | 12        | 144        | 210         | 21         |
|                              | <b>Semester Total</b>                              | <b>126</b> | <b>36</b> | <b>36</b> | <b>38</b> | <b>414</b> | <b>650</b>  | <b>65</b>  |
| <b>YEAR 4: SEMESTER VIII</b> |                                                    |            |           |           |           |            |             |            |
| EM 450                       | Entrepreneurship, Management & Planning            | 36         | 18        | 18        | 12        | 36         | 120         | 12         |
| RP 450                       | Research Project and Fieldwork                     | 18         | 36        | 18        | 38        | 450        | 560         | 56         |
|                              | <b>Semester Total</b>                              | <b>54</b>  | <b>54</b> | <b>36</b> | <b>50</b> | <b>486</b> | <b>680</b>  | <b>68</b>  |
| <b>Grand Total</b>           |                                                    |            |           |           |           |            | <b>5180</b> | <b>518</b> |

**KEY:**

LH-lecture hours,  
 TH-tutorial hours,  
 AH-assignment hours,  
 IS-independent studies hours,  
 PH-practical hours,  
 CT-x-ray Computed Tomography,  
 MR-Magnetic Resonance.

# SCHOOL OF PHARMACY



## ***Ag. DEAN, Dr. Ambrose Haule, MSc. (Romania), PhD ( Sunderland-UK)***

The School of Pharmacy at CUHAS- Bugando, started in 2010 with thirty six students. In accordance with the requirements laid down by the Tanzania Pharmacy Council, the Bachelor of Pharmacy degree is designed to produce healthcare professionals who are committed to meeting the pharmaceutical needs of all health seeking communities.

### **Vision:**

To provide Highly Qualified Pharmacists who can suit the Pharmaceutical needs of Tanzania, in Health Care Systems, Community, Training and Research Institutions.

### **Mission:**

- 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

## **BACHELOR OF PHARMACY (BPHARM) PROGRAMME**



## BACHELOR OF PHARMACY (BPHARM)

### Broad Objectives

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

### Specific Objectives

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

### PROGRAMME GOALS

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

### Summary of the Eight Semester Modules for B.Pharm Programme

| SEMESTER 1      |             |                                                    |        |       |           |       |       |       |
|-----------------|-------------|----------------------------------------------------|--------|-------|-----------|-------|-------|-------|
| No.             | Course Code | Course Name                                        | Theory |       | Practical |       | Total |       |
|                 |             |                                                    | Hrs    | Units | Hrs       | Units | Hrs   | 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 |       |
|                 |             |                                                    | Hrs    | Units | Hrs       | Units | Hrs   | 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 |       |
|                 |             |                                                    | Hrs    | Units | Hrs       | Units | Hrs   | 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 |       |
|                 |             |                                                                                    | Hrs    | Units | Hrs       | Units | Hrs   | 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      | Course Name                                                                        | Theory |       | Practical |       | Total |       |
|                 |             |                                                                                    | Hrs    | Units | Hrs       | Units | Hrs   | Units |
| 1.              | CP320       | Clinical Pharmacology 1                                                            | 178    | 11.9  | 50        | 1.1   | 228   | 13.0  |
| 2.              | 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      | Course Name                                                                        | Theory |       | Practical |       | Total |       |
|                 |             |                                                                                    | Hrs    | Units | Hrs       | Units | Hrs   | 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      | Course Name                                                                        | Theory |       | Practical |       | Total |       |
|                 |             |                                                                                    | Hrs    | Units | Hrs       | Units | Hrs   | 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 |       |
|                 |             |                                                                                    | Hrs    | Units | Hrs       | Units | Hrs   | 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.<br>BC: Biochemistry.<br>CH: Chemistry.<br>CP: Clinical Pharmacology | PC: Pharmaceutics.<br>PD: Pharmacodynamic Agents and Drug Design<br>PE: Parasitology & Medical Entomology.<br>PG: Pharmacognosy. |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                |                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| DC: Drug Development and Chemotherapy<br>DS: Developmental Studies<br>ER: Epidemiology & Biostatistics.<br>MM: Pharmaceutical Microbiology<br>MP: Principle of General Pathology<br>PB: Pharmaceutical Botany. | PH: Physiology.<br>PP: Pharmacy Practice.<br>PT: Pharmaceutical Phytochemistry.<br>RP: Research Project. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|

## BACHELOR OF PHARMACY PROGRAMME (STARTED 2020/21)

### STRUCTURE OF MODULES

| Code                      | Course Name                                                            | LH  | TS  | AH | IS | PH  | TH  | Credits |
|---------------------------|------------------------------------------------------------------------|-----|-----|----|----|-----|-----|---------|
| <b>YEAR 1: SEMESTER 1</b> |                                                                        |     |     |    |    |     |     |         |
| BP120                     | Basics of Clinical & Community Pharmacy                                | 17  | 8   | 0  | 0  | 9   | 34  | 3.4     |
| AN120                     | Anatomy                                                                | 85  | 17  | 4  | 2  | 34  | 142 | 14.2    |
| BC120                     | Biochemistry                                                           | 85  | 34  | 4  | 2  | 51  | 176 | 17.6    |
| EP120                     | Introduction to Professionalism & Ethics                               | 17  | 9   | 4  | 4  | 0   | 34  | 3.4     |
| DS120                     | Development Studies                                                    | 34  | 17  | 14 | 25 | 0   | 90  | 9.0     |
| CH120                     | General, Physical Inorganic and Aliphatic Chemistry                    | 68  | 17  | 4  | 4  | 51  | 144 | 14.4    |
| Semester Total            |                                                                        | 306 | 102 | 30 | 37 | 145 | 620 | 62.0    |
| <b>YEAR 1: SEMESTER 2</b> |                                                                        |     |     |    |    |     |     |         |
| NA120                     | Neuroanatomy                                                           | 17  | 17  | 3  | 3  | 17  | 57  | 5.7     |
| HS120                     | Health Sociology                                                       | 34  | 17  | 4  | 5  | 0   | 60  | 6       |
| HP120                     | Health Psychology                                                      | 34  | 17  | 7  | 7  | 0   | 65  | 6.5     |
| PH120                     | Physiology                                                             | 119 | 34  | 3  | 3  | 51  | 210 | 21      |
| IC120                     | ICT & Communication Skills                                             | 17  | 17  | 17 | 6  | 51  | 108 | 10.8    |
| PC120                     | Pharmaceutics                                                          | 34  | 17  | 6  | 6  | 51  | 114 | 11.4    |
| Semester Total            |                                                                        | 255 | 119 | 40 | 30 | 170 | 614 | 61.4    |
| <b>YEAR 2: SEMESTER 3</b> |                                                                        |     |     |    |    |     |     |         |
| PE220                     | Parasitology and Medical Entomology                                    | 51  | 17  | 10 | 7  | 34  | 119 | 11.9    |
| MI220                     | Pharmaceutical Microbiology                                            | 97  | 23  | 16 | 18 | 76  | 230 | 23.0    |
| BE220                     | Epidemiology & Biostatistics                                           | 85  | 34  | 9  | 9  | 34  | 171 | 17.1    |
| PC220                     | Introduction to Pharmaceutical Technology                              | 34  | 17  | 6  | 6  | 34  | 97  | 9.7     |
| Semester Total            |                                                                        | 267 | 91  | 41 | 40 | 178 | 617 | 61.7    |
| <b>YEAR 2: SEMESTER 4</b> |                                                                        |     |     |    |    |     |     |         |
| MP220                     | Principles of General Pathology                                        | 40  | 11  | 8  | 8  | 24  | 91  | 9.1     |
| CP220                     | Clinical Pharmacology                                                  | 102 | 34  | 17 | 11 | 34  | 198 | 19.8    |
| CC220                     | Basic Pharmaceutical Calculations & Compounding of Liquid Preparations | 17  | 34  | 4  | 4  | 85  | 144 | 14.4    |
| CH220                     | Organic Chemistry & Spectroscopy                                       | 85  | 17  | 9  | 9  | 51  | 171 | 17.1    |
| Semester Total            |                                                                        | 244 | 96  | 38 | 32 | 194 | 604 | 60.4    |
| <b>YEAR 3: SEMESTER 5</b> |                                                                        |     |     |    |    |     |     |         |
| EP320                     | Pharmacy Ethics                                                        | 28  | 18  | 4  | 4  | 6   | 60  | 6.0     |
| NU320                     | Nutrition                                                              | 17  | 13  | 8  | 8  | 9   | 55  | 5.5     |
| CC320                     | Pharmaceutical Calculations and Solid & Semisolid Preparations         | 13  | 39  | 4  | 4  | 78  | 138 | 13.8    |
| PG320                     | Pharm Botany & Pharmacognosy                                           | 39  | 13  | 4  | 6  | 109 | 171 | 17.1    |
| PP320                     | Community Pharmacy Practice                                            | 39  | 39  | 6  | 6  | 96  | 186 | 18.6    |
| Semester Total            |                                                                        | 136 | 122 | 26 | 28 | 298 | 610 | 61.0    |
| <b>YEAR 3: SEMESTER 6</b> |                                                                        |     |     |    |    |     |     |         |
| ML320                     | Management & Leadership in Pharmacy                                    | 36  | 21  | 6  | 6  | 108 | 177 | 17.7    |
| PT320                     | Pharmaceutical Phytochemistry                                          | 36  | 24  | 6  | 6  | 36  | 108 | 10.8    |
| PC320                     | Industrial Pharmacy                                                    | 36  | 24  | 16 | 8  | 106 | 190 | 19      |
| DC320                     | Drug Development & Chemotherapy                                        | 36  | 24  | 9  | 12 | 36  | 117 | 11.7    |
| Semester Total            |                                                                        | 144 | 93  | 37 | 32 | 286 | 592 | 59.2    |
| <b>YEAR 4: SEMESTER 7</b> |                                                                        |     |     |    |    |     |     |         |
| Code                      | Course Name                                                            | LH  | TS  | AH | IS | PH  | TH  | Credits |



|                           |                                               |      |     |     |     |      |      |       |
|---------------------------|-----------------------------------------------|------|-----|-----|-----|------|------|-------|
| PC420                     | Biopharmaceutics and Pharmacokinetics         | 34   | 34  | 12  | 12  | 51   | 143  | 14.3  |
| TC420                     | Therapeutics of Communicable Diseases         | 17   | 17  | 9   | 9   | 68   | 120  | 12.0  |
| PD420                     | Medicinal Chemistry of Pharmacodynamic Agents | 34   | 34  | 12  | 12  | 51   | 143  | 14.3  |
| HR420                     | Health Research                               | 17   | 17  | 9   | 9   | 0    | 52   | 5.2   |
| PG420                     | Applied Pharmacognosy                         | 34   | 34  | 12  | 12  | 51   | 143  | 14.3  |
| Semester Total            |                                               | 136  | 136 | 54  | 54  | 221  | 601  | 60.1  |
| <b>YEAR 4: SEMESTER 8</b> |                                               |      |     |     |     |      |      |       |
| TN420                     | Therapeutics of Non-Communicable Diseases     | 39   | 26  | 18  | 40  | 104  | 227  | 22.7  |
| PP420                     | Forensic Pharmacy                             | 13   | 26  | 9   | 9   | 13   | 70   | 7.0   |
| EN420                     | Entrepreneurship                              | 23   | 2   | 12  | 12  | 5    | 54   | 5.4   |
| RP420                     | Research Field Project                        | 0    | 13  | 39  | 52  | 140  | 244  | 24.4  |
| Semester Total            |                                               | 75   | 67  | 78  | 113 | 262  | 595  | 59.5  |
| Programme Total           |                                               | 1548 | 847 | 344 | 366 | 1748 | 4853 | 485.3 |

**KEY:**

**LH**-Lecture hours,

**TH**-Tutorial/seminars hours,

**AH**-Assignment hours,

**IS**-Independent studies,

**PH**-Practical/Fieldwork/Clinical rotationhours,

**TH**-Total hours

**NB: A semester has 20 weeks with 18 teaching weeks: A week has 35 contact hours**

## **ARCHBISHOP ANTHONY MAYALA SCHOOL OF NURSING (AAMSoN)**



**DEAN, Prof. Rose Laisser**

**ADNE (MUHAS); M.Sc (Leeds Metropolitan University),  
PhD (University of Umea – Sweden)**

Archbishop Anthony Mayala School of Nursing (AAMSoN) started in 2010 under Catholic University of Health and Allied Sciences (CUHAS). This Nursing School produces well equipped Nurse Teachers with Bachelor of Science in Nursing Education and nurses with Bachelor of Science in Nursing. The programmes are geared towards producing innovative, creative and flexible nurses and nurse teachers who will cope with the dynamic changes of their professions, technology and socio-economic needs. Emphasis is on nursing standards, ethical issues and values of human life in the nursing and midwifery profession.

## **BACHELOR OF SCIENCE IN NURSING EDUCATION (BSc.NED)**



### **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.

## **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**

1. 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.
2. The programme will be structured in semesters. Each academic year will consist of two semesters; each semester lasting for 20 weeks including examinations.
3. 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.



4. During the course of study students will have a total of five weeks (185 hrs. ) for field work practice for research data collection (2<sup>nd</sup> semester), community health nursing practice and teaching practice in diploma schools of nursing (4<sup>th</sup> semester).
5. 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.
6. Allow a one-week inter-semester vacation.
7. There will be University examinations at the end of each semester. External examiners/moderators will be invited during these examinations.
8. 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      |             |
|              |                                                  | Hrs        | Units       | Hrs        | Units      | Hrs        | 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         |
| <b>TOTAL</b> |                                                  | <b>296</b> | <b>19.8</b> | <b>353</b> | <b>6.1</b> | <b>569</b> | <b>25.9</b> |
| 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         |
| 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         |
| <b>TOTAL</b> |                                                  | <b>391</b> | <b>26</b>   | <b>248</b> | <b>5.4</b> | <b>639</b> | <b>31.4</b> |
| Semester 3   |                                                  |            |             |            |            |            |             |
| Code         | Name of Course                                   | Theory     |             | Practice   |            | Total      |             |
|              |                                                  | Hrs        | Units       | Hrs        | Units      | Hrs        | Units       |
| LM200        | Leadership and management                        | 50         | 3.3         | -          | -          | 50         | 3.3         |
| PH200        | Clinical Physiology                              | 57         | 3.8         | -          | -          | 57         | 3.8         |
| 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         |
| <b>TOTAL</b> |                                                  | <b>427</b> | <b>28.2</b> | <b>186</b> | <b>4.2</b> | <b>600</b> | <b>32.2</b> |
| Semester 4   |                                                  |            |             |            |            |            |             |
| Code         | Name of Course                                   | Theory     |             | Practice   |            | Total      |             |
|              |                                                  | Hrs        | Units       | Hrs        | Units      | Hrs        | Units       |
| EP200        | Applied Educational Psychology                   | 40         | 2.7         | 0          | 0.0        | 40         | 2.7         |
| 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         |
| <b>TOTAL</b> |                                                  | <b>333</b> | <b>22.2</b> | <b>320</b> | <b>7.1</b> | <b>653</b> | <b>28.9</b> |

**B.Sc. NED 3 YEAR 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 6) 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 the second year long vacation.

**STRUCTURE AND FEATURE OF THE PROGRAMME (B.Sc. NED 3 years)**

| <b>Semester 1</b> |                       |               |             |                 |            |              |             |
|-------------------|-----------------------|---------------|-------------|-----------------|------------|--------------|-------------|
| <b>Code</b>       | <b>Name of Course</b> | <b>Theory</b> |             | <b>Practice</b> |            | <b>Total</b> |             |
|                   |                       | Hrs           | Units       | Hrs             | Units      | Hrs          | Units       |
| <b>AN100</b>      | Anatomy               | 129           | 8.6         | 232             | 5.2        | 342          | 3.8         |
| <b>BC100</b>      | Biochemistry          | 148           | 9.9         | 41              | 0.9        | 189          | 10.8        |
| <b>BE100</b>      | Bioethics I           | 19            | 1.3         | -               | -          | 19           | 1.3         |
| <b>TOTAL</b>      |                       | <b>296</b>    | <b>19.8</b> | <b>273</b>      | <b>6.1</b> | <b>550</b>   | <b>31.9</b> |
| <b>Semester 2</b> |                       |               |             |                 |            |              |             |
| <b>Code</b>       | <b>Name of Course</b> | <b>Theory</b> |             | <b>Practice</b> |            | <b>Total</b> |             |
|                   |                       | Hrs           | Units       | Hrs             | Units      | Hrs          | Units       |
| <b>PH100</b>      | Physiology            | 113           | 7.5         | 74              | 1.6        | 187          | 9.1         |

| <b>BS100</b>                   | Behavioural Science and Biostatistics                     | 134           | 8.9         | 74              | 1.6         | 208          | 10.5        |
|--------------------------------|-----------------------------------------------------------|---------------|-------------|-----------------|-------------|--------------|-------------|
| <b>DS100</b>                   | Development studies                                       | 60            | 4.0         | 30              | 0.6         | 90           | 4.6         |
| <b>BE100</b>                   | Bioethics II                                              | 19            | 1.3         | -               | -           | 19           | 1.3         |
| <b>TOTAL</b>                   |                                                           | <b>446</b>    | <b>29.7</b> | <b>178</b>      | <b>3.8</b>  | <b>624</b>   | <b>33.5</b> |
| <b>Semester 3</b>              |                                                           |               |             |                 |             |              |             |
| <b>Code</b>                    | <b>Name of Course</b>                                     | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                                |                                                           | Hrs           | Units       | Hrs             | Units       | Hrs          | Units       |
| <b>MM200</b>                   | Microbiology/Immunology                                   | 114           | 7.6         | 76              | 1.7         | 190          | 9.3         |
| <b>PE 200</b>                  | Parasitology/ Entomology                                  | 91            | 6.0         | 61              | 1.3         | 152          | 7.3         |
| <b>DS200</b>                   | Development studies                                       | 57            | 3.8         | 30              | -0.7        | -95          | 3.8         |
| <b>PH 200</b>                  | Clinical physiology                                       | 57            | 3.8         | -               | -           | 57           | 3.8         |
| <b>TOTAL</b>                   |                                                           | <b>327</b>    | <b>21.3</b> | <b>167</b>      | <b>3.7</b>  | <b>494</b>   | <b>25.7</b> |
| <b>Semester 4</b>              |                                                           |               |             |                 |             |              |             |
| <b>Code</b>                    | <b>Name of Course</b>                                     | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                                |                                                           | Hrs           | Units       | Hrs             | Units       | Hrs          | Units       |
| <b>ER200</b>                   | Epidemiology & Research                                   | 65            | 4.3         | -               | -           | 65           | 4.3         |
| <b>BN200</b>                   | Basic Nursing II                                          | 135           | 9.1         | 80              | 1.8         | 215          | 10.9        |
| <b>MS200</b>                   | Medical Surgical Nursing                                  | 166           | 11.1        | 150             | 3.3         | 316          | 14.4        |
| <b>MA200</b>                   | Mental Health & Psychiatric Nursing                       | 56            | 3.7         | 70              | 1.6         | 126          | 7.3         |
| <b>ER204</b>                   | <b>FIELD WORK (RESEARCH)</b>                              | 0             | 0           | 70              | 1.6         | 70           | 1.6         |
| <b>TOTAL</b>                   |                                                           | <b>422</b>    | <b>28.2</b> | <b>370</b>      | <b>8.3</b>  | <b>792</b>   | <b>38.5</b> |
| <b>Semester 5</b>              |                                                           |               |             |                 |             |              |             |
| <b>Code</b>                    | <b>Name of Course</b>                                     | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                                |                                                           | Hrs           | Units       | Hrs             | Units       | Hrs          | Units       |
| <b>PD300</b>                   | Paediatric Nursing                                        | 69            | 4.6         | 139             | 3.1         | 208          | 7.7         |
| <b>MC300</b>                   | Maternal and Child Health Nursing                         | 130           | 8.7         | 150             | 3.3         | 280          | 12.0        |
| <b>CH300</b>                   | Community Health Nursing                                  | 80            | 5.3         | -               | -           | 80           | 8.0         |
| <b>CP300</b>                   | Clinical Pharmacology                                     | 167           | 11.1        | 16              | 0.4         | 183          | 11.5        |
| <b>TOTAL</b>                   |                                                           | <b>446</b>    | <b>29.7</b> | <b>305</b>      | <b>6.8</b>  | <b>751</b>   | <b>39.2</b> |
| <b>Semester 6</b>              |                                                           |               |             |                 |             |              |             |
| <b>Code</b>                    | <b>Name of Course</b>                                     | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                                |                                                           | Hrs           | Units       | Hrs             | Units       | Hrs          | Units       |
| <b>LM300</b>                   | Leadership and Management                                 | 55            | 3.7         | 80              | 1.8         | 135          | 5.4         |
| <b>AP300</b>                   | Applied Educational Psychology                            | 80            | 5.3         | 0               | 0           | 80           | 5.3         |
| <b>HE300</b>                   | Health Educational Media Technology                       | 73            | 4.9         | 90              | 2.0         | 163          | 6.9         |
| <b>CD300</b>                   | Curriculum Development                                    | 99            | 6.6         | 0               | 0           | 99           | 6.6         |
| <b>CD 306</b><br><b>CH 307</b> | Field Work (Teaching Practice & Community Health Nursing) | 0             | 0           | 435             | 9.6         | 435          | 9.6         |
| <b>TOTAL</b>                   |                                                           | <b>307</b>    | <b>20.5</b> | <b>605</b>      | <b>13.6</b> | <b>912</b>   | <b>33.8</b> |
| <b>Semester 7</b>              |                                                           |               |             |                 |             |              |             |
| <b>Code</b>                    | <b>Name of Course</b>                                     | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                                |                                                           | Hrs           | Units       | Hrs             | Units       | Hrs          | Units       |
| <b>MW 400</b>                  | Maternal and Child Health Nursing                         | -             | -           | 600             | 13.3        | 600          | 13.3        |
| <b>PD400</b>                   | Paediatric Nursing                                        | -             | -           | 100             | 2.2         | 100          | 2.2         |
| <b>TOTAL</b>                   |                                                           | <b>-</b>      | <b>-</b>    | <b>700</b>      | <b>15.6</b> | <b>700</b>   | <b>15.6</b> |
| <b>Semester 8</b>              |                                                           |               |             |                 |             |              |             |
| <b>Code</b>                    | <b>Name of Course</b>                                     | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                                |                                                           | Hrs           | Units       | Hrs             | Units       | Hrs          | Units       |
| <b>PN 400</b>                  | Principles of Nursing                                     | -             | -           | 600             | 13.3        | 600          | 13.3        |
| <b>MA400</b>                   | Mental Health & Psychiatric Nursing                       | -             | -           | 100             | 2.2         | 100          | 2.2         |
| <b>TOTAL</b>                   |                                                           | <b>-</b>      | <b>-</b>    | <b>700</b>      | <b>15.5</b> | <b>700</b>   | <b>15.5</b> |



