

KILIMANJARO CHRISTIAN MEDICAL UNIVERSITY COLLEGE

(A Constituent College of Tumaini University Makumira)



FACULTY OF NURSING

REVISED CURRICULUM FOR THE BACHELOR OF SCIENCE IN NURSING (BScN)

IN-SERVICE TRAINING

(UQF Level 8)

THREE YEARS PROGRAMME

MARCH, 2018

1. **Institutional Profile** delimited to:

1.1 Name of institution: **Kilimanjaro Christian Medical University College (KCMUCo)**

1.2 Cluster of institution(Autonomous/Non-autonomous- College, Center, Institute or University) **Semi-Autonomous- Constituent College**

1.3 Nature of Provider (private, public, private public partnership) :**Private**

1.4 Programme host department: **Faculty of Nursing**

1.5 Head of Department and his/her contacts (*please include postal address, email, mobile and land landline telephone numbers*) **Rogathe Machange: Ag. Dean, Faculty of Nursing**

KILIMANJARO CHRISTIAN MEDICAL UNIVERSITY COLLEGE P.O BOX

2240, MOSHI, TANZANIA Landline: +255 272751837, MOBILE: +255 758 034 644

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<http://www.kcmuco.ac.tz/>

2. **Programme Details** on:

2.1 Proposed programme title: **Bachelor of Science in Nursing**

2.2 Programme Cluster: **Medicine, Veterinary and Allied Health Sciences**

2.2 Programme sub-field (*the discipline of the programme to be taught e.g. nursing, psychology, physics etc.*) **Nursing**

2.4 UQF level: **UQF Level 8**

2.5 Duration (years, *semesters and months, also the total credits of the programme should be stated*): **3 years, 6 semester, 36 months, 360 credits.**

2.6 Programme Status (*if is full time/ part time*): **Full time**

2.7 Mode of delivery (*if is face to face, mixed, out-reach, by distance, online, etc.*): **Face to Face**

2.8 Location of the delivery (*where the actual training will be based*): **Kilimanjaro Christian Medical University College, Longuo B, Sokoine Road, Moshi.**

2.9 Proposed intake numbers (*initial intake number and expected intake in the next 4 academic years*)

Year	2018	2019	2020	2021
Number of students(intake)	45	45	45	45

2.10 Entry Requirements/Qualification (*should be broad enough to expand access*)

The following criteria conform to the minimum entry criteria of Kilimanjaro Christian Medical University College (A constituent college of Tumaini University Makumira) and TCU:

- Ordinary Level Secondary Education Certificate with two credits with a “C” in Biology and Chemistry and “D” in Physics/Mathematics or four passes in biology, chemistry, physics and mathematics.
- A Diploma in **Nursing** certificate with an average of “**B+.**” or **GPA of 3.5** from an approved and recognized institution by TCU or NACTE in anatomy, physiology, pathology, physiotherapy / therapeutic skills, and clinical practice during the period of diploma study OR

- BSc (Lower second) majoring in Physics/Mathematics, Chemistry, Biology/Zoology.
- Relevant Advanced level Secondary School Education certificate is an added advantage.
- The applicant must have at least 3 years work experience.
- Applicant who have a valid license to practice nursing and midwifery from the professional regulatory body of the respective country
- Equivalent foreign application as established by regulating authority – Tanzania Commission for Universities.

2.11 Nature of Practical training or field work attached to programme (*if there will be field practical/attachment(off-Campus or on-campus) and how will it be organized and assessed*)

There shall be both on campus and off campus practical training. On campus practical training Students shall acquire theory and then practice in the laboratory, departments, and in clinical areas where as off campus practical training will include field work in the community, leadership to DNO and RNO rotation, Maternal and child, Mental Health and research.

Students shall rotate in selected departments (Mirembe National Hospital, Community Health Practice in the village, Antenatal and postnatal within Moshi Municipal) to meet stated learning outcomes. Students will practice in skill laboratory during theoretical teaching and thereafter transfer skills into actual community, clients/patients interactions. Students will conduct research both clinical and public related topics to find solutions on existing problems in the community.

2.12 List of other approved programmes in the host department/faculty/college/school in the following format;

S/N	Programme name	Date & Year Approved	Cluster	Student enrolment	Qualified Academic Staff available			
					Doctorate Degree	Master degree	Bachelor Degree	Total
1	BSc Nursing (Preservice programme)	2016	University	Year 1: 0	7	10	-	17
				Year 2: 44	-	11	2	13
				Year 3: 105	3	10	1	14
				Year 4: 40	-	5	-	5
2	MSs Midwifery	2016	University	Year 1: 0				
				Year 2: 6	1	2	-	3
3	BSc Optometry	2016	University	Year 1	7	1	3	10
				Year 2	-	1	3	4
				Year 3	-	1	3	4
				Year 4	-	1	3	4

N.B. A detailed list of the above academic staff with qualifications, rank and employment status should be indicated using the format indicated in item 9

3. Rationale for Programme Development or Review:

3.1 Justification of the programme undertaken (*should include market survey/situational analysis which will lead to the identification of the gap to be filled by the proposed programme: e.g. what a programme intends to achieve? Does it meet the specific needs in the sector? Does it benefit the society and the economy? How does it help achieve the objectives of the UQF*). Append situational analysis or market/job survey report

In responding to country vision and mission of industrialization in Tanzania, health care services needs critical strategies to render health of the communities in order to be productive both in industries and other sectors to promote country economies. The technical education and on job training is fundamental for improving performance both primary and tertiary health care facilities. Moreover, the need assessment conducted by KCMUCo and other national published documents calls for review of the existing curriculum to meet the knowledge and skills gap within the scope of nursing practice to meet the demand of the community in technology, cultural diversity and global nursing in the context of local and international perspectives.

Shortage of nurses and other health workers is impairing the provision of essential life interventions such as child immunization, safe pregnancy and delivery services for mothers and access to treatment to HIV AIDS, Malaria, and Tuberculosis among others. This shortage is also a major obstacle for a health system's ability to respond to chronic diseases and other health challenges. On the other hand, the availability of quality health care is inadequate, due to the fact that trained health workers are inequitably deployed and it is estimated that only 32% of the existing primary health facilities are manned by skilled workforce (PHSDP, 2007- 2017).

There are a low number of nurses that does not conform to international and national staffing levels. Through observation, complains from health workers and the public, there have been a constant outcry of nurse's shortage and especially in the era of HIV and AIDS and others chronic diseases including Neglected Tropical Disease (NTDs). The result, this shortage translates to high morbidity and mortality to all age groups who fail to access appropriate care at the time of need. According to Tanzania Population census (2012) MMR in Tanzania remained to be high 432/100,000 live births, far behind the accepted standards of MDG of MMR 193/100,000 as well as SDG of MMR 70/ 100,000 (WHO, 2015) and infant mortality is 52 deaths per 1,000 live births. However, TDHS&MIS (2015-2016) reported an increase of MMR in Tanzania of 556 per 100,000 difficulties to reach the target goal of SDG, MMR of 70/100,000 by 2030.

In 2015 the faculty of nursing at Kilimanjaro Christian Medical University College in collaboration with Duke University- United States of America worked on the collaborative research on task shifting to describe the scope of practice of nurses in four of the most underserved regions in health care service in Tanzania. Out of 4 regions (Shinyanga, Singida, Tanga and Mtwara) data were collected in 8 districts and included 14 health centers and 53 dispensaries. A total of 888 participants whereby service consumers, nurses, non-nursing health care workers, and managers were included **“Title:** Descriptive study of nursing scope

of practice in rural medically underserved areas of Africa, South of the Sahara (Msuya et al, 2017)”. The study revealed, despite of existing shortage of health personnel including nurses as the most pressing problems in the country. The available staff had inadequate knowledge and skill in various parameters that address the review of the curriculum to meet the demands of the community and changing trends of health care professionals. The curriculum includes palliative care, nursing informatics, and epidemiology and biostatistics. However, entrepreneurship, emerging and re-emerging communicable and non-communicable diseases has been included in other modules to fill the gaps that observed were existing in the previous curriculum.

Country strategic planning actions should focus on investing in people, in order to promote quality care through training nurses at higher level to enhance the performance of the health system. In this regard nursing curriculum cannot remain static; it must be responsive to changes in nursing practice, the society, the economy and changes in the nature of learning and teaching. The need assessment conducted also address a number of existing gaps in the country such as increase the number of nurses and midwives and improves women’s health to reduce maternal and infant mortality, and promotes health and wellbeing of Tanzanian population. The rationale for this programme is to achieve more suitable nursing education and training system, aligned with health sector employment requirements. Integration of national, regional and global nursing cultivates knowledge; skills and competencies to the wider market thus allow graduates to serve the need community.

3.2 Consultation process (*should include consultation with employers, relevant professional bodies, employment potential for the graduate etc. and append report on consultation(s) made as evidence*). In the programme design, the questionnaires were designed and distributed to key stakeholders and were asked to give their suggestions based on the strengths, gaps, competence for the BSc Nursing course. The following are some of them and their responses.

- Employers from government and non-government health facilities- there is a need to establish this to reduce shortage of staff, morbidity and mortality in the country.
- Former BScN graduates working in various settings – increase number of graduates for appropriate clinical decision making.
- Professional Bodies and Regulatory Authority – Tanzania Midwives Association (TAMA), Tanzania National Nurses Association (TANNA) and Tanzania Nursing and Midwifery Council (TNMC) – the program will ensure quality care rendered to the clients.
- Registered nurses currently working in the clinical setting – The Programme enhance professional development for nurses, to empower them with knowledge and skills on caring, teaching and research.
- Other health workers – there is a great shortage of staff especially nurses with BScN, hence the program is valid in the country.

- Employment potential: The graduate will remain in their primary employer since this is the in-service programme, however the chance for employment both to non-governmental and governmental is high since there is a great shortage of nurses in health care facilities and community at large.

3.3 Programme objectives and philosophy

Philosophy

Nursing is an art and science focusing on state of quality maintaining, supporting and restoring health and function. Through the nursing process we believe that, graduates will be able to assist and/or provide care to clients/patients, prevent diseases, achieve maximum health and maintain it. The nurse and nurse midwife is the key person to give the necessary care and advise to women, conduct deliveries, care of the newborns and make safe motherhood initiatives a reality.

Objectives

- Apply advanced knowledge, skills and appropriate attitudes relevant to nursing and midwifery practice in relation to promotive, preventive, curative and rehabilitation care services in the community.
- Demonstrate creativity and innovativeness in response to challenges essential in nursing practice and health care delivery
- Inculcate a culture of teamwork and build critical thinking and problem solving skills in nursing and health care practice
- Stimulate lifelong learning behaviour for nurses and advancement of nursing profession in response to global nursing context.
- Provide an international outlook of learning content and context so as to widen graduates opportunities into national, regional and international labour markets
- Conduct research and apply the findings in improving healthcare services

Purpose of the BScN programme

The purpose of BScN programme is to produce graduates who will;

1. Demonstrate high degree of competencies in managing nursing activities by applying clinical and cognitive scientific principles in health care settings.
2. Provide comprehensive care in managing patients/clients with different conditions in healthcare settings and community at large.
3. Demonstrate professional conduct, advocate for evidence based practice, interprets diagnostic tests and manage emergencies/disasters in community health services through information and communication technology.

3.4 Exit levels available with respect to UQF description (e.g. *Higher Certificate, Higher diploma, Postgraduate Certificate, Postgraduate Diploma, and M.Phil. etc. depending with the level of qualification. Refer to UQF table 2*)

There will be one final exit in this programme. Candidates will exit at UQF level 8 and will be awarded BSc Nursing degree, after passing all prescribed courses. The BScN will be conferred to candidates who meet all the KCMUCo of The Tumaini University – Makumira requirements in not more than four (4) years after their admission to BScN programme.

3.5 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. Refer to UQF table 4*)

Knowledge:

- Analyse nursing care of patients/clients in clinical and community setting in health promotion, prevention, curative and rehabilitation services.
- Describe management of patients/clients with medical and surgical conditions
- Interpret emerging and re-emerging diseases / conditions in the community
- Explain entrepreneurship in relation to health care provision in the community
- Compare national, regional and international health care provision in promoting quality nursing care

Skills

- Utilize a recognized nursing philosophy, psychosocial and spiritual aspect in nursing practice.
- Apply knowledge of basic sciences in provision of health services in the society.
- Apply scientific, political, economic and social science knowledge in analyzing and addressing professional and societal problems.
- Utilize research findings to enhance education, practice and management in nursing.
- Use evidence based practice in provisional of care.
- Apply leadership and managerial skills for improvement of health and nursing care within her/his scope of practice.
- Utilize the nursing processes in the delivery of health care services to all clients across their life-span and in all settings.

Competence:

- Demonstrate knowledge, skills, attitudes and practice relevant to nursing and midwifery care
- Demonstrate an understanding of how health care delivery systems are organized and financed and their effect on patient care services.

- Communicate information to facilitate decision making in provision of care to patients / clients/ families and community as large.
- Demonstrate competence in the teaching, planning, implementing and evaluating educational and health programmes in different settings.
- Exhibit professional knowledge, skills and competence in health promotion, risk prevention and reduction, in management and care of patients / clients
- Demonstrate an understanding and appreciation of personal and professional values and recognize their impact on decision making and professional behaviour as they relate to the provision of care to patients/clients.

4. **Programme Management** as regards to:

4.1 Entry Arrangement (*requirement for successful participation in this programme, selection process, policies and procedures with regard to allocation of places, appeals procedures etc.*)

i. *Requirement for successful participation in this programme*

Candidate will be allowed to be enrolled in the programme upon meeting admission criteria and paid the stipulated school fee by the college. Fresh students must register themselves within two weeks from the first day of the orientation week. All students (including on-going students) must register with the Admissions Office at the first two weeks of every semester or on return from vacation. Students will only be registered upon payment of prescribed fees whose amount shall be determined from time to time. Fees are payable in full at the beginning of the academic year or in two equal installments at the beginning of each semester. Continuing students must complete all registration formalities within two weeks of the beginning of the semester.

ii. *Selection process*

a) Procedure for application:

Advertisement of the programme will be available in the college website, Newspapers, Radio and Television. Brochure will be available at the college and faculty of nursing to advertise the course.

b) Admission process:

Eligible candidates will apply through KCMUCo. Application forms can be obtained from KCMUCo website (www.kcmuco.ac.tz). Online application will be used including all attachments required.

Completed application forms and all necessary supporting documents should be submitted to the admissions office at KCMUCo.; A copy of financial receipt in respect of application fees paid, Completed application forms with copies of certified certificates and Completed medical examination forms .The academic year begins in the month of October each year (unless otherwise stated).

Applications with relevant attachments should be addressed to the address below

The Admissions Officer
Kilimanjaro Christian Medical University College,
P.O. Box 2240, Moshi, Tanzania
Tel: +255 (027) 2753616
Fax: +255 (027) 2751351
E-mail: admission@kcmuco.ac.tz
Website: www.kcmuco.ac.tz

c) Screening and verification of certificates

Screening of certificates will be made at the college during registration in the first semester; however any authority in need of original for audit or otherwise students shall be required to submit in respective time when the need arises.

iii. Policies and procedures with regard to allocation of place, appeals procedures

The University is committed to fair, transparent and consistent admissions practices, and it believes that providing constructive feedback about an unsuccessful application will help an applicant to achieve a successful outcome in the future. The University will therefore provide feedback, when requested, to anyone whose application to study at undergraduate or postgraduate level has been unsuccessful. Following the provision of feedback, an applicant will have the right to appeal the selection decision, providing that there are sufficient grounds for an appeal. An applicant who wishes to make a complaint about the application process may do so using the University's complaints handling procedure. Please note that the complaints procedure cannot be used to challenge an academic decision to refuse an application. The University prefers to deal directly with applicants, and where possible, a request for feedback or the submission of an appeal should be made by the applicant, not by a third party. In cases where a request is submitted by a third party, data protection legislation may prevent the University from releasing information relating to an individual's application unless the University receives specific written permission from the applicant allowing them to deal with the third party. Should an applicant wish a third party to act on his/her behalf, for example because the applicant is under 16, or has disabilities which would make it difficult for him/her to submit an appeal or complaint directly, the applicant must provide written authorisation, including the name and contact details of the relevant third party.

4.2 Transfer and progression (*transfer route into this programme, transfer route from this programme, vertical articulation (higher qualifications) and horizontal articulations (other similar /same level qualifications)*).

- (i). Vertical progression- graduate from this programme will be able to join masters in nursing and other relevant courses offered at various universities e.g. Muhimbili University of health and allied Sciences, CUHAS, Nairobi University, Makerere, Duke University. Also graduate will be able to join Master of Public Health at KCMUCo, MUHAS, and CUHAS etc

- (ii) Horizontal progression- Not applicable for this programme;
- (iii) Transfer into programmes- students from other accredited institution under nursing Programmes are allowed to transfer their credits into this programme provided that the total credit transferred is not more than 240. And must pass all core courses in this programme and the transfer shall be approved by the Senate and later endorsed by TCU.
- (iv) Transfer out of the programme- Students undertaking this programme shall be allowed to transfer credit to other institutions of their choice, KCMUCo will issue the student achievement/performance/progress report to enable students' transferability

4.3 Arrangement for recognition of prior learning (informal and non-formal learning)-*(whether access to the programme is available through RPL)*

There is no recognition of prior learning in this BScN programme.

4.4 Learning assumed to be in place (pre- requisite-formal learning)- *The competencies and knowledge which the learner is assumed to have acquired, prior to enrolment in the qualification*

- Ordinary Level Secondary Education Certificate with two credits with a “C” in Biology and Chemistry and “D” in Physics/Mathematics or four passes in biology, chemistry, physics and mathematics.
- A Diploma in **Nursing** certificate with with an average of “**B+.**” or **GPA of 3.5** from an approved and recognized institution by TCU or NACTE in anatomy, physiology, pathology, physiotherapy / therapeutic skills, and clinical practice during the period of diploma study OR
- BSc (Lower second) majoring in Physics/Mathematics, Chemistry, Biology/Zoology.
- Relevant Advanced level Secondary School Education certificate is an added advantage.
- The applicant must have at least 3 years work experience.
- Applicant who have a valid license to practice nursing
- Equivalent foreign application as established by regulating authority – Tanzania Commission for Universities.

4.5 Transfer arrangement *(In the event that completion of programme delivery proves impossible for any reason to some or all students]*

- If the delivery of the programme is proved impossible, the student will be transferred to institution having the same programme namely, Hubert Kairuki Memorial University, Aghakan University, St. John's University of Tanzania.
- The university will provide academic progress to facilitate transfer.

4.6 Normal learning Matrix & Course Matrix (with course credits, hrs, core & electives/options, etc. The following is the example of normal learning matrix *(N.B. the % of time to be assigned can be determined with the help of table 5 in UQF). E.g. Semester 1 year 1*

PROGRAMME MATRIX

TABULATED OUTLINE OF MODULES AND CREDITS FOR BACHELOR OF SCIENCE IN NURSING

YEAR 1, SEMESTER 1								
Codes	Title of module	Lecture	Tutorial	Assignment	Independent studies	Practical training	Total Hours	Total Credits
KBBC 1101	Biochemistry	32.2	16.4	8.2	17	8.2	82	8.2
KBAN 1102	Anatomy	34.4	17.2	8.6	17.2	8.6	86	8.6
KBPH 1103	Physiology	34.4	17.2	17.2	17.2	-	86	8.6
KBCP 1104	Clinical Pharmacology	32.8	16.8	16.4	16.4	-	82	8.2
KBMI 1105	Microbiology/Immunology	32.8	8.2	8.2	8.2	24.6	82	8.2
KBPE 1106	Parasitology/Entomology	32.8	8.2	8.2	8.2	24.6	82	8.2
KBCC 1107	Communication and Computer Application Skills	10	20	20	20	30	100	10
TOTAL HOURS AND CREDITS IN SEMESTER 1							600	60
YEAR 1, SEMESTER 2								
Codes	Title of module	Lecture	Tutorial	Assignment	Independent studies	Practical training	Total Hours	Total Credits
KBBC 1201	Biochemistry	42.4	21.2	10.6	21.2	10.6	106	10.6
KBAN 1202	Anatomy	41.6	20.8	10.4	20.8	10.4	104	10.4
KBPH 1203	Physiology	41.6	20.8	20.8	20.8	-	104	10.4

KBPCP 1204	Clinical Pharmacology	38.4	19.2	19.2	19.2	-	96	9.6
KBMI 1205	Microbiology/Im munology	16	16	8	8	32	80	8.0
KBPE 1206	Parasitology/Ento mology	44	22	11	22	11	110	11
TOTAL HOURS AND CREDITS IN SEMESTER 2							600	60

YEAR 2, SEMESTER 3

Codes	Title of module	Lecture	Tutorial	Assignment	Independent studies	Practical training	Total Hours	Total Credits
KBDS 2308	Development Studies	24.8	12.4	12.4	12.4	-	62	6.2
KBAS 2309	Advanced Nursing Science	24	12	12	12	60	120	12.0
KBBS 2310	Behavioural Science	50.4	25.2	25.2	25.2	-	126	12.6
KBFF 2311	Foundation of Faith	24.8	12.4	12.4	12.4	-	62	6.2
KBLM 2312	Leadership and Management	28	14	14	14	-	70	7.0
KBRM 2313	Research Methodology	20	10	10	10	50	100	10.0
KBEB 2314	Epidemiology & Biostatistics	24	12	12	12	-	60	6.0
TOTAL HOURS AND CREDITS IN SEMESTER 3							600	60

YEAR 2, SEMESTER 4

CODES	Title of Module	Lecture	Tutorial	Assignment	Independent studies	Practical Training	Hours	Credits
KBDS 2408	Development Studies	24	12	12	12	-	60	6
KBAS	Advanced	60	7.5	7.5	7.5	67.5	150	15.0

2409	Nursing Science							
KBLM 2412	Leadership & Management	32	16	16	16	-	80	8
KBRM 2413	Research Methodology	-	-	-	-	31.0	310	31
TOTAL HOURS AND CREDITS IN SEMESTER 4							600	60
YEAR 3, SEMESTER 5								
Codes	Title of module	Lecture	Tutorial	Assignment	Independent studies	Practical Training	Total Hours	Total Credits
KBAS 3509	Advanced Nursing Science	28	14	14	14	70	140	14
KBLM 3512	Leadership & Management	16	-	-	-	64	80	8
KBCH 3515	Community Health Nursing	30	-	-	30	240	300	30
KBNE 3516	Nursing Education	40	10	10	10	30	100	10
TOTAL HOURS AND CREDITS IN SEMESTER 5							600	60
YEAR 3, SEMESTER 6								
Codes	Title of module	Lecture	Tutorial	Assignment	Independent studies	Practical Training	Total Hours	Total Credits
KBAS 3609	Advanced Nursing Science	28	14	14	14	210	280	28
KBCH 3615	Community Health Nursing	24	12	12	12	-	60	6
KBNE 3616	Nursing Education	40	10	10	10	30	100	10
KBNI 3618	Nursing Informatics	24	12	12	12	-	60	6
KBPC 3619	Palliative care	40	10	10	10	30	100	10

TOTAL HOURS AND CREDITS IN SEMESTER 6	600	60
TOTAL HOURS AND CREDITS FOR YEAR 1, 2, & 3	3600	360

1 Credit = 10 Notion hours (Learning Hours).

4.7 Benchmarking and international comparability (Identify *similar programmes locally and internationally, access them and say something learnt as best practice from the process*)

Similar programmes locally and internationally which were benchmarked when preparing the program are:

Locally

Courses in the BScN programme are comparable to others offered in the universities in Tanzania namely, Hubert Kairuki Memorial University on duration of the programme, mode of delivery and some of subject contents. Muhimbili University of Health and Allied Sciences for some of the subject content.

