



ST. FRANCIS UNIVERSITY COLLEGE OF HEALTH AND ALLIED SCIENCES (SFUCHAS)

Constituent College of Saint Augustine University of Tanzania



**PROSPECTUS
2016/2017**

TABLE OF CONTENT

Contents

MEMBERS OF THE UNIVERSITY BOARD OF TRUSTEES	iv
MEMBERS OF THE UNIVERSITY COUNCIL	iv
MEMBERS OF THE SENATE	v
PRINCIPAL ADDRESSES	vi
MISSION AND VISION OF THE COLLEGE.....	1
SFUCHAS Values	1
ACADEMIC PROGRAMMES	2
STUDENTS ADMISSION CRITERIA	3
UNDERGRADUATE PROGRAMMES.....	4
Entrance Requirements for MD. Course.....	4
FINANCIAL INFORMATION.....	5
EXAMINATION REGULATIONS.....	11
A TEN-SEMESTER CURRICULUM FOR THE DOCTOR OF MEDICINE (MD) COURSE.....	12
SUMMARY OF THE MODULES FOR THE SEMESTER SYSTEM	13
SEMESTER 1	16
SEMESTER 2	19
SEMESTER 3	21
SEMESTER 4	25
SEMESTER 5	28
SEMESTER 6 and 7	32
SEMESTER 8 and 9	32
SEMESTER TEN	34
CLINICAL CLERKSHIP GUIDELINES	38
Summary of the Curriculum for Diploma Programmes.....	40
Summary of the Curriculum for Certificate Programmes.....	43

THE PRINCIPAL'S MESSAGE

This edition of the Prospectus comes when the college is in its fifth year of its establishment. Within the five years SFUCHAS has grown and developed tremendously. It started with a minimal number of 46 students in the MD programme, currently there are 615 Medical students (MD1 to MD5). Among the notable features of the 2014/2015 Prospectus, is the establishment of the Institute of Allied Health Sciences running 2 Diploma programmes: Diploma in Medical Laboratory Sciences (DMLS) and Diploma in Pharmaceutical Sciences (DPS) and one Certificate programme in Medical Laboratory Sciences (CMLS).

As stated above, SFUCHAS started with only 46 MD students, within the five years the number has increased to 803 from all of its programmes. It is gratifying to note that SFUCHAS will be having its first graduation ceremony this year 28th November, 2015.

The college has taken steps to reduce congestion of student/patient ratio at SFRH by entering into a Memorandum of Understanding (MoU), with the Morogoro Regional Referral Hospital whereby the Fourth years (MD4) are undertaking their clinical rotations.

The number of Faculty has also increased significantly from the initial 8 full time faculty in 2010 to 43 full time faculty in 2014.

Infrastructure development has also taken place: 2 new classrooms each with a capacity of 200 students; one Multipurpose Laboratory with a capacity 150 students and an IT Room with a capacity of 30 students.

In conclusion, I wish to thank all members of SFUCHAS Community, friends, well- wishers, visitors who have worked hard to raise the profile and image of the college both nationally and internationally.

Prof. Cassian C. Magori
Principal (SFUCHAS).

MEMBERS OF THE UNIVERSITY BOARD OF TRUSTEES

Most Rev. Jude Thaddeus Ruwai'chi	Archbishop of Mwanza, Chairman
His Eminence Polycarp Cardinal Pengo	Archbishop of Dar es Salaam
Most Rev. Josaphat Lebulu	Archbishop of Arusha
Most Rev. Paul Ruzoka	Archbishop of Tabora
Most Rev. Damian Dallu	Archbishop of Songea
Rt. Rev. Tarcisius Ngalalekumtwa	Bishop of Iringa
Rt. Rev. Gabriel Mmole	Bishop of Mtwara
Rt. Rev. Desiderius Rwoma	Bishop of Bukoba
Rt. Rev. Evaristus M. Chengula	Bishop of Mbeya
Rt. Rev. Isaac Amani	Bishop of Moshi
Rt. Rev. Salutaris Libena	Bishop of Ifakara
Rev. Fr. Augustin Van Baelen, SDS	General Mission Secretary

MEMBERS OF THE UNIVERSITY COUNCIL

Rt. Rev. John Ndimbo	Chairman
Most rev. Jude Thaddeus Ruwai'chi	Archbishop of Mwanza
Mr. Chacha Musabi	Representative, Ministry of Education and Vocation Training
Dr. Boniphace Nyandwi	Representative of the Laity
Rt. Rev. Isaac Amani	Bishop of Moshi
Rev. Dr. Thadeus Mkamwa	Vice Chancellor SAUT
Rev. Fr. Raymond Saba	TEC Secretary General
Rt. Rev. Augustine Shao	Bishop of Zanzibar
Mr. Gasper N. Mwanalyela	Lawyer
Rev. Fr. Pius N. Msereti	Representative of the Senate
Ms. Zinaida Marwa	Representative of the Senate

MEMBERS OF THE SENATE

Rev. Dr. Thadeus Mkamwa	Vice Chancellor, Chairman
Rev. Fr. Peter Mwanjonde	Deputy Vice Chancellor for Administration and Finance
Rev. Fr. Cleophas Mabula	Ag. Deputy Vice Chancellor Administration and Finance
Rev. Dr. Longino Kamuhabwa	Principal AJUCO
Rev. Dr. Juvenalis Asantemungu	Principal, Archbishop Mihayo University College of Tabora
Prof. Cassian Magori	Principal, St. Francis University College of Health and Allied Sciences
Rev. Dr. Bernard Witek, SDS	Principal, Jordan University College
Rev. Dr. Respicius Rugemalira	Corporate Counsel/Secretary
Rev. Dr. Frowin Mlengule	Director, SAUT Bukoba Centre
Rev. Dr. Flavian Kassala	Director, SAUT Arusha Centre
Prof. Senga K. Pemba	Deputy Principal for Academic Affairs, St. Francis University College of Health and Allied Sciences
Prof. Fulgens L. Mbunda	Deputy Principal for Academic Affairs, AJUCO
Ms. Zinaida Marwa	Director, Quality Assurance
Sr. Dr. Hellena Bandiho	Director of Postgraduate Studies, research and Consultancy
Prof. Romuald Haule	Director, SAUT Mbeya Centre
Dr. Eustard Tibategeza	Deputy Principal for Academic Affairs, AMUCTA
Sr. Dr. Clara Rupia	Deputy Director for Academic Affairs
Dr. Slelyus L. Mkoma	SAUT – Marian Centre
Dr. Odass Bilame	Dean Faculty of Social Sciences, SAUT
Dr. Venance Makilika	Deputy Director for Academic Affairs Mbeya Centre
Dr. Slaus Mwisomba	Deputy Principal for Academic Affairs STEMMUCO

PRINCIPAL ADDRESSES

Tanzania Episcopal Conference (TEC)
P. O. Box 2133,
Dar es Salaam,
Tanzania
Tel: 022-851075-9; Fax: 022-857133/850295
E-mail: tec@cats-net.com

Vice Chancellor

St. Augustine University of Tanzania
P. O. Box 307 (SAUT),
Mwanza, Tanzania
Tel: Office: 028-25527; Res: 028-2550166; Fax: 252550167
E-mail: sautmalimbe@yahoo.com,
Email: <garasivc1941@hotmail.com>
Website: <http://www.saut.ac.tz>

The Principal

Principals' Office
Postal: P. O. Box 175,
Ifakara, Tanzania
Phone: (255) 23-2931-568
Fax: (255) 23-2931-569

Email: cassianmagori@yahoo.com
Principal@sfuchas.ac.tz
Website: www.sfuchas.ac.tz

MISSION AND VISION OF THE COLLEGE

VISION of the College

- To be an outstanding Catholic University by setting standards of excellence in health training, research and health care for the Rural Community.

MISSION of the college

- To transfer knowledge from one generation to another through teaching, advance and frontier of knowledge through research in Rural Community.
- To create a competent human resource with moral, spiritual and ethical values in Rural Tanzania.
- Delivery of quality services to the rural Community in Tanzania.

SFUCHAS Motto

Discipline, Diligence & Excellence

Core functions

Teaching, Research & Consultancy Services

SFUCHAS Values

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

- i) **Equity and Justice**
The SFUCHAS 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 college 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 College 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 College staff and students shall enhance citizenry through abidance to the Tanzanian Constitution and the law of the land.

ACADEMIC PROGRAMMES

Currently the College offers MD programme leading to the award of a Medical Doctor Degrees of SAUT. Also it has started two Diploma courses and one Certificate course.