## **BACHELOR OF SCIENCE IN NURSING (B.Sc.N)4 YEAR PROGRAMME**



## **BACHELOR OF SCIENCE IN NURSING (BScN)**

### **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 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 patient's 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 week 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

### **STRUCTURE OF MODULES**

| <b>Semester 1</b> |                                                             |               |             |                 |             |              |             |
|-------------------|-------------------------------------------------------------|---------------|-------------|-----------------|-------------|--------------|-------------|
| <i>Code</i>       | <i>Name of Course</i>                                       | <i>Theory</i> |             | <i>Practice</i> |             | <i>Total</i> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>AN100</b>      | Anatomy                                                     | 129           | 12.9        | 232             | 23.4        | 361          | 36.1        |
| <b>BC100</b>      | Biochemistry                                                | 148           | 14.8        | 41              | 4.1         | 189          | 18.9        |
| <b>PS100</b>      | Philosophy                                                  | 40            | 4.0         | -               | -           | 40.0         | 40.0        |
| <b>NI 100</b>     | Nursing Informatics                                         | 35            | 3.5         | 70              | 7.0         | 105          | 10.5        |
| <b>TOTAL</b>      |                                                             | <b>352</b>    | <b>35.2</b> | <b>343</b>      | <b>34.3</b> | <b>695</b>   | <b>69.5</b> |
| <b>Semester 2</b> |                                                             |               |             |                 |             |              |             |
| <i>Code</i>       | <i>Name of Course</i>                                       | <i>Theory</i> |             | <i>Practice</i> |             | <i>Total</i> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>BS 100</b>     | Behavioural Science and Biostatistics                       | 140           | 14.0        | -               | -           | 140          | 14.0        |
| <b>PH 100</b>     | Medical Physiology                                          | 114           | 11.4        | 74              | 7.4         | 188          | 18.8        |
| <b>PC100</b>      | Professional Communication Skills ,advocacy and counselling | 45            | 4.5         |                 | 4.6         | 91           | 9.1         |
| <b>NE 100</b>     | Nursing Ethics                                              | 75            | 7.5         | -               | -           | 75           | 7.5         |
| <b>DS100</b>      | Development studies I                                       | 65            | 6.5         | 30              | 3.0         | 95           | 9.5         |
| <b>TOTAL</b>      |                                                             | <b>439</b>    | <b>43.9</b> | <b>150</b>      | <b>15.0</b> | <b>589</b>   | <b>58.9</b> |
| <b>Semester 3</b> |                                                             |               |             |                 |             |              |             |
| <i>Code</i>       | <i>Name of Course</i>                                       | <i>Theory</i> |             | <i>Practice</i> |             | <i>Total</i> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>MM200</b>      | Microbiology/Immunology                                     | 114           | 11.4        | 76              | 7.6         | 190          | 19.0        |
| <b>PE 200</b>     | Parasitology/ Entomology                                    | 91            | 9.1         | 61              | 6.1         | 152          | 15.2        |

|                       |                                         |               |             |                 |             |              |             |
|-----------------------|-----------------------------------------|---------------|-------------|-----------------|-------------|--------------|-------------|
| <b>PH 200</b>         | Clinical Physiology                     | 57            | 5.7         | -               | -           | 57           | 5.7         |
| <b>BN 200</b>         | Basic Nursing                           | 135           | 13.5        | 90              | 9.0         | 145          | 14.5        |
| <b>DS 200</b>         | Developmental Studies II                | 65            | 6.5         | 30              | 3.0         | 95           | 9.5         |
| <b>TOTAL</b>          |                                         | <b>398</b>    | <b>39.8</b> | <b>257</b>      | <b>25.7</b> | <b>639</b>   | <b>63.9</b> |
| <b>Semester 4</b>     |                                         |               |             |                 |             |              |             |
| <b>Code</b>           | <b>Name of Course</b>                   | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                       |                                         | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>ER 200</b>         | Epidemiology and Research Methodology I | 60            | 6.0         | 20              | 2.0         | 80           | 8.0         |
| <b>MS 200</b>         | Medical & Surgical Nursing              | 90            | 9.0         | 150             | 15.0        | 240          | 24.0        |
| <b>MP 200</b>         | Mental Health & Psychiatric Nursing     | 70            | 7.0         | 70              | 7.0         | 140          | 14.0        |
| <b>ER 200</b>         | Research FIELD WORK                     | -             | -           | 35              | 3.5         | 35           | 3.5         |
| <b>TOTAL</b>          |                                         | <b>220</b>    | <b>22.0</b> | <b>275</b>      | <b>27.5</b> | <b>495</b>   | <b>49.5</b> |
| <b>Semester 5</b>     |                                         |               |             |                 |             |              |             |
| <b>Code</b>           | <b>Name of Course</b>                   | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                       |                                         | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>CP300</b>          | Clinical Pharmacology                   | 167           | 16.7        | 16              | 1.6         | 183          | 18.3        |
| <b>MW 300</b>         | Midwifery                               | 140           | 14.0        | 140             | 14.0        | 280          | 28.0        |
| <b>PD 300</b>         | Paediatric Nursing                      | 69            | 6.9         | 135             | 13.5        | 204          | 20.4        |
| <b>CH300</b>          | Community Health Nursing                | 70            | 7.0         | 70              | -           | 140          | 14.0        |
| <b>TOTAL</b>          |                                         | <b>446</b>    | <b>44.6</b> | <b>361</b>      | <b>36.1</b> | <b>807</b>   | <b>80.7</b> |
| <b>Semester 6</b>     |                                         |               |             |                 |             |              |             |
| <b>Code</b>           | <b>Name of Course</b>                   | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                       |                                         | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>LM 300</b>         | Leadership and Management               | 70            | 7.0         | 105             | 10.5        | 175          | 17.5        |
| <b>PL 300</b>         | Principles of Learning and Teaching     | 60            | 6.0         | -               | -           | 60           | 6.0         |
| <b>CH 300</b>         | Community health nursing FIELD PRACTICE | -             | -           | 140             | 14          | 140          | 14.0        |
| <b>NT 300</b>         | Nutrition                               | 80            | 8.0         | 35              | 3.5         | 115          | 11.5        |
| <b>EP 300</b>         | Entrepreneurship                        | 30            | 3.0         | 45              | 4.5         | 75           | 7.5         |
| <b>TOTAL</b>          |                                         | <b>240</b>    | <b>24.0</b> | <b>325</b>      | <b>32.5</b> | <b>565</b>   | <b>56.5</b> |
| <b>Semester 7</b>     |                                         |               |             |                 |             |              |             |
| <b>Code</b>           | <b>Name of Course</b>                   | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                       |                                         | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>MW400</b>          | Midwifery Practice                      | -             | -           | 600             | 60.0        | 600          | 60.0        |
| <b>PD 400</b>         | Paediatric Nursing Practice             | -             | -           | 100             | 10.0        | 100          | 10.0        |
| <b>TOTAL</b>          |                                         | -             | -           | <b>700</b>      | <b>70.0</b> | <b>700</b>   | <b>70.0</b> |
| <b>Semester 8</b>     |                                         |               |             |                 |             |              |             |
| <b>Name of Course</b> |                                         | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                       |                                         | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>PN 400</b>         | Principles of Nursing                   | -             | -           | 600             | 60.0        | 600          | 60.0        |
| <b>MA 400</b>         | Mental Health and Psychiatric Nursing   | -             | -           | 100             | 10.0        | 100          | 10.0        |
| <b>TOTAL</b>          |                                         | -             | -           | <b>700</b>      | <b>70.0</b> | <b>700</b>   | <b>70.0</b> |

# BACHELOR OF SCIENCE IN NURSING (BSc.N) (STARTED 2020/21)

## STRUCTURE OF MODULES

| Semester 1: Year 1 |                                            |      |            |            |           |           |            |            |             |
|--------------------|--------------------------------------------|------|------------|------------|-----------|-----------|------------|------------|-------------|
| Course Code        | Course Name                                | Core | LH         | T/SH       | AH        | ISH       | PH         | Total Hrs  | Credits     |
| FN100              | Foundations & Basic Principles of Nursing  | Core | 17         | 9          | 17        | 10        | 51         | 104        | 10.4        |
| AN100              | Anatomy                                    | Core | 85         | 17         | 11        | 34        | 85         | 232        | 23.2        |
| BC100              | Biochemistry                               | Core | 85         | 34         | 34        | 32        | 51         | 236        | 23.6        |
| EP100              | Introduction to Professionalism & Ethics   | Core | 17         | 7          | 7         | 5         | 0          | 36         | 3.6         |
| <b>Total</b>       |                                            |      | <b>204</b> | <b>67</b>  | <b>69</b> | <b>81</b> | <b>187</b> | <b>608</b> | <b>60.8</b> |
| Semester 2: Year 1 |                                            |      |            |            |           |           |            |            |             |
| Course Code        | Course Name                                | Core | LH         | T/SH       | AH        | ISH       | PH         | Total Hrs  | Credits     |
| NA100              | Neuroanatomy                               | Core | 17         | 17         | 11        | 11        | 34         | 90         | 9.0         |
| HP100              | Health Psychology                          | Core | 34         | 17         | 7         | 7         | 0          | 65         | 6.5         |
| HS100              | Health Sociology                           | Core | 34         | 17         | 4         | 5         | 0          | 60         | 6.0         |
| PH100              | Physiology                                 | Core | 119        | 34         | 34        | 52        | 51         | 290        | 29.0        |
| IC100              | ICT and Communication skills               | Core | 17         | 17         | 17        | 6         | 51         | 108        | 10.8        |
| <b>Total</b>       |                                            |      | <b>221</b> | <b>102</b> | <b>73</b> | <b>81</b> | <b>136</b> | <b>613</b> | <b>61.3</b> |
| Semester 3: Year 2 |                                            |      |            |            |           |           |            |            |             |
| Course Code        | Course Name                                | Core | LH         | T/S<br>H   | AH        | ISH       | PH         | Total Hrs  | Credits     |
| MI200              | Microbiology & Immunology                  | Core | 85         | 17         | 10        | 14        | 68         | 194        | 19.4        |
| PE200              | Parasitology & Medical Entomology          | Core | 51         | 17         | 10        | 7         | 34         | 119        | 11.9        |
| BE200              | Biostatistics and Epidemiology             | Core | 85         | 34         | 34        | 18        | 34         | 205        | 20.5        |
| DS200              | Development studies                        | Core | 34         | 17         | 14        | 25        | 0          | 90         | 9.0         |
| <b>Total</b>       |                                            |      | <b>255</b> | <b>85</b>  | <b>68</b> | <b>64</b> | <b>136</b> | <b>608</b> | <b>60.8</b> |
| Semester 4: Year 2 |                                            |      |            |            |           |           |            |            |             |
| Course Code        | Course Code                                | Core | LH         | T/SH       | AH        | ISH       | PH         | Total Hrs  | Credits     |
| CP200              | Clinical Pharmacology                      | Core | 102        | 34         | 17        | 11        | 34         | 198        | 19.8        |
| AP200              | Advanced Principles of Nursing             | Core | 34         | 17         | 10        | 10        | 34         | 105        | 10.5        |
| NR200              | Nursing Research                           | Core | 17         | 17         | 17        | 17        | 34         | 102        | 10.2        |
| T&L200             | Teaching and Learning in Clinical Practice | Core | 34         | 17         | 17        | 17        | 34         | 119        | 11.9        |
| CH200              | Community Health Nursing                   | Core | 34         | 17         | 20        | 7         | 0          | 78         | 7.9         |

|                            |                                              |             |             |             |             |            |             |                  |                |
|----------------------------|----------------------------------------------|-------------|-------------|-------------|-------------|------------|-------------|------------------|----------------|
| <b>Total</b>               |                                              |             | <b>221</b>  | <b>119</b>  | <b>81</b>   | <b>62</b>  | <b>119</b>  | <b>602</b>       | <b>60.2</b>    |
| <b>Semester 5: Year 3</b>  |                                              |             |             |             |             |            |             |                  |                |
| <b>Course Code</b>         | <b>Course Name</b>                           | <b>Core</b> | <b>LH</b>   | <b>T/SH</b> | <b>AH</b>   | <b>ISH</b> | <b>PH</b>   | <b>Total Hrs</b> | <b>Credits</b> |
| EP300                      | Ethics and Professionalism                   | Core        | 34          | 17          | 12          | 10         | 12          | 85               | 8.5            |
| MS300                      | Medical-Surgical Nursing                     | Core        | 85          | 34          | 17          | 11         | 180         | 327              | 32.7           |
| LE300                      | Leadership & Management and Entrepreneurship | Core        | 80          | 34          | 20          | 20         | 34          | 188              | 18.8           |
| <b>Total</b>               |                                              |             | <b>170</b>  | <b>68</b>   | <b>81</b>   | <b>67</b>  | <b>214</b>  | <b>600</b>       | <b>60.0</b>    |
| <b>Semester 6: Year 3</b>  |                                              |             |             |             |             |            |             |                  |                |
| <b>Course Code</b>         | <b>Course Name</b>                           | <b>Core</b> | <b>LH</b>   | <b>T/SH</b> | <b>AH</b>   | <b>ISH</b> | <b>PH</b>   | <b>Total Hrs</b> | <b>Credits</b> |
| MW300                      | Midwifery                                    | Core        | 68          | 34          | 17          | 7          | 180         | 306              | 30.6           |
| PN300                      | Paediatric Nursing                           | Core        | 51          | 17          | 7           | 7          | 70          | 152              | 15.2           |
| MH300                      | Mental Health                                | Core        | 51          | 17          | 7           | 7          | 70          | 152              | 15.2           |
| <b>Total</b>               |                                              |             | <b>170</b>  | <b>68</b>   | <b>31</b>   | <b>21</b>  | <b>320</b>  | <b>610</b>       | <b>61.0</b>    |
| <b>Semester 7: Year 4</b>  |                                              |             |             |             |             |            |             |                  |                |
| <b>Course Code</b>         | <b>Course Name</b>                           | <b>Core</b> | <b>LH</b>   | <b>T/SH</b> | <b>AH</b>   | <b>ISH</b> | <b>PH</b>   | <b>Total Hrs</b> | <b>Credits</b> |
| MP400                      | Midwifery Practice                           | Core        | 4           | 17          | 17          | 16         | 96          | 150              | 15.0           |
| CH400                      | Community health field                       | Core        | 4           | 17          | 17          | 16         | 96          | 150              | 15.0           |
| AR400                      | Applied Research fieldwork                   | Core        | 4           | 17          | 17          | 16         | 96          | 150              | 15.0           |
| PN400                      | Pediatric Nursing Practice                   | Core        | 4           | 17          | 17          | 16         | 96          | 150              | 15.0           |
| <b>Total</b>               |                                              |             | <b>16</b>   | <b>68</b>   | <b>68</b>   | <b>64</b>  | <b>384</b>  | <b>600</b>       | <b>60.0</b>    |
| <b>Semester 8: Year 4</b>  |                                              |             |             |             |             |            |             |                  |                |
| <b>Course Code</b>         | <b>Course Name</b>                           | <b>Core</b> | <b>LH</b>   | <b>T/SH</b> | <b>AH</b>   | <b>ISH</b> | <b>PH</b>   | <b>Total Hrs</b> | <b>Credits</b> |
| FP400                      | Forensic Psychiatry Field (MH 400)           | Core        | 8           | 8           | 17          | 17         | 250         | 300              | 30.0           |
| MS400                      | Medical-surgical practice (MS400)            | Core        | 8           | 8           | 17          | 17         | 250         | 300              | 30.0           |
| <b>Total</b>               |                                              |             | <b>16</b>   | <b>16</b>   | <b>34</b>   | <b>34</b>  | <b>500</b>  | <b>600</b>       | <b>60.0</b>    |
| <b>Total per programme</b> |                                              |             | <b>1273</b> | <b>593</b>  | <b>505</b>  | <b>474</b> | <b>1996</b> | <b>4841</b>      | <b>484.1</b>   |
| <b>%</b>                   |                                              |             | <b>26.3</b> | <b>12.3</b> | <b>10.4</b> | <b>9.8</b> | <b>41.2</b> | <b>100%</b>      |                |

## **BACHELOR OF SCIENCE IN NURSING (BSc.N) (3 years 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 21<sup>st</sup> 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 patient's 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 week 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

**STRUCTURE OF MODULES**

| <b>Semester 1</b> |                                                             |               |             |                 |             |              |             |
|-------------------|-------------------------------------------------------------|---------------|-------------|-----------------|-------------|--------------|-------------|
| <b>Code</b>       | <b>Name of Course</b>                                       | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>AN100</b>      | Anatomy                                                     | 129           | 12.9        | 232             | 23.2        | 361          | 36.1        |
| <b>BC100</b>      | Biochemistry                                                | 148           | 14.8        | 40              | 4.0         | 189          | 18.9        |
| <b>PS100</b>      | Philosophy                                                  | 40            | 4.0         | -               | -           | 40           | 4.0         |
| <b>TOTAL</b>      |                                                             | <b>317</b>    | <b>31.7</b> | <b>272</b>      | <b>27.2</b> | <b>590</b>   | <b>59.0</b> |
| <b>Semester 2</b> |                                                             |               |             |                 |             |              |             |
| <b>Code</b>       | <b>Name of Course</b>                                       | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>BS100</b>      | Behavioural Science and Biostatistics                       | 140           | 14.0        | -               | -           | 140          | 14.0        |
| <b>PH100</b>      | Physiology                                                  | 114           | 11.4        | 74              | 7.4         | 188          | 18.8        |
| <b>PC100</b>      | Professional Communication Skills, advocacy and counselling | 45            | 4.5         | 46              | 4.6         | 91           | 9.1         |
| <b>NE100</b>      | Nursing Ethics                                              | 75            | 7.5         | -               | -           | 75           | 7.5         |
| <b>DS100</b>      | Developmental Studies I                                     | 65            | 6.5         | 30              | 3.0         | 95           | 9.5         |
| <b>TOTAL</b>      |                                                             | <b>439</b>    | <b>43.9</b> | <b>150</b>      | <b>15.0</b> | <b>589</b>   | <b>58.9</b> |
| <b>Semester 3</b> |                                                             |               |             |                 |             |              |             |
| <b>Code</b>       | <b>Name of Course</b>                                       | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>MM200</b>      | Microbiology/Immunology                                     | 114           | 11.4        | 76              | 7.6         | 190          | 19.0        |
| <b>PE200</b>      | Parasitology/ Entomology                                    | 91            | 9.1         | 61              | 6.1         | 152          | 15.2        |
| <b>NI 200</b>     | Nursing Informatics                                         | 35            | 3.5         | 70              | 7.0         | 105          | 10.5        |
| <b>BN 200</b>     | Basic Nursing                                               | 55            | 5.5         | 90              | 9.0         | 145          | 14.5        |
| <b>DS200</b>      | Development studies II                                      | 65            | 6.5         | 30              | 3.0         | 95           | 9.5         |
| <b>TOTAL</b>      |                                                             | <b>305</b>    | <b>30.5</b> | <b>237</b>      | <b>23.7</b> | <b>542</b>   | <b>54.2</b> |
| <b>Semester 4</b> |                                                             |               |             |                 |             |              |             |
| <b>Code</b>       | <b>Name of Course</b>                                       | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>ER200</b>      | Epidemiology & Research Methodology I                       | 60            | 6.1         | 20              | 2.0         | 80           | 8.0         |
| <b>MW200</b>      | Midwifery                                                   | 80            | 8.0         | 100             | 10.0        | 180          | 18.0        |
| <b>AD 200</b>     | Advanced Concepts in Nursing                                | 65            | 6.5         | 130             | 13.0        | 195          | 19.5        |
| <b>CH 200</b>     | Community Health Nursing I                                  | 40            | 4.0         | -               | -           | 40           | 4.0         |
| <b>NT200</b>      | Nutrition                                                   | 50            | 5.0         | 35              | 3.5         | 85           | 8.5         |
| <b>TOTAL</b>      |                                                             | <b>325</b>    | <b>32.5</b> | <b>330</b>      | <b>33.0</b> | <b>655</b>   | <b>65.5</b> |
| <b>Semester 5</b> |                                                             |               |             |                 |             |              |             |
| <b>Code</b>       | <b>Name of Course</b>                                       | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>CP 300</b>     | Clinical Pharmacology                                       | 167           | 16.7        | 16              | 1.6         | 183          | 18.3        |
| <b>MS 300</b>     | Medical & Surgical Nursing                                  | 140           | 14.0        | 140             | 14.0        | 280          | 28.0        |
| <b>ER300</b>      | Epidemiology and Research Methodology II (FIELD PRACTICE)   | -             | -           | 35              | 3.5         | 35           | 3.5         |
| <b>TI 300</b>     | Trends and Issues in Nursing                                | 30            | 3.0         | -               | -           | 30           | 3.0         |
| <b>MP300</b>      | Mental Health & Psychiatric Nursing I                       | 70            | 7.0         | 70              | 7.0         | 140          | 17.0        |
| <b>TOTAL</b>      |                                                             | <b>407</b>    | <b>40.7</b> | <b>261</b>      | <b>26.1</b> | <b>668</b>   | <b>66.8</b> |
| <b>Semester 6</b> |                                                             |               |             |                 |             |              |             |
| <b>Code</b>       | <b>Name of Course</b>                                       | <b>Theory</b> |             | <b>Practice</b> |             | <b>Total</b> |             |
|                   |                                                             | Hrs           | Credits     | Hrs             | Credits     | Hrs          | Credits     |
| <b>LM 300</b>     | Leadership and management                                   | 70            | 7.0         | 105             | 10.5        | 175          | 17.5        |
| <b>PL 300</b>     | Principles of learning and Teaching                         | 60            | 6.0         | -               | -           | 60           | 6.0         |
| <b>CH 300</b>     | Community health Nursing FIELD                              | -             | -           | 140             | 14.0        | 140          | 14.0        |
| <b>PD 200</b>     | Paediatric Nursing                                          | 85            | 8.5         | 135             | 13.5        | 220          | 22.0        |
| <b>EP 300</b>     | Entrepreneurship                                            | 30            | 3.0         | 45              | 4.5         | 75           | 7.5         |
| <b>TOTAL</b>      |                                                             | <b>250</b>    | <b>25.2</b> | <b>415</b>      | <b>41.5</b> | <b>665</b>   | <b>66.5</b> |

## **DIRECTORATE OF POSTGRADUATE STUDIES**



**Prof. Jeremiah Seni**

***MD (UDSM); M.Med. (Makerere), PhD (Calgary)***

### **Introduction**

The Directorate of Postgraduate studies coordinates and oversees all Postgraduate Programmes at CUHAS. It is currently coordinating all Masters of Medicine programmes (MMed), Masters of Science in Paediatric Nursing (M.Sc PN), Masters of Public Health (MPH), Master of Science in Clinical Microbiology and Diagnostic Molecular Biology (MSc. CMDMB), and Doctor of Philosophy (PhD) programmes.