Internationally, benchmarking was done against The Eastern, Central and South Africa College of Nursing (ECSACON) for some of the contents of the course. This will make graduates of the programme compete in labour market both locally and internationally.

4.8 Programme evaluation procedures (*specify time-frame for review of this programme, alumni, employers, faculty & student evaluation mechanisms in place and procedures for obtaining feedback*)

The relevancy and implementation of the programme objectives will be monitored by internal and external examiners. All students will be required to evaluate the modules at the end of each academic year. Furthermore the implementation of the programme will be reviewed by the staff during the review sessions. The overall curriculum will be reviewed within three to five years. Feedback from employers will be obtained through tracer study. Any change in this program will be made based on the evaluation findings from stakeholders following TCU and University guidelines. The department and other stakeholders will be responsible for evaluation of the curriculum. Departmental staff will critique the contents inline with the changes observed in nursing practice. They will be responsible to carry out research and tracer study to service consumers to identify any gaps that needs to make improvement of the course outline within the curriculum. Any changes should be reported to the academic board. Curriculum review will involve all stakeholders including academic staff, students, service consumers and other stakeholders such as community to make comprehensive changes of the curriculum that could meet the demand of the society.

The departmental staff are responsible to make changes in the curriculum based on the identified gaps, thereafter the department will conduct a workshop of stakeholders including TNMC, TANA, employer, graduates, and other service consumers for their inputs in the preliminary draft of the curriculum, moreover the department then will forward to academic board for various critiques and then to the SCACA, finally the curriculum will be presented to the Senate and lastly submit to TCU for Approval of the curriculum.

Students will be given an opportunity to evaluate academic staff and the overall of delivery of the curriculum to the institution. Valid comments will be included in improvement of the services delivered by the department both academic and non-academic activities within the programme.

5. Assessment Details which indicate:

5.1 Programme assessment strategy (for both, formative and summative assessment)

There shall be a formative assessment (Continuous Assessment) and summative assessment (Semester Examination) during the delivery of the programme. Continuous Assessment shall carry 50% and the Semester Examination 50% respectively.

Examination component contribution

- Formative Assessment (Continuous assessment (CA))
 - Assignment
 - Objective Structured Clinical Examination (OSCE)
 - Oral-Practical assessment
 - Written tests
- Summative Assessment (End of Semester examination (SE))
 - End of semester written examination
 - Oral-Practical examination.
 - Logbook- general nursing care
 - Portfolio
- Research and/or Field work report

5.2 Examination general format & examination regulations,

Examination will be conducted based on specific course, year of study and examination schedule. The format shall comprise;

5.2.1 Examination general format

- a) Written examinations
- c) Practical examinations
- d) Field visit / community field report
- d) Research Projects

5.2.2 Examination regulations

Invigilation and conduct of Examinations

- a. Invigilators who are normally academic members of staff shall be appointed and briefed by the Head of Department who is the Chief Internal Examiner.
- b. The internal Examiner for any particular examination paper shall normally be one of the invigilators.
- c. Names of invigilators for various examination time-tables shall be sent to the Deputy Provost for Academics one month before the start of the examinations.

- d. At least two invigilators shall be allocated to each examination room and at least one must be in the examination room through out examination time.
- e. The Deputy Provost for Academic Affairs shall appoint one of the Senior Invigilators to co-ordinate invigilation in each examination room where several examinations are taking place.
- f. Instructions to candidates and invigilators shall be published at the end of each semester by the Deputy Provost for Academic Affairs, setting out details of procedures to be followed in the conduct of examinations.
- g. The Chief Invigilator shall collect all examination papers and related materials from the Examination's Office, at least half an hour before the start of all respective examinations.
- h. The Chief Invigilator shall ensure that all examinations start and end on time.
- i. The Invigilators, under the direction of the Chief Invigilator shall be responsible for the security and laying out of the examination papers and for such other duties as may be specified in the instructions to invigilators.
- j. Invigilators shall remain in the examination room throughout the examination.
- k. In case where the Invigilator is unable to be present at the start of the examination, he/she shall inform the Head of Department who shall then nominate a replacement from the Department concerned.
- l. Internal Examiners shall certify the total number of scripts received from the record of candidates who have taken the examination.
- m. There shall be an examination report sheet in which the students shall sign upon submission of the script and the invigilators comments about the conduction of the examination.

Irregularities in conduction of Examinations

- a. All cases of Examination irregularities shall be reported to and handled by the office of the DPAA. Inappropriate conduct by a student concerning examinations impairs academic integrity, and will subject the offending student to suspension .
- b. The Examination Irregularities Committee (EIC) shall be appointed by the DPAA. The EIC will handle and advise the College Academic Board on reported cases of examination irregularities. Such examination irregularities can include, but are not limited to:
 - i. No unauthorised material (for example purses, electronic equipment such as cellphones and pagers) shall be allowed into examination premises.

- ii. Reading other candidate's answer scripts.
- iii. Attempting to copy or making reference to the unauthorized materials in the examination room.
- iv. Communicating with other students, either verbally or through other means, during the examination without permission from the invigilator.
- v. Permitting another candidate to copy from someone's paper.
- vi. Impersonation or endeavouring to obtain assistance from any other candidate directly or indirectly or endeavouring to give assistance to any other student.
- vii. Removing examination answer books/sheet from examination room.
- viii. Starting to attempt the examination before being authorised to do so.
- ix. Continuing the examination after being ordered to stop.
- x. Borrowing of materials such as calculators, rulers, correcting fluid and pens among students during examinations.
- xi. Destroying or attempting to destroy evidence relating to any suspected irregularity.
- xii. Failing to comply with any other examination rules, regulations, or directions given by an invigilator.
- xiii. Plagiarism and Reproducing the works of another person or persons in course work assignments without acknowledgement and with intent to deceive.
- xiv. Absconding examinations.

Procedure for dealing with irregularities

Prior to the beginning of each examination, invigilators shall draw to the attention of candidates the seriousness of irregularities in examinations.

If an invigilator suspects a student of examination irregularities the following steps shall be taken:

- i. The student shall be approached immediately.
- ii. Any unauthorized material in the possession of the students, as well as his/her answer book and examination question paper shall be confiscated.
- iii. Ensure that the incidence is witnessed by another person to verify the matter
- iv. The invigilator shall report in writing to the Deputy Provost for Academic Affairs within 24 hours;

- v. The Deputy Provost for Academic Affairs shall require the student to submit a written statement concerning the incidence within 24 hours after receiving the invigilator's report
- vi. The Deputy Provost for Academic Affairs shall set up an investigation committee which should complete the investigation within two weeks.
- vii. The investigation committee shall submit the report to the Deputy Provost for Academic Affairs, who shall in turn table the matter before the Academic Board.
- viii. The Academic Board shall take appropriate action, and if need be make appropriate recommendations to Senate.
- ix. While the matter is under investigation, the candidate may attempt other papers
- x. An internal examiner, who in the course of marking examination scripts or research or assignment papers suspects that an academic irregularity has taken place, shall report in writing the matter to the Deputy Provost for Academic Affairs, through the respective Faculty Dean.
- xi. The Deputy Provost for Academic Affairs will follow the procedures vii) to ix) above.
- xii. If it is established that the student committed an examination irregularity, he or she shall be expelled from the University forthwith.
- xiii. A candidate who causes disturbances or any form of chaos during the examination shall be evicted from the examination room immediately and may be prohibited by the DPAA from sitting for subsequent examinations. The fate of such a candidate shall be determined by the College Academic Board upon investigation by the EIC.

5.3. Examination moderations, practical and research report assessment where applicable,

5.3.1 SETTING AND MODERATION OF EXAMINATIONS

- a) An Internal Examiner is normally an academic member of staff at the level of a Lecturer or above who has taught the course being examined.
- b) Supplementary and Special Examination papers shall be set simultaneously with the Regular University Examination papers.

- c) Examination papers shall be internally moderated by the Faculty/ Departmental Moderation Committee and the moderated exam should bare the signature af all those involved, also External Examiners shall be involved after the examination.
- d) The moderated and sealed examination paper shall be sent to the Deputy Provost for Academics and/or the Examination Officer for safe keeping before the start of the examinations.
- e) Strict precautions shall be taken to ensure that there are no examination leakages.

SPECIAL EXAMINATIONS

- a) A special examination is one which is taken at a time other than the regular examination period as the result of extenuating circumstances.
- b) A student may, in extenuating circumstance, be allowed to postpone sitting for an examination, provided he or she reports the matter in writing, before the examination to the Deputy Provost for Academic Affairs through the Dean of Students and the Dean of Faculty.
- c) Such a report shall be accompanied by authentic supporting documents.
- d) With the exception of emergency cases such requests must be submitted to the office of the DPAA at least 48 hours before a given examamination is due to start.
- e) A student shall be deemed to be eligible for special examinations after receiving a letter of authorization to take special examinations from the Deputy Provost for Academic Affairs.
- f) Special examinations shall be conducted at such time, coincident with supplementary examinations or any other convinient time before end of academic year-
- g) When a student is allowed to sit for a special examination, he/ she shall be considered to be attempting the examination for the first time, and shall be accorded all of the rights provided for in the examination regulations.
- h) Special examinations shall not be availed to students who have absented themselves from regular examinations without written permission.

SUPPLEMENTARY EXAMINATIONS

- a)

A supplementary examination is one which is taken
by a student after he/she fails a paper
in a regular or in a special examination.

- b) A student shall be allowed to sit for a supplementary examination only if he/she has failed in less than 50% of the prescribed examination papers.
- c) The supplementary examination must be taken only in the failed paper(s)
- d) Supplementary examinations shall be conducted at a convenient time determined by the Academic Board within the concerned academic year.
- e) The pass mark for supplementary examination is a “B” irrespective of the score.
- f) A supplementary examination paper fee of Tsh. 50,000 must be paid for each supplementary examination paper provided to a student.
- g) The fee must be paid in advance to the finance department to cover the University’s expenses of providing a supplementary examination.

POSTPONEMENT OF STUDIES

- a) A student may, in extenuating circumstances postpone studies
- b) The student shall report the matter in writing, to the Deputy Provost for Academic Affairs through the Dean of Students, the Dean of Faculty or respective directorate.
- c) Such a report shall be accompanied by authentic supporting documents.
- d) A student may be allowed to postpone studies for a reason which in the opinion of the Academic Board is strong enough to prevent one from pursuing studies effectively.
- e) No student shall postpone studies without written permission from the Deputy Provost for Academic Affairs.
- f) Such postponement shall be for a semester or an academic year as the case may be.
- g) The maximum period for a student to postpone studies shall be one year in the case of programmes of normal longevity of up to 4 years and 2 years for programmes of more than 4 years duration.
- h) The period of postponement shall not be counted towards the students’ registration
- i) A student may also be allowed to postpone studies for failure to pay student fees, deposits and charges
- j) On grounds of ill health provided the postponement has been recommended by a competent medical practitioner and approved by the University.
- k) Re-admission for a student who postponed studies on the ground of ill health is subject to a recommendation by a competent medical practitioner and approval by the University.

- l) Where practical, such a student shall be allowed to continue with his or her studies from the point at which he or she was when taken ill.

LEAKAGE OF EXAMINATION

(a) Definition

Any act which results in a candidate or candidates having access to, or knowledge of examination questions or of any unauthorized materials related to the examinations, before the scheduled date and time of the examination shall amount to leakage of examinations.

(b) Procedure for dealing with leakage of Examinations

- i) Any person suspecting leakage of a test or examination shall immediately report to the Deputy Provost for Academic Affairs.
- ii) Where there are strong indications that an examination leakage has taken place, the Deputy Provost for Academic Affairs, in consultation with the Provost shall cancel/ withdraw the examination and order a fresh examination to be set and administered.
- iii) The Deputy Provost for Academic Affairs shall set up by a committee to investigate the circumstances surrounding the suspected leakage.
- iv) Then investigating committee shall submit its findings to the Deputy Provost for Academic Affairs, who shall in turn table them before the Academic Board and if necessary the Senate.
- v) The Academic Board shall then take appropriate action, and if need be make appropriate recommendation to the Senate.
- vi) Where it is established that an examination leakage has taken place appropriate disciplinary action shall be taken against those found responsible for the leakage.

INSTRUCTIONS TO STUDENTS AND INVIGILATORS

- a) Candidates shall acquaint themselves with the instruction on the front page of the answer books/examination papers.
- b) Candidates shall ensure that they write their examination numbers, titles and the paper number on the answer books, including the continuation sheets.
- c) Examination Numbers will be issued each year and verified by the Deputy Provost for Academic Affairs. The numbers will be different from student Registration Numbers.

- d) Examination Numbers will be serialised in the following format:- e.g. TUMA/KCMUCo/MD/2013/250
- e) At all times during the examination, the examination numbers should be conspicuously placed on the desks.
- f) Candidates without examination numbers authorising them to sit for the examination will not be allowed to sit for the examinations.
- g) No student shall be permitted to enter the examination room after the lapse of 30 minutes from the commencement of the examination. However, if a candidate arrives before the first half hour has passed; the Invigilator may use his discretion in extending the time limit for the candidate provided no candidate has already left the room.
- h) All candidates are required to be present within the examination premises 30 minutes before the scheduled time of the examinations.
- i) No student will be allowed to leave the examination room during the first or last 30 minutes, except in cases of absolute emergency. Between these times, students may leave the room and be escorted to known common toilets. Students shall however sign out on leaving the examination room, and sign in when they re-enter the examination room.
- j) A candidate reporting late (more than 30 minutes after the start of examination) shall be barred from sitting for the examination and his/her case reported to the DPAA
- k) Misreading the examination timetable will not be regarded as 'sufficient cause' for missing an examination.
- l) No books, bags, notes, rough papers and any other paraphernalia should be taken by the candidates into the examination room. Candidates are not allowed to bring their own log tables and calculators in the examination room **unless there is an express provision otherwise in case of a particular paper.**
- m) A candidate is not permitted to enter examination venue with any inscriptions on any body part or clothing that can be construed as an aid to answering examination questions.
- n) Any unauthorized materials should be handed over to the Senior Invigilator before the examination starts.
- o) Invigilators shall have power to confiscate any unauthorised materials or aid brought into the examination room

- p) Invigilators shall have power to expel from the examination room any student who creates a disturbance in the examination room.
- q) At the end of the examination, and on the instructions from the senior invigilator, candidates shall be required to stop writing and assemble their scripts. The students shall hand in his/her scripts to the invigilator and sign to that effect.
- r) If, for any reason, such as sudden illness or other sufficient cause, a candidate is unable to attend an examination he should report the circumstances to the Deputy Provost for Academic Affairs at the earliest possible moment before the start of the scheduled examination.
- s) These instructions shall remain in force unless amended by the Senate upon recommendations of the College Academic Committee and the Senate sub-Committee for Academic and Curriculum Affairs (SCACA)

APPOINTMENT OF EXTERNAL EXAMINERS

- a) An External Examiner is normally a re-known academician in a University at the level of a Senior Lecturer or above possessing at least a Masters Degree in the field of his qualification.
- b) Senate shall appoint External Examiners on the recommendation of the College Academic Committee, upon presentation of Curriculum Vitae by the External Examiner.
- c) External Examiners shall be approved by the College Academic Committee in consultation with Senate.
- d) If the current External Examiners are being invited for the last time, departments and Faculties shall start searching for new External Examiners to ensure their appointment within the first month of the following academic year.
- e) External Examiners shall not have taught the subject to the students to be examined either as full time or part-time staff members of the University during the last four years.
- f) External Examiners can be appointed for three years consecutively followed by a recess of three years and possible re-appointment.

FUNCTIONS OF EXTERNAL EXAMINERS

- a) To Examine the Quality of Examination Papers

- b) To read and grade Research Papers/Dissertations/Theses
- c) Review the course content and curriculum
- d) Present a report on the examination to the Deputy Provost for Academic Affairs for presentation to the Faculty Boards.
- e) To visit the Library/ Laboratory and give their advice regarding the Library Holdings/Laboratory Equipment in respect of the concerned programme.
- f) To grade Oral Defence (viva voce)

MARKING AND MODERATION OF EXAMINATIONS

- a) External Examiners shall review any script to ensure consistency in marking, internal examiners shall be required to have a proper marking scheme.
- b) The Head of Department, as the chief Internal Examiner, shall ensure standardisation of marking between internal Examiners.
- c) After marking all the scripts, Internal Examiners shall enter Continuous assessment and the end of the year examination marks on the individual course mark sheets.
- d) All Internal Examiners are required to submit results, scripts, projects and assessment materials and records to the head of departments at least 24 hours before viva voce examinations are conducted.
- e) Staff members failing to meet the set examination deadlines without good cause, shall be subjected to disciplinary action according to prevailing regulations.
- f) The Head of Department shall give the scripts together with copies
- g) of the question papers, final marking schemes and mark-sheets to the External Examiner on arrival. Records of continuous assessments and projects shall be kept by the Head of department and be made available to the External Examiners.
- h) The External Examiner shall normally be expected to review extreme cases.

PROCESSING OF EXAMINATION RESULTS BY DEPARTMENTS, FACULTY EXAMINERS' COMMITTEE, FACULTY BOARD, COLLEGE EXAMINATION COMMITTEE, COLLEGE ACADEMIC BOARD AND SENATE

Processing by Departments

- i. A meeting of the Department Board of Examiners shall consider the result and make recommendations to the Faculty Board of Examiners.

- ii. The External Examiners will be expected to attend the Departmental Board of Examiners' meeting.
- iii. The External Examiner shall provide a general overview of performance.
- iv. The final mark in any subject shall be derived from continuous assessments and the end of year examinations.
- v. Unless otherwise approved by Senate, each course shall be graded out of a maximum of 100 marks.
- vi. Continuous assessments as approved by the Senate shall vary depending on the nature of the course.
- vii. The pass mark as approved by the Senate shall vary depending on the nature of the course in question.
- viii. Unless otherwise specified by Senate, the Examination grading system shall be as follows.

2: Unless otherwise stated, the final decisions are made at the end of the audit year

- a) The Semester Grade score shall be rounded up/down to one decimal place.
- b) The Final Grade score shall be truncated to one decimal place.
- c) After the Departmental Board of examiners meeting, all the relevant examination mark sheets shall be accurately completed, checked and signed by the Internal Examiner, the Head of Department, the Dean (where applicable) and the External Examiner(s).
- d) All documents tabled during Departmental Boards of Examiners Meeting shall be reclaimed from members of the Board at the end of the Meeting.
- e) Internal Examiners and External Examiners shall not divulge marks to students.
- f) All examination results are confidential until the Faculty Boards of Examiners consider them.
- a) Degrees in Medicine should be awarded to successful candidates without classification.

Processing by the Faculty Examiners' Committee

- a) There shall be faculty/directorate/Institute Examination Moderation Committees (Examiner's Committee) responsible for moderating end of semester examinations.

- b) Moderation of examinations shall also involve External Examiners who shall be invited to examination marking and overall assessment at the end of the academic unit.
- c) Moderation shall include evaluating the quality of semester course assessment tests, copies of which shall have been deposited at the examination office/faculty/Directorate hosting the degree or non-degree programme for easy availability to moderation committee and the external examiner
- d) The Faculty Examiners' Committee shall forward the provisional results and recommendations to the Faculty Board/Directorate
- e) College Academic Committee for final decision and to Senate for approval.

Processing by College Examination Committee

Processing by the College Academic Board

- a) All examination results shall be presented to College Academic Board after the College Examination Committee meeting.
- b) All examination results are not official until approved by the College Academic Board/or Senate.
- c) College Academic Board may accept, reject, vary or modify results and or recommendations from the Faculty Board of Examiners and College Examination Committee.
- d) No department or Faculty has the authority to alter examination marks/results once these have been approved by the Academic Board and the Senate
- e) The results for passed candidates shall be released in transcript form indicating percentage marks as well as letter grading in accordance to the grading system shown above in section 14(a)
- f) Lost transcripts will be replaced at a fee of TShs 20,000/-.

Processing by the Senate

- i) All the Constituent College Academic Board Reports on examinations shall be submitted to the Senate.
- ii) The Senate shall direct or recommend to the College Academic Board on the general conduct of examinations in the Colleges.
- iii) The Senate shall lay down general policies on involvement of external examiners and conduct of examinations in the Constituent Colleges.

- iv) The regulations/procedures in moderation of examinations in the Colleges shall be approved by the Senate

Release of Examination Results

Final results of all students in every final examination shall be subject to review by the Faculty Board of Examiners, and University Senate/College Academic Committee. Disclosure of the examination results shall be made by the College Academic Committee not later than four weeks after the end of the examinations. The results shall be published, showing only the student examination number (for identification) and the letter grade obtained in the examination.

Disposal of Examination answer books and other scripts

Unless otherwise retained by the University Library for archival purposes, all used examination answer books/scripts shall be destroyed after the expiry of eighteen (18) months following final decision of Senate on the examination concerned. Examination results in electronic form shall be stored indefinitely in the Students' Academic Record Information System

5.4 Condition for continuation and discontinuation,

- a) Final student disposal shall be undertaken at the end of either semester of the academic year.
- b) Professional conduct, logbook, field work attachment report, practical, and dissertation assessment will also determine whether a student will proceed to the subsequent year of study or graduate.
- c) A student passing in all prescribed semester courses shall proceed to the subsequent year of study or graduate.
- d) A student who fails in <50% of the prescribed courses shall be allowed to sit for supplementary examinations in the failed courses within one-week after release of results in either semester (*this does not apply for the clinical years*).
- e) Student who fails in 50% of the prescribed courses in either semester shall repeat a year in the failed courses from studies in either semester.
- f) Student who fails in >50% of the prescribed courses in either semester shall be discontinued from studies in either semester.