Diploma Medical Laboratory Sciences (DMLS)

Diploma in Phamarceutical Sciences (DPS)

Certificate in Medical Laboratory Sciences (CMLS)

A. The following are the academic programmes currently offered

i. Undergraduate programme

Doctor of Medicine (MD):	5 years
--------------------------	---------

ii. Diploma Programmes

Diploma in Pharmaceutical Sciences:	3 years
Diploma in Medical Laboratory Science	3 years

iii. Certificate Programme

Certificate in Medical Laboratory Sciences	2years
--	--------

B) FUTURE PLANNED PROGRAMMES AS FROM (2015/2016).

i. Certificate Programmes

Certificate in Pharmaceutical Sciences	2 year
Pre-MD Programme	1 year

ii. Undergraduate Programmes

Bachelor of Science in Nursing (BSc.)	3 years
Bachelor of Medical Laboratory Sciences (B MLS)	3 years
Bachelor of Science in Biological Anthropology (BScBA)	3years

iii. Postgraduate Programmes

Masters in Public Health (MPH):	1 year
Master of Medicine (M. Med):	3 years
Masters of Human Resources for Health (MHR)	3years

STUDENTS ADMISSION CRITERIA

UNDERGRADUATE PROGRAMMES

Faculty of Medicine

The Faculty of Medicine will offer the Doctor of Medicine (MD) undergraduate degree programme

Entrance Requirements for MD. Course

Direct entrance

- (i) Minimum of three Principal passes at “C” grade or HIGHER in CHEMISTRY, BIOLOGY/ZOOLOGY or PHYSICS or Geography, at (“A) level. Minimum of 6.0 points or Higher

Equivalent Qualifications:

Holders of Diploma or Advance Diploma in Clinical Medicine with second class or (B) average pass.

Diploma in Medical Laboratory Science Technology

- (i) A holder of form VI Certificate with one principal pass and two subsidiaries in the science subjects of Biology, Chemistry Physics or Mathematics or A holder of IV certificate or equivalent with three credits in Biology, Chemistry, Physics or Mathematics
- (ii) Laboratory Assistant from a recognized institution with at least two years of experience in Clinical Laboratory Practice provided the applicant has two passes in science subjects in O-Level.

Diploma in Pharmaceutical Sciences

- (i) A holder of form VI Certificate with one principal pass and two subsidiaries in the science subjects of Biology, Chemistry Physics or Mathematics or A holder of IV certificate or equivalent with three credits in Biology, Chemistry, Physics or Mathematics
- (ii) Pharmaceutical assistant from a recognized institution with at least two years experience in Pharmacy Practice provided the applicant has two passes in science subjects I O-Level.

Certificate in Medical Laboratories Sciences and Technology

- (i) A candidate must have a certificate of secondary education (O-Level) or equivalent with at least 2”D” passes in Biology, Chemistry, Physics or Mathematics) or East Africa Certificate of Education (EACE) ‘O’ level and has pass
- (ii) From IV leavers who have attended one year course in the medical science but subject to passing an Entrance Examination

Students Admission Procedures

All intending to join in Certificate and Diploma Programmes should apply through NACTE, www.nacte.go.tz

All intending to join in Bachelor Degree programmes should apply through TCU, www.tcu.go.zt

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. All moneys payable to the College shall be paid directly into the College account. No student will be allowed to carry forward parts 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.

It is envisaged that student can take advantage of obtaining a loan from the Higher Education Student's Loan Board.

The following fees will be applicable for the 2012/2013 academic year:

FEE STRUCTURE FOR MD PROGRAMME ACADEMIC YEAR 2016/2017

Figures in TSHS

A: Payable to University

S/N	Description	Year 1	Year 2	Year 3	Year 4	Year 5
1	Transfer fee	30,000				
2	Registration fee	30,000	30,000	30,000	30,000	30,000
3	Admission Fee	75,000				
4	Sustainability Fund	45,000	45,000	45,000	45,000	45,000
5	TCU Quality Assurance	20,000	20,000	20,000	20,000	20,000
6	ID Card	10,000				
7	Health Capitation	100,000	100,000	100,000	100,000	100,000
8	Seminar/Conferences	30,000	30,000	30,000	30,000	30,000
9	Examination Fee	150,000	150,000	150,000	150,000	150,000
10	Caution Money	50,000	50,000	50,000	50,000	50,000
11	Special Faculty Requirement	150,000	150,000	150,000	150,000	150,000
12	Community Outreach		250,000			
13	Internet Service	10,000	10,000	10,000	10,000	10,000
14	Graduation Fee					100,000
15	Tuition Fee	4,150,000	4,150,000	4,150,000	4,150,000	4,150,000
	Total Cost to Student	4,850,000	4,985,000	4,735,000	4,735,000	4,835,000

B: Direct Student Costs (Payment to Student)

S/N	Description	Year 1	Year 2	Year 3	Year 4	Year 5
1	Student Union	20,000	20,000	20,000	20,000	20,000
2	Stationery	100,000	100,000	100,000	100,000	100,000
3	Books	300,000	300,000	300,000	300,000	300,000
4	Fieldwork	-	480,000	480,000	620,000	-
5	Elective and Research	-	-	-	-	100,000
6	Meals and Accommodation	2,618,000	2,618,000	2,618,000	2,618,000	2,618,000
	Total Cost to Student	3,038,000	3,518,000	3,518,000	3,658,000	3,138,000

**FEE STRUCTURE FOR BSc. Nursing and BSc. Medical Laboratory FOR ACADEMIC YEAR
2016/17**

Figures in Tshs.

A: Payable to University

S/N	Description	Year 1	Year 2	Year 3	Year 4
1	Transfer fee	30,000			
2	Registration fee	30,000	30,000	30,000	30,000
3	Admission Fee	75,000			
4	Sustainability Fund	45,000	45,000	45,000	45,000
5	TCU Quality Assurance	20,000	20,000	20,000	20,000
6	ID Card	10,000			
7	Health Capitation	100,000	100,00	100,000	100,00
8	Seminar/Conferences	30,000	30,000	30,000	30,000
9	Examination Fee	150,000	150,000	150,000	150,000
10	Caution Money	50,000	50,000	50,000	50,000
11	Special Faculty Requirement	150,000	150,000	150,000	150,000
12	Community Outreach		250,000		
13	Internet Service	10,000	10,000	10,000	10,000
14	Graduation Fee				100,000
15	Tuition Fee	4,150,000	4,150,000	4,150,000	4,150,000
	Total Cost to Student	4,850,000	4,985,000	4,735,000	4,835,000

B: Direct Student Costs (Payment to Student)

S/N	Description	Year 1	Year 2	Year 3	Year 4
1	Student Union	20,000	20,000	20,000	20,000
2	Stationery	100,000	100,000	100,000	100,000
3	Books	300,000	300,000	300,000	300,000
4	Fieldwork	-	480,000	480,000	620,000
5	Elective and Research	-	-	-	-
6	Meals and Accommodation	2,618,000	2,618,000	2,618,000	2,618,000
	Total Cost to Student	3,038,000	3,518,000	3,518,000	3,658,000

NB:

- 1. SFUCHAS has limited accommodation facilities, hence:-**
 - Rates range from Tshs 250,000.00 to 500,000.00 per year.
 - First priority will be given to new comers and finalists on first come, first served basis.
 - Payment should only be made upon confirmation of room availability.
- 2. Health Capitation: Candidates with valid Insurance ID will contribute Tshs 49,600.00 for health capitation**
- 3. Admission fee will be paid by First year and Transferred students**

FEE STRUCTURE FOR DIPLOMA PROGRAMMES
(Diploma in Pharmaceutical Sciences; Diploma in Medical Laboratory Science and Technology)
Academic Year 2016/17 Figures in Tshs.