## THE MASTER OF MEDICINE (MMed) 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, Orthopaedics and Trauma, and Anatomical Pathology.



## 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.

## MASTER OF MEDICINE IN INTERNAL MEDICINE (MMed IM)

### Objectives of the Programme

To produce highly skilled and competent internists with sound scientific principles of international standard required for a specialist in internal medicine.

### Program expected learning outcomes

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge   | <ul style="list-style-type: none"><li>• Comprehend scientific knowledge of Physiology, Biochemistry, Microbiology &amp; Immunology, Clinical Pharmacology, Epidemiology and Research Methods relevant to the needs of medical patient.</li><li>• Apply new innovations in the medical field and other related fields through continuing education and multidisciplinary interactions.</li><li>• Demonstrate competency in the teaching of undergraduate medical students and other allied health cadres.</li></ul>                                                                                                                |
| Skills      | <ul style="list-style-type: none"><li>• Manage competently all medical problems in the fields of infectious diseases, cardiology, nephrology, neurology, gastroenterology, dermatology, rheumatology, nutrition and metabolic diseases.</li><li>• Comprehend laboratory, radiological and endoscopic investigations to reach appropriate diagnosis for specific npatients' management.</li><li>• Plan and conduct clinical medical research competently relevant to the needs of the medical patient and community</li><li>• Demonstrate leadership competency in the appropriate or related field of his/her training.</li></ul> |
| Attitude    | <ul style="list-style-type: none"><li>• Demonstrate high professional &amp; ethical standards in the course of his professional medical practice in Internal Medicine towards patients, colleagues and the community.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                   |
| Competences | <ul style="list-style-type: none"><li>• Manage competently all medical problems in the fields of infectious diseases, cardiology, nephrology, neurology, gastroenterology, dermatology, rheumatology, nutrition and metabolic diseases.</li><li>• Plan and conduct clinical medical research competently relevant to the needs of the medical patient and community</li></ul>                                                                                                                                                                                                                                                     |

### Normal learning Matrix

All courses in this programme are core

| Year/<br>Semester       | Code                    | Course title                                     | LH  | TH   | AS  | PH   | IS   | CH   | Credits |
|-------------------------|-------------------------|--------------------------------------------------|-----|------|-----|------|------|------|---------|
| Year 1<br>Semester 1    | PY600                   | Clinical Physiology                              | 42  | 62   | 40  | 60   | 76   | 280  | 28.0    |
|                         | BC600                   | Clinical Biochemistry                            | 32  | 48   | 30  | 88   | 62   | 260  | 26.0    |
|                         | MI600                   | Microbiology and Immunology                      | 50  | 88   | 40  | 90   | 52   | 320  | 32.0    |
|                         | CP600                   | Clinical Pharmacology                            | 48  | 78   | 40  | 74   | 60   | 300  | 30.0    |
|                         | ER600                   | Epidemiology, Biostatistics and Research Methods | 30  | 24   | 36  | 80   | 20   | 190  | 19.0    |
|                         | ME600                   | Medical ethics and professionalism               | 20  | 10   | 5   | 0    | 5    | 40   | 4.0     |
|                         | Total year 1 semester 1 |                                                  | 222 | 310  | 191 | 392  | 275  | 1390 | 135.0   |
| Year 1<br>Semester 2    | ID600                   | Infectious Diseases                              | 48  | 92   | 40  | 96   | 64   | 340  | 34.0    |
|                         | CD600                   | Cardiology                                       | 42  | 82   | 33  | 113  | 50   | 320  | 32.0    |
|                         | RD600                   | Respiratory diseases                             | 36  | 72   | 20  | 92   | 40   | 260  | 26.0    |
|                         | Total year 1 semester 2 |                                                  | 126 | 246  | 93  | 301  | 154  | 920  | 92.0    |
|                         | Total year I            |                                                  | 348 | 556  | 284 | 693  | 429  | 2310 | 231.0   |
| Year 2<br>Semester 1    | DM700                   | Dermatology                                      | 30  | 60   | 20  | 80   | 30   | 220  | 22.0    |
|                         | HM700                   | Hematology                                       | 24  | 48   | 30  | 108  | 50   | 260  | 26.0    |
|                         | NM700                   | Nutrition and Metabolic Diseases                 | 52  | 104  | 40  | 114  | 50   | 360  | 36.0    |
|                         | DT700                   | Dissertation I (proposal development)            | 20  | 20   | 10  | 10   | 70   | 130  | 13.0    |
|                         | Total year 2 semester 1 |                                                  | 126 | 232  | 100 | 312  | 200  | 970  | 97.0    |
| Year 2<br>Semester 2    | RT700                   | Rheumatology                                     | 20  | 38   | 30  | 72   | 40   | 200  | 20.0    |
|                         | GT700                   | Gastroenterology                                 | 46  | 92   | 40  | 140  | 42   | 360  | 36.0    |
|                         | NE700                   | Neurology                                        | 36  | 72   | 25  | 152  | 35   | 320  | 32.0    |
|                         | DT700                   | Dissertation II (Data collection)                | 0   | 10   | 30  | 80   | 50   | 170  | 17.0    |
|                         | Total year 2 semester 2 |                                                  | 102 | 212  | 125 | 444  | 167  | 1050 | 105.0   |
|                         | Total Year II           |                                                  | 228 | 444  | 225 | 756  | 367  | 2020 | 202.0   |
| Year 3<br>Semester 1    | NP800                   | Nephrology                                       | 34  | 72   | 30  | 134  | 50   | 320  | 32.0    |
|                         | GR800                   | Geriatrics                                       | 8   | 22   | 60  | 80   | 90   | 260  | 26.0    |
|                         | DT800                   | Dissertation III (Data analysis)                 | 20  | 10   | 20  | 300  | 40   | 390  | 39.0    |
|                         | Total year 3 semester 1 |                                                  | 62  | 104  | 110 | 514  | 180  | 970  |         |
| Year 3<br>Semester 2    | CT800                   | Chronic Disorders and Terminal Care              | 4   | 8    | 20  | 64   | 24   | 120  | 12      |
|                         | PD800                   | Paediatrics                                      | 4   | 8    | 16  | 72   | 20   | 120  | 12      |
|                         | PS800                   | Psychiatry                                       | 4   | 8    | 16  | 72   | 20   | 120  | 12      |
|                         | DT800                   | Dissertation IV (report writing and viva voce)   | 0   | 20   | 20  | 60   | 40   | 140  | 14      |
|                         | AP800                   | Advanced Clinical Practice                       | 12  | 42   | 68  | 192  | 106  | 420  | 42      |
|                         | Total year 3 semester 2 |                                                  | 24  | 86   | 140 | 460  | 210  | 920  | 92      |
|                         | Total Year III          |                                                  | 86  | 190  | 250 | 974  | 390  | 1890 | 189.0   |
| TOTAL HOURS AND CREDITS |                         |                                                  | 662 | 1190 | 759 | 2423 | 1186 | 6220 | 622.0   |

**NOTE:** All courses are core

|                                   |                                              |
|-----------------------------------|----------------------------------------------|
| <b>KEY:</b>                       | IS: Independent studies                      |
| LH: Lecture Hours                 | CU: Credit unit                              |
| TH: Tutorial Hours                | CH: Credit Hours                             |
| AH: Assignment Hours              | 10 Notional Hours= 1 CREDIT UNIT             |
| PH: Practical or Field work hours | Numbering: Programme, Year, Semester, Course |

## MASTER OF MEDICINE IN OBSTETRICS AND GYNAECOLOGY (MMed OBGYN)

### Objectives of the Programme

The main objective of this programme is to train suitable candidates to become highly skilled and competent Obstetricians and Gynaecologists. On successful completion of the training the graduate in MMed Obstetrics and Gynaecology is expected to be able to work independently with sound scientific principles of international standard required for a specialist in Obstetrics and Gynaecology, and have the knowledge, skills, attitude and ethics, related to the profession.

### Program expected learning outcomes

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge   | <ul style="list-style-type: none"> <li>Recognize basic scientific knowledge underlying different obstetrics and gynaecology disorders</li> <li>Analyse structure, functioning, development and growth for the normal and abnormal reproductive systems.</li> <li>Understand basic concepts of laboratory procedures necessary for diagnosis and treatment of obstetric and gynaecological disorders</li> <li>Identify and discuss common problems related to normal and abnormal labour</li> <li>Describe different management modalities for obstetrics and gynaecological problems</li> </ul> |
| Skills      | <ul style="list-style-type: none"> <li>Assess patients clinically and interpret laboratory and/or radiological investigations to reach the right diagnosis.</li> <li>Manage appropriately obstetrics/gynaecological conditions</li> <li>Perform surgical procedures in obstetrics and gynaecology</li> <li>Interpret research findings that are necessary to improve patient care in obstetrics/gynaecology.</li> </ul>                                                                                                                                                                         |
| Competences | <ul style="list-style-type: none"> <li>Demonstrate ability to prioritize professional duties effectively when faced with multiple patients and problems</li> <li>Practice in a manner ethically, morally and culturally sensitive to clients' needs</li> <li>Communicate with other health care providers</li> </ul>                                                                                                                                                                                                                                                                            |



**Normal learning Matrix**

All courses in this program are core

| <b>Year 1 Semester 1</b> |                                   |     |     |     |     |     |       |         |
|--------------------------|-----------------------------------|-----|-----|-----|-----|-----|-------|---------|
| Course Code              | Course title                      | LH  | TH  | AS  | IS  | PH  | TOTAL | Credits |
| ER600                    | Epidemiology and Research Methods | 56  | 30  | 7   | 19  | 48  | 160   | 16      |
| AN 600                   | Applied Anatomy                   | 68  | 52  | 12  | 24  | 84  | 240   | 24      |
| RP 600                   | Reproductive Physiology           | 30  | 30  | 20  | 60  | 30  | 170   | 17      |
| PH 600                   | Clinical Physiology               | 85  | 45  | 30  | 90  | 30  | 280   | 28      |
| CP 600                   | Clinical Pharmacology             | 107 | 58  | 25  | 90  | 30  | 310   | 31      |
| MI 600                   | Microbiology & Immunology         | 104 | 54  | 17  | 100 | 45  | 320   | 32      |
| GP 600                   | Gynaecologic Pathology            | 72  | 72  | 14  | 50  | 72  | 280   | 28      |
| <b>Total</b>             |                                   | 522 | 341 | 128 | 430 | 339 | 1760  | 176     |

**Year 1 Semester 2**

| Course Code  | Course title                                             | LH  | TH | AS | PH  | IS  | Total | Credits |
|--------------|----------------------------------------------------------|-----|----|----|-----|-----|-------|---------|
| CL 600       | Clinical Approach to Gynaecologic and Obstetric patients | 30  | 20 | 10 | 30  | 20  | 110   | 11      |
| PO 600       | Preventive Obstetrics                                    | 40  | 20 | 15 | 45  | 20  | 140   | 14      |
| BR 600       | Breast function and its disorders                        | 60  | 20 | 10 | 50  | 60  | 200   | 20      |
| <b>Total</b> |                                                          | 130 | 60 | 35 | 125 | 100 | 450   | 45      |

**Year 2 Semester 1**

| Course Code  | Course title                     | LH  | TH  | AS | PH  | IS  | Total | Credits |
|--------------|----------------------------------|-----|-----|----|-----|-----|-------|---------|
| GG 700       | General gynaecology              | 40  | 40  | 20 | 60  | 80  | 240   | 24      |
| GN700        | Gynaecologic Neoplasia /oncology | 260 | 160 | 30 | 200 | 200 | 850   | 85      |
| <b>Total</b> |                                  | 300 | 200 | 50 | 260 | 280 | 1190  | 119     |

**Semester 2 Year 2**

| Course Code          | Course title                                     | LH | TH | AS | IS  | PH  | Total hrs | Credits |
|----------------------|--------------------------------------------------|----|----|----|-----|-----|-----------|---------|
| SP700                | Problems of sex, marriage and pregnancy subjects | 40 | 40 | 20 | 60  | 80  | 240       | 24      |
| DI 700               | Dissertation                                     | 20 | 40 | 30 | 200 | 260 | 550       | 55      |
| <b>Total Year II</b> |                                                  | 60 | 80 | 50 | 260 | 340 | 790       | 79      |

**Semester 1 Year 3**

| Course Code  | Course title                       | LH  | TH  | AS | IS  | PH  | Total | Credits |
|--------------|------------------------------------|-----|-----|----|-----|-----|-------|---------|
| PL 800       | Pregnancy and labour abnormalities | 120 | 140 | 30 | 120 | 200 | 610   | 61      |
| CC 800       | Common complications of pregnancy  | 120 | 150 | 30 | 120 | 200 | 620   | 62      |
| <b>Total</b> |                                    | 240 | 290 | 60 | 240 | 400 | 1230  | 123     |

**Semester 2 Year 3**

| Course Code           | Course title                                   | LH  | TH  | AS | IS  | PH  | Total hrs | Credits |
|-----------------------|------------------------------------------------|-----|-----|----|-----|-----|-----------|---------|
| <b>AOG 800</b>        | Advances in Obstetrics & Gynecology            | 80  | 60  | 20 | 60  | 80  | 300       | 30.0    |
| <b>DT800</b>          | Dissertation Report presentation and VIVA VOCE | 10  | 10  | 20 | 30  | 20  | 90        | 9.0     |
| <b>ME 800</b>         | Ethics in Obstetrics and Gynaecology           | 10  | 40  | 5  | 15  | 40  | 110       | 11.0    |
| <b>Total Year III</b> |                                                | 100 | 110 | 45 | 105 | 140 | 500       | 50      |

**KEY**

|     |                               |                             |                     |
|-----|-------------------------------|-----------------------------|---------------------|
| LH: | Lecture Hours                 | AS:                         | Assignment hours    |
| TH: | Tutorial Hours                | IS:                         | Independent studies |
| PH: | Practical or Field work hours | 10 Notional Hours= 1 CREDIT |                     |

**MASTER OF MEDICINE IN SURGERY (MMed SURG)*****Objectives of the Programme***

To produce highly skilled and competent surgeon with sound scientific principles of international standard required for a specialist in general surgery.

**Programme Expected Learning Outcomes**

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b>   | <ul style="list-style-type: none"> <li>Apply scientific knowledge of anatomy, physiology, Microbiology pathology and pharmacology and biochemistry relevant to the needs of the surgical patient.</li> <li>Discover and assess community surgical needs in the community and propose appropriate scientific interventions.</li> <li>Plan and conduct clinical medical research competently relevant to the needs of the general surgery patient and community</li> </ul> |
| <b>Skills</b>      | <ul style="list-style-type: none"> <li>Accurately notice the signs for various surgical disorders</li> <li>Competently perform all general surgical operations</li> </ul>                                                                                                                                                                                                                                                                                                |
| <b>Competences</b> | <ul style="list-style-type: none"> <li>Demonstrate competency in the teaching of undergraduate medical students and other allied health cadres</li> <li>Demonstrate high professional &amp; ethical standards in the course of his professional medical practice in Surgery.</li> <li>Demonstrate leadership competency in the appropriate or related field of his/her training</li> </ul>                                                                               |

**Normal learning matrix and Corse Matrix**

All courses in this programme are core

**Semester 1 Year 1**

| Code         | Course title                      | LH         | T/SH       | AS         | IS         | PH         | CH          | CU           |
|--------------|-----------------------------------|------------|------------|------------|------------|------------|-------------|--------------|
| SN 600       | Surgical anatomy                  | 49         | 44         | 36         | 51         | 140        | 320         | 32.0         |
| SP 600       | Surgical physiology               | 51         | 31         | 31         | 37         | 20         | 170         | 17.0         |
| PA 600       | Surgical pathology                | 73         | 46         | 46         | 49         | 26         | 240         | 24.0         |
| ER 600       | Epidemiology and Research methods | 54         | 36         | 38         | 42         | 20         | 190         | 19.0         |
| MI 600       | Microbiology and Immunology       | 95         | 61         | 61         | 71         | 33         | 320         | 32.0         |
| CP 600       | Clinical Pharmacology             | 70         | 44         | 40         | 57         | 19         | 230         | 23.0         |
| <b>Total</b> |                                   | <b>392</b> | <b>262</b> | <b>252</b> | <b>307</b> | <b>258</b> | <b>1470</b> | <b>147.0</b> |

**Semester 2 Year 1**

| Code         | Course title              | LH        | T/SH      | AS        | IS         | PH         | CH         | CU          |
|--------------|---------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| PS 600       | Principles of surgery     | 48        | 48        | 48        | 64         | 112        | 320        | 32.0        |
| UG 600       | Urology                   | 48        | 50        | 50        | 66         | 116        | 330        | 33.0        |
| CA 600       | Clinical Apprenticeship I | -         | -         | -         | 160        | 120        | 280        | 28.0        |
| <b>Total</b> |                           | <b>96</b> | <b>98</b> | <b>98</b> | <b>290</b> | <b>348</b> | <b>930</b> | <b>93.0</b> |

#### Semester 1 Year 2

| Code         | Course title                  | LH         | T/SH       | AS         | IS         | PH         | CH          | CU           |
|--------------|-------------------------------|------------|------------|------------|------------|------------|-------------|--------------|
| AS 700       | Abdominal surgery             | 72         | 72         | 72         | 96         | 168        | 480         | 48.0         |
| PS 700       | Paediatric surgery            | 48         | 48         | 48         | 64         | 112        | 320         | 32.0         |
| CA 700       | Clinical Apprenticeship II    | 0          | 0          | 0          | 80         | 200        | 280         | 28.0         |
| RP 700       | Research Proposal Development | 0          | 4          | 12         | 14         | 20         | 50          | 5.0          |
| <b>Total</b> |                               | <b>120</b> | <b>124</b> | <b>132</b> | <b>254</b> | <b>500</b> | <b>1130</b> | <b>113.0</b> |

#### Semester 2 Year 2

| Code         | Course title                  | LH         | T/SH       | AS         | IS         | PH         | CH          | CU           |
|--------------|-------------------------------|------------|------------|------------|------------|------------|-------------|--------------|
| OT 700       | Orthopaedic and Trauma        | 66         | 66         | 66         | 88         | 154        | 440         | 44.0         |
| AN 700       | Anaesthesia                   | 44         | 44         | 44         | 58         | 100        | 290         | 29.0         |
| CA 700       | Clinical Apprenticeship III   | 0          | 0          | 0          | 200        | 80         | 280         | 28.0         |
| RP 700       | Research Proposal Development | 0          | 0          | 0          | 40         | 90         | 130         | 13.0         |
| <b>Total</b> |                               | <b>110</b> | <b>110</b> | <b>110</b> | <b>386</b> | <b>424</b> | <b>1140</b> | <b>114.0</b> |

#### Semester 1 Year 3

| Code         | Course title               | LH         | T/SH       | AS         | IS         | PH         | CH          | CU           |
|--------------|----------------------------|------------|------------|------------|------------|------------|-------------|--------------|
| TS 800       | Thoracic surgery           | 54         | 54         | 54         | 54         | 144        | 360         | 36.0         |
| HN800        | Head and neck surgery      | 57         | 57         | 57         | 57         | 152        | 380         | 38.0         |
| GY 800       | Gynaecology                | 14         | 12         | 14         | 14         | 36         | 90          | 9.0          |
| CA 800       | Clinical Apprenticeship IV | 0          | 0          | 0          | 140        | 140        | 280         | 28.0         |
| DC 800       | Data Collection            | 0          | 0          | 0          | 0          | 240        | 240         | 24.0         |
| <b>Total</b> |                            | <b>125</b> | <b>123</b> | <b>125</b> | <b>265</b> | <b>712</b> | <b>1350</b> | <b>135.0</b> |

#### Semester 2 Year 3

| Code               | Course title              | LH         | T/SH       | AS         | IS         | PH         | CH          | CU           |
|--------------------|---------------------------|------------|------------|------------|------------|------------|-------------|--------------|
| NS 800             | Neurosurgery              | 54         | 54         | 54         | 54         | 144        | 360         | 36.0         |
| RA 800             | Recent advances           | 52         | 52         | 52         | 52         | 142        | 350         | 35.0         |
| CA 800             | Clinical Apprenticeship V | 0          | 0          | 0          | 50         | 140        | 190         | 19.0         |
| DT 800             | Dissertation Writing      | 0          | 4          | 20         | 50         | 76         | 150         | 15.0         |
| <b>Total</b>       |                           | <b>106</b> | <b>110</b> | <b>126</b> | <b>206</b> | <b>502</b> | <b>1050</b> | <b>105.0</b> |
| <b>GRAND TOTAL</b> |                           |            |            |            |            |            | <b>7070</b> | <b>707.0</b> |

#### KEY

LH:Lecture Hours

T/SH:Tutorial/Seminar Hours

AS: Assignment Hours

IS:Independent studies

PH:Practical or Field work hours

CH:Contact Hours

CU: Credit Units

## MASTER OF MEDICINE IN PAEDIATRICS AND CHILD HEALTH (MMed PAED)

### Objectives of the Programme

To produce highly skilled and competent Paediatricians with sound scientific principles of international standard required for MMed Paediatrics degree holder.