- g) Additional examination regulations should be observed as stipulated on the specific program curriculum.
 - h) The maximum grade that shall be awarded where a supplementary examination has been passed shall be “B”. The same applies for a repeated course.
 - i) A candidate who fails Supplementary Examinations shall repeat the failed courses during the next academic year and sit for the examinations when they are scheduled. Repeating the courses shall include repeating the coursework.
 - j) Only student who failed the supplementary examination in none-core subject will be allowed to carry forward the failed course and they will not be allowed to graduate until they passes the courses
 - k) A candidate who fails after repeating the year of study will be discontinued from studies.
 - l) A candidate with a GPA of less than 2.0 after the Supplementary Examinations shall be discontinued.
- a. Students may also be discontinued from studies due to the following reasons:
- i Failure to attend regular scheduled examinations or tests unless caused by unavoidable extenuating circumstance
 - ii Committing examination/academic irregularities
 - iii Committing disciplinary offences as described in the “Tumaini University Makumira Students’ by-laws
 - iv Absconding from studies;
 - v Failure to attended at least 80% of the scheduled semester class period for each course
 - vi Missing more than 10 consecutive days of class
 - vii Failure to pay student fees, deposits and charges
 - viii Ill-health if recommended by a recognized medical practitioner

ISSUANCE OF TRANSCRIPTS

The University shall issue transcripts as shown here under (subject to revision):

- i) Partial transcripts/progress report will cost TShs 5,000
- ii) Full transcript will cost Tshs 20,000.
- iii) Certification of transcripts and certificates will be charged a minimum of Tshs. 5000/= for five copies and Tshs. 2000/= for each extra copy.

These rates are subject to revision from time to time.

REPLACEMENT OF LOST ACADEMIC CERTIFICATES

The University may issue a copy of an award certificate in case of loss of the original on the following conditions:

- (i) The applicant must produce evidence that the loss had been adequately publicly announced, including a written report from the Police.
- (ii) The applicant produces a sworn affidavit.
- (iii) The certificate or transcript so issued shall be visibly marked "DUPLICATE" A non-refundable fee of 50,000/= for Tanzanians and US\$40) for foreigners shall be charged, for a copy of the certificate or transcript issued.

Practical assessment

Students will demonstrate skills in the laboratory and put into practice in the clinical setting. In this regard an assessment will be based either in clinical setting or in Skill laboratory. Students will be assigned to demonstrate their skills in a given procedure. Continuous assessment will be done by internal assessor and other clinical staff based on the specified topic/subject. However at the end of the year, external examiner will assess both theory and practical aspect. Basically practical assessment involves Study tour/, Logbook, Case study during clinical rotation, Field report and research report,

5.5 Weight of each component in the final assessment of the programme

Continuous assessment (CA) 60%

Assignment 10% - Students will be given an assignment in a specified topic and the score will be converted into 10 % out of 60% of the continuous assessment.

Practical 30% - Students will demonstrate skills in the laboratory and put into practice in the clinical setting. In this regard an assessment will be based either in clinical setting (OSCE) or Skill laboratory (OSPE), students will be assigned to demonstrate their skills in a given procedure.

Written tests 20% - Written tests will base on the specified contents.

Semester examinations 40%

Written examination 20% and Practical examination 20% (where applicable)

Where research and field work report are applicable, it will carry 100% as an independent assessment using the guideline approved by the college.

5.5.1 Grading Scores Undergraduate Programs

Percentage range	70-100%	60-69%	50-59%	40-49%	35-39%	0-34%
Letter grade	A	B+	B	C	D	E
Points	5	4	3	2	1	0
Possible compliment	Excellent	Very Good	Good	Fail for supplementary	Fail for supplementary	Failfor supplementary

5.5.2 Five-Point Grading Sytem: Undergraduate And Postgraduate

Grade Point Range		
Undergraduate – UQF level 6,7 and 8	Postgraduate – UQF levels 9 and 10	Class of Award
4.4-5.0	4.5 – 5.0	First class ((and with Honours where applicable)
3.5-4.3	4.0 – 4.4	Second class (and with Honours where applicable) - Upper Division
2.7-3.4	3.0 – 3.9	Second class (and with Honours where applicable) - Lower Division
2.0 – 2.6		PASS

5.5.3 Diploma Grading Scores

Percentage range	75-100%	70-74%	65-70%	50-64%	40-49%	0-34%	-	0
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Letter grade	A	B+	B	C	D	F	I	Q
Points	5	4	3	2	1	0		
Possible compliment	Excellent	Very Good	Good	Fair	Weak	Poor		

5.5.4 DIPLOMA THE FIVE-POINT GRADING SYTEM

Grade Point Range	
Diploma NTA level 4,5 and 6	Class of Award
4.1-5.0	First class
3.5-4.0	Second class UPPER
3.0-3.4	Second class LOWER
2.0 – 2.9	PASS

NB:

1. In addition to scores from any optional courses, scores from all core courses must be included in computing the final grade for degree classification based on the minimum number of credits required to fulfill requirements for the degree award. The sessional and cumulative grade point averages (GPA) should be worked out as follows:

a. The letter grades will be assigned points as follows:

A	B+	B	C	D	E
5	4	3	2	1	0

6. Courses Description

Course outlines for all courses or modules to be taught and learnt within the programme are to be provided here-i.e course matrix. *(This section should follow the outline of each 6*

YEAR ONE: SEMESTER ONE

- i. Course Title: Biochemistry (KBBC 1101)**
- ii. Course status: Core**
- iii. Course Credits: 8.2**
- iv. Total Hours: 82**
- v. Course Aim:**

Biochemistry forms a bridge between biology and chemistry by studying how complex chemical reactions and chemical structures give rise to all forms of life and life's processes. The Medical Biochemistry course is designed to provide the novice student with a fundamental understanding of current concepts of human biochemistry and molecular biology. Hopefully the progression of topics will develop the subject in a fashion useful to the student, especially if he/she feels insecure about chemical and biochemical concepts.

vi. Learning Outcome

By the end of the course, the nursing student should be able to:-

- 1) Describe the chemistry of proteins, lipids and carbohydrates
- 2) Describe selected concepts in molecular biology.

- 3) Describe the principles of biological oxidation, oxidative phosphorylation and thermodynamics.
- 4) Describe the processes of metabolism
- 5) Describe hormone mechanisms and signal transduction.
- 6) Apply knowledge of body biochemical alterations in caring patients/clients.

vii. Course content

1. Review of Basic Concepts in organic and basic chemistry

- 1.1 Atoms, elements, compounds and bonding types, polar and non-polar compounds, forces that stabilize biological molecules
- 1.2 Chemical and physical change, types of chemical reactions
- 1.3 Acids and bases, buffers: water and pH
- 1.4 Important biochemical functional groups
- 1.5 ATP structure and its role as universal chemical energy currency
- 1.6 Cell biology

2. Structures, properties and functions of significant biological molecules

- 2.1 Carbohydrates
- 2.2 Amino acids
- 2.3 Lipids: TGs, Phospholipids, Sphingolipids, Plasmalogens, blood group antigens and fatty soluble vitamins
- 2.4 Nucleotides
- 2.5 Membranes structure, assembly and function including membrane transport
- 2.6 Enzymology:-
 - 2.6.1 Bioenergetics and the role of ATP,
 - 2.6.2 Enzyme general properties, kinetics, mechanism of enzyme action and regulation of activity

3. Structure, function and replication of informational macromolecules (DNA, RNA & Protein synthesis)

- 3.1 Nucleic acid structure and function
- 3.2 DNA organization, Replication and repair
- 3.3 RNA synthesis (transcription), synthesis and modification
- 3.4 Peptides protein structure and functions
- 3.5 Protein synthesis and the genetic code
- 3.6 Regulation of gene expression
- 3.7 Intracellular traffic and sorting of proteins
- 3.8 Molecular genetics and recombinant DNA technology

Internal Homeostasis

3.9 Blood, body fluids and the kidney

- 3.9.1 Biosynthesis of nutritionally non-essential amino acids
- 3.9.2 Catabolism of proteins and amino acid Nitrogen = urea formation
- 3.9.3 Porphyrins and bile pigments
- 3.9.4 Creatinine metabolism and excretion

- 3.9.5 Metabolism of purine and pyrimidine nucleotides = uric acid production and excretion
- 3.9.6 Acid base balance and acid base disorders
- 3.9.7 Plasma proteins, immunoglobulins and blood coagulation

4. Locomotor System

4.1 Locomotor biochemistry

- 4.1.1 The extracellular matrix and bone formation: types, structures and properties of cytoskeletal proteins
- 4.1.2 Muscle structure and muscle contraction

viii. Teaching/Learning methods

Lecturer discussion, Practical in laboratory

ix. Assessment methods

Assignments 10%

Written test 40%

Semester written examinations 50%

x. Reading list

Murray, RK, Granner, DK., Rodwell, VW (2003.) *Harpers Biochemistry*, 5th Ed. Appleton and Lange, U.S.A.

Quellette, R J (2001). *Introduction to General, Organic and Biological Chemistry*. Appleton and Lange, USA.

i **Course Title: Anatomy (KBAN 1102)**

ii **Course status: Core**

iii **Course Credits: 8.6**

iv **Total Hours: 86**

v **Course Aim:**

The study of Anatomy is fundamental for understanding the structure and organization of the human body in relation to its basic function and the disease process. A sound knowledge of anatomy will enable the nursing student to recognize variations from the normal and the implications of these in the disease process. It will assist the nursing student in the planning and implementation of individual patient centered care in a rational, scientific and professional manner.

vi **Learning Outcomes**

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

- 1) Explain the principles of general anatomy.
- 2) Describe the general aspects of cell morphology (cytology).
- 3) Describe the structure, location and function of the organs and tissues of the human body.
- 4) Explain the normal structure of the different body regions.
- 5) Describe the anatomical interrelationships between body systems.
- 6) Describe normal human developmental anatomy (embryology).
- 7) Apply knowledge of anatomy in nursing care to patients/ clients in clinical and community setting in promotion of health

vii **Course content**

1. Introduction to anatomy

1.1 Anatomical terminology

1.2 Anatomical position

2. Organization of the human body:

2.1 Cells-tissue –organ- systems

3. Cell biology

3.1 Cell structure

3.2 Cell organelles

3.3 Cell organelles, structure and physiology

4. Tissues

4.1 Epithelia

4.2 Connective tissues

4.3 Muscles tissue

4.4 Nerve tissues

4.5 Organ systems

5. Introduction to Embryology

- 5.1 Development of human being
- 5.2 Developmental periods
- 5.3 Embryological terminologies
- 5.4 Significance of embryology
- 5.5 The beginning of human development
- 5.6 Fertilization process
- 5.7 Importance of fertilization
- 5.8 Implantation process
- 5.9 Formation of blastocyst and bilaminar embryonic disc
 - 5.10 Formation of the amniotic cavity and embryonic disc
 - 5.11 Formation of germ layers, early tissue and organ differentiation
 - 5.12 Appearance of primitive streak
 - 5.13 Development of notochord
 - 5.14 Differentiation of three germ layers

6. GIT / Digestive System / Alimentary canal

- 6.1 Mouth, pharynx, esophagus, stomach, small intestine, large intestine and the anus: adventitia or serosa, muscle layers, sub-mucosa, mucosa, nerve supply.
- 6.2 Physiology of digestive system
 - 6.2.1 food ingestion, peristalsis, digestion, absorption, defecation
 - 6.2.2 Accessory organs, salivary glands, tongue, teeth, liver, gallbladder, biliary tract, pancreas
- 6.3 Histology of the digestive system and its accessory organs
- 6.4 Diseases of the mouth, pharynx, salivary glands, oesophagus, stomach, intestines, pancreas, liver, biliary tract: inflammation, infections, ulcers, stones, cancers.

7. The respiratory system

- 7.1 Upper respiratory tract
 - 7.1.1 Nose and nasal cavity, pharynx; position, structure and functions
 - 7.1.2 Trachea: position, structure and functions
- 7.2 Lower respiratory tract
 - 7.2.1 Lungs: position, structure and functions
 - 7.2.2 Pleura: position, structure and functions
 - 7.2.3 Bronchi and bronchioles, respiratory bronchioles and alveoli: functions
 - 7.2.4 Respiratory disorders: URTI, LRTI, tumours, asthma, pneumonia, bronchitis, TB, emphysema

8. The cardiovascular

- 8.1 Heart
 - 8.1.1 Position, structure, chambers, pericardium, myocardium, endocardium, valves, conducting system, muscle structure, coronary vessels, big vessels
 - 8.1.2 Functional aspects of the heart,
 - 8.1.3 Blood vessels, structure, arteries, arterioles, veins, capillaries

8.1.4 Functional aspects of vessels

8.1.5 Cardiovascular disorders

9. The lymphatic systems

9.1 Lymphatic system

9.1.1 Lymph, lymph capillaries and large lymph vessels, lymphatic organs.

9.1.2 Lymph nodes, spleen, thymus:

9.1.3 Lymphatic disorder, disease spread, obstruction, lymphadenitis, lymphoma, splenomegaly

10. The endocrine system

10.1 Pituitary gland and hypothalamus

10.1.1 Position, structure and function

10.2 Thyroid and parathyroid glands

10.2.1 position, structure and function

10.3 Adrenal glands

10.3.1 position, structure and function

10.4 Pancreatic islets

10.4.1 position, structure and function

10.5 Pineal gland

10.5.1 position, structure and function

10.6 Thymus gland

10.6.1 position, structure and function

10.7 Local hormones

10.7.1 histamine, serotonin, prostaglandins, gastrointestinal hormones,

10.8 Disorders of endocrine system

10.8.1 secretory disorders, hyper-, hypo; tumours of, diabetes mellitus, diabetes insipidus

11. The reproductive system

11.1 Bony pelvis and reproduction

11.2 Female reproductive system;

11.2.1 external genitalia, internal genitalia

11.3 Vagina, uterus, uterine tubes, ovaries, puberty, menstrual cycle, menopause

11.4 The breast

11.5 The male reproductive system:

11.5.1 scrotum, testes, seminal vesicles, ejaculatory ducts,

11.6 Prostate gland, urethra and penis, puberty in the male

11.7 Disorders;

11.7.1 STIs, imperforate hymen, cervical disorders, uterine body disorders, fallopian tube disorders, disorders of the breast, breast cancer

12. The urinary system

12.1 Kidneys:

12.1.1 position, organs associated with kidneys, gross structure, microscopy, function

- 12.2 Ureters:
 - 12.2.1 position, structure and function
- 12.3 Urinary bladder:
 - 12.3.1 structure, position and function
- 12.4 Urethra:
 - 12.4.1 position, structure and functions
- 12.5 Disorders:
 - 12.5.1 stones, hydro-nephrosis, congenital malformations, pyelonephritis, glomerulonephritis, tumours, prostatic obstruction, bladder infections, tumours

i. Teaching methods

Lecture, lecture discussion, and Practical in laboratory

ii. Assessment methods

Assignment 10%

Practical 10%

Written test 30%

Semester written examinations 50%

iii. Reading list

Snell, RS (2004) *Clinical Anatomy*, 4th Ed, Lippincott, London.

Thiobodeau GA and Patton KT (2003). *Anatomy and Physiology*. Mosby, St. Louis.

Waugh A and Grant A (2005). *Anatomy and Physiology in Health and Illness*. Churchill Livingstone, New York.

Waugh A and Grant A. (2010). Ross and Wilson. *Anatomy and physiology in Health And Illness*. 11th Ed. Churchill Livingstone. New York

i **Course Title: Physiology (KBPH 1103)**

ii **Course status: Core**

iii **Course Credits: 8.6**

iv **Total Hours: 86**

v **Course Aim:**

The study of physiology is fundamental for understanding the main functions of the human body at cellular level. A comprehensive knowledge of physiology is critical for understanding the relationship between systems and the disease process. It is important for the nursing student to have a sound knowledge of the normal functioning of the human body. This knowledge will enable the nursing student to plan, implement and evaluate the nursing care of the patient in a rational, scientific and professional manner.

vi **Learning Outcome**

By the end of this course, the student should be able to:

- 1) Explain the importance of physiology to nurses as health care professionals.
- 2) Describe the important elements of human physiology.
- 3) Explain the physiology of the human cell as a functional unit in the body.
- 4) Describe the various fluid components and their volumes: The extra cellular fluid compartments and the intracellular fluid compartments.
- 5) Explain the importance of maintaining fluid balance in the body in relation to intake and output.
- 6) Explain the concept of homeostasis.
- 7) Explain the mechanisms of fluid shift from one compartment to the other
- 8) Explain the mechanisms of Diffusion, Osmosis and osmotic pressure and Active transport.
- 9) Describe the general formation and functions of blood and different blood cells
- 10) Apply knowledge of physiology in nursing care to patients/ clients in clinical and community setting in promotion of health.

vii **Course Content**

1. HOMEOSTATIC MECHANISMS OF THE MAJOR FUNCTIONAL SYSTEMS

1.1 Volumes and main characteristics of composition

- 1.1.1 Extracellular fluid
- 1.1.2 Interstitial fluid
- 1.1.3 Blood plasma.
- 1.1.4 Transcellular fluid.

1.1.5 Intracellular fluid.

1.2 Main characteristics of transport mechanism through the cell membrane

- 1.2.1 Diffusion.
- 1.2.2 Osmosis.
- 1.2.3 Active transport.

- 1.2.4 Osmotic equilibrium between intracellular and extra cellular fluids.
- 1.2.5 Regulation of fluid exchange between intracellular and extra cellular fluids.

2. THE BLOOD

- 2.1 Function of the components.
- 2.2 Red cells, hemoglobin and haematocrit
 - 2.2.1 White cells.
 - 2.2.2 Granulocytes.
 - 2.2.3 Lymphocytes.
 - 2.2.4 Monocytes.
 - 2.2.5 Platelets.
 - 2.2.6 Plasma.
 - 2.2.7 Fluid, proteins, electrolytes, gases.
- 2.3 Blood groups.
 - 2.3.1 ABO system.
 - 2.3.2 Rhesus factor.
 - 2.3.3 Compatibility.
- 2.4 Tissue antigen
- 2.5 **Blood vessels**
 - 2.5.1 Functions of arteries and arterioles.
 - 2.5.2 Regulation of vasoconstriction by the nervous system and by hormones.
 - 2.5.3 Function of veins.
 - 2.5.4 Venous pressure.
 - 2.5.5 Function of capillaries
 - 2.5.6 Transport across the capillary membrane.
 - 2.5.7 Different types of transport.
- 2.6 **Blood Pressures**
 - 2.6.1 Arteries.
 - 2.6.2 Capillaries.
 - 2.6.3 Veins.
 - 2.6.4 Relationship of arterial pressure to cardiac output and total peripheral resistance.
 - 2.6.5 Arterial pressure control (short term and long term) by nervous system and hormones.
- 2.7 **Lymphatic system:**
 - 2.7.1 Component of lymph.
 - 2.7.2 Functions of lymph nodes, tonsils, lymphatic tissue in the digestive system.
 - 2.7.3 Functions of the spleen.
 - 2.7.4 Functions of the thymus.

3. HEART FUNCTION

- 3.1 Action potentials in cardiac muscles, cardiac cycle of systole and diastole.
- 3.2 Functions of valves.

- 3.3 Normal heart sounds.
- 3.4 Cardiac output and regulation of cardiac output
- 3.5 Heart rhythm, regulation of heart rhythm and control by autonomic nervous system and hormones.
- 3.6 Electrocardiogram (ECG).
- 3.7 Normal ECG.
- 3.8 Relation of ECG and action potentials.

i. Teaching methods

Lecture, Lecture discussion and Practical laboratory.

ii. Assessment methods

Assignment 10%

Written tests 40%

Semester Written Examinations 50%

iii. Reading list

Snell, RS (2004) *Clinical Anatomy*, 4th Ed, Lippincott, London.

Thiobodeau GA and Patton KT (2003). *Anatomy and Physiology*. Mosby, St. Louis.

Waugh A and Grant A (2005). *Anatomy and Physiology in Health and Illness*.

Churchill Livingstone, New York.

6. Course Description

i **Course Title: Clinical Pharmacology (KBCP 1104)**

ii **Course status: Core**

iii **Course Credits: 8.2**

iv **Total Hours: 82**

v **Course Aim**

The aims of this course are to introduce the nursing student to the basic concepts of pharmacology. Provide the nursing student with the basic principles of drug action and to apply them in the clinical setting. Provide the nursing student with knowledge of clinical agents found in the environment.

vi **Learning outcome**

By the end of the course, the learner should be able to:

- 1) Explain the pharmacokinetics and pharmacodynamics of common medicines used in the clinical setting.
- 2) Describe medicines acting in central nervous system, respiratory system and endocrine system
- 3) Assess the condition of individual patients for safe administration of prescribed medication
- 4) Evaluate the therapeutic action of prescribed medication to patients/clients in clinical and community setting in promotion of health.

vii **Course content**

1. Basic concept of pharmacology

- 1.1 Drug classification
- 1.2 Pharmacokinetics/Pharmacodynamics
- 1.3 Basic Pharmacokinetic calculations
- 1.4 Routes of drug administration
- 1.5 Factors modifying drug actions

2. Central Nervous System pharmacology

- 2.1 General anesthetics, local anesthetics/regional anesthetics
- 2.2 Antiepileptic
- 2.3 Sedative hypnotics
- 2.4 Drugs used in mental illness
- 2.5 Opioids analgesics and antagonist
- 2.6 Non opioids analgesics and Nonsteroidal anti-inflammatory drugs
- 2.7 CNS stimulants

2.8 Autonomic Nervous System pharmacology

3. Respiratory System Drugs

3.1 Drugs for Cough

3.2 Drugs for asthma

4. Endocrine Pharmacology

1.1 Thyroid Hormones and related drugs

1.2 Insulin, Oral hypoglycemic and glucagon

1.3 Corticosteroids of importance

1.4 Hormonal contraceptives

1.5 Oxytocins and drugs acting on uterus

1.6 Drugs acting on calcium balance

viii Teaching methods

Lecture, group discussions, presentations

ix Assessment Methods

Assignment 10%

Written tests 40%

Semester Written Examinations 50%

x Reading list

Foster RW (2000). *Basic Pharmacology*, 4th Ed. Haworth Press UK, Amazon UK.