A: Payable to University

S/N	Description	Year 1	Year 2	Year 3
1	Transfer fee	30,000.00		
2	Registration fee	30,000.00	30,000.00	30,000.00
3	Admission Fee	75,000.00		
4	Sustainability Fund	45,000.00	45,000.00	45,000.00
5	TCU Quality Assurance	20,000.00	20,000.00	20,000.00
6	ID Card	10,000.00		
7	Health Capitation	100,000.00	100,000.00	100,000.00
8	Seminar/Conferences	30,000.00	30,000.00	30,000.00
9	Examination Fee	150,000.00	150,000.00	150,000.00
10	Caution Money	50,000.00	50,000.00	50,000.00
11	Special Faculty Requirement	150,000.00	150,000.00	150,000.00
12	Tuition Fee	1,200,000.00	1,200,000.00	1,200,000.00
13	Internet Service	10,000.00	10,000.00	10,000.00
14	Graduation Fee			100,000.00
15	Community Outreach			250,000.00
	Total Cost to University	1,900,000.00	1,175,000.00	2,135,000.00

B: Direct Student Costs (Payment to Student)

S/N	Description	Year 1	Year 2	Year 3
1	Student Union	20,000.00	20,000.00	20,000.00
2	Stationery	100,000.00	100,000.00	100,000.00
3	Books	300,000.00	300,000.00	300,000.00
4	Fieldwork Allowance			480,000.00
6	Meals and Accommodation	2,618,000.00	2,618,000.00	2,240,000.00
	Total Cost to Student	3,038,000.00	3,038,000.00	3,518,000.00

NB:

4. **SFUCHAS has limited accommodation facilities, hence:-**
 - Rates range from Tshs 250,000.00 to 500,000.00 per year.
 - First priority will be given to new comers and finalists on first come, first served basis.
 - Payment should only be made upon confirmation of room availability.
5. **Health Capitation: Candidates with valid Insurance ID will contribute Tshs 49,600.00 for health capitation**
6. **Admission fee will be paid by First year and Transferred students**

FEE STRUCTURE FOR CERTIFICATE PROGRAMMES
(Certificate in Pharmaceutical Sciences; Certificate in Medical Laboratory Science and Technology) Academic Year 2016/17 Figures in Tshs.

A: Payable to University

S/N	Description	Year 1	Year 2
1	Transfer fee	30,000.00	
2	Registration fee	30,000.00	30,000.00
3	Admission Fee	75,000.00	
4	Sustainability Fund	45,000.00	45,000.00
5	TCU Quality Assurance	20,000.00	20,000.00
6	ID Card	10,000.00	
7	Health Capitation	100,000.00	100,000.00
8	Seminar/Conferences	30,000.00	30,000.00
9	Examination Fee	150,000.00	150,000.00
10	Caution Money	50,000.00	50,000.00
11	Special Faculty Requirement	150,000.00	150,000.00
12	Internet Service	10,000.00	10,000.00
13	Graduation Fee		100,000.00
14	Community Outreach		250,000.00
15	Tuition Fee	1,000,000.00	1,000,000.00
	Total Cost to Student	1,700,000.00	1,935,000.00

B: Direct Student Costs (Payment to Student)

S/N	Description	Year 1	Year 2
1	Student Union	20,000.00	20,000.00
2	Stationery	100,000.00	100,000.00
3	Books	300,000.00	300,000.00
4	Fieldwork Allowance		480,000.00
6	Meals and Accommodation	2,618,000.00	2,618,000.00
	Total Cost to Student	3,038,000.00	3,518,000.00

NB:

7. **SFUCHAS has limited accommodation facilities, hence:-**
 - Rates range from Tshs 250,000.00 to 500,000.00 per year.
 - First priority will be given to new comers and finalists on first come, first served basis.
 - Payment should only be made upon confirmation of room availability.
8. **Health Capitation: Candidates with valid Insurance ID will contribute Tshs 49,600.00 for health capitation**
9. **Admission fee will paid by First year Students Only**

EXAMINATION REGULATIONS

EXAMINATION REGULATIONS

General Regulations

1.1 General University Examinations regulations on

- a) Registration for examination.
- b) Eligibility for examinations.
- c) Absence from examinations.
- d) Board of Examiners.
- e) Conduct of examinations.
- f) Examination irregularities
- g) Procedures for appeals and
- h) Preservation of scripts

Will remain as stipulated in the St. Augustine University of Tanzania (SAUT) prospectus.

Examination Regulations for the MD Programme

2. General Regulations for the MD Programme

- 2.1. The MD programme is a 10 semester programme and the maximum allowable period for registration shall be 14 semesters.
- 2.2. Registration of full time students shall be done yearly at the beginning of each academic audit year.
- 2.3. For every course taught there shall be at least one continuous assessment examination and an end of semester university examination. The continuous assessment shall constitute 50% of the end of semester examination grade.
- 2.4. A candidate who obtains a C grade or higher in all courses examined in an audit year shall be declared to have passed the examination and will be allowed to proceed to the next year of study.
- 2.5. A candidate who for compelling reasons does not appear for any regular examination wholly or partly shall be allowed by Senate to sit for special examination as first sitting on the recommendation of Faculty/Institute and Academic Committee.
- 2.6. A candidate who fails in one or more subjects shall be allowed to sit for a supplementary examination during the long vacation if he/she obtained an overall GPA of 1.6 or higher.
- 2.7. A candidate who obtains an overall GPA of less than 1.6 at the end of an audit year shall be discontinued from studies.
- 2.8. A candidate who fails the first supplementary shall be allowed to proceed to the next year of study and sit for a second supplementary provided he/she obtains an overall GPA of 1.8 or higher.
- 2.9. A candidate who fails the first supplementary with an overall GPA of less than 1.8 shall be discontinued from studies
- 2.10. No candidate shall be allowed to sit for a third supplementary, EXCEPT in special cases as may be determined by Senate on recommendations of the Faculty Board and Academic Committee.
- 2.11. The highest grade a candidate can obtain after a supplementary examination shall be a "C".

3 Examination regulations specific to MD in the Clinical Year

- 3.1 No candidate shall be allowed to proceed to the clinical year of study unless and until he/she has passed all professional basic science courses.
- 3.2 A candidate who fails the junior clinical rotation shall be required to do a supplementary rotation of not less than 4 weeks in the failed rotation during the long vacation; provided that the maximum tenure for the M.D programme of 14 semesters is not exceeded.
- 3.3 The candidate will be considered to have passed his clinical rotation if he will have demonstrated in the course of the rotation that;
 - 3.3.1 Has acquired a satisfactory level of clinical skills in eliciting a history and physical findings from a patient.
 - 3.3.2 Has clerked the required number of patients and submitted detailed write-up of the history, physical findings, lab results and a plan of management of each patient for evaluation.
 - 3.3.3 Has followed closely the patient's daily progress,
 - 3.3.4 Observe and assisted or executed the prescribed number of procedures,
 - 3.3.5 Has passed a written evaluation at the end of the rotation.

- 3.4 At the end of the senior rotation a candidate will not pass the final examination in any clinical subject unless and until he/she has passed the clinical part, which will consist of 40% clinical continuous assessment and 60% of the final examination.
- 3.5 A candidate failing the end of the year examination will be required to appear for a supplementary examination in the failed subjects within three months if he has failed one or two subjects or within six months if he has failed in more than two subjects.
- 3.6 A candidate who fails in more than four subjects will be required to repeat the year if this does not conflict with other regulations.
- 3.7 A candidate in the final year failing a supplementary examination after he/she has attended all prescribed courses shall sit for a second supplementary at the next opportunity of the same course.
- 3.8 A candidate in the final year failing a supplementary examination shall have to register for subsequent supplementary (ies) one month before the commencement of the examination.
- 3.9 A student shall be awarded the MD degree after passing all prescribed courses including Development Studies.
- 3.10 The MD degree shall not be classified.
- 3.11 The grading system shall be as per TCU Guidelines:

Numeric Mark	Letter Grade
75-100	A
70-74	B ⁺
60-69	B
50-59	C
45-49	D
0 -44	E

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

1.0 BACKGROUND

The School of Medicine will be the second owned by the Tanzania Episcopal Conference (TEC)

The MD training programme is the most pivotal upon which hinges the Mission of the College 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 Colleges in Tanzania and elsewhere –to semesterize and modularize all academic programmes, SFUCHAS has adopted a similar model for its programmes.