**Program expected learning outcomes**

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge   | <ul style="list-style-type: none"> <li>• Comprehend scientific knowledge of Physiology, Biochemistry, Microbiology &amp; Immunology, Clinical Pharmacology, Epidemiology and Research Methods relevant to the needs of pediatric patients.</li> <li>• Comprehend all paediatric problems in the fields of Neonatology, Emergencies in Childhood, Developmental Paediatrics, Infectious Diseases and Tropical Paediatrics, Nutrition and Metabolic Disorders and Storage Diseases, Paediatric cardiology, Paediatric nephrology, Paediatric gastroenterology, Paediatric dermatology, Paediatric endocrinology and Paediatric oncology.</li> <li>• Comprehend laboratory, radiological and endoscopic investigations to reach appropriate diagnosis for specific pediatric patient's management.</li> </ul>                                                                                                                                                                                                                                                                                                    |
| Skills      | <ul style="list-style-type: none"> <li>• Apply scientific knowledge of Physiology, Biochemistry, Microbiology &amp; Immunology, Clinical Pharmacology, Epidemiology and Research Methods relevant to the needs of paediatric patients.</li> <li>• Manage competently all paediatric problems in the fields of Neonatology, Emergencies in Childhood, Developmental Paediatrics, Infectious Diseases and Tropical Paediatrics, Nutrition and Metabolic Disorders and Storage Diseases, Paediatric cardiology, Paediatric nephrology, Paediatric gastroenterology, Paediatric dermatology, Paediatric endocrinology and Paediatric oncology.</li> <li>• Discover and assess pediatric medical conditions in the community and propose appropriate scientific interventions.</li> <li>• Apply rationally laboratory, radiological and endoscopic investigations to reach appropriate diagnosis for specific pediatric patients' management.</li> <li>• Apply new innovations in the pediatric medical field and other related fields through continuing education and multidisciplinary interactions.</li> </ul> |
| Attitudes   | <ul style="list-style-type: none"> <li>• Demonstrate high professional &amp; ethical standards in the course of his or her professional medical practice towards patients, colleagues and the community.</li> <li>• Bestow leadership competency in the appropriate or related field of his/her training.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Competences | <ul style="list-style-type: none"> <li>• Manage competently all paediatric problems in the fields of Neonatology, Emergencies in Childhood, Developmental Paediatrics, Infectious Diseases and Tropical Paediatrics, Nutrition and Metabolic Disorders and Storage Diseases, Paediatric cardiology, Paediatric nephrology, Paediatric gastroenterology, Paediatric dermatology, Paediatric endocrinology and Paediatric oncology.</li> <li>• Demonstrate competency in the teaching of undergraduate medical students and other allied health cadres</li> <li>• Plan and conduct clinical medical research competently relevant to the needs of the medical patient and community</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Normal learning Matrix**

All courses in this program are core

**Semester 1 Year 1**

| Course Code | Course title                | LH  | TH | AS | IS | PH | CH  | CU   |
|-------------|-----------------------------|-----|----|----|----|----|-----|------|
| PY600       | Clinical Physiology         | 85  | 45 | 42 | 78 | 30 | 280 | 28.0 |
| BC600       | Clinical Biochemistry       | 80  | 30 | 30 | 90 | 30 | 260 | 26.0 |
| MI600       | Microbiology and Immunology | 104 | 54 | 35 | 85 | 45 | 320 | 32.0 |
| CP600       | Clinical Pharmacology       | 107 | 58 | 30 | 90 | 30 | 310 | 31.0 |

|              |                                                  |            |            |            |            |            |              |              |
|--------------|--------------------------------------------------|------------|------------|------------|------------|------------|--------------|--------------|
| ER600        | Epidemiology, Research Methods and Biostatistics | 30         | 24         | 18         | 38         | 80         | 190          | 19.0         |
| <b>Total</b> |                                                  | <b>406</b> | <b>211</b> | <b>155</b> | <b>381</b> | <b>215</b> | <b>1,360</b> | <b>136.0</b> |

**Semester 2 Year 1**

| Course Code  | Course title                                          | LH         | TH         | AS        | IS         | PH         | CH           | CU           |
|--------------|-------------------------------------------------------|------------|------------|-----------|------------|------------|--------------|--------------|
| GP600        | General Paediatrics and Child Health                  | 80         | 70         | 20        | 144        | 288        | 600          | 60.0         |
| NE600        | Neonatology, Paediatric Emergencies and Critical care | 74         | 48         | 20        | 80         | 208        | 430          | 43.0         |
| CL600        | Clinical Apprenticeship I                             | -          | -          | 20        | 70         | 180        | 270          | 27.0         |
| <b>Total</b> |                                                       | <b>154</b> | <b>118</b> | <b>60</b> | <b>294</b> | <b>676</b> | <b>1,300</b> | <b>130.0</b> |

**Semester 1 Year 2**

| Course Code  | Course title                      | LH         | TH        | AS        | IS         | PH         | CH           | CU           |
|--------------|-----------------------------------|------------|-----------|-----------|------------|------------|--------------|--------------|
| NG700        | Nutrition and gastroenterology    | 64         | 50        | 20        | 110        | 236        | 480          | 48.0         |
| PA 700       | Pulmonology and allergic disorder | 44         | 34        | 11        | 65         | 166        | 320          | 32.0         |
| CL700        | Clinical Apprenticeship II        | -          | -         | 8         | 30         | 112        | 150          | 15.0         |
| CD700        | Concept development               |            |           | 20        | 50         | 160        | 230          | 23.0         |
| <b>Total</b> |                                   | <b>108</b> | <b>84</b> | <b>59</b> | <b>255</b> | <b>674</b> | <b>1,160</b> | <b>116.0</b> |

**Semester 2 Year 2**

| Course Code  | Course title                    | LH         | TH        | AS        | IS         | PH         | CH           | CU           |
|--------------|---------------------------------|------------|-----------|-----------|------------|------------|--------------|--------------|
| CH700        | Cardiology and Haemato-oncology | 120        | 62        | 30        | 146        | 352        | 710          | 71.0         |
| CL700        | Clinical Apprenticeship III     | -          | -         | 20        | 76         | 174        | 270          | 27.0         |
| PD700        | Proposal Development            | -          | -         | 20        | 30         | 130        | 180          | 18.0         |
| <b>Total</b> |                                 | <b>120</b> | <b>62</b> | <b>70</b> | <b>252</b> | <b>656</b> | <b>1,160</b> | <b>116.0</b> |

**Semester 1 Year 3**

| Course Code  | Course title                                     | LH         | TH        | AS        | IS         | PH         | CH           | CU           |
|--------------|--------------------------------------------------|------------|-----------|-----------|------------|------------|--------------|--------------|
| NR800        | Neurology, metabolic disorders and endocrinology | 130        | 70        | 30        | 144        | 338        | 720          | 72.0         |
| PN800        | Paediatric nephrology                            | 19         | 6         | 8         | 16         | 34         | 80           | 8.0          |
| RA800        | Paediatric rheumatology and autoimmune condition | 37         | 12        | 8         | 40         | 78         | 170          | 17.0         |
| CL800        | Clinical Apprenticeship IV                       | -          | -         | 16        | 60         | 184        | 260          | 26.0         |
| DC800        | Data collection                                  | -          | -         | -         | -          | 180        | 180          | 18.0         |
| <b>Total</b> |                                                  | <b>186</b> | <b>88</b> | <b>62</b> | <b>260</b> | <b>814</b> | <b>1,410</b> | <b>141.0</b> |

**Semester 2 Year 3**

| Course Code  | Course title                                 | LH        | TH        | AS        | IS         | PH         | CH         | CU          |
|--------------|----------------------------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| ID800        | Infectious Diseases and Tropical Paediatrics | 86        | 50        | 20        | 94         | 280        | 530        | 53.0        |
| CL800        | Clinical Apprenticeship V                    | -         | -         | 16        | 70         | 224        | 310        | 31.0        |
| DT800        | Dissertation                                 | -         | -         | -         | 20         | 160        | 180        | 18.0        |
| <b>Total</b> |                                              | <b>86</b> | <b>50</b> | <b>36</b> | <b>184</b> | <b>664</b> | <b>920</b> | <b>92.0</b> |

**KEY**

|     |                               |     |                     |
|-----|-------------------------------|-----|---------------------|
| LH: | Lecture Hours                 | IS: | Independent studies |
| TH: | Tutorial Hours                | CH: | Contact Hours       |
| PH: | Practical or Field work hours | CU: | Credit Unit         |
| AS: | Assignment Hours              |     |                     |

## MASTER OF MEDICINE IN ORTHOPEDICS AND TRAUMA (MMed OT)

### Objectives of the Programme

To produce highly skilled and competent orthopedic surgeons capable of diagnosing and treating patients with incapacities of the spine and extremities.

To provide skilled Orthopaedic surgeons who are capable of teaching paramedical personnel, medical learners, interns, medical officers and surgical registrars the principles of diagnosing and treating patients with incapacities of the spine and extremities.

### Program expected learning outcomes

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

| Competence Domain  | Learning outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b>   | Apply scientific knowledge of anatomy, physiology, pathology and biochemistry relevant to the needs of the surgical patient.                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Skills</b>      | <ul style="list-style-type: none"> <li>• Manage competently all orthopedic problems including emergency general surgical conditions, trauma, adult and pediatric orthopedic problems and common reconstructions and neurosurgical affections.</li> </ul>                                                                                                                                                                                                                                                                   |
| <b>Competences</b> | <ul style="list-style-type: none"> <li>• Demonstrate competency in the teaching of undergraduate medical learners and other allied health cadres</li> <li>• Plan and conduct clinical medical research competently relevant to the needs of the surgical patient and community.</li> <li>• Discover and assess community surgical needs in the community and propose appropriate scientific interventions</li> <li>• Demonstrate leadership competency in the appropriate or related field of his/her training.</li> </ul> |
| <b>Attitude</b>    | <ul style="list-style-type: none"> <li>• Demonstrate high professional &amp; ethical standards in the course of his professional medical practice in surgery.</li> </ul>                                                                                                                                                                                                                                                                                                                                                   |

### Normal learning Matrix

All courses in this program are core

| Year/Semester            | Code   | Course title                                       | LH         | TH         | IS        | PH         | AS        | Tt.H       | Credits     |
|--------------------------|--------|----------------------------------------------------|------------|------------|-----------|------------|-----------|------------|-------------|
| <b>Year 1 Semester 1</b> | CA 600 | Clinical anatomy                                   | 36         | 18         | 18        | 72         | 6         | 150        | 15.0        |
|                          | MI 600 | Microbiology & Immunology                          | 36         | 18         | 9         | 18         | 12        | 93         | 9.3         |
|                          | AP 600 | Advanced Pathology                                 | 18         | 18         | 9         | 18         | 6         | 69         | 6.9         |
|                          | PH 600 | Clinical Physiology                                | 36         | 18         | 18        | 18         | 10        | 100        | 10.0        |
|                          | ER 600 | Epidemiology, Biostatistics & Research Methodology | 18         | 18         | 18        | 36         | 10        | 100        | 10.0        |
|                          | CP 600 | Clinical Pharmacology                              | 54         | 18         | 18        | 18         | 10        | 118        | 11.8        |
| <b>Semester Total</b>    |        |                                                    | <b>198</b> | <b>108</b> | <b>90</b> | <b>180</b> | <b>54</b> | <b>630</b> | <b>63.0</b> |
| <b>Year 1 Semester 2</b> | BT 600 | Biomechanics of Trauma                             | 9          | 9          | 25        | 144        | 9         | <b>196</b> | <b>19.6</b> |
|                          | UT 600 | Upper Limb Trauma                                  | 9          | 9          | 26        | 144        | 9         | <b>197</b> | <b>19.7</b> |
|                          | LT 600 | Lower Limb and Pelvic Trauma                       | 9          | 9          | 27        | 144        | 9         | <b>198</b> | <b>19.8</b> |
|                          | ST 600 | Soft Tissues Trauma                                | 9          | 9          | 30        | 144        | 9         | <b>201</b> | <b>20.1</b> |

|                              |        |                                          |            |            |            |             |            |             |              |
|------------------------------|--------|------------------------------------------|------------|------------|------------|-------------|------------|-------------|--------------|
| <b>Semester Total</b>        |        |                                          | <b>36</b>  | <b>36</b>  | <b>108</b> | <b>576</b>  | <b>36</b>  | <b>792</b>  | <b>79.2</b>  |
| <b>Year 2<br/>Semester 1</b> | AB 700 | Adult Orthopedics of Bones and Joints    | 9          | 12         | 30         | 126         | 10         | <b>187</b>  | <b>18.7</b>  |
|                              | ND 700 | Adult Orthopedics Neuromuscular Diseases | 9          | 12         | 30         | 126         | 10         | <b>187</b>  | <b>18.7</b>  |
|                              | AM 700 | Adult Orthopedics Musculoskeletal Tumors | 9          | 12         | 30         | 126         | 10         | <b>187</b>  | <b>18.7</b>  |
|                              | HF 700 | Adult Orthopedics of Hand, Foot & Spine  | 9          | 9          | 27         | 126         | 10         | <b>181</b>  | <b>18.1</b>  |
|                              | RP 700 | Research proposal preparation            | 0          | 9          | 27         | 54          | 14         | <b>104</b>  | <b>10.4</b>  |
| <b>Semester Total</b>        |        |                                          | <b>36</b>  | <b>54</b>  | <b>144</b> | <b>558</b>  | <b>54</b>  | <b>846</b>  | <b>84.6</b>  |
| <b>Year 2<br/>Semester 2</b> | MD 700 | Musculoskeletal Development              | 9          | 9          | 45         | 126         | 20         | <b>209</b>  | <b>20.9</b>  |
|                              | CD 700 | Congenital Deformities                   | 9          | 9          | 45         | 126         | 18         | <b>207</b>  | <b>20.7</b>  |
|                              | PN 700 | Pediatrics Neuromuscular Diseases        | 9          | 9          | 45         | 126         | 16         | <b>205</b>  | <b>20.5</b>  |
|                              | GS 700 | General surgery & Neurosurgery           | 9          | 9          | 45         | 126         | 18         | <b>207</b>  | <b>20.7</b>  |
| <b>Semester Total</b>        |        |                                          | <b>36</b>  | <b>36</b>  | <b>180</b> | <b>504</b>  | <b>72</b>  | <b>828</b>  | <b>82.8</b>  |
| <b>Year 3<br/>Semester 1</b> | PT 800 | Pediatrics Trauma                        | 18         | 18         | 36         | 126         | 18         | <b>216</b>  | <b>21.6</b>  |
|                              | DC 800 | Data collection for Dissertation         | 0          | 0          | 36         | 450         | -          | <b>486</b>  | <b>48.6</b>  |
| <b>Semester Total</b>        |        |                                          | <b>18</b>  | <b>18</b>  | <b>72</b>  | <b>576</b>  | <b>18</b>  | <b>702</b>  | <b>70.2</b>  |
| <b>Year 3<br/>Semester 2</b> | XR 800 | External rotations                       | 9          | 9          | 72         | 360         | 15         | <b>465</b>  | <b>46.5</b>  |
|                              | DD 800 | Dissertation writing and defense         | 9          | 9          | 180        | 144         | 21         | <b>363</b>  | <b>36.3</b>  |
| <b>Semester Total</b>        |        |                                          | <b>18</b>  | <b>18</b>  | <b>252</b> | <b>504</b>  | <b>36</b>  | <b>828</b>  | <b>82.8</b>  |
| <b>GRAND TOTAL</b>           |        |                                          | <b>342</b> | <b>270</b> | <b>846</b> | <b>2898</b> | <b>270</b> | <b>4626</b> | <b>462.6</b> |

### **KEY**

|                                   |                         |
|-----------------------------------|-------------------------|
| LH: Lecture Hours                 | IS: Independent studies |
| TH: Tutorial Hours                | CH: Contact Hours       |
| PH: Practical or Field work hours | CU: Credit Unit         |
| AS: Assignment Hours              |                         |
| 10 Notional Hours= 1 Credit       |                         |

## **MASTER OF MEDICINE IN ANATOMICAL PATHOLOGY (MMed AP)**

### **Objectives of the Programme**

The Master of Medicine in Anatomical Pathology will produce a competent pathologist who is able to:

- Provide expertise professional diagnostic services in surgical pathology and cytopathology.
- Be competent in performing Clinical and Forensic autopsies
- To produce trainers in histology, cytology and diagnostic molecular biology in Tanzanian institutions and elsewhere.
- To produce competent graduates who can conduct high quality research that can translate into policy.



- Be a good researcher in Pathology and other health related fields
- Have the ability to manage a laboratory and/or a health care facility
- To offer consultancy in pathology, laboratory medicine and general medical services including running a tumour board and cancer registry

### **Programme learning outcomes**

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

| <b>Competence Domain</b> | <b>Learning outcomes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b>         | <ul style="list-style-type: none"> <li>• Discuss principles of pathology</li> <li>• Discuss principles forensic and clinical autopsy</li> <li>• Review epidemiology and biostatistics in relation to pathology</li> <li>• Describe entrepreneurship in relation to pathology and laboratory medicine.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Skills</b>            | <ul style="list-style-type: none"> <li>• Evaluate the impact of the existing national diagnostics guidelines in pathology and laboratory medicine and precisely advice on improving them.</li> <li>• To interpret histopathological and cytopathological samples with use of cytochemical and immunohistochemical stains</li> <li>• Develop, execute and analyse standard operating procedures (SOPs) for quality control and assurance (QC&amp;QA) in pathology and laboratory medicine. Develop research questions and design research methods for answering them</li> </ul>                                                                                                                                                                                                                                                                                                                                       |
| <b>Competences</b>       | <ul style="list-style-type: none"> <li>• Plan and manage health, industrial and medical research laboratories.</li> <li>• Perform and interpret results of relevant laboratory diagnostic tests.</li> <li>• Integrate epidemiological and statistical skills in planning and analysing health researches.</li> <li>• Integrate pathology and laboratory medicine in cancer control programmes.</li> <li>• Practice with high professionalism, with good relationship with patients, community, teaching skills and maintaining good practices</li> <li>• Integrate clinical pathology, laboratory medicine, and medical research field.</li> <li>• Work in the system in the context of health care</li> <li>• Prepare fundable international research proposal.</li> <li>• Train health professionals in the field of pathology and laboratory medicine in Tanzanian medical universities and elsewhere.</li> </ul> |

### **Normal learning matrix and course matrix with its total credit and hours**

| <b>Course Code</b>       | <b>Course title</b>                            | <b>LH</b> | <b>TH</b> | <b>AS</b> | <b>IS</b> | <b>PH</b> | <b>CH</b> | <b>Credits</b> |
|--------------------------|------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|
| <b>Year 1 Semester 1</b> |                                                |           |           |           |           |           |           |                |
| <b>MP 600</b>            | Applied Principles of Pathology                | 36        | 12        | 12        | 48        | 12        | 120       | 12             |
| <b>DM 600</b>            | Diagnostic Microbiology and Immunology         | 36        | 12        | 12        | 48        | 12        | 120       | 12             |
| <b>ER 600</b>            | Epidemiology, Biostatistics & Research Methods | 36        | 18        | 16        | 48        | 12        | 130       | 13             |
| <b>HI 600</b>            | Histology                                      | 18        | 18        | 10        | 24        | 54        | 124       | 12.4           |
| <b>BP 600</b>            | Bioethics and Professionalism.                 | 18        | 18        | 4         | 4         | 0         | 44        | 4.4            |

|                          |                                                                         |            |            |            |            |             |             |              |
|--------------------------|-------------------------------------------------------------------------|------------|------------|------------|------------|-------------|-------------|--------------|
| <b>BB 600</b>            | Biosafety and Biosecurity.                                              | 18         | 18         | 4          | 4          | 0           | 44          | 4.4          |
| <b>Semester total</b>    |                                                                         | <b>162</b> | <b>96</b>  | <b>58</b>  | <b>176</b> | <b>90</b>   | <b>582</b>  | <b>58.2</b>  |
| <b>Year 1 Semester 2</b> |                                                                         |            |            |            |            |             |             |              |
| <b>SS 600</b>            | Systemic Pathology and Surgical Pathology I                             | 36         | 54         | 36         | 60         | 144         | 330         | 33           |
| <b>GM 600</b>            | Genetics and Molecular Biology                                          | 36         | 36         | 36         | 18         | 72          | 198         | 19.8         |
| <b>TP 600</b>            | Basic laboratory techniques in pathology and cytology                   | 36         | 36         | 24         | 36         | 90          | 222         | 22.2         |
| <b>Semester total</b>    |                                                                         | <b>108</b> | <b>126</b> | <b>96</b>  | <b>114</b> | <b>306</b>  | <b>750</b>  | <b>75</b>    |
| <b>Year 2 Semester 1</b> |                                                                         |            |            |            |            |             |             |              |
| <b>CP 700</b>            | Chemical Pathology                                                      | 18         | 18         | 36         | 30         | 18          | 120         | 12           |
| <b>HE 700</b>            | Hematology                                                              | 18         | 18         | 48         | 48         | 54          | 186         | 18.6         |
| <b>RD 700</b>            | Research and Dissertation I                                             | 0          | 18         | 10         | 40         | 90          | 158         | 15.8         |
| <b>Semester total</b>    |                                                                         | <b>36</b>  | <b>54</b>  | <b>94</b>  | <b>118</b> | <b>162</b>  | <b>464</b>  | <b>46.4</b>  |
| <b>Year 2 Semester 2</b> |                                                                         |            |            |            |            |             |             |              |
| <b>SS 700</b>            | Systemic Pathology and Surgical Pathology II                            | 26         | 52         | 42         | 60         | 130         | 310         | 31           |
| <b>DT 700</b>            | Diagnostic Molecular / Immunohistochemical and Investigative Techniques | 10         | 20         | 30         | 54         | 50          | 164         | 16.4         |
| <b>RP 701</b>            | Research and Dissertation II                                            | 0          | 0          | 10         | 40         | 90          | 140         | 14           |
| <b>Semester total</b>    |                                                                         | <b>36</b>  | <b>72</b>  | <b>82</b>  | <b>154</b> | <b>270</b>  | <b>614</b>  | <b>61.4</b>  |
| <b>Year 3 Semester 1</b> |                                                                         |            |            |            |            |             |             |              |
| <b>PT 800</b>            | Pathology of Tropical diseases.                                         | 36         | 36         | 18         | 24         | 90          | 204         | 20.4         |
| <b>FM 800</b>            | Forensic and medical Autopsy.                                           | 18         | 18         | 24         | 36         | 126         | 222         | 22.2         |
| <b>DA 800</b>            | Data Collection and Analysis                                            | 0          | 0          | 0          | 36         | 180         | 216         | 21.6         |
| <b>Semester total</b>    |                                                                         | <b>54</b>  | <b>54</b>  | <b>42</b>  | <b>96</b>  | <b>396</b>  | <b>642</b>  | <b>64.2</b>  |
| <b>Year 3 Semester 2</b> |                                                                         |            |            |            |            |             |             |              |
| <b>SP 800</b>            | Senior surgical pathology practice                                      | 18         | 36         | 36         | 44         | 126         | 260         | 26           |
| <b>ME 800</b>            | Laboratory Management & Entrepreneurship                                | 18         | 18         | 12         | 10         | 18          | 76          | 7.6          |
| <b>DD 800</b>            | Dissertation writing and defense                                        | 0          | 9          | 0          | 36         | 189         | 234         | 23.4         |
| <b>Semester total</b>    |                                                                         | <b>36</b>  | <b>63</b>  | <b>48</b>  | <b>90</b>  | <b>333</b>  | <b>570</b>  | <b>57</b>    |
| <b>Grand Total</b>       |                                                                         | <b>432</b> | <b>465</b> | <b>420</b> | <b>748</b> | <b>1557</b> | <b>3622</b> | <b>362.2</b> |