Greenstein B (2004). *Trounce's Clinical Pharmacology for Nurses*, 7th Ed. Churchill Livingstone, New York

Greenstein B and Gould D (2009). *Trounce's Clinical Pharmacology for nurses*, 18th Ed. Churchill Livingstone, New York

Goodman, Gilman (2000). *Pharmacological Basis of Therapeutics*, 11th Ed. Macgraw Hill United States

Laurence, Bennett PN (2000). *Clinical Pharmacology* Blackwell, Amazon

6. Course Description

i **Course Title: MICROBIOLOGY/IMMUNOLOGY (KBMI 1105)**

ii **Course status: Core**

iii **Course Credits: 8.2**

iv **Total Hours: 82**

v **Course Aim**

The study of Medical Microbiology and Immunology includes Bacteriology, Mycology, Virology and Immunology, with an emphasis on their relation to the disease process. The course should equip the student nurse with the knowledge and skills that will enable him/her to engage in problem solving strategies in the treatment and prevention of disease.

vi **Learning Outcome**

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

- 1) Describe the main principles of general Medical Microbiology and Immunology
- 2) Describe the host-parasite environment relationship in health and in microbial diseases.
- 3) Describe the etiology of known microbial and immunological health problems.
- 4) Explain the general epidemiological aspects of microbial health problems
- 5) Identify laboratory procedures used for determining the etiology of common microbial and immunological health problems.
- 6) Identify the problem solving role of Microbiology and Immunology in preventative and curative medicine.
- 7) Apply general aseptic procedures, for collection and handling of appropriate specimens
- 8) Utilize the basic knowledge of Medical Microbiology and Immunology in dealing with clinical and public health care problems.

vii **Course content**

1. General Bacteriology

1.1 Introduction to microbiology

1.2 Bacteriology

- 1.2.1 The bacterial cell.
- 1.3 Growth of bacteria.
- 1.4 Bacterial genetics.
- 1.5 Taxonomic criteria and bacterial classification.
- 1.5.1 Sterilization and disinfection
- 1.6 Principles and mode of action of antibacterial and antifungal agents.
- 1.7 Microbial ecology and normal human body flora.
- 1.7.1 Staphylococci
- 1.7.2 Streptococci.
- 1.7.3 Neisseriae.
- 1.7.4 Haemophilus.
- 1.7.5 Mycobacteria.
- 1.7.6 Spirochaetes.
- 1.7.7 Treponema
- 1.7.8 Anerobic spore forming Bacilli
- 1.8 Escherichia, Klebsiella.
- 1.9 Salmonella.
- 1.10 Shigella.
- 1.11 Yersinia
- 1.12 Proteus and Pseudomonas.
- 1.13 Vibrio cholera.
- 1.14 Chlamydiae.
- 2. Mycology and Virology**
 - 2.1 Mycology
 - 2.1.1 Introduction and classification.
 - 2.1.2 Superficial mycoses.
 - 2.1.3 Subcutaneous mycoses.
 - 2.1.4 Deep-Seated mycoses.
 - 2.1.5 Opportunistic mycoses.
 - 2.2 Virology.
 - 2.2.1 Introduction to viruses.
 - 2.3 Biology of viral replication.
 - 2.3.1 Orthomyxoviridae.
 - 2.3.2 Picornaviruses.
 - 2.3.3 Enteroviruses and Rhinoviruses.
 - 2.4 Retroviruses.
 - 2.5 Rabdoviridae.
 - 2.6 Herpes virus.
 - 2.7 Hepatitis Viruses.
 - 2.8 Human Papillomaviruses.
- 3. Antiviral Chemotherapy.
- 4. Immunology**
 - 4.1 Introduction to immunology.

- 4.1.1 Non-specific immunity.
- 4.1.2 Specific immunity
- 4.1.3 Anatomy and Biology of the immune response.
- 4.1.4 Antigens, immunogens and haptens.
- 4.2 Immunoglobulins/antibodies.
- 4.3 Complement system.
- 4.3.1 Cytokines
- 4.3.2 T/B Cell receptors
- 4.4 Hypersensitivity reactions
- 4.4.1 MHC
- 4.5 Immunodeficiency states
- 4.5.1 Primary and secondary immune response
- 4.6 Immunization and immunoprophylaxis.

viii **Teaching methods**

Lecture, lecture discussion, group work, Practical in laboratory.

ix **Assessment methods**

Assignment 10%

Practical 10%

Written tests 30%

Semester written examinations 50%

x **Reading list**

Jawetz, Melnick, Adelberg's (1938). *Medical Microbiology*, 3rd Ed, McGraw Hill, Asian Institute of Medicine.

Roitt I (2000). *Essential Immunology* by Blackwell Scientific Publication, London

Stuckle VA (1993). *Microbiology for Nurses* (3rd Ed) Blaine Tindall, London.

Timbury MC (2000). *Notes on Medical Virology* Churchill Livingstone, New York.

6. Course Description

i. **Course Title: Parasitology/Entomology (KBPE 1106)**

ii. **Course status: Core**

iii. **Course Credits: 8.2**

iv. **Total Hours: 82**

v. **Course Aim**

The course covers protozoology and helminthology with emphasis on biomedical aspects of parasitology, identification of life cycle, epidemiological factors, host parasitic relationships, and appropriate preventive and control measures.

vi. **Learning Outcome**

By the end of the course, the learner should be able to:

- 1) Classify the parasite as to genus and species
- 2) Describe the parasite species according to shape, size and habitat
- 3) Describe the life cycle of the parasite and its virulence factor
- 4) Describe the epidemiology of the disease caused by the parasite
- 5) Identify vector(s) associated with transmission of the parasite
- 6) Describe the pathophysiological changes that the parasite induces
- 7) Describe the immunological processes that the patient mounts against the parasite
- 8) Describe vaccines used against the parasite
- 9) Apply control strategies used to limit spread of the parasite

vii. **Course content**

1. Protozoology

1.1 Blood protozoa: *Plasmodium*, *Trypanosoma*, *Leishmania* species

1.2 Intestinal protozoa: *Entamoeba*, *Giardia*, *Cryptosporidium*, *Balantidium* species

1.3 Urinogenital protozoa: *Trichomonas* species

1.4 Tissue protozoan genera: *Toxoplasma* species

2. Nematology

2.1 Blood and tissue nematodes: *Wuchereriabancrofti*, *Brugiamalayi*, *B. timori*, *Onchocerca volvulus*, *Mansonella* species, *Loa loa*, *Dracunculusmedinensis*,

Trichinella spiralis

2.2 Intestinal nematodes: *Ascarislumbricoides*, *Enterobiusvermicularis*,
Toxocaracanis, *Ancylostomaduodenale*, *Necatoramericanus*,
Strongyloidesstercoralis, *Trichuristrichiura*

3. Trematology&Cestology

3.1 Blood flukes: *Schistosoma* species

3.2 Liver flukes: *clonorchissinensis*, *Opisthorchisviverini*, *O. felineus*,
Fasciolahepatica.

3.3 Lung flukes: *Paragonimus* spp.

3.4 Intestinal flukes: *Fasciolopsisbuski*, *Echinostoma* spp.

3.5 Tapeworms: *Taeniasaginata*, *T. solium*, *Diphyllobothriumlatum*,
Dipylidiumcaninum, *Hymenolepisnana*, *Echinococcusgranulosus*, *E.*
multilocularis.

viii. Teaching methods

The course is taught by Team-Based Learning (TBL) mode. TBL is a student-centered way of teaching. Briefly in TBL students take charge of their learning process. Faculty does not stand in front of the class to give regular/classical lectures. All essential learning materials are assembled in what is known as a FOLDER which is given to each student to study and prepare for different examinations. Rather few lectures on essential aspects of the folder content and selected parasites are highlighted. Occasionally and whenever called (by the students) the faculty attends to ensure that students are moving in right direction and address any uncertainties.

ix. Assessment methods

All modules of parasitology and entomology course are assessed and weighed equally through the two semesters. In TBL three examinations are done. The first examination is an individual readiness assurance test (iRAT). The iRAT consists of MCQs based on materials in the FOLDER. Soon after the iRAT students, in groups of about ten form teams. Each team revisits the iRAT and answers the same examination as teams. This examination is the gRAT (group readiness assurance test). Each team will give one answer for each question which they have reasons to believe is the correct answer. The gRAT answer is by consensus. Next is the Application examination session whereby students use the knowledge they have gained to answer application questions. The score for each student will be sum of the marks he/she obtained by doing iRAT as an individual and gRAT and Application obtained by each team where the student belonged.

For each exam iRAT, gRAT and application will constitute 60%, 20% and 20% respectively making a total of 100%.

Note: To pass a particular module a student must answer correctly 50% of questions in the iRAT. Any student who fails to answer correctly 50% of questions in the iRAT will re-sit for that examination.

x. Reading list

Bogitsh BJ, Carter CE ,Oeltmann TN (2005). *Human Parasitology*: 3rd Ed. Academic Press, London.

Bonita R, Beaglehole R & Kjellstrom T (2006). *Basic Epidemiology*, 2nd Ed. Geneva, Switzerland. WHO

Halton, D.W, Behnke, J.M, Marshall, M. (2001). *Practical Exercises in Parasitology*. University Press, Cambridge.

Rosner, B. (2006). *Fundamentals of Biostatistics*, 6th Ed. Belmont, CA: Tomson Brookes/Cole

Spencer WJ (2000.) *Clinical Bacteriology, Mycology and Parasitology: An Illustrated ColourText*. University Press, Cambridge.

Parija SC. (2008). *Textbook of Medical Parasitology Protozoology and Helminthology (Text and Colour Atlas)*, 3rd Ed. All India Publisher Distributors (AIDP)

6. Course Description

i **Course Title: Communication and Computer Application Skills (KBCC 1107)**

ii **Course status: Core**

iii **Course Credits: 10**

iv **Total Hours: 100**

v **Course Aim**

The course intends to equip students with knowledge and skills for effective communication to the clients/patients and community. Computer skills will assist learners to match with changing technology in provision of health service both in clinical and community settings.

vi **Learning Outcomes**

By the end of the course, the learner should be able to:-

- 1) Explain the importance of communication skills
- 2) Explain the basics of communication in health care settings
- 3) Demonstrate skills in listening, interviewing, counselling and educating patients/clients.
- 4) Demonstrate positive interpersonal relationships with colleagues, patients, clients and their relatives at work, within families and the wider community
- 5) Utilize verbal and non-verbal cues for therapeutic communication in patient/client care
- 6) Apply knowledge and skills of communication during the nursing care to patient/client and relatives in the clinical and community setting.

vii **Course content**

1. Introduction

- 1.1 Meaning of communication
- 1.2 Objectives of communication skills
- 1.3 Importance of communication
- 1.4 Types of communication
- 1.5 Principles of communication
- 1.6 Theories of communication
- 1.7 Models of Communication in nursing
- 1.8 Body language

2. Writing skills

- 2.1 Summary and precise writing
- 2.2 Note taking
- 2.3 Plagiarism
- 2.4 Composition and essay writing
- 2.5 References/Bibliography/Citations

- 3. Communication styles**
 - 3.1 Passive communication
 - 3.2 Aggressive communication
 - 3.3 Assertive communication
 - 3.4 Passive aggressive communication
- 4. Public speaking skills**
- 5. Interview skills**
- 6. Reading and Listening skills**
 - 6.1 Structure of reading
 - 6.2 Strategies of reading
 - 6.3 Importance of listening
 - 6.4 Techniques for active listening
 - 6.5 Barriers to effective listening
- 7. Communication in health care**
 - 7.1 Therapeutic communication
 - 7.2 Effective group work
- 8. Application of computer skills**
 - 8.1 Introduction to computer
 - 8.2 Hardware
 - 8.3 Software
 - 8.4 External devices
 - 8.5 Internet and search engine
 - 8.6 Microsoft office

viii **Teaching methods**

Lectures, group discussion, presentations, role play, practical in computer laboratory

ix **Assessment methods**

Assignments 10%

Practical 10%

Written test 30%

Semester written examination 50%

x **Reading list**

Brookside Associates. (2007). Nursing fundamentals. Brookside Associates Medical Education Division

Galvin, M. K. (2001). *Communication at Work*: National textbook company

Kate L. & Alberti. (2001) *A handbook for Writers*. Chicago; University of Chicago Press

McCabe, C., & Timmins, F. (2006). *Communication Skills for Nursing Practice*. New York, NY: Palgrave Macmillan.

Waugh A and Grant A. (2010). Ross and Wilson .Anatomy and physiology in Health and Illness. 11th Ed. Churchill Livingstone. New York

- Murthy, J. D. (2009). *Contemporary English Grammar* .Book Palace, New Delhi
- Payne. S and Walker J. (2001) *Psychology for Nurses*.OUP. Buckingham.
- Quinn, F.M. (2000) *Principles and Practice of Nurse Education* (4th ed.) Nelson
Thornes, Cheltenham
- Ronald, B. (2005). *Communication at Work: Principle and Practice for Business and
Professionals*.(8th Ed). McGraw-Hill
- Stewart, M.A. (1995) *Effective Physician-Communication*. Can Med Assoc. J. 152 (9)
1423-1433

YEAR ONE: SEMESTER TWO

6.Course Description

- i **Course Title: Biochemistry (KBBC 1201)**
- ii **Course status: Core**
- iii **Course Credits: 10**
- iv **Total Hours: 100**
- v **Course Aim**

The introductory part of this course highlights the impact of Biochemistry on medicine and the study of molecular basis of life. The multi-molecular interaction process, the properties of water and its effects on bio-molecules such as amino acids, proteins etc. are described. The course covers the study of macro-molecule forces involved in molecular interaction, energy transformation, molecular inter-convention storage and the flow of genetic information. Some concepts in cell biology, for example, cellular organization, and recent developments in molecular biology are covered. Where appropriate the molecular basis of various diseases is described.

Some of the competences of the nursing student will be to understand the enzymatic effects on food substances, to interpret laboratory results, to observe the effects of treatment on patients in order to plan, implement and evaluate the delivery of appropriate nursing care.

- vi **Learning Outcome**

By the end of the course, the learner should be able to:

- 1) Describe the chemistry of proteins, lipids and carbohydrates
- 2) Describe selected concepts in molecular biology.
- 3) Describe the structure and function of enzymes.
- 4) Describe the principles of biological oxidation, oxidative phosphorylation and thermodynamics.
- 5) Describe the processes in intermediary porphyries and bile pigments metabolism.
- 6) Describe hormone mechanisms and signal transduction.
- 7) Describe molecular and energy transformation.
- 8) Describe signal transduction/flow and the storage of genetic information.
- 9) Apply knowledge and skills of biochemistry in the provision of nursing care

- vii **Course content**

1. Glycogen

1.1 Glycolysis and the TCA cycle

- 1.2 Glycogen metabolism
- 1.3 Gluconeogenesis and regulation of blood glucose
- 2. Neuromuscular and skeletal biochemistry**
- 2.1 Biochemistry of nerve impulse transmission
- 2.2 Specialized derivatives of amino acids and their functions (neurotransmitters such as catecholamines, serotonin, GABA, Nitric oxide, and melanins)
- 3. Cholesterol, fatty acids and respiration**
- 3.1 Cholesterol biosynthesis and regulation and excretion
- 3.2 Biosynthesis of fatty acids and regulation
- 3.3 Lipid transport and storage (lipoprotein metabolism and cardio vascular diseases)
- 3.4 Myoglobin and Hemoglobin structure and functions
- 4. Hormones**
- 3.1 Reproduction, growth Hormones and endocrine biochemistry
- 3.1.1 Types of hormone receptors and mechanism of signal transduction
- 3.1.2 Peptide and Steroid hormones – properties and mechanism of action: Pituitary and hypothalamus hormones, Thyroid hormones, Adrenal hormones and catecholamines.
- 3.1.3 Metabolism of Eicosanoids (prostaglandinins, prostacyclins and thromboxanes)
- 3.1.4 Reproductive hormones and growth producing hormones
- 3.1.5 Hormones of the gonads: synthesis, functions and catabolism,
- 3.1.6 Placental hormones
- 3.1.7 Thyroid hormones: synthesis, function and catabolism
- 3.1.8 Growth hormone and other growth affecting hormones
- 4 Digestion, absorption and transport of nutrients**
- 4.1 Digestion and absorption of Carbohydrates, Lipids and Proteins
- 4.2 Water soluble vitamins
- 4.3 Important Mineral micronutrients
- 5 Metabolism**
- 5.1 Biologic oxidation
- 5.2 Respiratory chain and oxidative phosphorylation
- 5.3 Intermediary metabolism
- 5.4 The pentose phosphate pathway and other hexose metabolism (G6PD deficiency, gactosemia and cataract)
- 5.5 Oxidation of Fatty acids and ketogenesis
- 5.6 Catabolism of amino acids carbon skeletons
- 5.7 Metabolism of xenobiotics

viii **Teaching methods**

Lecture, Lecture discussion, Seminars/Tutorials

ix **Assessment methods**

Assignment s 10%
Written test 40%
Semester written examinations 50%

x **Reading list**

Murray R.K, Granner DK. Roducell VW (2003).*Harpers Biochemistry*, 5th Ed,
Appleton and Lange. U.S.A.

Quellette R.J (2001). *Introduction to General, Organic and Biological
Chemistry*.Appleton and Large, USA.

6. Course Description

- i **Course Title: Anatomy (KBAN 1202)**
- ii **Course status: Core**
- iii **Course Credits: 9.4**
- iv **Total Hours: 94**
- v **Course Aim**

The study of Anatomy is fundamental for understanding the structure and organization of the human body in relation to its basic function and the disease process. A sound knowledge of anatomy will enable the nursing student to recognize variations from the normal and the implications of these in the disease process. It will assist the nursing student in the planning and implementation of individual patient centred care in a rational, scientific and professional manner.

- vi **Learning Outcome**

By the end of the course, the learner should be able to:

- 1) Describe the anatomy of musculoskeletal system
- 2) Describe the anatomy of nervous system
- 3) Explain the anatomy of special senses (skin, eyes, ear, nose and throat)
- 4) Apply knowledge of anatomy of musculoskeletal, nervous systems and special senses in the provision of nursing care

- vii **Course content**

1. The musculoskeletal system

- 1.1 Bones: position, structure, types and function, blood supply, nerve supply: Bones of the upper limb, bones of the lower limb, pelvis, the spine
- 1.2 Joints: position, structure, classification of joints, types, and functions: major joints of the UL, LL, Spine, stability aspects
- 1.3 Muscles: smooth muscle, striated muscle, cardiac muscle; functions: Major muscles of the UL, LL, and Spine
- 1.4 Disorders: fractures, osteoporosis, rickets, osteomyelitis, osteogenesis imperfect and other common congenital conditions, osteoarthritis, gout, traumatic dislocations and fractures, septic arthritis, TB

2. The nervous system

- 2.1 Divisions of the nervous system
- 2.2 Neurones and connections
- 2.3 The central nervous system
- 2.4 The meninges

- 2.5 The neuroglia
- 2.6 Parts of the brain
- 2.7 Anatomy of the spinal cord
- 2.8 The peripheral nervous system, spinal nerves, cranial nerves
- 2.9 Autonomic nervous system, sympathetic and parasympathetic
- 2.10 Disorders of the brain, infections, tumors, stroke, trauma, haematoma
- 2.11 Disorders of the spinal cord: quadriplegia, paraplegia, trauma, congenital spina bifida
- 2.12 Peripheral nerves: trauma, compressions, lacerations, inflammation, poliomyelitis
- 3. The special senses:**
 - 3.1 The skin:**
 - 3.1.1 Structure of the skin
 - 3.1.2 Functions of the skin
 - 3.1.3 Disorders of the skin: burns, pressure sores, malignant tumours, infections, albinism, atopic eczema
 - 3.2 Eyes:**
 - 3.2.1 Structure of the eye, muscles of the eye, functions of the eye: disorders of the eye: cornea, pupil, iris, uvea, retinal, the optic nerve, squint, cataract, corneal opacity, retinopathies, detachment, tumors, refractive errors
 - 3.3 ENT:**
 - 3.3.1 Structure of the ear, outer, middle, inner ears: the pinna, the meatus, Eustachian tube, ear drum, ossicles, cochlea, functional aspects; disorders of the ear, hearing loss, otitis media, and external otitis.

viii **Teaching methods**

Lectures, Lecture Discussion, seminars/tutorials

ix **Assessment methods**

Assignments 10%

Practical 10%

Written test 30%

Semester written examinations 50%

x **Reading list**

Snell R.S (2004). *Clinical Anatomy*, 3rd Ed, Lippincott. London.

Thiobodeau, G.A & Patton KT (2003). *Anatomy and Physiology*. Mosby, St. Louis.
Waugh, A. & Grant, A. (2005). *Anatomy and Physiology in Health and Illness*. Churchill Livingstone, New York.

Waugh A and Grant A. (2010). *Ross and Wilson Anatomy and Physiology in Health and Illness*, 11th Ed. Churchill Livingstone.

6. Course Description

- i. Course Title: Physiology (KBPH 1203)**
- ii. Course status: Core**
- iii. Course Credits: 9.4**
- iv. Total Hours: 94**
- v. Course Aim**

The study of physiology is fundamental for understanding the main functions of the human body at cellular level. A comprehensive knowledge of physiology is critical for understanding the relationship between systems and the disease process. It is important for the student nurse to have a sound knowledge of the normal functioning of the body. This knowledge will enable the student critically plan, implement and evaluate the nursing care of the patient in a rational, scientific and professional manner.

vi. Learning Outcome

By the end of the course, the learner should be able to:

- 1) Explain the major divisions of the circulatory system
- 2) Describe the functions and the control of the cardiovascular system.
- 3) Describe the physiology of the respiratory system, alveolar gaseous exchange and the control of the respiratory system.
- 4) Describe the physiology of the kidney, the renal mechanism, filtration, excretion and absorption
- 5) Explain the endocrine function of the kidney.
- 6) Describe the physiology of the digestive system, motility, digestion and absorption
- 7) Explain the endocrine functions of the digestive system.
- 8) Utilize the knowledge of cardiovascular, respiratory, urinary and digestive systems in the delivery of nursing care to patient/client

vii. Course content

1. METABOLISM AND EXCRETION SYSTEMS

1.1 Respiratory system.

1.1.1 Function of the upper and lower airways.

1.1.2 Function of the pleurae and pleural cavity.

1.2 Control of the bronchial musculature

- 1.2.1 Autonomic nervous system
- 1.2.2 Hormonal

1.3 Mechanism of pulmonary ventilation

- 1.3.1 Inspiration.
- 1.3.2 Role of compliance of the lung and of the thoracic wall.
- 1.3.3 Role of surfactant.

1.4 Volumes.

- 1.4.1 Pulmonary volumes and capacities.
- 1.4.2 Anatomical/physiological dead space.
- 1.4.3 Minute respiratory volume.

1.5 Pulmonary circulation

- 1.5.1 Composition of blood in arteries and veins.
- 1.5.2 Blood pressure in arteries and veins.

1.6 Gaseous exchange and gaseous transport

- 1.6.1 Diffusion of oxygen and carbon dioxide through the respiratory membrane.
- 1.6.2 Transport of oxygen in the arterial blood.
- 1.6.3 Diffusion of oxygen and carbon dioxide between the peripheral tissue, capillaries and tissue cell.
- 1.6.4 Transport of carbon dioxide.