2.0 OBJECTIVES

The objective of the College, 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 STRUCTURE OF MODULES FOR THE SEMESTER SYSTEM

SUMMARY OF THE MODULES FOR THE SEMESTER SYSTEM

SEMESTER I (25.8 UNITS)

<i>Course</i>	<i>Lectures</i>	<i>Practical/ Seminars</i>	<i>Hours</i>	<i>Teaching weeks</i>	<i>Units</i>
AN 100	110	232	342	19	13.8
BC 100	148	41	189	19	10.7
MF 301	19	-	19	19	1.3

SEMESTER 2 (25.6 UNITS)

<i>Course</i>	<i>Lectures</i>	<i>Practical/ Seminars</i>	<i>Hours</i>	<i>Teaching weeks</i>	<i>Units</i>
PH 100	113	74	187	19	9.3
BS 100	129	80	209	19	10.4
DS 100	60	30	90	19	4.6
MF 302	19	-	19	19	1.3

SEMESTER 3 (27.4 UNITS)

<i>Course</i>	<i>Lectures</i>	<i>Practical/Seminars</i>	<i>Hours</i>	<i>Teaching weeks</i>	<i>Units</i>
MM 200	114	76	190	19	9.3
PE200	91	61	152	19	7.3
PH 200	57	-	57	19	3.8
DS 200	65	30	95	19	4.9
CM	-	36	36	19	0.8
MF	19	-	19	19	1.3

SEMESTER 4 (32 UNITS)

<i>Course</i>	<i>Lectures</i>	<i>Practical/ Seminars</i>	<i>Hours</i>	<i>Teaching weeks</i>	<i>Units</i>
MP 200	199	68	267	19	14.7
ER 200	65	167	232	19	8.0
EF 200	50	90	140	19	5.3
CM 200	37	9	46	19	2.7
MF 304	19	8	19	19	1.3

SEMESTER 5 (31.1 UNITS)

<i>Course</i>	<i>Lecture s</i>	<i>Practical/ Seminars</i>	<i>Hour s</i>	<i>Teaching weeks</i>	<i>Units</i>
CP 300	167	16	183	19	11.5
MD300(301- 309)	264	53	317	19	18.7
MF 305	11	8	19	19	0.9

SEMESTER 6 (32.7 UNITS)

<i>Course</i>	<i>Lectur es</i>	<i>Practical/ Seminars</i>	<i>Hour s</i>	<i>Teaching weeks</i>	<i>Units</i>
MF 306	19	-	19	19	1.3
MD 300 (310- 317)	421	148	569	19	31.4

SEMESTER 7 and 8 (33.3 UNITS)

<i>Course</i>	<i>Lectures</i>	<i>Practical/ Seminars</i>	<i>Hours</i>	<i>Teaching weeks</i>	<i>Units</i>
MC 400	15	369	15	12	9.2
MH 400	15	369	15	12	9.2
MG 400	15	369	15	12	9.2
ME 400		256	256	8	5.7

SEMESTER 9 and 10 (35.5 UNITS)

<i>Course</i>	<i>Lectures</i>	<i>Practical /Seminars</i>	<i>Hours</i>	<i>Teaching weeks</i>	<i>Units</i>
MS 500	48	336	384	12	10.7
MI 500	48	336	384	12	10.7
MZ 500	48	144	192	6	6.4
MY 500	48	144	192	6	6.4
MF 309	19	-	-	19	1.3

KEY to MD Course subjects

¹AN: Anatomy

²BC: Biochemistry

³MF: Medical Ethics & Forensic Medicine

⁴PH: Physiology

⁵BS: Behavioural Sciences & Biostatistics

⁶DS: Development Studies

⁷MM: Microbiology/Immunology

⁸PE: Parasitology/Entomology

⁹MP: Pathology

¹⁰ER: Epidemiology & Research Methodology

¹¹CM: Introduction to Clinical Methods

¹²EF: Nutrition Field Project

¹³CP: Clinical Pharmacology

¹⁴MD: Management of Diseases Courses I & II

¹⁵MC: Community Medicine

¹⁶MH: Paediatrics & Child Health

¹⁷MG: Obstetrics & Gynaecology

¹⁸ME: Elective Period

¹⁹MS: Surgery

²⁰MI: Internal Medicine

²¹MY: Psychiatry

²²MZ: Surgical Specialties (Anaesthesiology & Critical Care Medicine, Otorhinolaryngology, Ophthalmology)

Details of the Teaching programme for the 10 semesters (MD)

SEMESTER 1

ANATOMY (AN 100)

(13.8 UNITS)

Aim

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

Objectives

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

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

Course Contents

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

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

BIOCHEMISTRY (BC 100)

(10.7 UNITS)

Introduction

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

Aims

To impart knowledge on structural organization of biomolecules

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

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

Objectives

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

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

Course Content:

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

MEDICAL ETHICS AND FORENSIC MEDICINE (MF 301-306 and 309) (8.7 UNITS)

Introduction

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

Aims

To develop working knowledge of current ethical guidelines, professional codes of practice.
To understand how ethical guidelines relate to medical practice & research.

Objectives

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

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

Course Contents

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

Module	Code	Course Name	Lectures		Practical's		Total	
			Hour s	Units	Hour s	Units	Hour s	Unit s
I	MF 301	Medical Ethics I	19	1.3	-	-	19	1.3
	MF 302	Medical Ethics I	19	1.3	-	-	19	1.3
	MF 303	Medical Ethic I	19	1.3	-	-	19	1.3
II	MF 304	Forensic Medicine	19	1.3	-	-	19	1.3
	MF 305	Forensic Medicine	11	0.7	8	0.2	19	0.9
III	MF 306	Medical Ethics	19	1.3	-	-	19	1.3
	MF 309	Medical Ethics II	19	1.3	-	-	19	1.3
TOTAL			125	8.5	8	0.2	133	8.7

SEMESTER 2

PHYSIOLOGY (PH 100)

(9.3 UNITS)

Aims

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

Objectives

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

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

Course Contents

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

Module	Code	Course Name	Lectures		Practical's		Total	
			Hours	Units	Hours	Units	Hours	Units
I	PH 101	Fluid and circulation	37	2.4	36	0.8	72	3.2
II	PH 102	Metabolism and excretory systems	36	2.4	26	0.6	62	3.0
III	PH 103	Neuro-endocrine physiology	42	2.8	12	0.3	54	3.1
TOTAL			115	7.6	74	1.7	189	9.3

BEHAVIORAL SCIENCES AND BIostatISTICS (BS 100)

(10.4 UNITS)

Aims

To provide a course that is relevant to current public health problems and their interventions.

To provide students with fundamental statistical skills relevant to public health analysis.

To introduce students to specific concepts and models that explain ill-health and diseases.

Objectives

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

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

Course Contents

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

Module	Code	Course Name	Lectures		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
I	BS 101	Medical Sociology	50	3.3	28	0.6	78	3.9
II	BS 102	Health and Psychology	45	3.0	25	0.6	70	3.6
III	BS 103	Biostatistics and dermography	39	2.6	21	0.5	60	3.1
TOTAL			134	8.6	74	1.8	208	10.4

DEVELOPMENT STUDIES (DS100)

(4.6 UNITS)

Aim

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

Objectives

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

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

Course Contents

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

Module	Code	Course Name	Lectures		Practical's		Total	
			Hours	Units	Hours	Units	Hours	Units
L	DS 101	Social Development and Health	25	1.7	10	0.2	35	1.9
LI	DS 102	Education, Rural Development, Gender and Health	15	1.0	10	0.2	25	1.2
LII	DS 103	Population, Poverty and Health, and Entrepreneurship	20	1.3	10	0.2	30	1.5
TOTAL			60	4.0	30	0.6	90	4.6

SEMESTER 3

MICROBIOLOGY/IMMUNOLOGY (MM 200)

(9.3 UNITS)

Aim

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

Objectives

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

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

Course Contents

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

Module	Code	Course Name	Lectures		Practical's		Total	
			Hours	Units	Hours	Units	Hours	Units
I	MM 201	General Bacteriology	54	3.6	62	1.4	116	5.0
II	MM 202	Virology and Mycology	39	2.6	6	0.1	45	2.7
III	MM 203	Immunology	21	1.4	8	0.2	29	1.6
TOTAL			114	7.6	76	1.7	190	9.3

PARASITOLOGY/MEDICAL ENTOMOLOGY (PE 200)

(7.3 UNITS)

Aim

To impart knowledge on identification of life cycles, epidemiological factors, host-parasite relationships
To impart knowledge on identification of the appropriate preventive and control measures.

Objectives

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

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

Course Contents

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

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

CLINICAL PHYSIOLOGY (PH 200)

(3.8 UNITS)

Introduction

Physiology is the study of normal functioning and phenomenon of living things. It is a biological science with particular aims of describing, explaining and understanding how living things work or function; and the intricate control system and regulatory mechanisms that permit the body to operate and survive in an often-hostile environment.

During the second year students learn clinical physiology with relation to normal and disordered physiological functions of organs and body systems. The students also learn the physiological basis underlying diagnostic procedures as well as the physiological basis underlying diseases management and treatment.

Aims

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

Objectives

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

- Explain the concept of reserve, compensation and failure.
- Describe the body fluid compartments, derangements of body fluid and how the kidneys compensate for such derangements.