### **KEY**

|                                   |                         |
|-----------------------------------|-------------------------|
| LH: Lecture Hours                 | IS: Independent studies |
| TH: Tutorial Hours                | CH: Contact Hours       |
| PH: Practical or Field work hours | CU: Credit Unit         |
| AS: Assignment Hours              |                         |
| 10 Notional Hours= 1 Credit       |                         |

## **MASTER OF MEDICINE IN EAR NOSE AND THROAT (MMed ENT)**

### **Objectives of the Programme**

The M. Med ENT programme is intended to achieve the following:

- To produce graduates capable of integrating biomedical sciences knowledge in managing patients with ENT diseases
- To produce graduate that can competently manage patients with ENT diseases

- To produce skilled graduates capable of developing, evaluating, and executing management guidelines in relation to ENT diseases.
- To produce competent graduate who can conduct high quality research that can translate into policy.
- To produce professionals vested with moral and ethical values

**Programme Expected Learning outcomes**

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge   | <ul style="list-style-type: none"> <li>• Comprehend scientific knowledge of Physiology, Anatomy, Microbiology &amp; Immunology, Pathology, Clinical Pharmacology, Epidemiology and Research Methods relevant to the needs of Ear, Nose, Throat, Head and Neck patients.</li> <li>• Comprehend all Ear, Nose, Throat, Head and Neck medical problems.</li> <li>• Comprehend laboratory, radiological and endoscopic investigations to reach appropriate diagnosis for specific Ear, Nose, Throat, Head and Neck patient's management.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Skills      | <ul style="list-style-type: none"> <li>• Apply scientific knowledge of Physiology, Anatomy, Microbiology &amp; Immunology, Pathology, Clinical Pharmacology, Epidemiology and Research Methods relevant to the needs of Ear, Nose, Throat, Head and Neck patients.</li> <li>• Manage competently all Ear, Nose, Throat, Head and Neck surgical and medical conditions prevalent in the hospitals and in the community.</li> <li>• Discover and assess Ear, Nose, Throat, Head and Neck medical conditions in the community and propose appropriate scientific interventions.</li> <li>• Apply rationally laboratory, radiological and endoscopic investigations to reach appropriate diagnosis for specific Ear, Nose, Throat, Head and Neck patients' management.</li> <li>• Apply new innovations in the Ear, Nose, Throat, Head and Neck medical field and other related fields through continuing education and multidisciplinary interactions.</li> <li>• Teach Ear, Nose and Throat and Head and Neck Surgery</li> <li>• Carry out research in the hospitals and the community in relation to Ear, Nose and Throat and Head and Neck Surgery health.</li> </ul> |
| Attitude    | <ul style="list-style-type: none"> <li>• Demonstrate high professional &amp; ethical standards in the course of his or her professional medical practice in Ear, Nose, Throat, Head and Neck surgery towards patients, colleagues and the community.</li> <li>• Bestow leadership competency in the appropriate or related field of his/her training.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Competences | <ul style="list-style-type: none"> <li>• Manage competently all Ear, Nose, Throat, Head and Neck surgical and medical conditions prevalent in the hospitals and in the community.</li> <li>• Demonstrate competency in the teaching of undergraduate medical students and other allied health cadres pertaining to Ear, Nose, Throat, Head and Neck surgical and medical conditions.</li> <li>• Plan and conduct clinical medical research competently relevant to the needs of the Ear, Nose, Throat, Head and Neck patient and community.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

### Normal learning matrix and course matrix

| Course code              | Course                                                 | LH         | TH         | AS         | IS         | PH          | CH          | Credits     |
|--------------------------|--------------------------------------------------------|------------|------------|------------|------------|-------------|-------------|-------------|
| <b>Year 1 Semester 1</b> |                                                        |            |            |            |            |             |             |             |
| <b>AA 600</b>            | Advanced Anatomy of Ear, Nose, Throat, Head and Neck   | 18         | 18         | 18         | 36         | 90          | 180         | 18          |
| <b>AP 600</b>            | Advanced Pathology of Ear, Nose, Throat, Head and Neck | 18         | 36         | 18         | 36         | 18          | 126         | 12.6        |
| <b>MI 600</b>            | Microbiology and Immunology                            | 36         | 36         | 24         | 60         | 18          | 174         | 17.4        |
| <b>ER 600</b>            | Epidemiology, Biostatistics & Research Methods         | 18         | 36         | 16         | 36         | 18          | 124         | 12.4        |
| <b>PH 600</b>            | Clinical Physiology                                    | 18         | 18         | 16         | 34         | 18          | 104         | 10.4        |
| <b>CP 600</b>            | Clinical Pharmacology                                  | 18         | 36         | 16         | 36         | 18          | 124         | 12.4        |
| <b>Semester total</b>    |                                                        | <b>126</b> | <b>180</b> | <b>108</b> | <b>238</b> | <b>180</b>  | <b>832</b>  | <b>83.2</b> |
| <b>Year 1 Semester 2</b> |                                                        |            |            |            |            |             |             |             |
| <b>AT600</b>             | Applied Anatomy and physiology of Ear Nose and Throat  | 18         | 18         | 36         | 48         | 144         | 264         | 26.4        |
| <b>EE 600</b>            | Ear Nose and Throat Emergencies                        | 36         | 18         | 36         | 48         | 126         | 264         | 26.4        |
| <b>PS 600</b>            | Principles of Surgery                                  | 18         | 18         | 24         | 18         | 90          | 168         | 16.8        |
| <b>TD 600</b>            | Temporal bone Anatomy and Dissection                   | 18         | 18         | 24         | 24         | 72          | 156         | 15.6        |
| <b>ME 600</b>            | Medical Ethics and Professionalism                     | 18         | 18         | 4          | 4          | 0           | 44          | 4.4         |
| <b>Semester total</b>    |                                                        | <b>108</b> | <b>90</b>  | <b>124</b> | <b>142</b> | <b>432</b>  | <b>896</b>  | <b>89.6</b> |
| <b>Year 2 Semester 1</b> |                                                        |            |            |            |            |             |             |             |
| <b>PR 700</b>            | Paediatric Rhinology (Rhinology I)                     | 18         | 18         | 36         | 30         | 90          | 192         | 19.2        |
| <b>PO 700</b>            | Pediatric Otology                                      | 18         | 36         | 36         | 60         | 126         | 276         | 27.6        |
| <b>PL 700</b>            | Pediatric Laryngology Head and Neck                    | 18         | 36         | 36         | 60         | 126         | 276         | 27.6        |
| <b>Semester total</b>    |                                                        | <b>54</b>  | <b>90</b>  | <b>108</b> | <b>150</b> | <b>342</b>  | <b>744</b>  | <b>74.4</b> |
| <b>Year 2 Semester 2</b> |                                                        |            |            |            |            |             |             |             |
| <b>AS 700</b>            | Audiology and Speech Pathology                         | 18         | 18         | 24         | 48         | 72          | 180         | 18.0        |
| <b>RN 700</b>            | Rhinology II: Inflammation, Trauma and Neoplasms       | 36         | 36         | 36         | 54         | 180         | 342         | 34.2        |
| <b>RP 700</b>            | Research Proposal development                          | 0          | 0          | 10         | 40         | 90          | 140         | 14.0        |
| <b>Semester total</b>    |                                                        | <b>54</b>  | <b>54</b>  | <b>70</b>  | <b>142</b> | <b>342</b>  | <b>662</b>  | <b>66.2</b> |
| <b>Year 3 Semester 1</b> |                                                        |            |            |            |            |             |             |             |
| <b>IH 800</b>            | Inflammatory conditions of the Head and Neck           | 18         | 36         | 18         | 24         | 90          | 186         | 18.6        |
| <b>TH 800</b>            | Traumatic conditions of the Head and Neck              | 36         | 36         | 24         | 36         | 126         | 258         | 25.8        |
| <b>NH 800</b>            | Neoplastic conditions of the Head and Neck             | 18         | 18         | 24         | 36         | 90          | 186         | 18.6        |
| <b>DC 800</b>            | Data collection                                        | 0          | 0          | 0          | 36         | 144         | 180         | 18.0        |
| <b>Semester total</b>    |                                                        | <b>72</b>  | <b>90</b>  | <b>66</b>  | <b>132</b> | <b>450</b>  | <b>810</b>  | <b>81</b>   |
| <b>Year 3 Semester 2</b> |                                                        |            |            |            |            |             |             |             |
| <b>OI 800</b>            | Otology and Neurotology: Inflammatory conditions       | 18         | 18         | 24         | 36         | 90          | 186         | 18.6        |
| <b>OT 800</b>            | Otology and Neurotology: Traumatic conditions          | 18         | 36         | 36         | 44         | 126         | 260         | 26.0        |
| <b>ON 800</b>            | Otology and Neurotology: Neoplastic conditions         | 18         | 18         | 36         | 44         | 90          | 206         | 20.6        |
| <b>DD 800</b>            | Dissertation writing and defense                       | 0          | 9          | 0          | 36         | 189         | 234         | 23.4        |
| <b>Semester total</b>    |                                                        | <b>54</b>  | <b>81</b>  | <b>96</b>  | <b>160</b> | <b>495</b>  | <b>886</b>  | <b>88.6</b> |
| <b>Grand Total</b>       |                                                        | <b>468</b> | <b>585</b> | <b>572</b> | <b>964</b> | <b>2241</b> | <b>4830</b> | <b>483</b>  |

### KEY

|                             |                               |     |                     |
|-----------------------------|-------------------------------|-----|---------------------|
| LH:                         | Lecture Hours                 | IS: | Independent studies |
| TH:                         | Tutorial Hours                | CH: | Contact Hours       |
| PH:                         | Practical or Field work hours | CU: | Credit Unit         |
| AS:                         | Assignment Hours              |     |                     |
| 10 Notional Hours= 1 Credit |                               |     |                     |

## MASTER OF MEDICINE IN RADIOLOGY (MMed. RAD)

### Objectives of the Programme:

To produce highly competent and skilled specialist radiologists with sound scientific principles of international standards that are vested in ethical, moral and professional values.

### Programme Expected Learning Outcomes

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b> | <ul style="list-style-type: none"> <li>Analyse scientific knowledge of radiology/ imaging.</li> <li>Analyse techniques for radiological/imaging examinations and procedures.</li> <li>Analyse risks, complications and management of all radiological examinations and procedures.</li> </ul>                                                                                                                                                                                                                                                                                      |
| <b>Skills</b>    | <ul style="list-style-type: none"> <li>Perform radiological/imaging examinations and procedures.</li> <li>Interpret radiological/imaging examinations and procedures.</li> <li>Report on radiological/imaging examinations and procedures, and communicate results.</li> <li>Manage radiological/imaging equipment.</li> <li>Conduct patient triage.</li> <li>Build a teamwork spirit within and outside the Department.</li> <li>Conduct radiological/ imaging research studies for evidence.</li> <li>Teach others on relevant science and art of radiology/ imaging.</li> </ul> |
| <b>Attitudes</b> | <ul style="list-style-type: none"> <li>Promote compassionate care to clients and colleagues.</li> <li>Exhibit collaborative spirit within and outside the Department.</li> <li>Attend conflicts in a friendly manner.</li> <li>Value radiology/ imaging professionalism by following stipulated ethical standards.</li> </ul>                                                                                                                                                                                                                                                      |

### Normal Learning and Course Matrix

All courses in this program are core.

| Course code | Course title                                   | LH | TS | AS | IS  | PH  | TH  | Credits |
|-------------|------------------------------------------------|----|----|----|-----|-----|-----|---------|
|             | <b>Semester I Year 1</b>                       |    |    |    |     |     |     |         |
| IA600       | Imaging Anatomy                                | 17 | 17 | 17 | 119 | 102 | 272 | 27.2    |
| PA600       | Pathology                                      | 17 | 17 | 17 | 117 | 85  | 253 | 25.3    |
| IP600       | Imaging Physics and Radiation Protection       | 17 | 17 | 17 | 54  | 17  | 122 | 12.2    |
| IT600       | Imaging Informatics & Technology               | 17 | 17 | 10 | 7   | 34  | 85  | 8.5     |
| ME600       | Medical Ethics and Professionalism             | 17 | 17 | 17 | 7   | 10  | 68  | 6.8     |
|             | <b>Total</b>                                   | 85 | 85 | 78 | 304 | 248 | 800 | 80      |
|             | <b>Semester II Year 1</b>                      |    |    |    |     |     |     |         |
| RP600       | Radiological Procedures & Techniques           | 17 | 17 | 7  | 85  | 191 | 317 | 31.7    |
| EI600       | Emergency Imaging                              | 17 | 17 | 7  | 85  | 170 | 296 | 29.6    |
| EP600       | Epidemiology, Biostatistics & Research Methods | 34 | 34 | 17 | 17  | 17  | 119 | 11.9    |
| TM600       | Teaching Methodology                           | 17 | 17 | 7  | 7   | 20  | 68  | 6.8     |
|             | <b>Total</b>                                   | 85 | 85 | 38 | 194 | 398 | 800 | 80      |
|             | <b>Semester III Year 2</b>                     |    |    |    |     |     |     |         |
| CI700       | Chest Imaging                                  | 17 | 17 | 17 | 50  | 136 | 237 | 23.7    |
| AI700       | Abdominal Imaging                              | 17 | 17 | 10 | 50  | 153 | 247 | 24.7    |
| UI700       | Urogenital Imaging                             | 17 | 17 | 17 | 50  | 119 | 220 | 22      |

| Course code  | Course title                          | LH         | TS         | AS         | IS          | PH          | TH          | Credits      |
|--------------|---------------------------------------|------------|------------|------------|-------------|-------------|-------------|--------------|
| <b>RD700</b> | Research Design                       | 7          | 7          | 10         | 7           | 68          | 99          | 9.9          |
|              | <b>Total</b>                          | 58         | 58         | 54         | 157         | 476         | 803         | 80.3         |
|              | <b>Semester IV Year 2</b>             |            |            |            |             |             |             |              |
| <b>BI700</b> | Breast Imaging                        | 17         | 17         | 17         | 50          | 136         | 237         | 23.7         |
| <b>OG700</b> | Obstetrics and Gynaecological Imaging | 17         | 17         | 17         | 50          | 153         | 254         | 25.4         |
| <b>RF700</b> | Research Fieldwork                    | 7          | 7          | 7          | 7           | 289         | 317         | 31.7         |
|              | <b>Total</b>                          | 41         | 41         | 41         | 107         | 578         | 808         | 80.8         |
|              | <b>Semester V Year 3</b>              |            |            |            |             |             |             |              |
| <b>CV800</b> | Cardiac and Vascular Imaging          | 17         | 17         | 17         | 50          | 153         | 254         | 25.4         |
| <b>MS800</b> | Musculoskeletal Imaging               | 17         | 17         | 17         | 50          | 170         | 271         | 27.1         |
| <b>NR800</b> | Neuroradiology                        | 17         | 17         | 17         | 50          | 170         | 271         | 27.1         |
|              | <b>Total</b>                          | 51         | 51         | 51         | 150         | 493         | 796         | 79.6         |
|              | <b>Semester VI Year 3</b>             |            |            |            |             |             |             |              |
| <b>HN800</b> | Head and Neck Imaging                 | 17         | 17         | 7          | 50          | 153         | 244         | 24.4         |
| <b>OR800</b> | Oncological and Radionuclide Imaging  | 34         | 10         | 7          | 50          | 136         | 237         | 23.7         |
| <b>PI800</b> | Paediatric Imaging                    | 17         | 17         | 17         | 50          | 221         | 322         | 32.2         |
|              | <b>Total</b>                          | 68         | 44         | 31         | 150         | 510         | 803         | 80.3         |
|              | <b>Semester VII Year 4</b>            |            |            |            |             |             |             |              |
| <b>IR900</b> | Interventional Radiology              | 17         | 36         | 36         | 50          | 102         | 241         | 24.1         |
| <b>IN901</b> | Integrated Imaging Rotation I         | 7          | 7          | 7          | 100         | 204         | 325         | 32.5         |
| <b>ER900</b> | External Rotation                     | 0          | 0          | 0          | 0           | 240         | 240         | 24           |
|              | <b>Total</b>                          | 24         | 43         | 43         | 150         | 546         | 806         | 80.6         |
|              | <b>Semester VIII Year 4</b>           |            |            |            |             |             |             |              |
| <b>IN902</b> | Integrated Imaging Rotation II        | 7          | 7          | 7          | 250         | 380         | 651         | 65.1         |
| <b>RD900</b> | Research Dissemination                | 7          | 7          | 7          | 17          | 102         | 140         | 14           |
|              | <b>Total</b>                          | 14         | 14         | 14         | 267         | 482         | 791         | 79.1         |
|              | <b>Grand Total</b>                    | <b>426</b> | <b>421</b> | <b>350</b> | <b>1479</b> | <b>3731</b> | <b>6407</b> | <b>640.7</b> |

#### **KEY**

|                                                                            |                                                                    |
|----------------------------------------------------------------------------|--------------------------------------------------------------------|
| LH: LH-Lecture hours,<br>TS-Tutorial/Seminar hours,<br>AH-Assignment hours | IS- Independent studies,<br>PH-Practical hours,<br>TH- Total hours |
|----------------------------------------------------------------------------|--------------------------------------------------------------------|

### **M.Med Dissertations**

Procedures and examination of the Dissertation is as stipulated in the CUHAS guidelines for Higher degree

# MASTER OF PUBLIC HEALTH (MPH)



## **MASTER OF PUBLIC HEALTH (MPH)**

### **BACKGROUND**

Looking at the present needs in the country both at central level and at the private sector demands for public health specialists, prompted CUHAS to start a Master of Public Health Programme (MPH). This initiative was 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, CUHAS started a one-year general MPH programme. This programme will be conducted in three (3) semesters.

### **GOALS OF THE PROGRAMME**

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 programmes and Health projects in developing countries.

### **OBJECTIVES**

#### **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 Programmes 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.

#### **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.

**Programme expected learning outcomes**

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge | <p>The candidate should have adequate knowledge in integrating different disciplines learnt in MPH in addressing the core functions of public health at different levels. More specific knowledge is expected in;</p> <ol style="list-style-type: none"> <li>Application of epidemiological and statistical skills in analysing and planning health needs for the community.</li> <li>Evaluation of different health strategies and interventions used in the control of diseases.</li> <li>Describing and analysing health services and organizational structures for an effective health management system.</li> <li>Managing and/or participating in environmental health control programs and disaster management.</li> <li>Developing cost effective methods for screening and surveillance for health outcomes related to Public Health Issues.</li> <li>Developing research proposal and projects which focus on specific Health problems.</li> <li>Designing appropriate methodology in the control of communicable diseases and epidemics.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Skills    | <p>Graduates of the MPH at CUHAS are expected to have skills to be able,</p> <ol style="list-style-type: none"> <li><i>To assess the health needs of the community.</i> To systematically collect, assemble, and make available information on the public health status of the community, in cooperation with others, including statistics on health status, community health needs, environmental health, epidemiologic, and other studies of health problems.</li> <li><i>To investigate the occurrence of health effects and health hazards in the community.</i> To systematically develop in collaboration with others in the community, more detailed information on the magnitude of a health problem, duration, trends, location, population at risk, and how best to proceed to prevent or control the problem.</li> <li><i>To analyze the determinants of identified health needs.</i> This is the process of examining etiologic, risk, and contributing factors that precede and contribute to specific health problems or reduced health status in the community. Identifying these factors helps in working with the community in planning intervention efforts for prevention or control.</li> <li><i>To advocate for public health, build constituencies, and identify resources in the community.</i> This is the process of generating support among constituent groups that address community health needs and issues, establishing collaborative relationships between a public health agency and the public it serves, the government body it represents, and other health and human-related organizations in the community.</li> <li><i>To prioritize among health needs.</i> To facilitate a community process to rank health needs according to their importance, the magnitude, the seriousness of the consequences, economic impact and community readiness or the ability to prevent or control the problem.</li> </ol> |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | <p>f) <i>To plan and develop policies to address priority health needs.</i> This is the process by which agencies, working with community constituents and other groups, facilitate the formulated goals and objectives to meet the priority health needs of the community, identify a course of action to achieve the goals and objectives in a way that fosters community involvement and ownership, and is responsive to local needs.</p> <p>g) <i>To manage resources and develop organizational structure.</i> To acquire, allocate influence, resources (people, facilities, and equipment) and to encourage or enable them to meet priority community health needs in the best way possible.</p> <p>h) <i>To implement public health programs. Work with other organizations, agencies and individuals to assure the implementation of programs in the community that fit community priorities. Work with the community to change community policy, practice or mores.</i></p> <p>i) <i>To evaluate health programs and provide quality assurance.</i> This is a process of continuous inquiry to determine the efficiency and effectiveness of efforts so that corrections can be made to improve activities and outcomes.</p> <p>j) <i>To inform and educate the public on health issues of public health importance.</i> This is the process of informing the community about health problems, the availability of services; gaining the attention of individuals, high-risk groups, and constituents concerning public health issues; and providing health education to help develop beliefs, attitudes, and skills conducive to good individual and community health.</p> |
| Competences | <p>The candidate should be able to demonstrate and prove their competencies;</p> <p>a) In responding to different public health needs at various organization levels.</p> <p>b) In analyzing the determinants of health and diseases.</p> <p>c) In transforming evidence-based data into planning of health services and programs.</p> <p>d) In effective communication and negotiation skills on public health issues.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Course Descriptions per year**  
**(Semester 1 Year 1)**

| Course Code  | Course Title                                                       | LH         | T/SH      | AS        | IS         | PH         | Total Hrs  | Credits   |
|--------------|--------------------------------------------------------------------|------------|-----------|-----------|------------|------------|------------|-----------|
| MPH 601      | Demography, Biostatistics and Determinants of Diseases             | 80         | 20        | 20        | 80         | 50         | 250        | 25        |
| MPH 602      | Review of Communicable and Non Communicable Diseases and Nutrition | 80         | 10        | 20        | 70         | 30         | 210        | 21        |
| MPH 603      | Environmental & Occupational Health and Disaster Preparedness      | 60         | 20        | 20        | 80         | 90         | 270        | 27        |
| MPH 604      | Reproductive Health and Foundation of Public Health                | 50         | 18        | 20        | 50         | 22         | 160        | 16        |
| <b>Total</b> |                                                                    | <b>270</b> | <b>68</b> | <b>80</b> | <b>280</b> | <b>192</b> | <b>890</b> | <b>89</b> |