1.7 Regulation of respiration by the nervous system via the respiratory center

- 1.7.1 Chemical control (carbon-dioxide and hydrogen ions).
- 1.7.2 Control via the peripheral chemoreceptor system: by decreasing arterial oxygen, increased arterial carbon dioxide concentration, increasing hydrogen ion concentration.
- 1.7.3 Control of inspiration and expiration rhythm.

1.8 Renal system

- 1.8.1 Kidney function:
 - 1.8.1.1 Urine formation.
 - 1.8.1.2 Filtration and the re-absorption mechanism.
 - 1.8.1.3 Excretion.
 - 1.8.1.4 Acid-base balance.
 - 1.8.1.5 Hormonal production and function - Rennin and Erythropoietin.

1.9 Gastrointestinal tract (GIT)

- 1.9.1 Structure and functions of the GIT system:
- 1.9.2 Mouth.
- 1.9.3 Salivary glands.
- 1.9.4 Oesophagus.
- 1.9.5 Stomach.
- 1.9.6 Pancrease.
- 1.9.7 Gall bladder.

- 1.9.8 Small intestine.
- 1.9.9 Large intestinal.
- 1.9.10 Liver.

2. **NEURO-ENDOCRINE PHYSIOLOGY**

2.1 Endocrine system

- 2.1.1 General classification of hormones.
- 2.1.2 Feedback control of hormones secretion.
- 2.1.3 Mechanism of hormones in general.
- 2.1.4 Function of different glands:
 - 2.1.4.1 Pituitary gland.
 - 2.1.4.2 Thyroid gland.
 - 2.1.4.3 Parathyroid glands.
 - 2.1.4.4 Pancreas.
 - 2.1.4.5 Adrenal gland medulla.
 - 2.1.4.6 Medulla.

2.2 The nervous system

- 2.2.1 Processing information:
 - 2.2.1.1 Synapses.
 - 2.2.1.2 Transmitter substances.
 - 2.2.1.3 Potentials.

2.3 Reflexes

- 2.3.1 Stretch.
- 2.3.2 Tendon.

2.4 Functions of the various component of the nervous system

- 2.4.1 Brain.
- 2.4.2 Spinal cord.
- 2.4.3 Nerves.
- 2.4.4 Pathways.
- 2.4.5 Autonomic nervous system.
- 2.4.6 Cerebrospinal fluid.

2.5 Relationship with endocrine system

- 2.5.1 Hypothalamus.
- 2.5.2 Pituitary gland.
- 2.5.3 Suprarenal gland.

viii. Teaching methods

Lecture, Lecturer discussion and Tutorials/Seminars

ix. Assessment methods

Assignment s 10%

Written test 40%

Semester written examinations 50%

x. Reading list

Ganong W (2006). *Review of Medical Physiology*, 4th Edition; Lange Publishers, New York.

Guyton A (2000). *Textbook of Medical Physiology*. 10th Edition; Saunders Publishers, New York.

Snell R.S (2004). *Clinical Anatomy*, 3rd Ed. Lippincott, London.

Thiobodeau GA, Patton KT (2003). *Anatomy and Physiology*. Mosby, St. Louis.

Waugh A, Grant A (2005). *Anatomy and Physiology in Health and Illness*. Churchill Livingstone, New York.

Waugh A and Grant A. (2010). *Ross and Wilson Anatomy and Physiology in Health and Illness*, 11th Ed. Churchill Livingstone.

6. Course Description

- i. Course Title: Clinical Pharmacology (KBCP 1204)**
- ii. Course status: Core**
- iii. Course Credits: 9.6**
- iv. Total Hours: 96**
- v. Course Aim**

This course is designed to introduce the learners to the basic concepts of pharmacology. The course will also provide the learners with the basic principles of drug action and to apply them in the clinical setting. Learners will also get basic knowledge of clinical agents found in the environment.

vi. Learning outcome

By the end of course, the learners should be able to:

- 1) Explain the basic pharmacokinetics and pharmacodynamics of GIT, cardiovascular, anti-infective and antineoplastic medication in clinical and community setting.
- 2) Identify the correct prescription of medication for patients.
- 3) Assess the condition of individual patients in order to safely administer prescribed medication and evaluate the therapeutic action of prescribed medication.
- 4) Describe the importance of clinical pharmacology in the delivery of patient care.
- 5) Apply the knowledge of pharmacology in delivering nursing care to patients/clients in various settings

vii. Course content

1. GIT Pharmacology

- 1.1 Drugs for Peptic Ulcers
- 1.2 Drug for constipation and Diarrhea
- 1.3 Anti-emetics

2. Cardiovascular drugs

- 2.1 Cardiac glycosides
- 2.2 Antiarrhythmics
- 2.3 Antihypertensive
- 2.4 Antiangina
- 2.5 Antidiuretics

2.6 Hematinics

3. Anti-infective drugs

3.1 Antimicrobial drugs

3.2 Antitubercular drugs

3.3 Antileprotic drugs

3.4 Antimalarial drugs

3.5 Antiprotozoa drugs

3.6 Antihelminthics

3.7 Antifungal drugs

4. Cancer Chemotherapy

4.0 Antineoplastic agents

4.1 Side effects of antineoplastic agents

4.2 Adjuvants to cancer chemotherapy

viii. **Teaching methods**

Lectures, Lecture discussion, Tutorials.

ix. **Assessment methods**

Assignments 10%

Written test 40%

Semester written examinations 50%

x. **Reading list**

Foster RW (2000). *Basic Pharmacology*, 4th Ed. Haworth Press UK, Amazon UK.

Goodman G (2000). *Pharmacological Basis of Therapeutics*, 11th Ed. Macgraw Hill United States.

Bennett PN (2003). *Clinical Pharmacology 9th Ed.* Church Hill Livingstone London

Greenstein B (2004). *Trounce's Clinical Pharmacology for Nurses, 9th Ed.* Churchill Livingstone, New York.

Greenstein B and Gould D (2009). *Trounce's Clinical Pharmacology for Nurses, 18th Ed.* Churchill Livingstone, New York.

Trounce J (2007). *Clinical pharmacology for nurses.* Churchill Livingstone New York

Rang H and Dale M (2007). *Pharmacology 6th Ed.* Churchill Livingstone. London

6. Course Description

i. Course Title: Microbiology/Immunology (KBMI 1205)

ii. Course status: Core

iii. Course Credits: 11

iv. Total Hours: 110

v. Course Aim

This course is intended to equip learners with knowledge of Important Microbial Infections, their management and principles of infection control. Learners will be able to provide appropriate nursing care to patients/clients in dynamic healthcare settings. They will also play major role in the prevention and control of infections in the community.

vi. Learning outcome

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

- 1) Explain the importance of Microbial Infections and their management
- 2) Describe principles of infection control
- 3) Apply aseptic technique during the nursing care in all settings
- 4) Apply the basic knowledge of important microbial infections and control in dealing with clinical and public health.

vii. Course content

1. Important Microbial Infections and their management

- 1.1 Acute and chronic respiratory infections.
- 1.2 Diarrhoeal diseases.
- 1.3 Urinary tract infections.
- 1.4 Sexually transmitted diseases.
- 1.5 Bacteremia, septicaemia, and endocarditis.
- 1.6 Choice of drugs for treatment of bacterial and fungal infections.
- 1.7 Nosocomial infections.

2. Infection control

- 2.1 Principles of infection control.

viii. Teaching methods

Lectures, Lecture discussion, Laboratory Practical, Tutorials,

ix. Assessment methods

Assignment s 10%

Practical 10%

Written test 30%

Semester written examinations 50%

x. Reading list

Jawetz, Melnick, & Adelberg's (1938) *Medical Microbiology* (3rd Ed) McGraw Hill, Asian Institute of Medicine.

Roitt I. *Essential Immunology* by (2000). Blackwell Scientific Publication, London

Stuckle, V. A. (1993) *Microbiology for Nurses* (3rd Ed) Blaine Tindall, London.

Timbury MC. Notes on *Medical Virology* (2000). Churchill Livingstone, New York.

6. Course Description

i. Course Title: Parasitology / Entomology (KBPE 1206)

ii. Course status: Core

iii. Course Credits: 11

iv. Total Hours: 110

v. Course Aim

The course covers entomology and ectoparasites with emphasis on biomedical aspects of parasitology, identification of life cycle, epidemiological factors, host parasitic relationships, and appropriate preventive and control measures. Control measures are the key concept in parasitology/entomology to limit the spread of diseases both in the clinical and community settings.

vi. Learning outcome

By the end of the course, learners should be able to:

- 1) Explain how arthropods affect human health
- 2) Identify the major groups of the insects and arthropods of medical importance
- 3) Identify arthropod vectors of major vector-borne diseases and/or infestations
- 4) Explain important aspects of the life cycles and/or behavior of insects and relate these to specific infestations and/or diseases transmission
- 5) Describe the epidemiology of important infestations caused by arthropods
- 6) Explain control strategies in the control of arthropods of medical importance
- 7) Describe how ecto-parasites transmit diseases
- 8) Apply the knowledge of insects, arthropods of medical importance and major vector-borne diseases and/or infestations in nursing care

vii. Course content

1. Ectoparasites/entomology

1.1 Diptera - Includes Families: Culicidae (mosquitoes), Simuliidae (black flies)

1.1.1 Ceratopogonidae (midges), Psychodidae (sand flies), Tabanidae (horse flies)

1.1.2 Muscidae (tsetse flies and house flies), Cyclorhampa (myiasis causing flies)

1.2 Siphonaptera – Families: Pulicidae (fleas), Tungidae (sand fleas or jiggers)

1.3 Anoplura – sucking lice, including body louse, head louse and crab louse

1.4 Mallophaga – Biting/chewing lice

1.5 Hemiptera – Families: Cimicidae (bed bugs) and Reduviidae (kissing/assassin bugs)

1.6 Orthoptera – Family Blattidae (cockroaches)

viii. Teaching methods

The course is taught by Team-Based Learning (TBL) mode. TBL is a student-centered way of teaching. Briefly in TBL students take charge of their learning process. Faculty does not stand in front of the class to give regular/classical lectures. All essential learning materials are assembled in what is known as a FOLDER which is given to each student to study and prepare for different examinations. Rather few lectures on essential aspects of the folder content and selected parasites are highlighted. Occasionally and whenever called (by the students) the faculty attends to ensure that students are moving in right direction and address any uncertainties.

ix. Assessment methods

All modules of parasitology and entomology course are assessed and weighed equally through the two semesters. In TBL three examinations are done. The first examination is an individual readiness assurance test (iRAT). The iRAT consists of MCQs based on materials in the FOLDER. Soon after the iRAT students, in groups of about ten form teams. Each team revisits the iRAT and answers the same examination as teams. This examination is the gRAT (group readiness assurance test). Each team will give one answer for each question which they have reasons to believe is the correct answer. The gRAT answer is by consensus. Next is the Application examination session whereby students use the knowledge they have gained to answer application questions. The score for each student will be sum of the marks he/she obtained by doing iRAT as an individual and gRAT and Application obtained by each team where the student belonged.

For each exam iRAT, iRAT and application will constitute 60%, 20% and 20% respectively making a total of 100%.

Note: To pass a particular module a student must answer correctly 50% of questions in the iRAT. Any student who fails to answer correctly 50% of questions in the iRAT will re-sit for that that examination.

x. Reading list

Bogitsh BJ, Carter CE ,Oeltmann TN(2005). *Human Parasitology*, 3rd Ed. Academic Press, London.

Bonita R, Beaglehole R &Kjellstrom T (2006).Basic Epidemiology, 2nd Ed. Geneva, Switzerland. WHO

Francis EG (1993). *Modern Parasitology* ,3th Ed. Blackwell, London

Gillespie GP (1995).*Medical Parasitology: A Practical Approach*. University Press, Oxford

Halton DW, Behnke JM, Marshall M (2001). *Practical Exercises in Parasitology*. University Press, Cambridge.

Rosner B (2006). *Fundamentals of Biostatistics*, 6th Ed. Belmont, CA: Tomson Brookes/Cole

SpencerWJ(2000.) *Clinical Bacteriology, Mycology and Parasitology: An Illustrated ColourText*. University Press, Cambridge.

ParijaSC(2008). *Textbook of Medical Parasitology Protozoology(Textbook and Colour Atlas)* 3rd Ed. All India Publisher and Distributors(AIPD).

YEAR TWO: SEMESTER 3

6. Course Description

i. Course Title: Development Studies (KBDS 2308)

ii. Course status: Core

iii. Course Credits: 6.2

iv. Total Hours: 62

v. Course Aim

The course exposes students to the theories, problems and contemporary issues of health and development in general. The course is important for nurses in order to understand the process of social development, practical development perspectives, economic and social-political consequences and their implications on health, health policies, health care systems and nursing practice. The course will also contribute to the self and professional development of a nurse who is aware of the social, economic and political environment in which she/he functions.

vi. Learning outcome

By the end of the course, learner should be able to:

- 1) Explain the concept of development
- 2) Explain different theories of development
- 3) Describe the process of social and political developments in Africa.
- 4) Describe the concept of population growth and development
- 5) Describe the concept of Gender equality in relation to development
- 6) Apply theories of development in the provision of health care in clinical and community setting.

vii. Course Contents

1. Development Studies in Higher Learning Institutions

- 1.1 The Concept of Development Studies
- 1.2 Objectives of teaching Development studies

2. Social Development and Health

- 2.1 The Concept, Theories and models of Development
- 2.2 Health care in the context of theories of social development
- 2.3 Indicators of Development
- 2.4 Social origins of ill health
- 2.5 Social determinants of health
- 2.6 Culture and health

3. Development and Health

- 2.1 Socio- economic Development and Health.

- 2.2 Impact and relationship between Poverty and Health.
- 2.3 Health Services Unemployment and Poverty in Tanzania.
- 2.4 Income Distribution and health case of Tanzania

4. Population and Health

- 1.1 Theories of Population Growth.
- 1.2 Population Pyramid; case of Tanzania.
- 1.3 Population Policy and Practice.
- 1.4 Population Growth and its Impact on the Health Sector.
- 1.5 Urban Migration.

5. Gender in Tanzania

- 1.1 The Concepts in Gender
- 1.2 The Growth of Gender Equality case of Tanzania
- 1.3 Gender relations in Resource control and health.
- 1.4 Gender Issues health and Development

viii. Teaching methods

Lectures, Lecture discussion and seminars

ix. Assessment methods

Assignment s 10%

Written test 40%

Semester written examinations 50%

x. Reading list

Rodney W (1996). *How Europe Undeveloped Africa*. TPH, DS

Rugumamu S (1996). *Leading Issues in Development Studies*, Eds University of Dar es Salaam.

Snyder M, Tadesse M (1995). *African Women and Development: A History*, Ed WUP

Todaro MP (1985) *Economic Development in Third World*, Longmans.

6. Course Description

i. Course Title: Advanced Nursing Sciences (KBAS 2309)

ii. Course status: Core

iii. Course Credits: 12

iv. Total Hours: 120

v. Course Aim

This course is designed to provide the nursing student with an increased awareness and understanding of the complexity of the nursing profession. It allows the nursing student to assess the contribution of nurse/midwife theorists to the practice of nursing. The course focuses on the critical analysis of theory and the application of nursing/midwifery theories to clinical and community practice. The nursing student has the opportunity to develop clinical/ community service judgment and to deliver evidence based care. Skills in Health Assessment and the use of the Nursing Process are practiced in placements in specialist clinical areas. The course aims to equip the nursing student with the skills necessary to deliver holistic patient centered care, and to communicate with patients, their families and health care professionals both verbally and through written documentation of patient care and management.

vi. Learning outcome

By the end of the course, learner should be able to:

- 1) Describe evolution of nursing in the world and Tanzania
- 2) Perform a comprehensive health assessment of individual patients/clients and accurately monitor record and report the findings of such an assessment.
- 3) Plan, implement and evaluate the care of individual, families and community using the Nursing Process.
- 4) Apply evidence based practice in delivery of health care services to individual, families and community.

vii. Course Content

1. Nursing Profession

1.1 Introduction

1.1.1 Definition of terms

1.1.2 Origin of nursing

1.1.3 Evolution of Nursing Profession (include why Advanced Nursing Sciences)

1.1.4 Role of the Professional nurse

2. Historical Images

- 2.1 Nursing theories/ model
- 2.2 Analyse nursing theories
- 3. Comprehensive Health Assessment
 - 3.1 Types of health assessment.
 - 3.2 Conduct a comprehensive health assessment (steps)
 - 3.3 Analyse health assessment data
 - 3.4 Health Risks Assessment Tools
- 4. Nursing care plan
 - 4.1 Nursing Process
 - 4.2 Steps in nursing process
- 5. Pain Management
 - 5.1 Physiology of pain
 - 5.2 Classification of pain
 - 5.3 Factors affecting pain responses
 - 5.4 Pain assessment tool
 - 5.5 Pharmacological & non-pharmacological pain management
- 6. Evidence-based nursing practice
 - 6.1 Evidence based nursing practice from a nursing perspective
 - 6.2 Challenges to using evidence based practice in nursing
 - 6.3 Resources for evidence-based nursing practice

viii. Teaching methods

Lectures/discussion, group discussions, case studies, Seminar, demonstration, role play

ix. Assessment methods

Assignments, 10%
 Written tests 15%
 OSCE examinations 25%
 Practical 30%
 Semester written examination 20%

x. Reading list

Dimond B (2005) Legal aspects of nursing, 4th Ed. Pearson Longman
 Fry ST & Veatch RM (2000). Case studies in nursing ethics, 2nd Ed. Boston, Jones & Bartlett, Publishers.
 Kozier B, Erb G, Berman A et al (2008). Fundamentals of nursing Concepts, process and practice, 8ndEd. Pearson
 Kozier B, Erb G, Berman A et al (2012). *Fundamentals of nursing Concepts, process and practice*, 2nd Ed. Pearson
 Perry AG, Potter PA (2010). Clinical nursing skills & techniques, 7th Ed. Mosby
 Rosdahl CB, Kowalski MT (2008). The textbook of basic nursing, Ed 9, Lippincott Williams & Wikins

6. Course Description

i. Course Title: Behavioural Sciences (KBBS 2310)

ii. Course status: Core

iii. Course Credits: 12.6

iv. Total Hours: 126

v. Course Aim

This course aims to introduce students to specific concepts and models that explain ill-health behaviour and disease that is relevant to current public health problems and their interventions. The psychology aspect provides students with a basic understanding of fundamental psychological theory essential for nursing care. The sociology part enables the students to understand health attitudes, beliefs and practices of patients and health professionals of culturally diverse groups. The knowledge on sociology provides some of the conceptual tools to help the students understand the relationships between social structures and people's health experiences.

vi. Learning outcome

By the end of the course, the learner should be able to:

- 1) Explain the relationship between illness and human behaviour.
- 2) Identify social cultural and psychological factors that influence ill-health.
- 3) Describe the different models that explain health behaviour.
- 4) Explain the relationship between culture and health.
- 5) Identify the social, cultural and psychological factors that may lead to adverse health outcomes in human populations.
- 6) Identify broad based social issues that are important in public health interventions.
- 7) Analyse factors that affect utilization of health services
- 8) Analyse risk behaviour pertaining to health.
- 9) apply the knowledge of behavioural science in the provision of quality health care

vii. Course content

1. Introduction to sociology

1.1 Development of Sociology

1.2 The scope and types of sociology

1.3 Basic concepts in sociology

2. Medical Sociology and Anthropology

- 2.1 Medical Anthropology
- 2.2 Anthropology and Health care
- 2.3 Culture health and disease
- 3. Culture**
 - 3.1 Concepts of Culture and Types of culture (Material and non-material)
 - 3.2 Elements and Roles of culture
 - 3.3 Cultural Conformity and Adaptation
 - 3.4 Culture, beliefs and Health
- 4. Socialization**
 - 4.1 Definition and Types of socialization
 - 4.2 Role of socialization
 - 4.3 Agents of socialization (Mass media, family etc)
- 5. Health and illness**
 - 5.1 Concept of health, illness,
 - 5.2 Health seeking behavior
 - 5.3 Explanatory Model
- 6. Gender and health**
 - 6.1 Role of different age groups
 - 6.2 Role of women and men in decision making and power
 - 6.3 The relationship between gender and health
 - 6.4 Gender Based violence
 - 6.5 Gender and Reproductive health
 - 6.6 Intimate Partner Violence (IPV)
- 7. Social Institutions**
 - 7.1 Institutions, types and roles of social institution
 - 7.2 Family: types of family, function, marriage, types of marriage
 - 7.3 Religion,
 - 7.4 Others- schools, work, army, political, economic, social organization, social control
 - 7.5 Marriage and Child Health
- 8. Social stratification**
 - 8.1 Types of social stratification
 - 8.2 Dimension of social stratifications
 - 8.3 Social inequality,
 - 8.4 Theories of Social Stratification,
 - 8.5 Social Mobility
- 9. Social Determinants of health**
 - 9.1. Individual determinants (attitude, perception, epidemiological factors)
 - 9.2. Gender and Age
 - 9.3. Socio – Economic status
- 10. Health and illness**
 - 10.1. Concept of health, illness,
 - 10.2. Health seeking behavior

10.3. Explanatory Model

10.4. Social control

11. Deviance and crime (statistics)

11.1. Pro and anti-social behavior

11.2. Social Function of Deviance

11.3. How society control deviance- (Norms, Religion and education Law and legal system)

12. Theories of behavior change

12.1. Health belief Model,

12.2. Diffusion of Innovation Theory,

12.3. Stages of change Model

12.4. Ecological model

12.5. The Sick Role

13. Social problems & Social Instability

13.1. Divorce, Single parents,

13.2. Violence Types & Forms (Gender & Child abuse),

13.3. Prostitutions & Human trafficking

13.4. Substance abuse, Homeless, Street children/street Family

13.5. Over population, Wars

14. Social Change

14.1. Definition, type of social change,

14.2. Theories of social change

14.3. Social Mobility

14.4. How and why societies change over time.

15. Social policy and social welfare

15.1. Social policies and health improvement

15.2. Social policies in Tanzania

16. Sociological Research methods

16.1. Source of knowledge,

16.2. The Scientific Method Inductive vs. Deductive

16.3. Approaches, Steps in Sociological Research

17. Psychology

viii. Teaching Methods

Lectures, Lecture discussion, group discussion, tutorials/seminars

ix. Assessment Methods

Assignments 10%

Written tests 40%

Semester written examinations 50%

x. Reading list

Helman CG (2007). Culture Health and Illness.5th Ed. Hodder Arnold
Smithson R(2005). Health and Social Care. Philip Altan Updates
Neeraja KP (2006).Textbook of Sociology for Nursing Students Jaypee Brothers.
Medical Publishers LTD. New Delhi.
HaralamboM(1997). Sociology a new approach,3rdEd.Causeway Press

6.Course Description.

i. Course Title: Foundation of Faith (KBFF 2311)

ii. Course status: Core

iii. Course Credits: 6.2

iv. Total Hours: 62

v. Course Aim

The course intends to prepare learners intellectually so that they may cope with new issues pertaining to faith. It also aims at making learners live moral lives and become good citizens.

vi. Learning outcome

By the end of the course, learner should be able to:

- 1) Explain religion and human experiences
- 2) Describe the foundations of different religions
- 3) Demonstrate ability to Interact and co-exist peacefully with people of other faiths
- 4) Apply the knowledge of faith so as to live an ethical type of life

vii. Course contents

1. Introduction
 - 1.1 The concept of God
 - 1.2 Defining Faith
 - 1.3 Basic elements of Religions
 - 1.4 Religious Attitudes to Life
2. Basic doctrines and practices of different religions
 - 2.1 Christianity
 - 2.2 Islam
 - 2.3 Buddhism
 - 2.4 African Traditional Religions
3. Religions in a Changing World
4. Religion and Politics
5. Religion and Ethics
6. **Selected issues in ethics**

- 6.1 Sexuality
- 6.2 Alcohol
- 6.3 Drugs
- 6.4 Suicide
- 6.5 Abortion
- 6.6 HIV&AIDS
- 6.7 Political and leadership ethics, Corruption
- 6.8 Civil Disobedience and right to dissent
- 6.9 Racism
- 6.10 Crime and Punishment, Capital punishment
- 6.11 Medical ethics

viii. Teaching methods

Lectures/discussion, Tutorials, Seminars

ix. Assessment Methods

Assignments 10%

Written tests 40%

Semester written examinations 50%

x. Reading list

Magesa L (1997). *African Religion: The Moral Traditions of Abundant Life*. Nairobi: Paulines Publications Africa.