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

Course Contents

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

Module	Code	Course Name	Lectures		Total	
			Hours	Units	Total hours	Total units
I	PH 201	Clinical Physiology of Fluid and Circulation	20	1.3	20	1.3
II	PH 202	Clinical Physiology of Metabolism and excretory system	19	1.3	19	1.3
III	PH 203	Clinical Physiology of Neurophysiology and endocrinology	18	1.2	18	1.2
		TOTAL	57	3.8	57	3.8

DEVELOPMENT STUDIES (DS 200)

(4.9 UNITS)

Aims

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

Objectives

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

Course Contents

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

Module	Code	Course Name	Lectures		Practical		Total	
			Hours	Units	Hours	Units	Hours	Units
I	DS 201	Globalization Environment and Health	20	1.3	10	0.2	30	1.5
II	DS 202	Human Rights, Governance and Entrepreneurship	45	3.0	20	0.4	65	3.4
TOTAL			65	4.3	30	0.6	95	4.9

INTRODUCTION TO BASIC CLINICAL METHODS (CM 200: 201-204) (0.8 UNIT)

Introduction

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

Aims

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

Objectives

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

Course Contents

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

Module	Code	Course Name	Lectures		Practicals		Total	
			Hours	Units	Hours	Units	Hours	Units
I	CM 201	Introduction to common physical signs in medicine	-	-	9	0.2	9	0.2
II	CM 202	Introduction to common physical signs in surgery	-	-	9	0.2	9	0.2
III	CM 203	Introduction to common physical signs in Obstetric and Gynaecological	-	-	9	0.2	9	0.2
IV	CM 204	Introduction to common physical signs in Paediatrics	-	-	9	0.2	9	0.2
TOTAL			-	-	36	0.8	36	0.8

SEMESTER 4

PATHOLOGY (MP 200)

(14.7 UNITS)

Aims

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

Objectives

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

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

Course Contents

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

Module	Code	Course Name	Lectures		Practicals		Total	
			Hours	Units	Hours	Units	Hours	Units
I	MP 201	Principles of General Pathology and Lympho-haemopoietic systems	65	4.3	26	0.6	91	4.9
II	MP 202	Systemic Pathology I (RS, CVS, UGS, GIT*)	80	5.3	20	0.4	100	5.7
III	MP 203	Systemic Pathology II (Endocrine, CNS skin and MSS, HIV/AIDS)	54	3.6	22	0.5	76	4.1
TOTAL			199	13.2	68	1.5	267	14.7

EPIDEMIOLOGY AND RESEARCH METHODOLOGY (ER 200)**(8.0 UNITS)****Aims**

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

Objectives

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

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

Course Contents

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

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

INTRODUCTION TO CLINICAL METHODS (CM 200: 205-206)**(2.7 UNITS)****Introduction**

This is a vertical program, on introduction to clinical skills development. The course started during semester 3 and students were divided into groups that rotate through different departments. At the end of this semester students should have completed the rotations. During the fourth semester psychopathology and introduction to clinical methods in psychiatry courses will be taught within the Clinical Methods Module. The psychopathology course introduces students to concepts of normality, disturbed behavior, and develops expressive skills for clinical psychiatry over 37 hours of lectures.

Aim

1. To introduce students to clinical skills based on cognitive knowledge acquired in basic sciences
2. To introduce/orientate students to the wards, importance of team work (e.g. nurses, laboratory personnel, pharmacists,) in patient care.

3. To develop basic elementary professional skills (communication and physical signs/features) in Psychiatry, Surgery, Pediatrics and Child Health, Medicine, Obstetrics and Gynaecology.
4. To introduce students to the clinical setting for mental health care and common mental disorders
5. To introduce the concept of psychopathology and normality and to provide an introduction to the technical language used to describe symptoms and signs in clinical psychiatry.

Objectives

- To enable the students to gain insight of the scope of Medicine, Psychiatry, Surgery, Pediatrics and Child Health, Obstetrics & Gynaecology.
- To define and describe psychopathology Vs normative behaviors
- To list and define common abnormalities in basic human psychological processes.

Course Contents

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

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

NUTRITION FIELD PROJECT (EF 200)

(5.3 UNITS)

Introduction

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

Aim

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

Objectives

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

- Describe nutrition disorders of public health importance globally and in Tanzania
- Analyse causes of malnutrition using the UNICEF's conceptual framework and how to intervene using the Triple A Cycle.
- Develop a research proposal to assess nutritional status in the community.
- Carry out a nutritional survey in the community using anthropometric measurements.
- Interact well with mothers, families and community leaders.
- Analyse and interpret research findings and disseminate them to the community.

Course Content

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

SEMESTER 5

CLINICAL PHARMACOLOGY (CP 300)

(11.5 UNITS)

Aim

To introduce the student to the basic concepts of pharmacology.

To provide the student with the basic principles of drug action and to apply them in rational clinical use in the diagnosis, prevention and treatment of disease.

To provide the student with knowledge of chemical agents found in environment.

Objectives

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

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

Course Contents

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

Module	Code	Course Name	Lectures		Practical's		Total	
			Hours	Units	Hours	Units	Hours	Units
I	CP 301	Autonomic Nervous system	52	3.5	9	0.2	61	3.7
II	CP 302	Pharmacology of the nervous and endocrine systems	52	3.5	5	0.1	57	3.6
III	CP 303	Systemic Pharmacology	60	4.0	8	0.2	68	4.2
TOTAL			164	11.0	22	0.5	186	11.5

MANAGEMENT OF DISEASES COURSES I, II AND III (MD 300)

Introduction

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

Aim

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

Objectives

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

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

MANAGEMENT OF DISEASES I (MD 300) (13.6UNITS Semester 5)

Course Content:

Module	Code	Course Name	Lectures		Practical's		Total	
			Hours	Units	Hours	Units	Hours	Units
I	MD 301	Principles of Surgery	31	2.1	-	-	31	2.1
II	MD 302	Infectious diseases	30	2.0	-	-	30	2.0
III	MD 303	Cardiovascular and Respiratory diseases	30	2.0	-	-	46	2.4
IV	MD 304	Dermatology and Rheumatology	23	1.5	-	-	25	1.5
V	MD 305	Neurology	26	1.7	-	-	30	1.8
VI	MD 306	Nephrology, Urology, Geriatrics and chronic illnesses	30	2.0	-	-	35	2.1
TOTAL			204	13.7	-	-	204	13.7

Management of disease II (MD 300) (13.6UNITS) semester 6

Module	Code	Course Name	Lectures		Practical's		Total	
			Hours	Units	Hours	Units	Hours	Units
VII	MD 307	Endocrine and GIT disorders	18	2.0	-	-	18	2.0
VIII	MD 308	Orthopaedics and Neurosurgery	18	2.0	-	-	18	2.0
IX	MD 309	Mental illnesses and related disorders	18	2.3	-	-	18	2.3
X	MD 310	Diseases of the eye	15	3.8	-	-	15	3.8
XI	MD 311	Paediatrics and Child Health	60	1.9	-	-	60	1.9
XII	MD 312	Obstetrical and Gynaecology	60	5.1	-	-	60	5.1
XIII	MD 313	Communicable diseases control	15	3.8	-	-	15	3.8
TOTAL			204	13.6	-	-	569	31.6

MANAGEMENT OF DISEASES 111 (MD300) (13.6 UNITS) SEMESTER 7.

Module	Code	Course Name	Lectures		Practicals		Total	
			Hours	Units	Hours	Units	Hours	Units
xiv	MD 314	ENT	53	3.5	-	-	53	3.5
xv	MD 315	Diagnostic Radiology and radiotherapy	76	5.1	-	-	76	5.1
xvi	MD 316	anesthesiology	75	5.0	-	-	75	5.0
TOTAL			204	13.6	-	-	204	13.6

MD 314 Ortorhinolaryngology (ENT).

Aims

To train competent doctors who after their training period will be able to handle without supervision adequate ORL care to the individual patient and community.