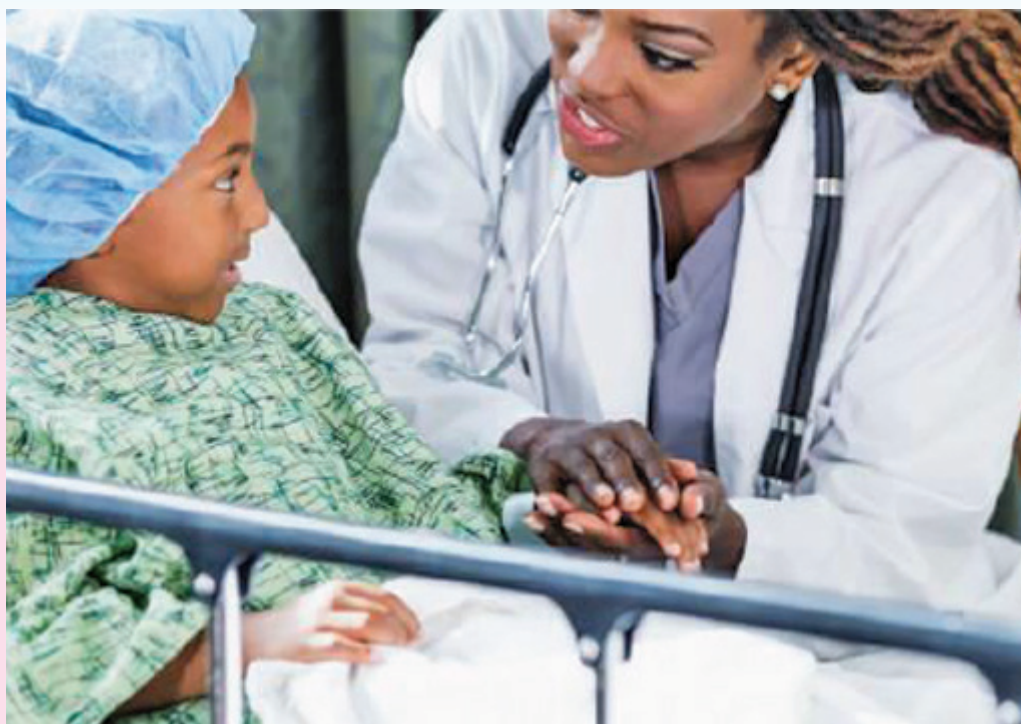
***(Semester 2 Year 1)***

| Course Code  | Course Title                                         | LH         | T/SH       | AS         | IS         | PH         | Total Hrs   | Credits    |
|--------------|------------------------------------------------------|------------|------------|------------|------------|------------|-------------|------------|
| MPH605       | Health Planning and Management                       | 55         | 30         | 25         | 50         | 50         | 210         | 21         |
| MPH606       | Health System Delivery and Health Management Systems | 45         | 20         | 20         | 35         | 20         | 140         | 14         |
| MPH607       | International and Global Health, and Family Health   | 40         | 35         | 30         | 30         | 35         | 170         | 17         |
| MPH608       | Research Methodology and Project Design              | 55         | 20         | 22         | 63         | 150        | 310         | 31         |
| MPH609       | Health Promotion and Health Ethics                   | 36         | 20         | 15         | 20         | 29         | 120         | 12         |
| MPH610       | Dissertation Work                                    | -          | 20         | -          | 60         | 150        | 230         | 23         |
| <b>Total</b> |                                                      | <b>231</b> | <b>145</b> | <b>112</b> | <b>258</b> | <b>434</b> | <b>1180</b> | <b>118</b> |

**KEY:**

|                             |                               |
|-----------------------------|-------------------------------|
| LH:                         | Lecture Hours                 |
| T/SH:                       | Tutorial/ Seminar Hours       |
| PH:                         | Practical or Field work hours |
| AS:                         | Assignment Hours              |
| IS:                         | Independent studies           |
| 10 Notional Hours= 1 CREDIT |                               |

## **MASTER OF SCIENCE IN PAEDIATRIC NURSING (MSc. PN)**



## MASTER OF SCIENCE IN PAEDIATRIC NURSING (MSc.PN)

### BACKGROUND

Master degree in Paediatric Nursing (MSc.PN) 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.

### Expected Learning Outcomes

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

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b> | <p>To be able to:</p> <ol style="list-style-type: none"> <li>Analyze critically theories, concepts and principles of human growth and development in the provision of paediatric nursing care to children.</li> <li>Integrate effectively basic sciences knowledge and understanding in the care of children with diverse health conditions including those with special needs</li> <li>Appraise theories and principles of nursing during provision of care to children with medical, surgical conditions; both in acute, chronic and during emergency situations.</li> <li>Apply theories and models of community paediatric nursing promotion activities for children in healthcare and community settings</li> <li>Adapt appropriate evidences in paediatric nursing profession for provision of quality services to neonates infants and children</li> <li>Analyze major global health issues, policies and structures that affect children's health and health care</li> <li>Apply ethical knowledge and understanding when interacting with children and families from diverse social, economic and cultural backgrounds.</li> </ol> |
| <b>Skills</b>    | <p>To be able to</p> <ol style="list-style-type: none"> <li>Design paediatric nursing care plan models appropriate for nursing of neonates, infants and children with diverse health conditions and situations</li> <li>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.</li> <li>Coordinate paediatric nursing care activities using available resources in different work settings</li> <li>Apply scientific principles in designing, conducting, disseminate findings on research related to children's health</li> <li>Use evidence based paediatric nursing practice to solve neonatal, infants and children's health problems</li> </ol>                                                                                                                                                                                                                                                                                                                                   |

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | <ul style="list-style-type: none"> <li>vi. Utilize appropriate measurement tools to measure growth and development of neonates, infants and children</li> <li>vii. Teach colleagues, junior staff, parents and families on issues pertaining to children's' health promotion and disease prevention</li> <li>viii. Demonstrate morality and high ethical standards during provision services to children and families from different social, economic and cultural backgrounds</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Competencies</b> | <p>To be able to:</p> <ul style="list-style-type: none"> <li>i. Appraise health research for policy advise in provision of quality paediatric nursing care</li> <li>ii. Present research findings in scientific conferences, policy makers' meetings and in other professional peers' audiences.</li> <li>iii. Demonstrate creativity and independency when dealing with care of complex paediatric nursing issues, conditions and situations arising in her /his mandate.</li> <li>iv. Adapt nursing, medical and research ethical principles in dealing with legal and practical problems facing nursing professionals and the healthcare system</li> <li>v. Comply with compassionate care principles to the sick and well neonates, infants, children and families from diverse backgrounds</li> <li>vi. Set quality assurance standards in her /his area of work in line with the existing systems</li> <li>vii. Demonstrate sensitivity of others' views and opinions in issues related to the pediatric nursing profession</li> </ul> |

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

## PURPOSE OF THE PROGRAMME

### 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.

## 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

## STRUCTURE OF THE PROGRAMME

### SEMESTER 1

| Code         | Course Name                                            | LH         | S&AS<br>H  | PH         | ISH        | Total<br>Hrs | Total<br>Credits |
|--------------|--------------------------------------------------------|------------|------------|------------|------------|--------------|------------------|
| BC600        | Principles of Biochemistry                             | 20         | 20         | 20         | 20         | 80           | <b>8</b>         |
| CP600        | Clinical Pharmacology                                  | 20         | 10         | 40         | 10         | 80           | <b>8</b>         |
| GD600        | Essentials of Growth and Development                   | 20         | 10         | 80         | 10         | 120          | <b>12</b>        |
| EP600        | Ethics, Principles and Practices of paediatric nursing | 20         | 20         | 70         | 10         | 120          | <b>12</b>        |
| NM600        | Nutrition and Malnutrition                             | 20         | 20         | 50         | 10         | 100          | <b>10</b>        |
| EB600        | Epidemiology and Biostatistics                         | 20         | 30         | 30         | 20         | 100          | <b>10</b>        |
| PH600        | Clinical Physiology                                    | 20         | 20         | 25         | 20         | 85           | <b>8.5</b>       |
| <b>Total</b> |                                                        | <b>140</b> | <b>130</b> | <b>315</b> | <b>100</b> | <b>685</b>   | <b>68.5</b>      |

### SEMESTER 2

| Code         | Course Name                                    | LH         | S&AS<br>H  | PH         | ISH       | Total<br>Hrs | Total<br>Credits |
|--------------|------------------------------------------------|------------|------------|------------|-----------|--------------|------------------|
| PE600        | Paediatric emergencies                         | 30         | 40         | 80         | 20        | 170          | <b>17</b>        |
| PS600        | Nursing in Paediatric Surgery and orthopaedics | 20         | 20         | 100        | 20        | 160          | <b>16</b>        |
| NP600        | Neuropsychiatry and Clinical psychology        | 40         | 30         | 10         | 20        | 100          | <b>10</b>        |
| NN600        | Nursing in Neonatology                         | 30         | 20         | 90         | 30        | 170          | <b>17</b>        |
| <b>Total</b> |                                                | <b>120</b> | <b>110</b> | <b>280</b> | <b>90</b> | <b>600</b>   | <b>60</b>        |

### SEMESTER 3

| Code         | Course Name                                              | LH         | S&A<br>S H | PH             | ISH        | Total<br>Hrs | Total<br>Credits |
|--------------|----------------------------------------------------------|------------|------------|----------------|------------|--------------|------------------|
| PO600        | Nursing in Paediatric haematology and oncology           | <b>20</b>  | <b>10</b>  | <b>40</b>      | <b>10</b>  | <b>80</b>    | <b>8</b>         |
| MI 600       | Microbiology and infections in Children                  | 20         | 20         | 40             | 20         | 100          | <b>10</b>        |
| PD600        | Specific paediatric conditions and Diseases              | 15         | 10         | 40             | 10         | 75           | <b>7.5</b>       |
| PR600        | Chronic Diseases and Paediatric rehabilitation           | 15         | 20         | *40            | 10         | 85           | <b>8.5</b>       |
| PN600        | Paediatric Community health Nursing and Health Promotion | 10         | 20         | *100           | 20         | 150          | <b>15</b>        |
| RD600        | Research Design                                          | 20         | 30         | *80            | 80         | 210          | <b>21</b>        |
| <b>Total</b> |                                                          | <b>100</b> | <b>110</b> | <b>120+220</b> | <b>150</b> | <b>700</b>   | <b>70</b>        |

### SEMESTER 4

|                                 |             |               |
|---------------------------------|-------------|---------------|
| <b>Dissertation</b>             | Total Hrs   | Total Credits |
|                                 | 600         | <b>60</b>     |
| <b>Grand Total Semester 1-4</b> | Total Hrs   | Total Credits |
|                                 | <b>2500</b> | <b>250</b>    |

### KEY:

|        |                              |
|--------|------------------------------|
| LH:    | Lecture Hours                |
| S&AsH: | Seminar and Assignment Hours |
| PH:    | Practical hours              |
| IS:    | Independent studies          |

### DISSERTATION

Students shall prepare a dissertation on a subject of paediatric nursing related topics. The dissertation shall be in form of research project.

**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.

**M.Sc PN Dissertations**

Procedures and examination of the Dissertation is as stipulated in the CUHAS guidelines for Higher degrees.



# **MASTER OF SCIENCE IN CLINICAL MICROBIOLOGY AND DIAGNOSTIC MOLECULAR BIOLOGY (MSc. CMDMB)**



## MASTER OF SCIENCE IN CLINICAL MICROBIOLOGY AND DIAGNOSTIC MOLECULAR BIOLOGY (MScCMDMB)

### Introduction

The M.Sc. CMDMB degree is a new programme aimed at producing competent and skilled graduates of international standard through clinical and laboratory apprenticeship. Graduates from this programme are expected to work in public and private hospitals, research institutions, industrial/pharmaceutical sectors and in other organizations.

### Objectives of the programme:

- To produce graduates capable of performing clinical microbiology and diagnostic molecular biology in health diagnostics, medical research fields and industrial/pharmaceutical laboratories.
- To produce skilled graduates capable of developing, evaluating and executing standard operating procedures (SOPs)/guidelines for quality control and assurance (QC & QA) in medical, research, academic and industrial/pharmaceutical laboratories.
- To produce competent graduate who can conduct high quality research that can translate into policy.
- To produce graduates with sound knowledge in entrepreneurship in medical diagnostics.
- To produce skilled laboratory professionals vested with moral and ethical values.

### Program expected learning outcomes

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Knowledge   | <ul style="list-style-type: none"><li>• Discuss Medical Laboratory Sciences</li><li>• Review epidemiological and biostatistical principles in relation to Medical laboratory sciences</li><li>• Describe entrepreneurship in relation to Medical Laboratory Sciences</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Skills      | <ul style="list-style-type: none"><li>• Evaluate the impact of the existing national diagnostics guidelines in clinical microbiology and molecular biology and precisely advice on improving them.</li><li>• Develop, execute and analyse standard operating procedures (SOPs) for quality control and assurance (QC&amp;QA) in medical, research, academic and industrial laboratories</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Attitudes   | <ul style="list-style-type: none"><li>• Practise laboratory medicine with the highest level of professional ethical and moral values</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Competences | <ul style="list-style-type: none"><li>• Plan and manage health, industrial and medical research laboratories.</li><li>• Perform and interpret results of relevant laboratory diagnostic tests.</li><li>• Integrate epidemiological and statistical skills in planning and analysing health researches.</li><li>• Practice with high professionalism , with good relationship with patients, community, teaching skills and maintaining good practices</li><li>• Integrate clinical microbiology in health diagnostics, industrial laboratories and medical research field.</li><li>• Work in the system in the context of health care</li><li>• Prepare fundable international proposal.</li><li>• Train health professionals in the field of clinical microbiology and diagnostic molecular biology in Tanzanian medical universities and elsewhere.</li></ul> |

### Normal learning Matrix

All courses in this program are core

| Course Code         | Course title                                             | LH  | TH  | AH | IS | PH  | H           | Credits      |
|---------------------|----------------------------------------------------------|-----|-----|----|----|-----|-------------|--------------|
| <b>Semester I</b>   |                                                          |     |     |    |    |     |             |              |
| CB 601              | Cell Biology and Molecular biology                       | 72  | 36  | 10 | 10 | 54  | 182         | 18.2         |
| IM 602              | Immunology                                               | 36  | 36  | 5  | 5  | 18  | 100         | 10.0         |
| BM 603              | Basic Microbiology                                       | 72  | 36  | 8  | 8  | 72  | 196         | 19.6         |
| ER 604              | Epidemiology, Research Methodology and Biostatistics     | 36  | 18  | 9  | 9  | 18  | 90          | 9            |
| BB 605              | Biosafety and Biosecurity                                | 18  | -   | 2  | 2  | -   | 22          | 2.2          |
| BB 606              | Bioethics                                                | 36  | -   | 2  | 2  | -   | 40          | 4.0          |
| Total               |                                                          | 270 | 126 | 36 | 36 | 162 | 630         | 63.0         |
| <b>Semester II</b>  |                                                          |     |     |    |    |     |             |              |
| DM 607              | Diagnostic Molecular Biology                             | 54  | 54  | 18 | 18 | 90  | 234         | 23.4         |
| AP 608              | Applied Microbiology                                     | 54  | 54  | 18 | 18 | 90  | 234         | 23.4         |
| BI 609              | Bioinformatics                                           | 18  | 18  | 9  | 9  | 18  | 72          | 7.2          |
| ME 610              | Laboratory management & Entrepreneurship                 | 36  | 18  | 9  | 9  | 18  | 90          | 9.0          |
| Total               |                                                          | 162 | 144 | 54 | 54 | 216 | 630         | 63.0         |
| <b>Semester III</b> |                                                          |     |     |    |    |     |             |              |
| LR 611              | Laboratory apprenticeship and Research proposal write-up | 18  | 36  | 18 | 36 | 522 | 630         | 63.0         |
| <b>Semester IV</b>  |                                                          |     |     |    |    |     |             |              |
| DT 612              | Dissertation and Scientific report writing               | 18  | 36  | 18 | 36 | 522 | 630         | 63.0         |
| <b>Total</b>        |                                                          |     |     |    |    |     | <b>2520</b> | <b>252.0</b> |

### KEY:

|     |                               |
|-----|-------------------------------|
| LH: | Lecture Hours                 |
| TH: | Tutorial Hours                |
| PH: | Practical or Field work hours |
| AS: | Assignment                    |
| IS: | Independent studies           |
| H:  | Hours                         |
| 10  | Notional Hours= 1 Credit      |

# **MASTER OF SCIENCE IN EPIDEMIOLOGY AND BIostatISTICS (MScEB)**



**MASTER OF SCIENCE IN EPIDEMIOLOGY AND BIOSTATISTICS (MScEB)****Introduction**

The Master of Science in Epidemiology and Biostatistics was introduced at CUHAS to address the National gap in personnel in the discipline of Epidemiology and Biostatistics and Epidemiology. We therefore aim to produce competent and skilled graduates of international standard through vigorous coursework and research. Graduates from this programme are expected to work in public and private hospitals, research institutions, institutions of higher learning and wherever else they are needed.

**Objectives of the Programme**

- Develop specialized health professionals in the field of epidemiology and biostatistics.
- Inculcate health professionals with competencies in conducting research that delineates the efficacy of health interventions.
- Promote graduates competencies of principles of Epidemiology and Biostatistics into disease surveillance and predictive modeling
- Promote moral, legal and high ethical conduct among trainees.
- To produce trainers in Epidemiology and Biostatistics in Tanzanian institutions and elsewhere.

**Programme expected learning outcomes**

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Knowledge</b> | <ul style="list-style-type: none"> <li>• Analyse critically the principles and concepts of Epidemiology and Biostatistics.</li> <li>• Differentiate epidemiological study designs.</li> <li>• Evaluate best statistical models for different epidemiological studies</li> </ul>                                                                                                                                                                       |
| <b>Skills</b>    | <ul style="list-style-type: none"> <li>• Study the health care system functioning.</li> <li>• Design research protocol.</li> <li>• Execute research.</li> <li>• Write research report, manuscripts, and presentations for dissemination of results.</li> <li>• Translate research results into policy.</li> <li>• Use different statistical models in epidemiological research.</li> <li>• Teach Epidemiology and Biostatistics to others.</li> </ul> |
| <b>Attitudes</b> | <ul style="list-style-type: none"> <li>• Safeguard the rights, safety and wellbeing of research participants.</li> <li>• Practice research with integrity.</li> </ul>                                                                                                                                                                                                                                                                                 |

**KEY**

LH - Lecture hours  
 TS - Tutorial/Seminar hours  
 AH - Assignment hours  
 IS - Independent studies  
 PH - Practical hours  
 TH - Total hours  
 10 Notional Hours= 1 Credit

## Normal learning matrix and course matrix

All courses in this programme are core

| Code                   | Course                                                     | LH         | TS         | AH         | IS         | PH          | TH          | Credits      |
|------------------------|------------------------------------------------------------|------------|------------|------------|------------|-------------|-------------|--------------|
| <b>Semester I</b>      |                                                            |            |            |            |            |             |             |              |
| <b>FE600</b>           | Fundamentals of Epidemiology                               | 68         | 17         | 10         | 10         | 51          | 156         | 15.6         |
| <b>IB600</b>           | Introduction of Biostatistics                              | 68         | 17         | 17         | 17         | 61          | 180         | 18.0         |
| <b>RM600</b>           | Research Methods                                           | 51         | 17         | 10         | 10         | 10          | 98          | 9.8          |
| <b>SC600</b>           | Statistical Computing                                      | 34         | 34         | 14         | 2          | 10          | 94          | 9.4          |
| <b>EC600</b>           | Epidemiology of Communicable and Non-communicable Diseases | 68         | 6          | 7          | 4          | 17          | 102         | 10.2         |
| <b>Semester Total</b>  |                                                            | <b>289</b> | <b>91</b>  | <b>58</b>  | <b>43</b>  | <b>149</b>  | <b>630</b>  | <b>63.0</b>  |
| <b>Semester II</b>     |                                                            |            |            |            |            |             |             |              |
| <b>AE600</b>           | Advanced Epidemiology                                      | 88         | 36         | 12         | 18         | 63          | 217         | 21.7         |
| <b>GM600</b>           | Generalized and Mixed models                               | 85         | 51         | 9          | 17         | 90          | 252         | 25.2         |
| <b>SM 600</b>          | Systematic Review & Meta-analysis                          | 39         | 34         | 17         | 17         | 91          | 198         | 19.8         |
| <b>Semester Total</b>  |                                                            | <b>212</b> | <b>121</b> | <b>38</b>  | <b>52</b>  | <b>244</b>  | <b>667</b>  | <b>66.7</b>  |
| <b>Semester III</b>    |                                                            |            |            |            |            |             |             |              |
| <b>LA700</b>           | Longitudinal Analysis                                      | 82         | 11         | 13         | 14         | 54          | 175         | 17.5         |
| <b>BE700</b>           | Bioethics                                                  | 34         | 4          | 3          | 3          | 12          | 56          | 5.6          |
| <b>TM700</b>           | Teaching Methodology                                       | 34         | 6          | 2          | 10         | 8           | 60          | 6.0          |
| <b>ES700</b>           | Entrepreneurship                                           | 14         | 3          | 3          | 2          | 10          | 32          | 3.2          |
| <b>PW700</b>           | Proposal Writing                                           | 3          | 3          | 6          | 32         | 64          | 110         | 11.0         |
| <b>FA700</b>           | Field Attachment                                           | -          | -          | -          | -          | 160         | 160         | 16.0         |
| <b>Semester Total</b>  |                                                            | <b>167</b> | <b>30</b>  | <b>27</b>  | <b>61</b>  | <b>308</b>  | <b>593</b>  | <b>59.3</b>  |
| <b>Semester IV</b>     |                                                            |            |            |            |            |             |             |              |
| <b>CR700</b>           | Communicating Research                                     | 17         | 34         | 17         | 34         | 528         | 630         | 63.0         |
| <b>Programme Total</b> |                                                            | <b>685</b> | <b>276</b> | <b>140</b> | <b>190</b> | <b>1229</b> | <b>2521</b> | <b>252.1</b> |



## DOCTOR OF PHILOSOPHY (PhD)



## **DOCTOR OF PHILOSOPHY (PhD)**

### **GUIDELINES**

#### **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 is offered by thesis both in the Monograph format and by Publications.