Mbiti J *African Religion and Philosophy*.

McGrath, Alister E (2003). *Christian Theology: An Introduction*. Oxford: Blackwell Publishing Ltd.

Norlen, Gunnar (2001). *Islam and Its World*. Research Institute of Makumira University College.

Norlen, Gunnar (2003). *Christian and Ethical life*. Research Institute of Makumira University College.

6. Course Description

i. Course Title: Leadership and Management (KBLM 3312)

ii. Course status: Core

iii. Course Credits: 7.0

iv. Total Hours: 70

v. Course Aim

This course exposes learners to styles of leadership and management. The course will address the importance of leadership within nursing and the need to recognize and develop leadership skills and potential within the profession. The knowledge of leadership and management will assist learners to attain qualities of a good leader and manager in nursing.

vi. Learning outcome

By the end of the course, learner should be able to:

- 1) Explain concepts of leadership and management
- 2) Demonstrate decision making skills in assisting clients toward recovery or improving their health.
- 3) Describe the structure of health care in Tanzania
- 4) Plan nursing activities to maintain patients/clients environment in provision of nursing service.
- 5) explain professional and ethical issues in leadership and management in nursing
- 6) Utilize knowledge and skills of leadership and management in managing both human and non-human resources in nursing.
- 7) Apply leadership skills in improving the quality of health care provision

vii. Course Contents

1. An overview of Nursing Leadership and Management

1.1 Definition of terms and concepts

1.2 Relationship between leadership and Management.

- 1.3 Historical development of leadership theories.
- 1.4 Tools for leadership and management problem – solving and decision – making
- 1.5 Leadership process. Leadership characteristics.
- 1.6 The management process
- 1.7 Role and functions in Planning
 - 1.7.1 Strategic planning
 - 1.7.2 Planned change
 - 1.7.3 Time management
 - 1.7.4 Fiscal planning (Budgeting)

2 Structuring Health Care Organizations

- 2.1 Health system
- 2.2 Organizational Structure
- 2.3 Principles of health system
- 2.4 Characteristics of a functioning health system
- 2.5 Authority and power in organizations
- 2.6 Organizing Groups for patient care and committee work

3 Managing Human Resources

- 3.1 Pre-employment staffing responsibilities
- 3.2 Employee indoctrination
- 3.3 Staffing needs and scheduling policies
- 3.4 Meeting staff development needs
- 3.5 Continuing Education
 - 3.5.1 Creating a motivating climate
 - 3.5.2 Organizational and interpersonal communication
 - 3.5.3 Managing conflict

4 Performance Management and Quality Improvement

- 4.1 The meaning of performance management
- 4.2 Management decision – making process
- 4.3 Quality Control
- 4.4 Performance appraisal
- 4.5 Creating a growth – producing work environment through discipline
- 4.6 Records, reports and statistics in health services

5 Professional and ethical issues in leadership and management

- 5.1 Ethical issues
 - 5.1.1 Ethical dilemmas
 - 5.1.2 Ethical problem – solving and decision – making
 - 5.1.3 Ethical frameworks for decision – making
 - 5.1.4 Principles of ethical reasoning
- 5.2 Legal and legislative issues
- 5.3 Career development issues
- 5.4 Policy development

viii. Teaching methods

Lectures/discussions, seminars and case studies

ix. Assessment methods

Assignments 10%

Written tests 20%

Field reports 20%

Written examinations 50%

x. Reading list

Bhat, A and Kumas, A (2010). Management, principles, processes and practices. Oxford University

Keuning D (2007) Management a European perspective 3rd Ed. Wolters-Noordhoff

Core GA (2002) Management theory and practice 5th Ed ELST London

Dessler G (2006) Human resource management 10th Ed. Prentice Hall India

Marquiz LB and Huston C (2006) Leadership roles and management functions in nursing 5th Ed. Lippincott manual New York

6. Course Description

- i. Course Title: Research Methodology (KBRM 2313)**
- ii. Course status: Core**
- iii. Course Credits: 10**
- iv. Total Hours: 100**
- v. Course Aim**

This course aims to examine the steps in the development of a research, review and evaluates current research findings in nursing for its applicability to nursing theory and practice and to study the process of scientific investigation. Learners will be introduced to a range of research methodologies and the principles underpinning research activity in nursing, midwifery and health care. Skills in searching for evidence based information will be enhanced to promote quality nursing care. : This is course training for the undergraduate students, who has already done epidemiology and biostatistics, in order to prepare them to develop a research proposal, conduct their research, and analyze their data using statistical software. Students will at the end develop a research report. The course will cover theory on the components of research proposal, practical sessions in developing a research proposal as well as practical sessions in data analysis and research write up.

vi. Learning outcome

By the end of the course, the learner should be able to:

- 1 Describe the stages of the research process.
- 2 Critique research findings in various published concepts in peer review journal
- 3 Use Biostatistics knowledge to analyze and present data to draw conclusion on health related concept.
- 4 Utilize research findings to improve the standard of nursing and midwifery care in Tanzania.

- 5 Apply research methods to collect, analyze and present critical information to stakeholders and wider audience.

vii. Course contents

1. Introduction to research
 - 1.1 Definition
 - 1.2 purpose of conducting research
 - 1.3 types of research (operational and basic types of research)
 - 1.4 Research cycle (Steps or stages of conducting research)
2. The research topic
 - 2.1 research idea
 - 2.2 narrowing of research idea into a researchable problem
 - 2.3 Formulation of research question(s) from problem
 - 2.4 Development of research title from research problems and questions
 - 2.5 Characteristics of a title
3. The research proposal
 - 3.1 definition
 - 3.2 Significance of research proposal
 - 3.3 Components of research proposal
 - 3.4 Steps in developing research proposal
 - 3.5 KCMU-College proposal format
 - 3.6 Difference between proposal and research report
 - 3.7 Practical:
 - 3.7.1 Prepare an outline of a research proposal
 - 3.7.2 Evaluate the structure of a research proposal according to KCMUCo format
4. Literature review 1
 - 4.1 What is literature in research
 - 4.2 Importance of literature review
 - 4.3 Literature sources
 - 4.4 Literature summarization matrix
5. Literature review 2
 - 5.1 MESH terms and Boolean operators to search literature
 - 5.2 Practical literature search and archiving
 - 5.3 Literature summarization matrix
6. Referencing and citation
 - 6.1 Referencing styles
 - 6.2 citing in-text

- 6.3 organizing reference list
- 6.4 Practical: Use of Mendeley

- 7. Hypothesis, questions and objectives
 - 7.1 research question(s)
 - 7.2 research hypothesis
 - 7.3 research objectives
 - 7.4 Classification of objectives
 - 7.5 Characteristics of broad objective
 - 7.6 Characteristics of specific objectives
 - 7.7 variables (dependent & independent) from specific objectives
- 8. Presentation skills
 - 8.1 Types of presentation
 - 8.2 Principles of preparing presentation
 - 8.3 Presenting
 - 8.4 Practical (individual):
 - 8.4.1 Develop research title, question/ hypothesis
 - 8.4.2 Develop broad and specific objectives
 - 8.4.3 Prepare and deliver a concise and clear presentation

- 9. Practical skills: individual assignments, & presentation
 - 9.1 Structure of the introduction - Prepare a well-structured introduction
 - 9.2 Structure of the literature review & Principles of writing literature review section - Prepare a well-structured literature review section
 - 9.3 Statement of the problem and justification - Prepare a well-structured statement of the problem and justification
- 10. Research Methods
 - 10.1 Introduction to research methods section
 - 10.2 Epidemiological study designs
 - 10.3 Study area
 - 10.4 Study population (Inclusion/exclusion criteria)
- 11. Sampling and sample size estimation
 - 11.1 Sampling methods
 - 11.1.1 different sampling methods/techniques
 - 11.1.2 appropriate sampling methods/ techniques for the chosen study
 - 11.2 Sample size estimation
 - 11.2.1 Sample size calculation using appropriate methods of study design
- 12. Data collection methods and tools
 - 12.1 Variables and measures
 - 12.2 Quantitative data collection methods and tools
 - 12.3 Qualitative data collection methods and tools

- 12.4 Compare and contrast quantitative and qualitative
- 12.5 Practical:
 - 12.5.1 Develop data collection tool(s) for the selected study & appropriate data collection tools for their chosen study
 - 12.5.2 Study procedure
- 13. Data processing and analysis plan for quantitative study
 - 13.1 Data quality assurance and control
 - 13.2 Plan of data analysis
 - 13.2.1 Data summarization techniques appropriate for their study design
- 14. Data processing and analysis plan for qualitative study
 - 14.1 Thematic framework analysis
 - 14.2 Content analysis
- 15. Quality assurance
 - 15.1 Quality assurance during selection & sampling of population
 - 15.2 Tool(s): validated tool (if any) & questions address specific objectives
 - 15.3 Pilot testing
 - 15.4 Quality assurance in data collection process
 - 15.5 Quality assurance in data cleaning
 - 15.6 Quality assurance in data analysis
- 16. Ethical principles and conduct in research
 - 16.1 Introduction to ethics in research
 - 16.2 Significance of ethics in research
 - 16.3 Ethical principles in research: respect for persons – informed consent, beneficence – benefit & risk and justice – selection of subjects. (Introduction to Belmont report)
 - 16.4 Good clinical Practice (GCP) & Good laboratory clinical practice (GLCP)
 - 16.5 Ethical approval (IRBs) & Permission(s)
 - 16.6 Research Misconducts: falsification, plagiarism, fabrication, etc.
 - 16.7 Development of consent forms
- 17. Database creation and data entry using SPSS (practical)
 - 17.1 Introduction to database: definition, significance, examples (excel, access, EPI Info, SPSS etc.)
 - 17.2 Introduction to SPSS database
 - 17.3 creating a database template
 - 17.4 Data entry using created database

viii. Teaching Methods

Lectures, seminars, Group work, Workshop

ix. Assessment Methods

Continuous Assessment

- Assignments 10%
- Written tests 40%

Research proposal 50%

x. **Reading list**

Blink H and Groove KS (2005) Fundamentals of research methodology for health care professionals. 2nd Ed. Cape Town, Africa Juta

Burns N and Groove KS (2007) understanding nursing research: Building evidence based practice. 4th Ed st Louis, MO: Saunders

Creswell JW (2009) Research design: Qualitative and mixed method approaches 3rd Ed. California SAGE

Gallin JL (2006) Principles and practice of Clinical Research san Diego, CA: Academic Press

Polit DF & Hungler BP (2004) Nursing Research: Principles and Methods. 8th Ed. Philadelphia: Lippincott

Rosner B (2006) Fundamentals of biostatistics 6th Ed. Belmont, CA: Thomson Brooks Cole

6. Course Description

- i. Course Title: Epidemiology and Applied Biostatistics (KBRM 2314)**
- ii. Course status: Core**
- iii. Course Credits: 6**
- iv. Total Hours: 60**
- v. Course Aim**

Epidemiology, focus on the determinants and distribution of diseases. The focus will be emphasized on epidemiological study designs for investigation of both communicable and non-communicable diseases in clinical and community setting. Biostatistics is an important part of medical training. It is important to assess common conditions, and to evaluate the impact of interventions. Biostatistics is used in research, and used for monitoring public health programs. It is extremely important for the statistics to be integrated with the other modules, which include the Epidemiology and the community health projects, and the research, that students are expected to do at the end of their course. Practical experiences with statistics both paper-based and computer-based are important in teaching this subject. Students need to be introduced to the simple descriptive statistics and know when and where to use the different statistics. They should learn how to calculate the statistics, and to explain their meaning. Analytic statistics is the beginning of Inference. This is when students realise that they can use statistics for more than describing their data. Inference relates the sample data collected by students to the population that it comes from, and draws various conclusions from the analysis. Students should be taught what the assumptions are behind the analysis. They should be aware of the concept of a standard error, and how it can be used to generate 95% Confidence intervals. They

should also learn about the hypothesis that they have before doing such analysis (null hypothesis). Point and interval estimate are the key concept to be made during interpretation of inference statistics.

vi. Expected Learning outcome:

1. Explain the concept of epidemiology and determinants of health
2. Explain the concept of disease causation and prevention in epidemiology
3. Apply epidemiological studies to solve problems in clinical and community settings.
4. Utilize the concept of qualitative and quantitative data analysis to draw inferences/conclusion in investigating clinical and community issues.

vii. Course content:

5. Introduction to epidemiological concepts

- 1.1 Definition and history of Epidemiology
- 1.2 Achievements in epidemiology

6. Health determinants

- 2.1 Bio-psycho-social factors

7. Types of study

- 3.1 Major study designs used in epidemiology
- 3.2 Critiquing published research reports.

4. Causation in epidemiology

- 4.1 The concept of cause
- 4.2 Establishing the cause of disease
- 4.3 Natural history of disease
- 4.4 Epidemic and endemic diseases
- 4.5 Chain of infection
- 4.6 Investigation and control of communicable disease

5. Epidemiology and prevention

- 5.1 The scope of prevention
- 5.2 Levels of prevention
- 5.3 Screening

6. Biostatistics

- 6.1 Introduction to Biostatistics
 - 6.1.1 Need for biostatistics
 - 6.1.2 Application of biostatistical methods
- 6.2 Data entry and database applications
 - 6.2.1 Designing a questionnaire
 - 6.2.2 Developing a data entry screen from a questionnaire
 - 6.2.3 Data entry into a computer

- 6.2.4 Manual and computer checking of entered data
- 6.3 Descriptive statistics
 - 6.3.1 Types of variables
 - 6.3.2 Qualitative (Categorical) variable
 - 6.3.3 Quantitative (Numerical) variable
 - 6.3.4 Quantitative and qualitative analysis
 - 6.3.5 Measures of central tendency and dispersion
 - 6.3.6 Proportions for binary (2 values) data
 - 6.3.7 Proportions for multiple response data
 - 6.3.8 Odds and how to calculate an odds from a proportion
 - 6.3.9 Means and standard deviation for continuous data.
 - 6.3.10 Medians and interquartile range
 - 6.3.11 Sample size and Sampling techniques
 - 6.3.12 Software package for data analysis
- 6.4 Analytic statistics
 - 6.4.1 Chi-squared test for comparing proportions
 - 6.4.2 How to calculate the chi-squared, and to look up p-values from a Table
 - 6.4.3 Standard error of a mean (and how it differs from a standard deviation)
 - 6.4.4 How to calculate 95% CI around a single mean
 - 6.4.5 How to use the standard error to compare 2 means.
 - 6.4.6 T-test
 - 6.4.7 Kruskal-Wallis test of 2 means (non-parametric)
- 6.5 Presenting data

viii. Teaching Methods

Lectures, seminars, Group work, Workshop, Assignment

ix. Assessment Methods

Continuous Assessment

- Assignments 10%
- Written tests 40%

Research proposal 50%

x. Reading list

Blink H and Groove KS (2005) Fundamentals of research methodology for health care professionals. 2nd Ed. Cape Town, Africa Juta

Burns N and Groove KS (2007) understanding nursing research: Building evidence based practice. 4th Ed st Louis, MO: Saunders

Creswell JW (2009) Research design: Qualitative and mixed method approaches 3rd Ed. California SAGE

Gallin JL (2006) Principles and practice of Clinical Research san Diego, CA: Academic Press

Polit DF & Hungler BP (2004) Nursing Research: Principles and Methods. 8th Ed.
Philadelphia: Lippincott

Rosner B (2006) Fundamentals of biostatistics 6th Ed. Belmont, CA: Thomson Brooks
Cole

YEAR TWO: SEMESTER 4

6. Course Description

i. **Course Title: Development Studies (KBDS 2408)**

ii. **Course status: Core**

iii. **Course Credits: 6**

iv. **Total Hours: 60**

v. **Course Aim**

The course exposes students to Tanzania's development experiences and be aware of the existing alternative development strategies. The importance of the course to nursing students is that it will help them to develop positive attitude towards independent learning and also lifelong learning as professionals. The student nurse is also able to network with other categories of students (Medicine, Physiotherapy & Pharmacy) by sharing knowledge, skills and experiences.

vi. **Learning outcome**

By the end of the course, the learner should be able to:

- 1) Analyze the dynamics of Tanzania's development plans/strategies and implementation in health and health related sectors.
- 2) Compare and contrast different development strategies in developing countries.
- 3) Analyze current development problems in Tanzania and how these problems relate to health
- 4) Apply the knowledge of development studies in planning, organizing and managing a health facility.

vii. **Course content**

1. Introduction

- 1.1 Definition of Health Care Sector
- 1.2 Health care administrative set up case of Tanzania.
- 1.3 Planning for Health Care.

2. Health Policy Planning and Resource Mobilization

- 2.1 Overview of Policy and Health Policy.
- 2.2 National Health Policy in Tanzania
- 2.3 Health Sector reform in Tanzania.
- 2.4 Health care financing; sources, types and impact to equity in health

3. Health and Environment

- 3.1 Safe Management of waste
- 3.2 Pollution, types, sources and impact of pollution to health
- 3.3 Global warming; causes and impact to health

3.4 Energy Development and its impact on environment and Health.

4. Industrialization, technological advancement and health

4.1. Features of Industrialization

4.2. Relationship between Industrialization, Urbanization and Health

4.3. Advantages and Disadvantages of Technological Development on Health

4.4. Advantages and Disadvantages of Technological Development on Health

4.5. Technological advances in Health and Medicine.

5. Globalization and Health

5.1.1 Overview of Globalization

5.1.2 Features of Globalization

5.1.3 Relationship between Globalization and \health

5.1.4 Advantages and Disadvantages of globalization on Health

5.1.5 Impact of Globalization on Health

6. Entrepreneurship in nursing

6.1. Definition of entrepreneurship

6.2. Importance of entrepreneurship

6.3. Categories/Types of entrepreneurship

6.4. General enterprising tendencies

6.5. Theories on entrepreneurship

6.6. Entrepreneurial qualities

6.7. Value addition

6.8. Concepts of labour market and labour market demand

6.9. Concept of entrepreneurial management

6.9.1. Entrepreneurship process

6.9.2. Common websites used for obtaining health information both national and international

6.9.3. Other sources of health information

viii. Teaching methods

Lectures, Lecture discussion, seminars and tutorials

ix. Assessment methods

Assignments 10%

Written test 40%

Semester written examinations 50%

x. Reading list

Boris U (2010). *Frontiers in Entrepreneurship*. 1st Ed. Born, Springer

Bornstein B and Davis S (2010). *Social Entrepreneurship: What everyone Needs to Edition*. Kentucky: Florence

Hisrich R.D, Michael Peters P.et al. (2005) *Entrepreneurship*. 6th Ed. New Delhi: Tata

- ILO (2003). *Start Your Business: Workbook*, International Labour Office, Geneva, International Edition *Know*: New York: Oxford University Press
- Kuratko D. & Richard M (2007). *Entrepreneurship- Theory, Process & Practice*, 7th
- Kuratko D. (2007). *Corporate Entrepreneurship*. USA: Now Publishers Inc.
- Management* Chltenham (UK): Edward Elgar Publishing.
- McGraw–Hill. Windrum P. (2008). *Innovation in Public Sector Services: Entrepreneurship, Creativity and*
- Rodney W (1996). *How Europe Undeveloped Africa*. TPH, DS
- Rugumamu S (1996). *Leading Issues in Development Studies*, Eds University of Dar es Salaam.
- Snyder M, Tadesse M (1995). *African Women and Development: A History*, Ed WUP
- Todaro MP (1985) *Economic Development in Third World*, Longmans

6. Course Description

i. Course Title: Advanced Nursing Sciences (KBAS 2409)

ii. Course status: Core

iii. Course Credits: 15

iv. Total Hours: 150

v. Course Aim

The course uses a topical approach to oncology and ethics based on a philosophical examination of self. It covers a variety of ethical issues including consequentiality, duty, and human rights. Each topic is discussed within the context of its historical development. Exploring the fundamental principles of each theory increases its applicability and usefulness to the nursing student. The student nurse examines applicability of ethics to the human life span.

vi. Learning outcome

By the end of the course, the learner should be able to:

- 1) Explain pertinent ethical and legal issues in the care of clients throughout the life span.
- 2) Describe moral frameworks in relation to self-awareness and professional decision-making.
- 3) Affirm legally and ethically responsible in the delivery of health care to clients.
- 4) Apply knowledge of oncology in care of patients/clients in clinical and community settings

vii. Course Contents

1. Ethical aspects in Nursing
 - 1.1. Definitions
 - 1.2. Ethics and code of conduct for nurses
 - 1.2.1. Evolution of ethics and code of conduct
 - 1.2.2. Regulatory Framework in Nursing Practice
 - 1.2.2.1. International Council of Nurses (ICN)
 - 1.2.2.2. East Central and Southern African College of Nursing (ECSACON)
 - 1.2.2.3. Tanzania Nurses and Midwives Council(TNMC)
 - 1.3. Moral Significance Of Nursing
 - 1.4. Ethical Decision Making