Objectives

- To enable the graduate to recognize and manage without supervision common ORL diseases in his/her place of practice.
- To enable the graduate to recognize provide primary care and refer to higher courses condition which are curable but beyond his competence.
- To enable the graduate to recognize incurable conditions and retain for palliative care.
- Anatomy of the External Ear I, Anatomy of the External and Middle Ear II, anatomy of the Inner ear III, Basic Principles of Physiology of Hearing and Hearing Tests, Basic Principles of Physiology of Equilibration and Test of Balance, Affections of the External Ear: Congenital anomalies, Trauma and Hearing Tests, Basic Principles of Physiology of Equilibration and Test of Balance, Affections of the External Ear: Congenital Anomalies, Trauma of the External Ear, Otitis External, Affections of the External Ear, Perichondritis, tumours of External Ear, Traumatic Drum Membrane rupture, Affections of the Middle Ear, Secretory Otitis Media, Affections of the Middle Ear, Acute Suppurative Otitis, Media, Chronic Suppurative Otitis Media, Complications of Suppurative Otitis Media, Affections of the Middle Ear, Acute Suppurative Otitis, Media, Chronic

Suppurative Otitis Media, Complications of suppurative Otitis Media, Hearing Impairment and Deafness, Speech and Language Disorder I, Speech and Language Disorder II, Anatomy and Physiology of the Nose and Pranasal Sinuses, Acute and Chronic Rhinitis, Acute and Chronic Sinusitis, Epistaxis, Allergic Rhinitis, Sino-nasal cancer, anatomy and Physiology of the Pharynx, Tonsillitis and Adenoid hypertrophy, Tumours of the pharynx and choanal atresia, Anatomy of larynx, Acute and Chronic laryngitis, Vocal cord paralysis, Tumours of the larynx: Laryngeal cancer, Tumours of the larynx: aryneal papillomas, Upper air way obstruction, indications of Tracheostomy Management.

Recommended Reading Materials

1. Hall & Colman Disease of the Ear Nose and Throat
2. Reference books: Scott's Brown Otolaryngology Vol. I – VI

CM 300: Bed side teaching

Medicine

Signs of Respiratory, Renal, Cardiovascular, Metabolic, Endocrine disorders (Diabetes) Neurology, Gastrointestinal, Rheumatology, Dermatology, AIDS and Musculoskeletal examination.

Surgery

History taking and basic physical examination, Examination of ulcers, fistulae and sinuses, Examination of a swelling, Examination of the breast, Examination of an inguino-scrotal swelling, Examination of the neck and thyroid.

MD315: Diagnostic Radiology and Radiotherapy

Aim

To educate medical students on utilization of Radiology and Radiological Sciences in patient management.

1.0 Objectives

- To educate medical students on the production of x-ray, they're physical properties, and various ways of acquiring, storing and transferring images.
- To equip medical students with adequate knowledge of the choice of various radiological methods/techniques used in investigating patients.
- To educate medical students on how to identify radiological signs and correlate these signs to clinico-pathological information; in order to make reasonable differential diagnoses.
- To introduce/educate medical students on clinical oncology; with emphasis on various modalities used in the management of different types of neoplastic disease which are common in Tanzania.

SEMESTER 6 and 7

Introduction

During semester 6 and 7 students will be divided into four groups of equal size and shall remain in their respective junior rotation groups throughout. The rotation of 10 weeks each in Internal Medicine, Paediatrics and child health, obstetrics & Gynaecology and Surgery.

Objectives

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

Course Contents

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

Rotation	Code	Course Name	Lectures		Practical's		Total	
			Hours	Units	Hours	Units	Hours	Units
I	MI 400	Internal medicine junior rotation	18	1.2	220	4.9	238	6.1
II	MH 400	Paediatrics and child health junior rotation	18	1.2	220	4.9	238	6.1
III	MG 400	Obstetrics and gynaecology junior rotation	18	1.2	220	4.9	238	6.1
IV	MS 400	Surgery junior rotation	18	1.2	220	4.9	238	6.1
TOTAL			72	4.8	880	19.6	952	24.4

SEMESTER 8 and 9

Introduction

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

Objective

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

Rotation	Code	Course Name	Lectures		Practical's		Total	
			Hours	Units	Hours	Units	Hours	Units
I	MC400	Community medicine rotation	15	1.0	365	8.1	380	8.1
II	MI 400	psychiatry rotation	48	3.2	315	7.0	363	10.2
III	MZ 400	Surgical specialities rotation	10	0.7	353	7.8	363	8.5
IV	MW 400	Medical specialities rotation	10	0.7	353	7.8	363	8.5
TOTAL			83	5.6	1386	30.7	1468	36.3

COMMUNITY MEDICINE (MC 400)

(9.2 UNITS)

Aims

To have medical doctors who are familiar with the prevailing health problems in the community and competent in managing them in line with the country's health policy.

Objectives

The student should be able to learn how to:

- Translate health policy and guidelines into action with more emphasis on Health Sector Reform (HSR).
- Design and implement district health plans.
- Mobilize resources and marketing of health services (entrepreneurship)
- Provide health services with technical and professional proficiency.

These are tasks that they will be expected to perform after completion of their training as DHM Team leaders.

Course Contents

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

Module	Code	Course Name	Lectures		Practicals		Total	
			Hour s	Units	Hour s	Units	Hour s	Units
I	MC 401	Research Methodology	4	0.3	96	2.1	100	2.4
II	MC 402	National Health Programmes	4	0.3	40	0.9	44	1.2
III	MC 403	Organization of Health Services in Tanzania	2	0.1	130	2.9	132	3.0
IV	MC 404	Planning and Management	5	0.3	103	2.3	108	2.6
TOTAL			15	1.0	369	8.2	384	9.2

5.6.5 PSYCHIATRY (MY 500)

(6.4 UNITS)

Aims

To enable students by imparting appropriate knowledge and skills to assess, diagnose and manage patients with mental disorders.

Pre-requisites: Student has completed and passed the mental illness and related disorders course.

Objectives

- At the end of the course students will be able to:
- Discuss the inter-relationship between psychological and physiological processes in illness, with focus on identifying protective, predisposing, precipitating and perpetuating factors associated with illness at both inter and intra-personal levels.
- Identify and list biological, psychological and social factors that influence mental illness presentation and course
- Assess, diagnose and manage patients with common psychiatric disorders and acute major psychiatric disorders.

SURGICAL SPECIALTIES (MZ 500)

(6.4 UNITS)

1. ANAESTHESIOLOGY AND CRITICAL CARE MEDICINE (MZ 501)

Aims

Impart knowledge on the basic principles and practice of anaesthesiology

Objectives

- At the end of the course the student should be able to:
- Provide appropriate resuscitation measures, pain relief and continuous support for vital body functions
- Use basic equipment for handling emergencies in the operating theatre, intensive care unit and emergency room.
- Administer local, spinal and general anaesthesia

1. OTORHINOLARYNGOLOGY (MZ 502)

Aims

To impart knowledge and skills to handle without supervision adequate ORL care to the individual patient and community

Objectives

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

- Recognize and manage unsupervised common ORL conditions in his/her place of practice.
- Recognize and render primary care and refer to higher institutions, ORL conditions which are curable but beyond his/her competence.
- Recognize and provide palliative care to patients with ORL conditions which are incurable.

2. OPHTHALMOLOGY (MZ 503)

Aim

To impart basic knowledge, clinical skills, management and prevention of common eye conditions

Objectives

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

- Diagnose and manage common eye diseases.
- Identify eye cases for referral
- Promote eye health in the community in collaborating with other players
- Train health workers on primary eye care.

SEMESTER TEN

Introduction

During semester 10 students will be divided into four groups of equal size and shall remain in their respective senior rotation group throughout. The rotations shall be of (5) weeks each in internal Medicine, paediatrics and child health, obstetrics & Gynaecology and surgery

Objectives

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

Rotation	Code	Course Name	Lectures		Practicals		Total	
			Hours	Units	Hours	Units	Hours	Units
I	MI 500	Internal medicine senior rotation	10	0.7	108	2.4	118	3.1
II	MH 500	Paediatrics and child health senior rotation	10	0.7	108	2.4	118	3.1
III	MG 500	Obstetrics and gynaecology senior rotation	10	0.7	108	2.4	118	3.1
IV	MS 500	Surgery senior rotation	10	0.7	108	2.4	118	3.1
TOTAL			40	2.8	432	9.6	472	12.4

INTERNAL MEDICINE (MI 500)

(10.7 UNITS)

Aims

To impart knowledge, practical skills, situation analysis, disease formulation and management of medical diseases to students who upon completion of the course would be competent without supervision to diagnose, treat, prevent common medical conditions and recognize complex conditions needing referral to specialist and institute preventive measure where appropriate.