The department will submit at least 2 names of suitably qualified individuals to act as supervisors for the candidate based on the CUHAS supervision guidelines. The names will have to be approved by the School Board, the Higher Degrees Committee and the Senate.

#### **ENTRY QUALIFICATIONS**

The prospective candidate must demonstrate the capacity to carry out research independently and ability to pursue the proposed study programme.

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. A holder of MD or BVM can register for a PhD programme; in this case, the duration of the training and content of the courses to be covered will be determined by the Higher Degree Committee based on the topic/area of specialization. .

#### **PROGRAMME STRUCTURE**

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.
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 (including certified copy of undergraduate Degree, Master Degree with relevant transcripts where appropriate, recent CV, and a five-page statement of the intended research topic) to the Director of Postgraduate Studies
3. The Director of Postgraduate Studies (through the respective applicant's Department and/or School Board) will assess the PhD candidate in five thematic areas (Applicant's qualifications including working experience in the subject matter, relevancy of the proposed PhD concept, suitability of the proposed supervisors, availability of funding and any other parameter) prior to submitting all necessary documents to the Higher Degree Committee for vetting, and subsequently to the Senate for approval.
4. Upon approval by the Senate, the candidate will be given a provisional registration which will last for one year, during which a candidate will prepare and present a comprehensive proposal on the area of interest through his/her respective department, PhD seminar forum and ultimately to the CUHAS/BMC Research and Ethics Committee (CREC) for approval.,.
5. The proposal should not exceed 25 pages in length (excluding the preamble pages, and appendices), typing in at least 12-point font and double spaced. The proposal must have at least the following



- i. Title; clearly spells out the research questions to be answered
- ii. Name of the author
- iii. Names of the supervisors
- iv. Abstract
- v. Background information of the research problems
- vi. The justification of the study, why the study is important and why it should be done
- vii. Materials and methodology.
- viii. How the results would be analyzed.
- ix. The ethical considerations must be discussed thoroughly.
- x. References

This proposal must be approved by the relevant Department, , the Higher Degrees Committee and the CREC. .

### **Supervisors**

The department will submit at least 2 names of suitably qualified individuals to act as supervisors for the candidate based on the CUHAS supervision guidelines. The names will have to be approved by the School Board, the Higher Degrees Committee and the Senate.

### **SANDWICH PROGRAMME**

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:

- a. Entry requirements are the same as stipulated above.
- b. The procedure for obtaining full registration will be similar to those stipulated above
- c. The degree award shall be either of the Catholic University of Health and Allied Sciences or partner institution or both (i.e. CUHAS and the partner institution) The manner into which the degree will be awarded will be determined by the memorandum of understanding between the two institutions.

### **THE STRUCTURE OF THE PhD THESIS**

#### **Monograph**

The PhD thesis 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:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>i) <i>Title page</i> which should include</p> <ul style="list-style-type: none"> <li>• Title of the study (including subtitle)</li> <li>• Author</li> <li>• Thesis submitted in partial fulfillment for the award of Doctor of Philosophy (PhD) degree of the Catholic University of Health and Allied Sciences.</li> <li>• Date of submission (Month, Year)</li> </ul> <p>ii) <i>Declaration page</i><br/>By the author and supervisors that the work presented is original and has not been presented for any other degree in any university.</p> <p>iii) <i>Dedication and acknowledgements</i></p> <p>iv) <i>Abstract</i></p> <p>v) <i>Table of contents</i></p> | <p>vi) <i>List of Figures</i></p> <p>vii) <i>List of Tables</i></p> <p>viii) <i>Introduction</i></p> <p>ix) <i>Literature review</i></p> <p>x) <i>Materials and Methods</i></p> <p>xi) <i>Results</i></p> <p>xii) <i>Discussions</i></p> <p>xiii) <i>Conclusions</i></p> <p>xiv) <i>Recommendations</i></p> <p>xv) <i>References</i></p> <p>xvi) <i>Appendices</i></p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Thesis by Publication

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.
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.
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 or methodology 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.
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. The papers should have been published, or accepted for publication or in print at the time of submission of the PhD thesis.
6. The published material must have not been used for an award of another degree.
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.
  - 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.
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 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 critically assess the thesis and submit Part I of the "*Dissertation and Thesis Scoring and Grading Guidelines*" form (i.e. Examiners Summary Assessment of Postgraduate Dissertation/Thesis).

- If the external examiners are 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

Director of Postgraduate Studies through the respective School Boards and the Higher Degree Committee

### **Viva voce Panel**

The viva voce panel which must be approved by the Senate or Chairman of the Senate on its behalf will consist of :

- The Chairman recommended by the Dean of Relevant School and approved by the Director of Postgraduate Studies.
  - The Chairperson of the viva voce panel shall be a senior academician preferably a person who has already attained the level of a professor
- The external examiner(s)
- The 2 internal examiners
- Two members with at least PhD or the rank of associate Professor appointed by the Dean
- Two members with at least PhD or the rank of associate Professor expert in the field of specialization appointed by the HoD
- Any other co-opted members appointed by the Director of Postgraduate studies

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 research work presented and the area of specialization
- The function of the viva voce examination shall be to make a definite recommendation to the relevant academic unit handling postgraduate studies and Senate whether the candidate has passed or failed after having ascertained:
  - that the thesis presented, the data, methodology, analysis and findings is the original work of the candidate
  - that the candidate fully grasps the broader subject area in which the study is based;
- and any weakness in the thesis that can be adequately clarified or addressed by the candidate. Assessment of the viva voce will be governed by Part IIA of the "*Dissertation and Thesis Scoring and Grading Guidelines*" form (i.e. Examiners Summary Assessment of Dissertation/Thesis viva voce). Final disposition of the candidate will be governed by the "*Dissertation and Thesis Scoring and Grading Guidelines*" form (Part IIB).
- Any corrections of the thesis have to be done and submission of error free dissertation done before a candidate will be awarded degree.

## INSTITUTE OF ALLIED HEALTH SCIENCES (IAHS)



**Director, Mr. Gration Tibaijuka,**  
*B. Pharmacy (UDSM), MSc. Pharm (Zaporozhye Medical Inst., Ukraine)*

The Institute of Allied Health Sciences (IAHS) is the centre in which the University offers Diploma Programmes in Allied Health Sciences. Currently, we run three Diploma Programmes specifically Diploma in Medical Laboratory Sciences, Diploma in Diagnostic Radiography and Diploma in Pharmaceutical Sciences. All three programmes are highly competitive and offer good employment prospects to our graduates.

### **Vision of the Institute:**

To become an institute of excellence in competence and diligence in training and skill provision, relevant to the community.

### **Mission of the Institute:**

- To deliver and impart knowledge, skills and understanding responsive to the health sector at large.
- To provide high quality technical skilled services to the community.



## DIPLOMA PROGRAMMES



## SUMMARY OF THE CURRICULUM FOR DIPLOMA PROGRAMMES

### DPS CURRICULUM SEMESTER MODULES

| Code       | Subject                                  | Theory |       | Practical |       | Total |       |
|------------|------------------------------------------|--------|-------|-----------|-------|-------|-------|
|            |                                          | Hrs    | Units | Hrs       | Units | Hrs   | Units |
| Semester 1 |                                          |        |       |           |       |       |       |
| PT107-108  | Pharmaceutics Theory - I                 | 75     | 6.0   | -         | -     | 75    | 5.0   |
| PT100-101  | Hygiene                                  | 75     | 5.0   | -         | -     | 75    | 5.0   |
| PT102-104  | Inorganic Chemistry                      | 97.5   | 6.5   | --        | -     | 97.5  | 6.5   |
| PT105-106  | Pharmaceutical Calculation - I           | 90     | 6.0   | -         | -     | 90    | 6.0   |
|            | Total                                    | 337.5  | 22.5  | -         | -     | 337.5 | 22.5  |
| Semester 2 |                                          |        |       |           |       |       |       |
| PT109-110  | Anatomy & Physiology                     | 120    | 8.0   | -         | -     | 120   | 8.0   |
| PT111-112  | Pharmaceutics Microbiology               | 90     | 6.0   | -         | -     | 90    | 6.0   |
| PT113-114  | Pharmaceutical Calculation –II           | 45     | 3.0   | -         | -     | 45    | 3.0   |
| PT115-116  | 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 |                                          |        |       |           |       |       |       |
| PT200-201  | Pharmaceutical Organic Chemistry         | 105    | 7.0   | -         | -     | 105   | 7.0   |
| PT202-203  | Drugs & Medical Supplies Management      | 60     | 4.0   | -         | -     | 60    | 4.0   |
| PT204-205  | Pharmacology I                           | 60     | 4.0   | -         | -     | 60    | 4.0   |
| PT206-208  | Pharmaceutical Calculation(III)          | 105    | 7.0   | -         | -     | 105   | 7.0   |
| PT209-210  | 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 |                                          |        |       |           |       |       |       |
| PT211-213  | 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   |
| PT217-218  | Pharmacology (II)                        | 60     | 4.0   | -         | -     | 60    | 4.0   |
| PT219-220  | 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   |
| PT301-302  | Pharmacology III                         | 30     | 2.0   | -         | -     | 30    | 2.0   |
| PT305-304  | 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   |
| PT305-308  | Pharmacology                             | 90     | 6.0   | -         | -     | 90    | 6.0   |
| PT309-310  | Pharmaceutics Theory VI                  | 90     | 6.0   | -         | -     | 90    | 6.0   |
| PT311-313  | Drugs & Medical Supplies Management III  | 105    | 7.5   | -         | -     | 105   | 7.5   |
| PT315-316  | 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 CURRICULUM (SEMESTER MODULES)

### Summary of the subjects and their code numbers

| <i>CODE</i>       | <i>SUBJECT</i>                              | <i>HOURS</i> | <i>UNITS</i> |
|-------------------|---------------------------------------------|--------------|--------------|
| <b>Semester 1</b> |                                             |              |              |
| <b>DR 111</b>     | Radiographic Photography and imaging (I)    | 75           | <b>5</b>     |
| <b>DR 112</b>     | Radiographic Technique and procedures (I)   | 142.5        | <b>9.5</b>   |
| <b>DR113</b>      | Anatomy, Physiology & Pathology (I)         | 90           | <b>6</b>     |
| <b>DR114</b>      | Applied physics                             | 82.5         | <b>5.5</b>   |
| <b>DR 115</b>     | Care of patients                            | 120          | <b>8</b>     |
|                   | Clinical rotations at X-Ray Department      | 80           | <b>2.7</b>   |
| <b>Total</b>      |                                             | <b>590</b>   | <b>36.7</b>  |
| <b>Semester 2</b> |                                             |              |              |
| <b>DR 121</b>     | Radiographic Photography and imaging (II)   | 60           | <b>4</b>     |
| <b>DR 122</b>     | Radiographic Technique and procedures (II)  | 157.5        | <b>4</b>     |
| <b>DR 123</b>     | Anatomy, Physiology & Pathology (II)        | 37.5         | <b>2.5</b>   |
| <b>DR 124</b>     | Radiation physics                           | 60           | <b>4</b>     |
| <b>DR 125</b>     | Basic ultrasound imaging (I)                | 90           | <b>6</b>     |
| <b>DR 126</b>     | Clinical practice at X-Ray department (I)   | 160          | <b>5.3</b>   |
| <b>Total</b>      |                                             | <b>565</b>   | <b>25.8</b>  |
| <b>Semester 3</b> |                                             |              |              |
| <b>DR 231</b>     | Radiographic Photography and imaging (III)  | 60           | <b>4</b>     |
| <b>DR 232</b>     | Radiographic Technique and procedures (III) | 90           | <b>6</b>     |
| <b>DR 233</b>     | Equipment of diagnostic radiography         | 150          | <b>10</b>    |
| <b>DR 234</b>     | Anatomy, Physiology & Pathology (III)       | 120          | <b>8</b>     |
| <b>DR 235</b>     | Radiobiology and radiation protection       | 30           | <b>2</b>     |
| <b>DR 236</b>     | Clinical practice at X-Ray department (II)  | 160          | <b>5.3</b>   |
| <b>Total</b>      |                                             | <b>610</b>   | <b>35.3</b>  |
| <b>Semester 4</b> |                                             |              |              |
| <b>DR 241</b>     | Radiographic technique and procedure (IV)   | 135          | <b>9</b>     |
| <b>DR 242</b>     | Anatomy, Physiology and Pathology (IV)      | 120          | <b>8</b>     |
| <b>DR 243</b>     | Radiological pathology (I)                  | 105          | <b>7</b>     |
| <b>DR 244</b>     | Basic Ultrasound imaging (II)               | 45           | <b>3</b>     |
| <b>DR 245</b>     | Clinical practice at X-Ray department (III) | 160          | <b>5.3</b>   |
| <b>Total</b>      |                                             | <b>565</b>   | <b>32.3</b>  |
| <b>Semester 5</b> |                                             |              |              |
| <b>DR 351</b>     | Radiographic technique and procedure (V)    | 127.5        | <b>8.5</b>   |
| <b>DR 352</b>     | Radiological pathology (II)                 | 105          | <b>7</b>     |
| <b>DR 353</b>     | Basic Ultrasound imaging (III)              | 45           | <b>3</b>     |
| <b>DR 354</b>     | Management and Administration               | 67.5         | <b>4.5</b>   |
| <b>DR 355</b>     | Quality Assurance                           | 60           | <b>4</b>     |
| <b>DR356</b>      | Clinical practice at X-Ray department (IV)  | 160          | <b>5.3</b>   |
| <b>Total</b>      |                                             | <b>565</b>   | <b>32.3</b>  |
| <b>Semester 6</b> |                                             |              |              |
| <b>DR 361</b>     | Field work                                  | 480          | <b>16</b>    |
| <b>DR 362</b>     | Equipment for diagnostic radiography (II)   | 90           | <b>6</b>     |
| <b>DR 363</b>     | Clinical practice (V)                       | 30           | <b>1</b>     |
| <b>Total</b>      |                                             | <b>600</b>   | <b>23</b>    |



## DMLS CURRICULUM (SEMESTER MODULES)

### Summary of the subjects and their code numbers

| <i>Code</i>       | <i>Course name</i>                         | <i>Lectures</i> |             | <i>Practicals</i> |             | <i>Total</i> |             |
|-------------------|--------------------------------------------|-----------------|-------------|-------------------|-------------|--------------|-------------|
|                   |                                            | Hrs             | Units       | Hrs               | Units       | Hrs          | Units       |
| <b>Semester 1</b> |                                            |                 |             |                   |             |              |             |
| 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         |
| <b>Total</b>      |                                            | <b>344</b>      | <b>22.9</b> | <b>36</b>         | <b>0.8</b>  | <b>380</b>   | <b>23.7</b> |
| <b>Semester 2</b> |                                            |                 |             |                   |             |              |             |
| 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         |
| <b>Total</b>      |                                            | <b>357</b>      | <b>23.7</b> | <b>-</b>          | <b>0.2</b>  | <b>357</b>   | <b>23.7</b> |
| <b>Semester 3</b> |                                            |                 |             |                   |             |              |             |
| 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         |
| <b>Total</b>      |                                            | <b>375</b>      | <b>24.9</b> | <b>252</b>        | <b>5.5</b>  | <b>625</b>   | <b>30.4</b> |
| <b>Semester 4</b> |                                            |                 |             |                   |             |              |             |
| 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         |
| <b>Total</b>      |                                            | <b>297</b>      | <b>19.7</b> | <b>250</b>        | <b>5.5</b>  | <b>547</b>   | <b>25.2</b> |
| <b>Semester 5</b> |                                            |                 |             |                   |             |              |             |
| 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         |
| <b>Total</b>      |                                            | <b>371</b>      | <b>24.6</b> | <b>482</b>        | <b>10.6</b> | <b>853</b>   | <b>35.2</b> |
| <b>Semester 6</b> |                                            |                 |             |                   |             |              |             |
| 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         |
| <b>Total</b>      |                                            | <b>241</b>      | <b>16</b>   | <b>124</b>        | <b>2.7</b>  | <b>365</b>   | <b>18.8</b> |

## 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](mailto: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.



## 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.

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2. Deputy Vice Chancellor (ARC)/Vice-Chairman
3. Deputy Vice Chancellor (PFA)
4. Corporate Counsel
5. Chief Accountant/Bursar
6. Director of Quality Assurance
7. Dean of Students
8. Director of Human Resources & Administration
9. Director of Planning, Business Development and Investment
10. Internal Auditor
11. Chaplain
12. Personal Assistant to the Vice Chancellor (In Attendance)
13. Administrative Officer (Secreary/Recorder)

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**Tutorial Assistant**

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BSc (MUHAS)

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**Lecturer and Assistant Head**

F.C Kachinde

MD (MUHAS), MMed(CUHAS),MSc (MUHAS)

**Senior Lecturer**

F. A. Massaga

MD (UDSM), MMed (MUHAS), Fellowship (South Africa)

G.C. Giiti

MD (UDSM); MMed (SAUT)

A.S. Massenga

MD (SAUT), MMed (KCMC), Fellowship (Kenya)

**Lecturer**

L. W. Amango

MD (UDSM); MMed (Makerere), PG Dip & MBA

F. J. Mbunda

MD (HKMU), MMed (CUHAS)

S.M. Byabato

MD (UDSM), MMed (Makerere)

J. Lubuulwa

BMBS (China), Masters of Surgery (China)

O.C. Ombati

BMBS (KIU-Uganda)), MMed (UDOM)

F. K. Munema

MD (HKMU), MMed (MUHAS)

**DEPARTMENT OF ENT**

**Lecturer and Head**

G.E. Buname

MD (MUHAS), MMed (Makerere)

**Lecturer**

O. M Kimario

MD(KCMCo) , MMed (MUHAS)

C. B. Protas

MD (CUHAS), MMed (CUHAS)

A.A. Kiberiti

MD(IMTU), MMed (MUHAS)

**DEPARTMENT OF OT**

**Lecturer and Head**

I.L. Akaro

MD(MUHAS),MMed(Makerere),Fellowship (Malawi)

**Lecturer**

I.H. Ngayomella

MD (UDSM); MMed (Orth) (Makerere): Visiting

M.M. Nkinda,

MD (UDSM), MMED (UDSM),MSc (UDSM)

S.G. Swetala

MD(MUHAS),MMed(CUHAS),Fellowship(Ethiopia)

W.M. Richard

MD (SAUT) , MMed (MUHAS)

E. E. Mlay

MD(HKMU) , MMed (MUHAS)

B.R. Mkinze

MD (CUHAS), MMed (CUHAS)

J. F.Staal

BSc (Netherlands), MMed (Netherlands), MSc (Netherlands)

#### **DEPARTMENT OF UROLOGY**

##### **Lecturer and Head**

J. Z. Igenge

MD (UDSM), MMed (KCMCo)

##### **Lecturer**

F. K Chacha

MD (SAUT), MMed (KCMCo)

F. Simula

MD(KCMCo), MMed (MUHAS)

#### **DEPARTMENT OF CARDIOTHORACIC SURGERY**

##### **Lecturer and Ag.Head**

S.F. Mahenda

MD (KCMCo), MMed (CUHAS), MSc (MUHAS)

#### **SCHOOL OF PHARMACY**

##### **Senior Lecturer and Ag. Dean**

A.F.S Haule

MSc (Romania), PhD (Sunderland-UK)

#### **DEPARTMENT OF PHARMACEUTICS AND PHARMACY PRACTICE**

##### **Lecturer and Head**

S. M. Mwita

B. Pharm (MUHAS) MSc (MUHAS), PhD (CUHAS)

##### **Assistant Lecturer**

K. Hamasaki

BSc (Japan), MSc (Japan)

D.M. Katabalo

B.Pharm (MUHAS), MSc (Nairobi)

E. E. Kimaro

B. Pharm (MUHAS), MSc (MUHAS)

##### **Tutorial Assistant**

J. C. Kapala

B. Pharm (CUHAS)

W.V. Minja

B.Pharm(CUHAS)

#### **DEPARTMENT OF MEDICINAL CHEMISTRY AND PHARMCOGNOSY**

##### **Senior Lecturer and Head**

A.F.S Haule

MSc (Romania), PhD (Sunderland-UK)

##### **Associate Professor**

S. M. Maregesi

BSc (UDSM), MSc (Belgium), PhD (Belgium)

##### **Professor**

J. Mwangi

PhD; Visiting

R. Malele

B.Pharm, PhD.