Objectives

- The graduate upon completion of the course should be able to:
- Take a detailed history and present focused clinical history which is relevant to the problem at hand
- Master techniques of demonstration of physical signs in different systems in patients and in eliciting positive and negative signs, which are relevant to the problem at hand.
- Order relevant investigations in order of importance in a problem at hand and perform side room investigations and recognize and interpret laboratory results of common medical conditions.
- Master principles in therapeutics, dosages and untoward effects of common prescribed drugs.
- Acquire skills in handling medical emergencies and recognizing complex medical conditions for referral to competent specialist.
- Plan and executive basic research, prepare project write up, publication and use of library and literature search.
- Acquire skills in teaching and effectively supervise subordinate health personnel.

Course Contents

The course will cover a number of disease system units including: Respiratory, Nephrology, Cardiovascular, Dermatology, Endocrinology, Gastroenterology, Neurology, Rheumatology, Haematology and Infectious diseases.

Emphasis will be on common communicable diseases like Tuberculosis, HIV, Malaria and emerging non-communicable diseases, for instance, hypertension, Diabetes Mellitus, and Strokes. Tropical diseases like leprosy, onchocerciasis, Schistosomiasis, and Filariasis will be covered adequately.

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

Module	Code	Course Name	Lectures		Practicals		Total	
			Hours	Units	Hours	Units	Hours	Units
I	MI 501 (a&b)	Infectious/Respiratory diseases	8	0.5	57	1.3	65	1.8
II	MI 502 (a&b)	Nephrology/Gastroenterology	8	0.5	59	1.4	67	1.9
III	MI 503 (a&b)	Neurology/Geriatrics	10	0.7	59	1.3	69	2.0
IV	MI 504 (a&b)	Endocrine/Haematology	7	0.5	40	0.8	47	1.3
V	MI 505 (a&b)	Rheumatology/Dermatology	9	0.6	52	1.2	61	1.8
VI	MI 506	Cardiology	6	0.4	32	0.7	38	1.1
VII	MI 507 (a&b)	Laboratory/Imaging			37	0.8	37	0.8
		Total	48	3.2	336	7.5	384	10.6

PAEDIATRICS AND CHILD HEALTH (MH 400)

(9.2 UNITS)

Aims

To impart knowledge and practical clinical skills on paediatrics and child health practice that would enable students upon completion of the course to prevent and manage major childhood illnesses in an effective and integrated manner that would help him/her provide quality paediatric and child health care

Objectives

- At the end of the course the student should be able to:
- Take a paediatric history using good communicating skills, interpret relevant points in the history to specific disease entities.
- Interpret abnormal signs in different systems and order relevant investigations
- Arrive at the right diagnosis and plan management.
- Perform basic clinical, nursing procedures and patient care
- Perform basic laboratory procedures, interpret them to improve the case management
- To use knowledge and skills base on IMCI diseases conditions as a basis for prevention and integrated management of the major childhood illnesses.
- Do a mini-survey and case report on a specific topic of interest in Paediatrics and Child Health.

OBSTETRICS AND GYNAECOLOGY (MG 400)

(9.2 UNITS)

Aims

Impart knowledge and skills in the management of common obstetric, gynaecological conditions as well as acquire broad understanding of reproductive health issues.

Objectives

- At the end of the course the student should be able to:
- Acquire communication skills and appropriate attitude in dealing with a gynaecologic and obstetric patient.
- Recognize and manage common gynaecological and obstetric conditions.
- Acquire knowledge and practical skills in the promotion and provision of family planning services.
- Recognize and manage life threatening emergency obstetric conditions
- Acquire general knowledge on preventive aspects of obstetrics, gynaecology, and reproductive health.

SURGERY (MS 500)

(10.7 UNITS)

Aim

To produce a graduate who is competent to diagnose common surgical conditions and institute management measures for the same, as well as recognize complex conditions, refer them to an appropriate specialist and institute preventive measures for surgical diseases where appropriate.

Objectives

- At the end of the course the student should be able to:
- Take, record and present a focused clinical history which helps to lead to a diagnosis.
- Perform physical examination of patients with surgical conditions, eliciting and recording relevant positive and negative physical signs.
- Request relevant laboratory, radiological and other investigations for confirmation of the diagnosis and other relevant evaluation of the surgical patient.
- Prescribe and perform various tests, procedures and activities necessary for preparation of patients for planned and emergency surgery as well as non-surgical therapy.
- Prescribe and carry out appropriate medical and surgical therapeutic measures for common surgical conditions and refer more complex conditions to competent specialists.
- Describe and execute an integrated interdisciplinary approach in the management of common surgical conditions.
- Teach and effectively supervise other medical and paramedical staff in his/her charge.
- Plan and execute basic research projects and prepare write-ups for reports, publication and other purposes.
- Use the library for study and literature search from print and electronic media.
- Recognize and describe preventable surgical conditions and institute appropriate preventive measures.

CLINICAL CLERKSHIP GUIDELINES

INTRODUCTION

The College 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 College 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.

SFUCHAS 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 Forensic Medicine in semesters 8 and 9. The senior rotation will take place in the 10th semester.

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

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

GOALS

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

Clerkship Guidelines

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

Clinical clerks are expected to:

1. Perform an admission history and physical examination on at least five patients per week. For each patient the student will:
 - a. Limit initial formal contact with patient to one hour.
 - b. Submit for review within 24 hours a detailed write-up of the history physical findings, admission lab results, a formulation, and a plan of management.

- c. Read suggested information relevant to a major aspect of the patient's illness.
 - d. Follow closely the patient's daily progress, and report on this progress during ward rounds.
 - e. Assist interns with routine chores (data-gathering, etc.) necessary for the care of the patient.
2. Demonstrate to the consultant (during twice-weekly "students only" sessions) their level of skill in eliciting historical information and physical findings.
 3. Observe and assist with special procedures such as bladder catheterization, Nasal Gastric tube insertions, bone marrow aspirations, lumbar punctures, venepuncture, etc.
 4. Present cases during attending rounds.

The Consultant/Attending Specialist is expected to:

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

The ward resident is expected to:

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

The intern is expected to:

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

Responsibilities for the Clerk

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

**THE INSTITUTE OF ALLIED SCIENCES
DIPLOMA PROGRAMMES**

Summary of the Curriculum for Diploma Programmes

DIPLOMA IN PHARMACEUTICAL SCIENCES

Code	Subject	Theor y		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
Semester 1							
PT 107-108	Pharmaceutics Theory - I	75	6.0	-	-	75	5.0
PT 100-101	Hygiene	75	5.0	-	-	75	5.0
PT 102-104	Inorganic Chemistry	97.5	6.5	--	-	97.5	6.5
PT 105-106	Pharmaceutical Calculation - I	90	6.0	-	-	90	6.0
	Total	337.5	22.5	-	-	337.5	22.5
Semester 2							
PT 109-110	Anatomy & Physiology	120	8.0	-	-	120	8.0
PT 111-112	Pharmaceutics Microbiology	90	6.0	-	-	90	6.0
PT 113-114	Pharmaceutical Calculation –II	45	3.0	-	-	45	3.0
PT 115-116	Pharmaceutics Theory – II	75	5.0	-	-	75	3.0
PP100-102	Pharmaceutical Practical - I	-	-	180	4.0	180	4.0
	Total	330	22.0	180	4.0	510	26.0
Semester 3							
PT 200-201	Pharmaceutical Organic Chemistry Drugs & Medical Supplies	105	7.0	-	-	105	7.0
PT 202-203	Management	60	4.0	-	-	60	4.0
PT 204-205	Pharmacology I	60	4.0	-	-	60	4.0
PT 206-208	Pharmaceutical Calculation(III)	105	7.0	-	-	105	7.0
PT 209-210	Pharmaceutics Theory (III)	75	5.0	-	-	75	5.0
PP 200	Pharmaceutical Practical (II)	-	-	90	2.0	495	29.0
	Total	405	27.0	90	2.0	495	29.0
Semester 4							
PT 211-213	Pharmacognosy	105	7.0	-	-	105	7.0
PT 214	Forensic Pharmacy I Drugs & Medical Supplies	15	1.0	-	-	15	1.0
PT215-216	Management (II)	52.5	3.5	-	-	52.5	3.5
PT 217-218	Pharmacology (II)	60	4.0	-	-	60	4.0
PT 219-220	Pharmaceutics Theory (IV)	75	5.0	-	-	75	5.0
PP 202	Pharmaceutical Practical (III)	-	2.0	90	2.0	90	2.0
	Total	292.5	26.0	90	2.0	397	28.0
Semester 5							
PT 300	Introduction to entrepreneurship	15	1.0	-	-	15	1.0
PT 301-302	Pharmacology III	30	2.0	-	-	30	2.0
Semester 6							
PT 314	Community Pharmacy	30	2.0	-	-	30	2.0
PT 305-308	Pharmacology	90	6.0	-	-	90	6.0
PT 309-310	Pharmaceutics Theory VI Drugs & Medical Supplies	90	6.0	-	-	90	6.0
PT 311-313	Management III	105	7.5	-	-	105	7.5
PT 315-316	Forensic Pharmacy III	75	5	-	-	75	5.0
PP 302	Pharmaceutics Practical V	-	-	67.5	1.5	67.5	1.5
	Total	390	26.6	67.5	1.5	457.5	28.0

DIPLOMA IN MEDICAL LABORATORY SCIENCES

Code	Course name	Lectures		Practical		Total	
		Hrs	Units	Hrs	Units	Hrs	Units
Semester 1							
LS 100-102	Anatomy (I)	99	6.6	-	-	99	6.6
LS 106-109	Biochemistry (I)	96	4.6	-	-	96	4.6
LS 114-115	Molecular biology	46	3.0	-	-	46	3.3
LS 116	Basic Sciences	45	3.0	-	-	45	3.0
LS 117-119	Communication skills	32	2.1	-	-	32	2.1
LS 120-121	Introduction to Information Technology	22	1.5	36	0.8	56	2.1
Total		340	20.8	36	0.8	374	21.7
Semester 2							
LS 103	Anatomy (II)	45	3.0	-	-	45	3.0
LS 104-105	Human Physiology	114	7.6	-	-	114	7.6
LS 110-112	Biochemistry (II)	96	6.4	-	-	96	6.4
LS 116-126	Introduction to Health Laboratory Sciences	72	4.8	-	0.2	72	4.8
Total		327	21.8	-	0.2	327	21.8
Semester 3							
LS 200-201	Blood Transfusion I	47	3.2	32	0.7	79	3.8
LS 206-209	Clinical Chemistry I	72	4.8	10	0.2	82	5.0
LS 214-217	Haematology I	54	3.6	28	0.6	82	4.2
LS 221-224	Health System Research	32	2.1	-	-	32	2.1
LS 225-226	Histopathology/Morbid Anatomy I	54	3.6	14	0.3	68	0.9
LS 229-232	Microbiology/Immunology I	65	4.3	24	0.5	72	4.8
LS 237-238	Parasitology I	54	3.6	18	0.4	72	4.0
LP 241	Practical I	-	-	180	4.0	180	4.0
Total		378	25.1	306	6.7	684	31.8
Semester 4							
LS 202-205	Blood Transfusion II	52	3.4	24	0.5	96	3.9
LS 210-213	Clinical Chemistry II	45	3.0	15	0.3	60	3.3
LS 218-220	Haematology II	56	3.7	19	0.4	75	4.1
LS 227-228	Histopathology/Morbid Anatomy II	42	2.8	18	0.4	60	3.1
LS 233-236	Microbiology II	56	3.7	15	0.3	71	4.0
LS 239-240	Parasitology II	61	4.0	19	0.4	80	4.4
LP 242	Practical II	-	-	54	1.2	54	1.2
Total		312	20.6	164	3.5	453	24.1
Semester 5							
LS 300-302	Clinical Chemistry III	60	4.0	19	0.4	79	4.4
LS 306-307	Haematology III	64	4.2	14	0.3	78	4.5
LS 312-315	Health Lab. Management	31	2.0	-	-	31	2.0
LS 316-317	Histopathology/Morbid Anatomy III	56	3.7	14	0.3	70	4.0
LS 320-321	Medical Entomology I	37	2.4	9	0.2	46	2.6
LS 324-325	Microbiology III	54	3.6	10	0.2	64	3.8
LP 332	Practicals III	-	-	66	1.4	66	1.4
LP 332	Field Practice	-	-	320	7.1	320	7.1
Total		302	19.9	452	10.0	754	29.9
Semester 6							
LS 303-305	Clinical Chemistry IV	50	3.3	14	0.3	54	3.6
LS 308-309	Haematology IV	56	3.7	14	0.3	60	4.0
LS 328-330	Health and Management	31	2.0	-	-	31	2.0
LS 318-319	Histopathology/Morbid Anatomy IV	70	4.6	19	0.4	89	5.0
LS 322-323	Medical Entomology II	37	2.4	10	0.2	47	2.6
LS 326-327	Microbiology/Immunology IV	43	2.8	10	0.2	47	3.0
LP 333	Practical IV	-	-	67	1.4	67	1.4
Total		287	18.8	134	2.9	395	21.7

CERTIFICATE IN MEDICAL LABORATORY SCIENCES

The main objective of this course is to train Health Laboratory Assistants who must be able to:

- a. Make early, reliable and correct laboratory diagnosis at primary and peripheral levels that will determine suitable treatment for the patient, in order to minimize the cost of making wrong treatment.
- b. Help the clinician to make early decisions whether to refer patients for further management at a higher level.
- c. Improve the quality of health care by better surveillance and recognition of common disease epidemics or rare diseases in the community, by utilization of laboratory information and provision of relevant epidemiological data.
- d. Give health education to the community on common diseases.
- e. Ensure proper management of the peripheral laboratory and exercise preventative maintenance of the laboratory equipment.
- f. Attend various health emergency e.g. Cholera epidemics, etc

Admission Requirements:

- (a) Direct Entry Requirements
A candidate must have a Certificate of Secondary Education (O-Level) or equivalent with at least 2 “D” passes in Biology, Chemistry, Physics or Mathematics **OR**
- (b) Equivalent Entry Requirements
Form IV leavers who have attended one year course in the medical sciences but subject to passing an Entrance Examination.

Duration of the Certificate Programme:

The certificate programme is scheduled to run under a semester system in which there are 18 teaching weeks plus 2 examinations weeks in each semester. The Certificate in Medical Laboratory Sciences is designed to run for two (2) years.

Structure of the programme and indicative training modules:

CODE	COURSE TITLE	UNITS
First year (Semester I)		
RCM 100	Anatomy and Physiology	6
RCM 101	Biochemistry	4
RCM 102	Laboratory Safety and First Aid	6
RCM 103	Laboratory Instrumentation	4
RCM 104	Microscopy	6
RCM 105	Specimen Collection	4
First Year (Semester II)		
RCM 106	Parasitology – Theory	6
RCM107	Parasitology – Practical	3
RCM 108	Microbiology/Immunology -Theory 1	6
RCM 109	Microbiology/Immunology - Practical 1	3
RCM 110	Haematology – Theory 1	6
RCM 111	Haematology- Practical 1	3
RCM 112	Clinical Chemistry- Theory 1	6

RCM 113	Clinical Chemistry- Practical 1	3
RCM 114	Blood Transfusion- Theory 1	3
RCM 115	Blood Transfusion- Practical 1	3
RCM 116	Histopathology	3
Second year (Semester III)		
RCM 200	Entomology- Theory	5
RCM 201	Entomology- Practical	2.5
RCM 202	Microbiology/Immunology- Theory	5
RCM 203	Microbiology/ Immunology- Practical 2	2.5
RCM 204	Haematology – Theory 2	5
RCM 205	Haematology- Practical 2	2.5
RCM 206	Clinical Chemistry- Theory 2	5
RCM 207	Clinical Chemistry- Practical 2	2.5
RCM 208	Blood Transfusion Theories 2	2.5
RCM 209	Blood Transfusion- Practical 2	2.5
RCM 210	Quality assurance	2.5
Second Year (Semester IV)		
RCM 211	Field Work	10
RCM 212	Laboratory Management and Administration	4
RCM 213	Communication Skills/Counselling	4
RCM 214	Primary Health Care Concepts	4
RCM 215	Clinical Laboratory Practice	10
RCM 216	Laboratory Ethics	4
RCM 217	Quality assurance in health care delivery	4
RCM 218	Blood transfusion/Haematology theory	7.5
RCM 219	Blood transfusion/Haematology practical	5.0
RCM 220	Clinical Chemistry/Histology Theory	2.5
RCM 221	Clinical chemistry/History Practical	2.5
RCM 222	Microbiology Immunology Theory	5.0
RCM 223	Microbiology Immunology Practical	2.5
RCM 224	Parasitological/Entomology Theory	5.0
RCM 225	Parasitological/Entomology Practical	2.5

Prepared by

**Office of the Principal
St. Francis University College of Health and Allied Sciences
P. O. Box 175, Ifakara, Morogoro
Phone: 023-2625376, fax: 023 - 2625334
Email; principal@sfuchas.ac.tz, Website: www.sfuchas.ac.tz**