Visiting



**Senior Lecturer**

|             |                     |                 |
|-------------|---------------------|-----------------|
| M. Chambuso | <i>B.Pharm, PhD</i> | <i>Visiting</i> |
| j. Sempombe | <i>PhD</i>          | <i>Visiting</i> |
| N. Mungai   | <i>PhD</i>          | <i>Visiting</i> |

**Assitant Lecturer**

|              |                                        |
|--------------|----------------------------------------|
| R.K. Matinde | <i>B.Pharm (CUHAS), MSc (MUHAS)</i>    |
| A. M.Thomas  | <i>B. Pharm (CUHAS), MSc (Mbarara)</i> |

**Tutorial Assistant**

|              |                                         |
|--------------|-----------------------------------------|
| T.Y. Mafuru  | <i>B. Pharm (CUHAS), Mpharm (MUHAS)</i> |
| L.L. Kihwili | <i>B.Pharm (CUHAS)</i>                  |

**ARCHBISHOP ANTHONY MAYALA SCHOOL OF NURSING**

**Associate Professor and Dean**

|               |                                                |
|---------------|------------------------------------------------|
| R. M. Laisser | <i>ADNE (MUHAS), MSc (Leeds), PhD (Sweden)</i> |
|---------------|------------------------------------------------|

**DEPARTMENT OF CLINICAL NURSING**

**Lecturer and Head**

|             |                                                  |
|-------------|--------------------------------------------------|
| A.L. Ndomba | <i>BScN (Canada), MSc. (Sweden), PhD (CUHAS)</i> |
|-------------|--------------------------------------------------|

**Associate Professor and Dean**

|               |                                                |
|---------------|------------------------------------------------|
| R. M. Laisser | <i>ADNE (MUHAS), MSc (Leeds), PhD (Sweden)</i> |
|---------------|------------------------------------------------|

**Lecturer**

|             |                                                |
|-------------|------------------------------------------------|
| K.N. Malale | <i>BSc N (MUHAS), MSc (Kenya), PhD (China)</i> |
|-------------|------------------------------------------------|

**Assistant Lecturer**

|                    |                                                 |
|--------------------|-------------------------------------------------|
| J. S. Mundamushimu | <i>BSc (SJUT), MSc (MUHAS)</i>                  |
| S. E. Kibona       | <i>BSc (CUHAS), MSc (CUHAS)</i>                 |
| G.M. Marandu       | <i>Dipl (Huruma), BScN (KCMCo), MSc (Kenya)</i> |
| P. S. Nzelu        | <i>BSc (CUHAS), MSc (CUHAS)</i>                 |
| R.B. Rakiru        | <i>BSc (KCMCo), MSc (CUHAS)</i>                 |
| M.J. Bhilaniye     | <i>BSc (UDOM), MSc (MUHAS)</i>                  |
| D.L. Muyanga       | <i>BSc (SJUT), MSc (UDOM)</i>                   |

**Tutorial Assistant**

|              |                    |
|--------------|--------------------|
| E. J. Dausen | <i>BSc (CUHAS)</i> |
| R.B. Magati  | <i>BSc (CUHAS)</i> |
| J.M. Fredy   | <i>BSc (CUHAS)</i> |
| N.J. Mtaita  | <i>BSc (CUHAS)</i> |
| J.P. Mlacha  | <i>BSc (CUHAS)</i> |

**Clinical Instructor**

|                 |            |
|-----------------|------------|
| G. L. Omondi    | BSc (SJUT) |
| T. K. Kajwangya | BSc(CUHAS) |
| E. P. Rwegasira | BSc (SJUT) |
| R. J. Ongito    | BSc (SJUT) |

**DEPARTMENT OF COMMUNITY MATERNAL AND CHILD HEALTH**

**Assistant Lecturer and Ag. Head**

|           |                         |
|-----------|-------------------------|
| L. Nsemwa | BSc (MUHAS), MSc(MUHAS) |
|-----------|-------------------------|

**Assistant Lecturer**

|                |                                              |
|----------------|----------------------------------------------|
| A. E. Dinho    | ADNE (MUHAS), MA (South Africa), MEAPP (OUT) |
| M.J. Kiyumbi   | ADM (Muhimbili), BSc (UDSM), MSc. (Uganda)   |
| L. R. Nyanda   | Dipl (Itigi), BSc (CUHAS), MSc (UDOM)        |
| A. S. Palangyo | BSc (CUHAS), MSc (UDOM)                      |
| A.I Lizonga    | BA (UDSM), MA (Mount Meru)                   |

**Clinical Instructor**

|               |            |
|---------------|------------|
| D. I. Ntutagi | BSc (SJUT) |
| L.A. Dominico | BSc (UDOM) |

**SCHOOL OF PUBLIC HEALTH**

**Assoc. Professor and Dean**

|            |                                                               |
|------------|---------------------------------------------------------------|
| H. Mazigo, | BVM(SUA), MSc (Jomo Kenyatta), MPH (CUHAS),<br>PhD (Makerere) |
|------------|---------------------------------------------------------------|

**Associate Dean**

*Vacant*

**DEPARTMENT OF COMMUNITY MEDICINE**

**Lecturer and Head**

|               |                         |
|---------------|-------------------------|
| N. S. Basinda | MD (SAUT), MMed (MUHAS) |
|---------------|-------------------------|

**Professors**

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

**Senior Lecturers**

|              |                                      |          |
|--------------|--------------------------------------|----------|
| A.D. Kapesa, | MD (UDSM), MMed (MUHAS), PhD (CUHAS) |          |
| R. Goldstein | MD, CM, FRCPC (Calgary)              | Visiting |
| R. Musto     | MD, PhD (Calgary)                    | Visiting |
| D. Sabapathy | MD, MBA, MPH (Calgary)               | Visiting |
| R. Zimmer    | MD, PhD (Calgary)                    | Visiting |

**Assistant Lecturer**

|                 |                              |  |
|-----------------|------------------------------|--|
| P.M. Chilipweli | B.Envi (RUCU), M.EOH (MUHAS) |  |
|-----------------|------------------------------|--|

**DEPARTMENT OF BIOSTATISTICS, EPIDEMIOLOGY AND BEHAVIORAL SCIENCES**

**Senior Lecturer and Head of Department:**

|              |                                                  |  |
|--------------|--------------------------------------------------|--|
| E. T. Konje, | B.Stat (Makerere), MSc (Makerere), PhD (Calgary) |  |
|--------------|--------------------------------------------------|--|

**Professor**

|          |                |          |
|----------|----------------|----------|
| R. Sauve | MD, MMED, FRCS | Visiting |
| T. Beran | BA, MSc, PhD   | Visiting |

**Senior Lecturer**

|                |                                          |          |
|----------------|------------------------------------------|----------|
| S.E. Ngallaba, | MD (UDSM), MSc (Dublin), MPH (Leeds)     |          |
| J. R. Mwanga   | BA(UDSM), MSc (London), PhD (Copenhagen) |          |
| M. Hardy       | MB, BS, FRCSC, MSc (Clin-Epid)           | Visiting |
| M. M. Cuodros  | MD, MSc (Epi), FACS, FICS                | Visiting |

**Lecturer**

|               |                            |          |
|---------------|----------------------------|----------|
| R.B. Kitambo, | B.Theol (Italy), MA (UDSM) |          |
| R. Ponsiano,  | MD, (MUHAS), PGD-Mch, MPH  | Visiting |

**Assistant Lecturer**

|              |                             |  |
|--------------|-----------------------------|--|
| P.M Ndaki    | B. Theol (Kenya), MA (UDSM) |  |
| M.W. Manyiri | MD (MUHAS), MSc (MUHAS)     |  |
| J.A. Peter   | BA (SAUT), MA (SAUT)        |  |

**Tutorial Assistant**

|            |            |  |
|------------|------------|--|
| T.R.Leeyio | BSc (SAUT) |  |
|------------|------------|--|

**DEPARTMENT OF ENVIRONMENTAL & OCCUPATIONAL HEALTH AND RESEARCH GIS**

**Lecturer and Head**

|            |                                                     |  |
|------------|-----------------------------------------------------|--|
| E. Charles | PHHC(Kuopio), BSc (SUA), MPH(SAUT),<br>PhD(Calgary) |  |
|------------|-----------------------------------------------------|--|

**Professors**

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

**Senior Lecturer**

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

**INSTITUTE OF ALLIED HEALTH SCIENCES**

**Principal Tutor and Director**

|                 |                               |
|-----------------|-------------------------------|
| G.R. Tibaijuka, | BPharm (UDSM), MSc ( Ukraine) |
|-----------------|-------------------------------|

**SCHOOL OF PHARMACEUTICAL SCIENCES**

**Tutor and Head**

|              |                             |
|--------------|-----------------------------|
| J.M. Bitoro, | DPS (UDSM), DHPE ( Arusha.) |
|--------------|-----------------------------|

**Principal Tutors**

|                  |                                                                 |
|------------------|-----------------------------------------------------------------|
| O. S. Mejjah,    | DPS (UDSM), BPharm(UDSM), Executive MBA<br>(Maastricht - ESAMI) |
| G. R. Tibaijuka, | BPharm (UDSM), MSc ( Ukraine)                                   |

**Tutor**

|                |                            |
|----------------|----------------------------|
| E.J. Bhwanah   | B.Pharm (CUHAS)            |
| M. Z. Vingson  | B.Pharm (CUHAS)            |
| V. V. Kigwinya | B.Pharm (CUHAS)            |
| E.K. Mbiza     | B.Pharm (CUHAS)            |
| D.A. Makungu   | DPS (CUHAS), BPharm (SJUT) |
| N.C. Kidaya    | B.Pharm (CUHAS)            |

**SCHOOL OF DIAGNOSTIC RADIOGRAPHY**

**Senior Tutor and Head**

|             |                                           |
|-------------|-------------------------------------------|
| J. M. Ndoda | DDR (SAUT), BMed (Kampala), Mmi (Kampala) |
|-------------|-------------------------------------------|

**Assistant Lecturer**

|               |                                       |
|---------------|---------------------------------------|
| R. S. Kidenda | DDR (CUHAS), BSc(Uganda), MSc(Uganda) |
|---------------|---------------------------------------|

**Tutors**

|               |                                            |
|---------------|--------------------------------------------|
| E.P. Nabugare | <i>DDR (SAUT), BMed. Imaging (Kampala)</i> |
| C.O.Ochieng   | <i>B. Diagnostic Ultrasound (Kampala)</i>  |
| S.S. William  | <i>BSc (India)</i>                         |
| J. J. John    |                                            |

**SCHOOL OF MEDICAL LABORATORY SCIENCES & TECHNOLOGY**

**Assistant Lecturer and Head**

|           |                                                |
|-----------|------------------------------------------------|
| B. Msemwa | <i>DMLS (CUHAS), BMLS (CUHAS), MSc (CUHAS)</i> |
|-----------|------------------------------------------------|

**Senior Tutor**

|             |                                                |
|-------------|------------------------------------------------|
| M. E. Anga  | <i>DMLS (MUHAS), BMLS (CUHAS), MSc(MUHAS)</i>  |
| Z.F. Mholya | <i>DMLS (CUHAS), BMLS (CUHAS), MSc (CUHAS)</i> |

**Tutors**

|              |                                              |
|--------------|----------------------------------------------|
| A.G. Mujungu | <i>Dipl. Education (Butimba), BSc (SUA),</i> |
| M.G. Kaji    | <i>DMLS (CUHAS), BSc(KCMUCo)</i>             |
| L. W. Mpoyo  | <i>BSc(IMTU)</i>                             |
| M.M. Karuma  | <i>BMLS (KIUT)</i>                           |
| H.H Mzee     | <i>BMLS (CUHAS)</i>                          |
| A. Matteru,  | <i>ADMLT(UDSM), DHPE (Arusha)</i>            |

**ADMINISTRATIVE AND TECHNICAL STAFF**

| Name                               | Qualification                                                 | Title                                                                    |
|------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------|
| <b>ADMINISTRATION</b>              |                                                               |                                                                          |
| Fr. Pantaleon Coelestine Rutambuka | BA (Italy), LLB (SAUT), Postgraduate Diploma (LST)            | Corporate Counsel                                                        |
| Rev. Fr. Christopher M. Dinho      | <i>BA (,Rome); MA (Rome)</i>                                  | Chaplain                                                                 |
| Ms. Thandiwe Y. Peter              | BCom (Australia), MStrtHRM (Australia); MCom (Australia)      | Principal Admin Officer & Personal Assistant to the Vice Chancellor /PRO |
| Ms. Norice Frank                   | BPA (Mzumbe), MScHRM(Mzumbe)                                  | Senior Human Resources Officer                                           |
| Mr. Daniel Nkuba                   | BPA (Mzumbe), MBA (OUT)                                       | Senior Administrative Officer                                            |
| Ms. Angelina Josephat Omuyanja     | BA (SAUT), Master of Education Management and Planning (SAUT) | Senior Administrative Officer/Examinations Officer                       |
| Ms. Leah Zacharia                  | BA (UDSM)                                                     | Administrative Officer                                                   |

| <b>Name</b>                     | <b>Qualification</b>                                                                             | <b>Title</b>                                   |
|---------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------|
| Mr. Edgar H. Rwegoshora         | BA (UDSM)                                                                                        | Quality Assurance Officer                      |
| Ms. Mariam T. Nhaluke           | BA (SAUT)                                                                                        | Administrative Officer/<br>Convocation Officer |
| Mr. Geoffrey S. Luena           | BA Mass Comm (SAUT)                                                                              | Administrative Officer                         |
| Mr. Christian Damas Hamis       | B.Local Govt. Management<br>(Mzumbe)                                                             | Administrative Officer                         |
| Ms. Neema J. Shiganga           | Dip.Law(ACM), BLL (SAUT)                                                                         | Administrative Officer                         |
| Ms. Magdalena W.<br>Olelemakata | BA (SAUT)                                                                                        | Administrative Officer                         |
| Ms. Irene M. Nyalla             | BCom-HRM (UDSM)                                                                                  | Administrative Officer                         |
| Mr. Humphrey Shoo               | BA (Mzumbe)                                                                                      | Administrative Officer/<br>Admissions Officer  |
| Ms. Rahma J. Shaaban            | BAP (UDOM)                                                                                       | Planning Officer                               |
| Ms. Blandina Mahiza             | Cert. Rec. Management (TPSC);<br>Dipl. Rec. Management (TPSC)                                    | Principal Rec. Management<br>Asst.             |
| Ms. Hellen Simon                | Dipl. Secretarial Studies<br>(TPSC-Tabora), MDEA I & II,                                         | Senior Personal Secretary                      |
| Ms. Anumie Mtweve               | BBA-HRM (OUT), MBA (SAUT)                                                                        | Senior Administrative<br>Officer               |
| Ms. Agnes Aswile Kayange        | Dipl. Mgt & Admin (ESAMI),<br>Secretarial course stage<br>(NABE) I & II                          | Principal administrative<br>Assistant          |
| Ms. Bibiana Sekei               | Dipl. Mgt & Admin (Shukuru<br>Int. Coll of Business)                                             | Senior administrative<br>Assistant             |
| Ms. Stella R. Zenge             | Cert. in Typing (VETA);<br>Computer Course (CBCS)                                                | Administrative Assistant                       |
| Ms. Limi B. Lufundisha          | Dipl. Secretarial Studies<br>(TPSC-Tabora), MDEA I & II,                                         | Senior Personal Secretary                      |
| Ms. Victoria Vicent             | Form IV, Certificate (TPSC)                                                                      | Senior Attendant                               |
| Mr. Alex Msenya Mkome           | Std. VII                                                                                         | Attendant                                      |
| Mr. Hezron S. Bassu             | Std VII                                                                                          | Attendant                                      |
| Mr. Emmanuel Duttu Robert       | Form IV                                                                                          | Attendant                                      |
| Mr. Issa Jumanne                | Form IV Cert. Driv. Grade I<br>(NIIT)                                                            | Senior Driver                                  |
| Mr. Nazaeli Manase              | Form IV Cert. Driv. Grade I<br>(NIIT)                                                            | Senior Driver                                  |
| Mr. Medard Selestine            | Cert. Driv                                                                                       | Driver                                         |
| Mr. Makinda A. Mbaga            | Cert.Driv. Grade II                                                                              | Driver                                         |
| Mr. James Bahati Sibuti         | STD VII, Driving Course<br>Certificate, Motor Vehicle<br>Mechanics Certificate Grade II<br>& III | Driver                                         |

| <b>Name</b>                            | <b>Qualification</b>                                                | <b>Title</b>                              |
|----------------------------------------|---------------------------------------------------------------------|-------------------------------------------|
| Mr. Kelvin A. Magesa                   | Std. VII, Mortuary Attendant certificate                            | Health Lab Attendant                      |
| Mr. Boniphace A. Mayunga               | Mortuary Atte. Cert                                                 | Health Lab Attendant                      |
| Ms. Rosalia Petro Nshoma               | Cert. Med Attendant                                                 | Health Lab Attendant                      |
| Ms. Saida Kheri Batenga                | Form IV, Cert (Secretarial)                                         | Personal Secretary                        |
| Ms. Grace Benjamin Kweyamba            | Form IV, Cert (Secretarial)                                         | Personal Secretary                        |
| <b><i>FINANCE AND ACCOUNTS</i></b>     |                                                                     |                                           |
| Mr. Boniface Kwiyea                    | ADCA (Mzumbe); CPA (T) (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)      | Principal Asst. Accountant                |
| Ms. Gracia Tibaijuka                   | Bachelor of Accountancy (SAUT)                                      | Asst. Accountant                          |
| Mr. Emmanuel Nyamilonda                | BBA in Accounting & Finance, MSc. Accounting & Finance              | Senior Asst. Accountant /Loans Officer    |
| Ms. Hellen Mathias Labia               | BBA (SAUT); MBA-Finance                                             | Principal Asst. Accountant                |
| Ms. Gloria W. Mshiu                    | B.Com-Accounting (UDSM)                                             | Asst. Accountant/Cashier                  |
| <b><i>INTERNAL AUDIT</i></b>           |                                                                     |                                           |
| Ms. Bahati Michael Kilungu             | ADA(SAUT), CPA (T) (NBAA), MSc. Accounting and Finance (Mzumbe)     | Senior Internal Auditor                   |
| <b><i>PROCUREMENT AND SUPPLIES</i></b> |                                                                     |                                           |
| Mr. Mkufi Ikhala                       | BCom (material Management) UDSM; CPSP(T) (PSPTB)                    | Sen. Procurement Officer                  |
| Mr. Freddy E. Kinyunyuni               | Dipl (TIA), BPLM (TIA), MSc (IFM), CPSP(T) (PSPTB)                  | Sen. Procurement Officer                  |
| Ms. Felister Luambano                  | Cert. PS (PSPTB), Dipl. PS (ZIFA), BPLM (TIA)                       | Asst. Procurement & Supplies Officer      |
| Mr. Erastus Thomas Gaudence            | Dip. Procurement and Supplies (St. Joseph) , Adv.Dip in Procurement | Senior Procurement and Supplies Assitant  |
| Ms. Stellah Edward Siwale              | Dip.Procurement and Supplies Management                             | Senior Procurement and Supplies Assistant |
| <b><i>LIBRARY</i></b>                  |                                                                     |                                           |
| Mr. Yanga Machimu                      | Dipl. LADS (Bagamoyo); B.Libr(OUT)                                  | Library Officer                           |
| Ms. Aziza Gihega                       | Dipl. LADS (Bagamoyo), BALIS (Tumaini)                              | Library Officer.                          |
| Mr. Oscar Joachim                      | Cert. Libr. (Bagamoyo), B.Libr(OUT)                                 | Library Officer                           |

| <b>Name</b>                   | <b>Qualification</b>                                                | <b>Title</b>                                    |
|-------------------------------|---------------------------------------------------------------------|-------------------------------------------------|
| Mr. Oliver Bondo              | Cert. Libr (Bagamoyo)                                               | Library Asstistant                              |
| Mrs Scholastica Kishosha      | Cert. Libr (Bagamoyo)                                               | Library Asstistant                              |
| Ms. Martha Method             | Cert. Libr and Records                                              | Library Asstistant                              |
| <b>ICT</b>                    |                                                                     |                                                 |
| Mr. Ismael M. Khangane        | <i>BSc(Cuba), MSc (CUBA), MSc (Spain)</i>                           | Principal Programmer I/Head of Computing Center |
| Mr. Mataba J. Magori          | <i>BSc.(Hons) (UK); Post Grad. Dipl (UK)</i>                        | Principal Computer Programmer                   |
| Mr. Emil Malisha              | <i>Dipl. IT (UCC), BSc (SAUT)</i>                                   | Systems and Network Administrator               |
| Mr. Festus Lukanazya          | <i>BComp Science(Arusha)</i>                                        | Computer Programmer (Web Master)                |
| Mr. Andrew Mihayo             | <i>Dipl (UCC), BSc (OUT)</i>                                        | Senior Comp Technician                          |
| Ms. Adeline Urassa            | <i>Cert I.T, Dipl. I.T (UCC)</i>                                    | Senior Comp Technician                          |
| <b>STUDENTS' WELFARE</b>      |                                                                     |                                                 |
| Sr. Dr. Mary Auxilia Mtuy     | BA in Eng. M.Sc. Edu Leadership, M. Theo, PhD                       | Dean of Students                                |
| Mr. Paul William Masele       | BA Education in Psychology, MA in project Management and Evaluation | Senior Warden                                   |
| Mr. Lawrence S. Kieji         | Form IV, Teaching Certificate Grade III A                           | Janitor                                         |
| <b>TECHNICAL</b>              |                                                                     |                                                 |
| Mr. Emmanuel Kimwaga          | <i>Dipl. In Prosection (UDSM)</i>                                   | Principal Prosector                             |
| Ms. Siphahel Msuya            | <i>Dipl. In Prosection (UDSM), BSc.(OUT)</i>                        | Principal Prosector                             |
| Mr. Jeffer Bhuko Othman       | <i>BMLS(CUHAS)</i>                                                  | Health Laboratory Scientist                     |
| Ms. Tekla Masanja Joseph      | <i>BSc (UDSM)</i>                                                   | Health Scientist (Botanist)                     |
| Mr. Joseph James John         | <i>DDR (CUHAS)</i>                                                  | Health Technologist                             |
| Ms. Laurencia Kwihaya Philipo | <i>DDR (CUHAS)</i>                                                  | Health Technologist                             |
| Mr. Eugene E. Mutagwaba       | <i>BSc (UDOM),</i>                                                  | Health Laboratory Scientist                     |
| Mr. Juma H. Magege            | <i>Form IV, Medical Lab Ass. Course</i>                             | Laboratory Assistant                            |
| Ms. Rosalia Petro Nshoma      | <i>Form IV, Medical Att. Cert</i>                                   | Laboratory Attendant                            |
| <b>ESTATES</b>                |                                                                     |                                                 |
| Eng. Valeria Aloyce Gabriel   | <i>Bachelor of Civil Engineering (Arusha)</i>                       | Civil Engineer & Estates Officer                |
| Mr. Emmanuel Mabula           | <i>Adv, Cert in Plumbing (NVTC)</i>                                 | Senior Technician/Plumber Technician            |
| Mr. Eliamini Jimmy            | <i>Dipl (Mbeya)</i>                                                 | Electrical Technician                           |
| Mr. Simon Mkama Kabaka        | <i>Cert. Civil Eng, ,</i>                                           | Technician                                      |



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This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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