- 1.5. Rights Of Patients/Clients And Nurses
- 1.6. Professional values
- 1.7. Ethical Principles in nursing
 - 1.7.1. Legal and ethical Issues in Nursing and Health care systemsConfidentiality
 - 1.7.2. Consent
 - 1.7.3. Health care laws
 - 1.7.3.1. Civil laws
 - 1.7.3.2. Criminal laws
 - 1.7.3.3. Tort laws
 - 1.7.4. Accountability
- 1.8. Ethical problems and dilemmas in Nursing practice and education
 - 1.8.1. Euthanasia
 - 1.8.2. Beneficence
 - 1.8.3. Right to life vsAutonomy
 - 1.8.4. Justice or fairness
 - 1.8.5. Fidelityvs Veracity
- 1.9. Right of the patient and the nurse
 - 1.9.1. Roles of Proessional nurse in ethics
- 1.10 Ethics through the Human Lifestyle
 - 1.10.1 The unborn child
 - 1.10.2 Childhood
 - 1.10.3 Adolescence
 - 1.10.4 Adulthood
 - 1.10.5 The elderly
 - 1.10.6 The dying

2 Oncology

- 2.1 Aetiology
- 2.2 Pathophysiology
- 2.3 Classification of cancer
- 2.4 Diagnostic measures
- 2.5 Pharmacological &non-Pharmacological treatment
- 2.6 Management of patient
- 2.7 Prevention of cancer

viii. Teacher methods

Lecture/discussion, group work, case studies, tutorials and seminars

ix. Assessment methods

Assignments 10%

Written tests 15%

Practical examination 25%

Semester written examinations 50%

x. Reading list

Dimond B (2005) *Legal aspects of nursing*, 4th Ed. Pearson Longman

Kozier B, Erb G, Berman A et al (2008). *Fundamentals of nursing Concepts, process and practice*, 8thEd. Pearson

Kozier B, Erb G, Berman A et al (2012). *Fundamentals of nursing Concepts, process and practice*, 2nd Ed. Pearson

Perry AG, Potter PA (2010). *Clinical nursing skills & techniques*, 7th Ed. Mosby

Rosdahl CB, Kowalski MT (2008). *The textbook of basic nursing*, Ed 9, Lippincott Williams & Wikins

6. Course Description

i. **Course Title: Research Methodology (KBRM 2413)**

ii. **Course status: Core**

iii. **Course Credits: 31**

iv. **Total Hours: 310**

v. **Course Aim**

This course equips learners with skills on conducting research. Learners will conduct research in their area of interest under the supervision of identified supervisors. This will enable learners to critique previous research reports and use the evidence based information in provision of health care services in clinical and community settings.

vi. **Learning Outcome**

By the end of this course, the learner should be able to:

- 1) Apply knowledge and skill in research to collect, process and analyze data
- 2) Write a research report based on the findings to draw inferences.
- 3) Utilize knowledge of research in promoting evidence based nursing care to patients/clients in clinical and community settings.

vii. Course content: **Field work: Data collection and report writing**

1. Data management

1.1 Database and data collection

1.1.1 Database creation

1.1.2 Data collection and entry

1.2 Data analysis in quantitative research

1.3 Data cleaning and descriptive analysis using SPSS

1.3.1 Data cleaning

1.3.2 Descriptive analysis using SPSS (categorical vs. numerical variables)

1.3.3 Dummy tables by specific objectives

1.3.4 Data manipulation

1.4 Inferential statistics using SPSS

1.4.1 Cross tabulations & interpretation

- 1.4.2 testing difference between groups (use of test statistics)
 - 1.4.3 Strength of association
 - 1.5 Data analysis in qualitative studies
 - 1.5.1 Steps in thematic framework analysis
- 2 writing the results section
 - 2.1 Parts of the results section;
 - 2.1.1 Background characteristics of the participants
 - 2.1.2 Results by specific objectives
 - 2.1.3 Data presentation (revision)
 - 2.1.4 Key features of tables and figures
 - 2.1.5 Writing results section for qualitative studies
- 3 writing discussion section
 - 3.1 Parts of discussion section;
 - 3.1.1 Summary of key findings
 - 3.1.2 General discussion
 - 3.1.3 Discussion of key findings
 - 3.1.4 Study limitations and/ or strengths & effects on results
 - 3.1.5 Conclusion
 - 3.1.6 Recommendations
- 4 Publication and issues involved
 - 4.1 Process of manuscript development
 - 4.2 choose a journal
 - 4.3 Authorship issues
 - 4.4 Ownership of data

viii. Teaching methods

Independent field work

ix. Assessment methods

Research reports 100%

x. Reading list

Blink H and Groove KS (2005) Fundamentals of research methodology for health care professionals. 2nd Ed. Cape Town, Africa Juta

Burns N and Groove KS (2007) understanding nursing research: Building evidence based practice. 4th Ed st Louis, MO: Saunders

Creswell JW (2009) Research design: Qualitative and mixed method approaches 3rd Ed. California SAGE

Gallin JL (2006) Principles and practice of Clinical Research san Diego, CA: Academic Press

Polit DF & Hungler BP (2004) Nursing Research: Principles and Methods. 8th Ed.
Philadelphia: Lippincott

Rosner B (2006) Fundamentals of biostatistics 6th Ed. Belmont, CA: Thomson Brooks
Cole

YEAR 3, SEMESTER 5

6. Course Description

i. **Course Title: Advanced Nursing Sciences (KBAS 3509)**

ii. **Course status: Core**

iii. **Course Credits: 14**

iv. **Total Hours: 140**

v. **Course Aim**

The course focuses on maternal health. The learner will be able to provide evidence based practice while providing maternal health care services to individual, families and community. Emphasis will be on provision of high quality maternal and child health care services to reduce maternal and child mortality.

vi. **Learning outcome**

By the end of the course, the learner should be able to:

1. Describe global, regional and national trends and policies related to maternal health.
2. Describe pre, intra and postpartum care of clients requiring maternal services in health care in clinical and community setting.
3. Apply knowledge of maternal health in promoting quality pre, intra and postpartum care in clinical and community settings
4. Apply evidenced based practice to provide service on obstetrics/gynaecological emergencies.

vii. **Course Contents**

1. Maternal Health

- Global trends and policies related to Maternal health
- Facts about Maternal Mortality
- National protocol and guidelines on Maternal Health
 - o Preconception care
 - o Focused antenatal care
 - o Postnatal care
- Management of obstetric emergencies
 - o Antepartum Haemorrhage
 - o Obstructed labour
 - o Postpartum haemorrhage
 - o Pre-eclampsia and Eclampsia
 - o Anaemia in pregnancy
 - o HIV AIDS with pregnancy

- Puerperal psychosis
- Abortions

viii. Teacher and learning methods

Lecture/discussion, group work, case studies, tutorials and seminars

ix. Assessment methods

Assignments 10%

OSCE 25%

Written tests 15%

Practical examination 30%

Semester written examinations 20%

x. Reading list

Dimond B (2005) *Legal aspects of nursing*, 4th Ed. Pearson Longman

Kozier B, Erb G, Berman A et al (2008). *Fundamentals of nursing Concepts, process and practice*, 8thEd. Pearson

Kozier B, Erb G, Berman A et al (2012). *Fundamentals of nursing Concepts, process and practice*, 2nd Ed. Pearson

Perry AG, Potter PA (2010). *Clinical nursing skills & techniques*, 7th Ed. Mosby

Rosdahl CB, Kowalski MT (2008). *The textbook of basic nursing*, Ed 9, Lippincott Williams & Wikins

Drife, J and Magowan, B (2004). *Clinical Obstetrics and Gynaecology*. Saunders. New York.

Enkin, M., Keirse, M. J. N. C., Neilson, J., Crowther, C., Duley, L., Hodnett, E., Hofmeyr, J. (2000) *A Guide to Effective Care in Pregnancy and Childbirth*. (3rd edition) Oxford University Press, Great Britain.

Wash, M. (1997) *Watson's Clinical Nursing and Related Sciences*. (5th edition) ELBS, London.

6. Course Description

i. **Course Title: Leadership and Management (KBLM 3512)**

ii. **Course status: Core**

iii. **Course Credits: 8**

iv. **Total Hours: 80**

v. **Course Aim**

Students will be accorded the opportunity to explore their own leadership skills and knowledge through fieldwork by relevant theoretical constructs. Action learning sets will be used to integrate the theoretical base of leadership with fieldwork within an identified health care setting.

vi. **Learning outcome**

By the end of the course, learner should be able to;-

1. Conduct leadership role to RNO, DNO, KCMC, RCHCO and Regional hospital office to plan nursing activities
2. Apply acquired knowledge on leadership to improve health care services in all settings.

vii. **Fieldwork Guidelines**

viii. **Teaching and learning methods**

Independent studies Field work: RNO, DNO, KCMC, RCHCO, and Regional hospital Rotation

ix. **Assessment method**

Individual Assignments 30%

Group assignment 20%

Semester written examinations 50%

x. **Reading list**

Bhat, A and Kumas, A (2010).Management, principles, processes and practices. Oxford University

Keuning D (2007) Management a European perspective 3third Ed. Wolters-Noordhoff

Core GA (2002) Management theory and practice 5th Ed ELST London

Dessler G (2006) Human resource management 10th Ed. Prentice Hall India

Marquiz LB and Huston C (2006) Leadership roles and management functions in nursing 5th Ed. Lippincott manual New York

6. Course Description

- i. Course Title: Community Health Nursing (KBCH 3515)**
- ii. Course status: Core**
- iii. Course Credits: 30**
- iv. Total Hours: 300**
- v. Course Aim**

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

vi. Learning outcome

By the end of the course, the learner should be able to:

- 1) Describe health care services in Tanzania
- 2) Identify the concepts of health determinants, high risk groups and prevention in the community context.
- 3) Explain the concept of emerging and re-emerging infectious and non-infectious diseases
- 4) Apply knowledge of PHC and CBHC to develop health promotion strategies appropriate for communities.
- 5) Identify community resources appropriate for specific groups in the community and ensure quality cold chain system for vaccine potency.
- 6) Identify current demographic and economic factors influencing health care issues.
- 7) Apply knowledge and skills in influencing people behavioural change in their real environment to promote health.
- 8) Conduct community health assessment and plan for intervention using health indicators to solve community problems in collaboration with other partners

vii. Course Contents

1. Introduction to community health nursing

- 1.1. Health Services in Tanzania.
- 1.2. Health and Development.
- 1.3. Types of community

- 1.4. Roles of the community health nurse
- 1.5. Demographic identification of high risk groups.
- 1.6. Emerging and re-emerging Infectious and non-infectious diseases.
- 2. Health determinants**
 - 2.1. Bio-psycho-social factors
- 3. Disease prevention**
 - 3.1. The scope of prevention
 - 3.2. Levels of prevention
 - 3.3. Screening
 - 3.4. Personal protective gears
- 4. The environment and health**
 - 4.1. Sanitation, & waste management
 - 4.2. Housing,
 - 4.3. Pollution.
- 5. Primary health Care**
 - 5.1. Health care Reforms in Tanzania
 - 5.2. PHC & CBHC concepts
 - 5.2.1. Principles of PHC
 - 5.2.2. Elements of PHC
 - 5.2.3. Development of CBHC.
 - 5.2.4. Reasons for adopting CBHC
 - 5.2.5. Roles of key implementers in PHC/CBHC
 - 5.4 Administration and management of vaccinations.
 - 5.3.1 Types of immunization.
 - 5.3.2 Administration of vaccination.
 - 5.3.3 Refrigeration and the cold chain.
 - 5.3.4 International regulation.
 - 5.3.5 Vaccination characteristics.
- 6 Health Indicators**
- 7 Occupational health**
- 8 Community Assessment, Planning and Interventions**
 - 8.1 Community assessment/ diagnosis
 - 8.1.1 Types of community assessment
 - Comprehensive assessment
 - Familiarisation
 - Problem oriented assessment.
 - Community sub-system assessment
 - 8.1.2 Steps in community assessment
 - 8.2 Community Planning
 - 8.2.1 Strategic planning
 - 8.2.2 Project planning

8.2.3 Community Intervention

8.2.4 Partnership for Health

viii. Teaching methods

Lecture/discussion, individual and group work, seminar/tutorial, case studies,
Field visits (Community Field - Visit infectious diseases hospitals, Assessment of the environment, Visit industries, write a report,).

ix. Assessment methods

Assignment 10%

Field visit 10%

Written tests 30%

Semester written examination 50%

x. Reading list

Bonota R, Beaglehole R., & Kjeuström, T. (2006) Basic Epidemiology 2nd Ed, Geneva Switzerland, WHO

Cook GC and Zumla AI (2003) Mansons Tropical diseases 22nd Ed. Saunders

Lankester T (2008) Setting up Community health programs, A practical Manual for use in developing countries 3rd Ed. Macmillan

Naidoo J and Wills J (2007) Health promotion foundation for practice 2nd Ed. St Louis Bailliere Tindall

Rosner B (2006). Fundamentals of biostatistics 6th Ed, Belmont CA: Thomson

Stanhope M & J. Lancaster (2004) Community health nursing 6th Ed St. Louis: Mosby

Wood C, Ngatia P, Nyakwana T, Oirere B and Waithaka PM (2008). Community Health, 3 Ed. AMREF

6. Course Description

- i. Course Title: Nursing Education (KBNE 3516)**
- ii. Course status: Core**
- iii. Course Credits: 10**
- iv. Total Hours: 100**
- v. Course Aim**

This course introduces nursing students to major theoretical perspectives on student learning and nursing education practices and how this body of knowledge can be used to facilitate teaching and learning process. The principles of learning and teaching are introduced using a variety of teaching strategies with an emphasis on health education to different groups in the clinical setting. It seeks to equip the nursing student with the appropriate knowledge and skills necessary to effectively identify, analyse and utilize health education opportunities in relation to clients, their significant others and staff within the clinical setting. Common teaching and learning strategies are taught which can be applied in a various contexts.

vi. Learning outcome

By the end of the course, the learner is expected to be able to:

- 1) Analyse individual psychological differences with regard to teaching and learning
- 2) Demonstrate sound understanding of theoretical bases for nursing education
- 3) Analyse the concept of andragogy and pedagogy in learning and teaching
- 4) Describe the domains of learning
- 5) Explain the concept of curriculum development
- 6) Develop a lesson plan for learning and teaching practice
- 7) Conduct microteaching to junior students to demonstrate ability to impart knowledge and skills to learners.
- 8) Apply knowledge of nursing education in clinical and community setting to impart knowledge/skills to patients/clients, students and community at large

vii. Course Contents

1. Psychological basis of teaching and learning

- 1.1. Individual differences
- 1.2. Motivation.
- 1.3. Intelligence.
- 1.4. Learning Styles

2. Theoretical bases for nursing education

- 2.1. Behavioural theory

- 2.2. Cognitive theory
- 2.3. Humanistic theory
- 2.4. Adult learning theory
 - 2.4.1. Andragogy and pedagogy

3. Domains of learning

- 3.1. Cognitive domain
- 3.2. Psychomotor domain
- 3.3. Affective domain

4. Introduction to curriculum development and planning

- 4.1. Types of curriculum
- 4.2. Curriculum models
- 4.3. Stages/stapes of curriculum development
- 4.4. Course planning
- 4.5. Unit planning
- 4.6. Curriculum review

5. Planning for teaching and learning activities

- 5.1. Organization of the learning environment
- 5.2. Lesson plan
- 5.3. Taxonomy of educational objectives

viii. Teaching methods

Lecture/discussion, group work, assignment, seminar/tutorial

ix. Assessment methods

Assignments 15%

Written tests 35%

Semester written examination 50%

x. Reading list

Brady, L. (1995). *Curriculum Development*. (6th Ed.) Prentice, hall

Bwatwa Y., Fordham P., Fox J., & Mlekwa. (1991). *Adult Education*. Nairobi: Oxford University

Gilbert, J.J. (1998). *Educational handbook for health personnel*. (6th Ed.). WHO, Geneva

Posner G. J (1995). *Analysing Curriculum*. (2nd Ed.). McGraw Hill.Inc.

Quinn, F.M., & Hughes. (2007). *Principals and practice of Nurse Education*. (5th Ed.). Nelson Thornes Ltd

YEAR 3, SEMESTER 6

6. Course Description

- i. Course Title: Advanced Nursing Science (KBAS 3609)**
- ii. Course status: Core**
- iii. Course Credits: 28**
- iv. Total Hours: 280**
- v. Course Aim**

The course focuses on maternal health. Emphasis will be on family planning and neonatal health care services to individual, families and community. Learners will be able to provide family planning service in the community to meet unmet needs of family planning in the society. Gender sensitivity in provision of health care services will be emphasized to minimize bias among community members.

vi. Learning outcome

By the end of the course, the learner should be able to:

1. Explain concept of family planning and population health.
2. Describe measures to protect neonatal and infant health in clinical and community setting
3. Advocate gender equity in provision of nursing care services in provision of health care
4. Apply knowledge and skills of maternal health in prevention of neonatal morbidity and premature mortality

vii. Course content.

1. Family Planning
2. Neonatal and Infant Health
 - 2.1. National protocol and guidelines on Neonatal Health
 - 2.2. Infant health challenges in the Postnatal period
 - 2.3. Infant Breast feeding
 - 2.4. Prevention of Malnutrition
 - 2.5. Kangaroo
 - 2.6. HIV care of Infants
 - 2.7. Neonatal conditions.
 - 2.8. Helping the baby to breath
3. Major Issues in women's health
 - 3.1. The context of sexuality- historical perspectives cultural and religious

- 3.2. Gender health and violence
 - 3.3. The role of National and International Organisation in Women's health.
 - 3.4. Gender equality and equity
 - 3.5. The role of nurses in prevention and management of gender violence
 - 4. General trends and issues in nursing
 - 4.1. Controversial issues in Nursing
 - 4.2. Gender relations in Health and Nursing
- viii. Teacher methods
- Lecture/discussion, group work, case studies, tutorials and seminars
- ix. Assessment methods
- Assignments 10%
 - OSCE 25%
 - Written tests 15%
 - Practical examination 30%
 - Semester written examinations 20%
- x. Reading list
- Dimond B (2005) *Legal aspects of nursing*, 4th Ed. Pearson Longman
- Kozier B, Erb G, Berman A et al (2008). *Fundamentals of nursing Concepts, process and practice*, 8thEd. Pearson
- Kozier B, Erb G, Berman A et al (2012). *Fundamentals of nursing Concepts, process and practice*, 2nd Ed. Pearson
- Perry AG, Potter PA (2010). *Clinical nursing skills & techniques*, 7th Ed. Mosby
- Rosdahl CB, Kowalski MT (2008). *The textbook of basic nursing*, Ed 9, Lippincott Williams & Wikins
- Drife, J and Magowan, B (2004). *Clinical Obstetrics and Gynaecology*. Saunders. New York.
- Enkin, M., Keirse, M. J. N. C., Neilson, J., Crowther, C., Duley, L., Hodnett, E., Hofmeyr, J. (2000) *A Guide to Effective Care in Pregnancy and Childbirth*. (3rd edition) Oxford University Press, Great Britain.
- Wash, M. (1997) *Watson's Clinical Nursing and Related Sciences*. (5th edition) ELBS, London.

6.Course Description.

i. Course Title: Community Health Nursing (KBCH 3615)

ii. Course status: Core

iii. Course Credits: 6

iv. Total Hours: 60

v. Course Aim

This course focuses on the practice of community health in the actual settings. It provides opportunities for learners to apply community/public health nursing concepts, theories, and processes in the care of individuals, families and the community. Special projects are assigned to develop learner's skills in the practice of community health nursing. Emphasis is on interdisciplinary health care with multicultural and high – risk families and aggregates in the community. Community involvement and participation in implementation of community projects is the key concept to empower community for their own health and development.

vi. Learning outcome

By the end of the course, the learner should be able to:

- 1) Identify the role of community involvement/participation in health care programmes.
- 2) Describe health promotion concept in clinical and community setting
- 3) Describe the concept of school health program to protect school pupils from diseases
- 4) Apply the concept of Planning in Community Health Care to address clinical and community issues.
- 5) Apply the nursing process to meet the health care needs of individuals, families, and community.
- 6) Practice community health nursing according to legal, ethical, and professional standards to individuals, families, and the community

vii. Course content

1. Community involvement and participation

- 1.1. Levels of community participation
- 1.2. Empowerment
- 1.3. Community development
- 1.4. Interpretations of community participation in health: compliance, contribution.
- 1.5. Collaboration, control of activities and resources by the community
- 1.6. Facilitating community participation
- 1.7. Evaluation of community participation
- 1.8. Obstacles to community participation

2. Health promotion and education

2.1. Health education

2.2. Health promotion

-Health promotion charter

3. Community Care Giver

3.1. School Health

3.2. The Face of Poverty

3.3. Violence and abuse

3.4. Current trends in Community Health Nursing

4. Planning in Community Health Care

4.1. Aspects of planning in community health care.

4.1.1. epidemiological prevention process planning model

4.1.2. Project planning

4.1.3. Strategic planning

viii. Teaching methods

Lecture discussion, case studies, seminar/tutorial,

ix. Assessment methods

Assignment 10%

Written tests 40%

Field report 50%

x. Reading list

Bonota R, Beaglehole R and Kjeuström T (2006) Basic Epidemiology 2nd Ed, Geneva Switzerland, WHO

Cook GC and Zumla AI (2003) Mansons Tropical diseases 22nd Ed. Saunders

Lankester T (2008) Setting up Community health programs, A practical Manual for use in developing countries 3rd Ed. Macmillan

Naidoo J and Wills J (2007) Health promotion foundation for practice 2nd Ed. St Louis Bailliere Tindall

Rosner B (2006). Fundamentals of biostatistics 6th Ed, Belmont CA: Thomson

Stanhope M & J. Lancaster (2004) Community health nursing 6th Ed St. Louis: Mosby

Wood C, Ngatia P, Nyakwana T, Oirere B and Waithaka PM (2008). Community Health, 3 Ed. AMREF

6. Course Description

i. Course Title: Nursing Education (KBNE 3616)

ii. Course status: Core

iii. Course Credits: 10

iv. Total Hours: 100

v. Course Aim

This course introduces nursing students to major theoretical perspectives on student learning and nursing education practices and how this body of knowledge can be used to facilitate teaching and learning process. The principles of learning and teaching are introduced using a variety of teaching strategies with an emphasis on health education to different groups in the clinical setting. It seeks to equip the nursing student with the appropriate knowledge and skills necessary to effectively identify, analyse and utilize health education opportunities in relation to clients, their significant others and staff within the clinical setting. Common teaching and learning strategies are taught which can be applied in a various contexts.

vi. Learning outcome

By the end of the course, the learner is expected to be able to:

- 1) Utilize the principles of teaching and learning in facilitating health education sessions
- 2) Apply different methods of teaching and learning in classroom and clinical settings
- 3) Utilize various teaching aids in facilitating health education session in different groups of learners
- 4) Conduct assessments and evaluation of students' learning achievements

vii. Course Contents

1. Introduction to principles of teaching and learning

- 1.1. Principles of teaching
- 1.2. Principles of learning
- 1.3. Principles of adult learning

2. Teaching aids

- 2.1. Flipcharts
- 2.2. Computer and projector
- 2.3. Audio cassette and video recording
- 2.4. Black or whiteboard
- 2.5. Placard

3. Methods of Teaching and Learning

- 3.1. Lecture
- 3.2. Lecture discussion
- 3.3. Demonstration
- 3.4. Role play
- 3.5. Seminar
- 3.6. Tutorial
- 3.7. Group discussion
- 3.8. Case studies
- 3.9. Team teaching

4. Planning for teaching

- 4.1. Selecting the subject matter for a teaching session
- 4.2. Selecting appropriate teaching methods
- 4.3. Organization of teaching environment
- 4.4. Lesson planning
- 4.5. Micro-teaching

5. Assessment and evaluation of learning

- 5.1. Purpose and aim of assessment and evaluation
- 5.2. Criteria for assessment and evaluation
- 5.3. Methods of assessment and evaluation

viii. Teaching methods

Lecture/discussion, group work, micro-teaching, seminar/tutorial

ix. Assessment methods

Assignments 10%
 Micro-teaching 10%
 Written tests 30%
 Semester written examination 50%

x. Reading list

Brady, L. (1995). *Curriculum Development*. (6th Ed.) Prentice, hall
 Bwatwa Y., Fordham P., Fox J., & Mlekwa. (1991). *Adult Education*. Nairobi: Oxford University
 Gilbert, J.J. (1998). *Educational handbook for health personnel*. (6th Ed.). WHO, Geneva
 Posner G. J (1995). *Analysing Curriculum*. (2nd Ed.). McGraw Hill.Inc.
 Quinn, F.M., & Hughes. (2007). *Principals and practice of Nurse Education*. (5th Ed.). Nelson Thornes Ltd

6. Course Description.

i. Course Title: NURSING INFORMATICS (KBNI 3618)

ii. Course status: Core

iii. Course Credits: 6

iv. Total Hours: 60

v. Course Aim

The course aims to prepare and produce nurses with knowledge and skills on gathering and managing patients' information from various sources for planning patients nursing care. It also aims to equip learners on the use of computer in various environments thus enabling the learner to document patients/clients information.

vi. Learning Outcome

By the end of the course, a learner should be able to:

- 1) Organize and manage patients' medical records
- 2) Apply computer knowledge in managing health information in clinical and public settings.

vii. Course Content:

1. Information Systems

- 1.1. Basic understanding of information systems
- 1.2. Introduction to Medical records
- 1.3. Types of Medical records
- 1.4. Tools Used in Medical records
- 1.5. Information System Security and Control
- 1.6. Building and Maintaining Information Systems
- 1.7. Report writing
- 1.8. Concept of Health management information system
- 1.9. Health Management Information System (TZ)

2. Information and database

- 2.1. Computer in nursing education
- 2.2. Computer Assisted Instruction
- 2.3. Classroom technologies
- 2.4. Distance learning
- 2.5. Course management
- 2.6. Computer in nursing administration
- 2.7. Human resource
- 2.8. Facility Management
- 2.9. Budget and Finance

- 2.10. Quality assurance and control
- 2.11. Computer in nursing practice
- 2.12. Bedside data entry
- 2.13. Computer based patient record (CPR)
- 2.14. Telemedicine/Tele-health

viii. Teaching methods

Lecture/Discussion, Practical, Seminar and Demonstration

ix. Assessment methods

Assignment 10%

Practical 30%

Written tests 10%

Semester written examination 50%

x. Reading list

Berman, A., & Snyder, S. (2012). *KozieandErb's Fundamentals of Nursing. Concepts, process, and Practice* (9th Ed.). New Jersey: Pearsons.

MoHSW, (2012) *Health Management Information System*, Book one, (3rded.). Dar es Salaam, Tanzania.

MoHSW (2013). *Health Management Information System. Training Manual*. Dar-es-Salaam

Potter, P. A., Perry, A. G., Stockert, A. P., et al. (2013). *Fundamentals of Nursing*, (8th Ed.). Elsevier, Mosby Co. St. Louis, Missouri. USA

6. Course Description

i. Course Title: PALLIATIVE CARE (KBPC 3619)

ii. Course status: Core

iii. Course Credits: 10

iv. Total Hours: 100

v. Course Aim

This course intends to equip a learner to care patients with chronic illness and give psychological support to the individual, family and community at large. Multidisciplinary approach will be emphasized to promote holistic care. The emerging and re-emerging diseases increased the burden of chronic diseases with terminally ill patients demanding care within their homes, thus palliative care highlights care beyond the health care facilities.

vi. Learning outcome

At the end of this module, students should be able to

- 1) Describe, the history, basic philosophy and models of PC
- 2) Apply knowledge of pain management and other symptoms in palliative care.
- 3) Apply skills in caring of the dying patients
- 4) Assess the impact of social, psychological and emotional aspects on PC patients and their families
- 5) Differentiate spirituality, religion and beliefs in relation to the meaning of life to PC clients
- 6) Describe the ethical-legal aspects of Management of PC clients
- 7) Demonstrate ability to communicate effectively to the PC clients, family and within their PC team
- 8) Demonstrate sensitivity to social cultural differences and diversity in the care of the PC clients and families

vii. Course content

1. Introduction to palliative care

- 1.1. Define Palliative Care
- 1.2. History and philosophy of palliative care
- 1.3. Concept, principles and practice of palliative care
 - 1.3.1. Palliative care as a human right issue
 - 1.3.2. Contribution of different disciplines
 - 1.3.3. Cultural issues
 - 1.3.4. Whole Person Care (holistic care)

- 2. Model of palliative care service delivery**
- 3. Pain and other symptom management**
 - 3.1. Pain
 - 3.1.1. Definition of pain
 - 3.1.2. Concepts of total pain
 - 3.1.3. Pain relief – A Universal Human Right
 - 3.1.4. Anatomy and pathophysiology of pain
 - 3.2. Types of pain
 - 3.2.1. Nociceptive pain (somatic pain and visceral pain)
 - 3.2.2. Neuropathic pains
4. Pain management
 - 4.1. Pharmacological approach
 - 4.1.1. WHO analgesic ladder
 - 4.1.2. Signs of adverse and toxic effect of oral opioids
 - 4.1.3. Myths about clinical use of opioids
 - 4.1.4. Regulatory Issues – TFDA/Pharmacy Council guidelines on the prescription and use of controlled drugs
 - 4.2. Non pharmacological approach
- 5. Barriers to pain management**
- 6. Symptom management**
 - 6.1. Pathophysiology and management of the following symptoms
 - 6.2. GIT
 - 6.2.1. Constipation and diarrhoea
 - 6.2.2. Nausea and Vomiting
 - 6.2.3. Anorexia, cachexia, fatigue
 - 6.2.4. Thirst, dry mouth
 - 6.2.5. Oral sore
 - 6.2.6. Swallowing problems
 - 6.3. Pulmonary symptoms
 - 6.3.1. Dyspnea
 - 6.3.2. Cough
 - 6.4. Neuropsychiatric symptoms
 - 6.4.1. Delirium, confusional states
 - 6.4.2. Insomnia
 - 6.4.3. Depression and other mood disorders
 - 6.4.4. Anxiety and fear
 - 6.4.5. Hallucination
 - 6.5. Dermatologic symptoms
 - 6.5.1. Management of ulcers
 - 6.5.2. Lymphoedema
 - 6.5.3. pruritis (itching)
 - 6.5.4. dry skin
 - 6.5.5. Skin rashes

7. Care of dying patient

7.1. Emergencies in palliative care

- 7.1.1. Spinal cord compression
- 7.1.2. Metabolic derangement (e.g. electrolyte imbalance, Tumorlysis syndrome, hypo/hyperglycemiaetc)
- 7.1.3. Hemorrhage
- 7.1.4. Drug toxicity
- 7.1.5. Pathological fracture

8. Physiology of dying

9. Withholding and withdrawing nutrition and fluids

10. Psychosocial

- 10.1 Assessing the ill person in relation to family, work and social contextwith tact and compassion
- 10.2 Strategies to meet individual patient and family care needs
- 10.3 Impact of chronic illness on interpersonal relationships
- 10.4 Psychological reactions to chronic illness, grief and loss and the coping strategies
- 10.5 Impact on patient and family loss of independence, role, appearance, sexuality and perceived self – worth
- 10.6 Ethnic, social and religious differences
- 10.7 Help patients and families to deal with practical assistance in financial, social and legal issues
- 10.8 Grief and bereavement
- 10.9 Anticipatory mourning and risk factors

11. Spirituality

- 11.1 Definition of spirituality
- 11.2 Assessment of spirituality
- 11.3 Differentiate spirituality, religion and belief
- 11.4 Meaning of life and sense of rationality

12. Ethical and legal issues

- 12.1 Decision-making at the end of life
- 12.2 Proxy decision-making and advance directives
- 12.3 Palliative care, euthanasia and physician assisted suicide

13. Clinical communication skills

- 13.1 Models of communication
- 13.2 Verbal and non-verbal communication
- 13.3 communication in special situations
 - 13.3.1 Breaking bad news
 - 13.3.2 Communicating prognosis
 - 13.3.3 Withholding or withdrawing fluid/food
 - 13.3.4 Decision – making
 - 13.3.5 Talking with relatives

14. Consequences of failure to communicate

15. Teamwork

- 15.1 Team structure, roles and responsibilities of multidisciplinary teams within the broader health context of palliative care
- 15.2 Networking (support systems and partners) and delegation
- 15.3 Forms of team support
- 15.4 Strategies that facilitate team functioning
- 15.5 Barriers to effective team work
- 15.6 Conflict and conflict resolution

16. Care of careers

- 16.1 Management of “Burn out”

17. Other palliative care clinical intervention

- 17.1 Palliative care surgery
- 17.2 Palliative care radiation
- 17.3 Palliative care chemotherapy
- 17.4 Antiretroviral therapy for HIV infected patients

viii. Teaching methods

Lecture discussion, tutorial, case studies, field visit

ix. Assessment methods

Assignment 10%
Individual report 10%
Group report 10%
Written tests 20%
Semester written examination 50%

x. Reading list

Brumer and Suddarth (2010) *Textbook of Medical Surgical Nursing*, 12thEd. Wolters Kluwer

Lipincott Williams & Wilkins

Osbon KS et al (2014). *Medical Surgical Nursing, preparation for practice*, 2nd Ed. Pearson

Watson’s M (2002). *Clinical nursing and related sciences*, 6th Ed. BailliereTindall

Lewis SM, Heitkemper MM & Dirksen SR (2004). *Medical Surgical Nursing; Assessment*

and management of clinical problems. Mosby, Inc.

Daniels R Nicoll H L (2012). *Contemporary Medical Surgical Nursing*, 2nd Ed. Delmar

Pellico LH (2013). *Focus on Adult health Medical Surgical Nursing*. Lipincott Williams & Williams

7. Facilities and Support Services (*facilities here should include only those directly related to this programmes and not institutional wide facilities*)

7.1 Facilities

7.1.1 Provide details of current available space allocated to the proposed or reviewed programme i.e. Provide number and capacity for each of the following: lecture rooms, laboratories, studio, workshop, seminar rooms, special rooms and others.

There are 3 classrooms and 1 computer room, 2 teachers office, and toilets for male and female students, of which 3 classes accommodates 40 students each. However, the building comprises 4 classrooms for preservice programme of which 3 classes accommodates 60 students each, 3 offices as well as toilets. 1 skills laboratory for nursing and midwifery procedures that accommodates 40 at once.

7.1.2 Provide details of additional space required for the proposed or reviewed programme

The programme will use Skill laboratory available at faculty of Nursing for nursing procedure before students engaging into actual patient care.

7.2 Library Facility (a) *Will learners have access to library facilities? (actual/remote) (b) Specify Location(s) and the staff qualifications of the library staff or technical staff for the proposed or reviewed programme (c) Material (Give detailed list of all relevant readings available in the library accessible remotely or actual. Classify them into discipline/subjects- e.g. for Bachelor of Arts with Education- History readings, educational foundation readings, Psychology readings...etc. as well as an average facility: student ratio) (d) Indicate list of textbooks and reference books, journals etc. for each course*

a) KCMUCo physical and remote library will be accessible to all students.

b) Location and staff qualification of the library staff.

a. Janeth Machange

i. KCMC

ii. Bachelor of Library and information studies

b. Dorica Mfungo Nyabujeje

i. KCMC

ii. Diploma in Library

- c. Material (Give detailed list of all relevant readings available in the library accessible remotely or actual. Classify them into discipline/subjects- e.g. for Bachelor of Arts with Education- History readings, educational foundation readings, Psychology readings...etc. as well as an average facility: student ratio)

Microbiology

Peter J; Roitt, Ivan M (Ivan Maurice) (2011), Roitt's essential immunology (12th Edition) Chichester, West Sussex ; Hoboken, NJ : Wiley-Blackwell, Geo F Brooks, Karen C Carroll,

Janet S Butel, Stephen A Morse (2007), Jawetz, Melnick & Adelberg's Medical Microbiology (24th Edition), McGraw Hill, London. Mims C., Mosby C.,

Murray P., Kobayshi G., Pfaller, M., Rosenthal, K. (2005). Medical Microbiology. (5th edition). Mosby International Ltd Moselio Schaechter; N Cary Engleberg;

Victor J DiRita; Terence Dermody (2013), Schaechter's Mechanisms of Microbial Disease (5th Edition), Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia

Patrick R. Murray, Ken S. Rosenthal (2014), Medical Microbiology (7th Edition), Elsevier

Stuckle VA (1993). Microbiology for Nurses (3rd Edition) Blaine Tindall, London.

Timbury MC (2000). Notes on Medical Virology Churchill Livingstone, New York

Felsenfeld G and McGhee J, D. (1986) Molecular Biology; Pub Med Journal

Biochemistry

Golder N wilson(2002) Biochemistry and Genetics; The McGraw Hill companies

John W Baynes and Marek H Dominiczak (2007) Medical Biochemistry; Elsevier Inc

Murray, RK, Granner, DK., Roducell, VW (2003.) Harpers Biochemistry, 5th Ed. Appleton and Lange, U.S.A.

Quellette, R J (2001).Introduction to General, Organic and Biological Chemistry.Appleton and Large, USA.

Anatomy

Snell, RS (2004) Clinical Anatomy, 4th Ed, Lippincott, London.

Thiobodeau GA and Patton KT (2003).Anatomy and Physiology. Mosby, St. Louis.

Waugh A and Grant A (2005).Anatomy and Physiology in Health and Illness. Churchill Livingstone, New York.

Waugh A and Grant A. (2010).Ross and Wilson.Anatomy and physiology in Health and Illness. 11th Ed. Churchill Livingstone.New York Physiology

Physiology

Ganong W (2006).Review of Medical Physiology, 4th Edition; Lange Publishers, New York.

Guyton A (2000).Textbook of Medical Physiology. 10th Edition; Saunders Publishers, New York. Snell R.S (2004). Clinical Anatomy, 3rd Ed. Lippincott, London.

Thiobodeau GA, Patton KT (2003). Anatomy and Physiology. Mosby, St. Louis.

Waugh A and Grant A. (2010).Ross and Wilson Anatomy and Physiology in Health and Illness, 11th Ed. Churchill Livingstone.

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Pharmacology

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d. Indicate list of textbooks and reference books, journals etc. for each course

7.3 Equipment :(*provide details of the type(s) of equipment currently available, which are pertinent to the proposed or reviewed programme in terms of type of equipment and quantity required as well as an average equipment: student ratio*)

Tables and Chairs, Health learning materials (Computer, Projector, Models, Charts, Manikin)

Wireless internet is available to all students and staff at the department

7.4 Information and Communications Technology (*provide details of the type(s) of technology/equipment currently available, which are pertinent to the proposed or reviewed programme as well as an average facility: student ratio*)

Wireless internet is available to all students and staff at the department. There is electronic research data base to both undergraduate and postgraduate programme. Learning Content Management System(LCMS) for uploading learning materials and students download materials. Likewise used for academic communication between students and lecturers.

7.5 Learner Support Services (*Provide details of academic and non-academic support services available to learners like academic advisor(s), laboratories, internet, health centre(s), computers, accommodations, counselling facility(ies), sports and games facilities etc.*)

Skill Laboratory Equipped with various instruments and Manikins for nursing procedures

Consultant Hospital / Clinical setting: There are good number of patients and conditions for students to practice skills in actual settings to various departments. Outpatient Department, paediatric department, Gynaecological and Obstetric department, Orthopaedic department, Ear, Nose and throat department, Dermatology department, Radiology

department, Medical department, surgical department, Eye department, premature unit, Laboratory investigation department, Anatomy room, Biotechnology institute.

Municipal and district hospital (Mawenzi, Majengo, TPC, Machame, Huruma, Kilema, Mwanga and Same) are available for clinical practice.

Kibong'oto Institute of infectious diseases will be used to practice infectious disease control.

Mawenzi regional hospital will be used for Reproductive and Child health as well as psychiatry nursing.

Majengo health centre, Pasua health centre and St Joseph hospital will be used for reproductive health practice.

Other Support Services

Bank services, canteens, shops, playing grounds and hostels/rooms for accommodation are available for learners at KCMUCo surroundings.

Electricity and water supply are available at the hospital and KCMU College 24hrs.

8. 0 **Academic staff available to run the proposed or reviewed programme** (*Preferably in a table that indicates courses per semester, each course should be assigned with qualified academic staff*)

YEAR 1, SEMESTER 1&2			
Codes	Title of module	Name of Academic Staff	Academic Qualification
Basic Sciences			
KBBC 1101	Biochemistry	Prof Reginald Adolph Kavishe	PhD Human glutathione s-transferase polymorphisms and <i>Plasmodium falciparum</i> ATP-binding cassette transport proteins in malaria. MSc Biochemistry BSc with Education
		Elimsaada Kituma	MSc Clinical research BSc (general)Chemistry/Microbiology BSc Biotechnology and Lab Science
KBAN	Anatomy	Julius Sabas Kauki	MSc Human Anatomy and Embryology BSc with Education

1102		Prof Mallya	MMed Orthopaedics Medical Doctor (MD)
KBPH 1103	Physiology	Dr Kajiru Kilonzo	MMed internal Medicine MD
		Dr Sara Urassa	MMed internal Medicine MD
KBCP 1104	Clinical Pharmacology	Dr Hadija Semvua	PhD MSc Clinical Pharmacology Bpharm
		Dr Eva Muro	PhD MSc Clinical Pharmacology Bpharm
KBMI 1105	Microbiology/I mmunology	Prof Noel Sam	MMed Medical Microbiology MD
		Prof John Shao	MMed Medical Microbiology MD
		Dr Debora Kajeguka	PhD MSc Clinical Research BSc General Microbiology & Chemistry
		Petro Nambunga	MSc Medical Microbiology, Immunology with Molecular Biology BSc Molecular Biology and Biotechnology
KBPE 1106	Parasitology/Ent omology	Prof Mramba Nyindo	PhD Microbiology and immunology MSc Veterinary Medical Science Bachelor of Veterinary Science Bachelor of Animal Science
		Dr Jovin Kitau	PhD MSc Medical Parasitology /Entomology BSc Zoology& Wildlife Sciences
		Dr Johnson Jason Matowo	PhD MSc Medical Parasitology /Entomology Bachelor of Science (general)
KBCC 1107	Communication and Computer Application Skills	Stella Te	
YEAR 2 SEMESTER 3			
Nursing Specific Program			
Codes	Title of module	Lecturer	Academic Qualification
KBDS 2308	Development Studies	Mchau	M.A Development Studies Bachelor of Divinity
KBAS 2309	Advanced Nursing Science	Rogathe Machange	MSC in Nursing(clinical research) BSc Nursing
		Vivian Saria	MScNursing (Critical Care) BSc Nursing Advanced diploma in Nursing Paediatrics

			Diploma in Nursing
		Lekule	MSc Public Health MSc Nursing Critical Care BSc Nursing Diploma in Nursing
KBBS 2310	Behavioural Science	Christina Chuki Mtuya	MSc Public Health B.A Sociology
		Prof Declare Mushi	PhD Public Health M.A Medical Sociology B.A Sociology
		Victor Katiti	MSc Public Health B.A Sociology
		Stella	B.A Community Psychology
KBFF 2311	Foundation of Faith	Rev Deogratias Msanya	Master of Theology (MTh) Bachelor of Divinity (B.D) BSc (Hons) in Health Systems Approach to HIV&AIDS Care and Management
KBLM 2312	Leadership and Management	Upendo Mamchome	MSc Leadership/Management BSc Nursing
		Marycelina Msuya	MSc Public Health Diploma in Nursing Education
KBRM 2313	Research Methodology	Dr James Ngocho	MSc Clinical research MD
		Prof Sia Msuya	PhD Public Health M Phil in International Public Health MD
KBEB 2314	Epidemiology & Biostatistics	Beatrice	MSc Epidemiology/Applied Biostatistics BSc
		Dr Michael Mahande	PhD MSC Public Health BSc Animal Science & Production
		Prof Sia Msuya	PhD MSC International Health MD
Year 2 semester 4			
CODES	Title of Module	Name of Academic Staff	Academic Qualificatio
KBDS 2408	Development Studies	Robison Mchau	MSc Development studies BSc B.D
KBAS 2409	Advanced Nursing Science	Rogathe Machange	MScNursing (clinical research) BSc Nursing Diploma in Nursing
		Vivian Saria	MSc Nursing (Critical care) BSc Nursing Advanced Diploma in Nursing Paediatrics
		Isaack Lekule	MSc Nursing (Critical care) MSc Public Health BSc Nursing

			Diploma in Nursing
		Mariam Barabara	MScNursing (Midwifery) BSc Nursing Diploma in Nursing
KBLM 2412	Leadership & Management	Upendo Mamchome	MSc Leadership & Management BSc Nursing Diploma in Nursing
		Marycelina Msuya	MSc Public Health Diploma in Nursing Education
KBRM 2413	Research Methodology	Dr James Ngocho	MSc Clinical research Medical Doctor (MD)
		Dr Michael Mahande	PhD Public Health – Epidemiology&Biostatistics MSc Public Health BSc Animal Science
		Dr Sia Msuya	PHD HIV& Sexual transmitted diseases MSc International Community Health MD
YEAR3, SEMESTER 5			
Codes	Title of module	Name of Academic Staff	Academic Qualification
KBAS 3509	Advanced Nursing Science	Rogathe Machange	MSc Nursing (clinical research) BSc Nursing Diploma in
		Vivian Saria	MSc Nursing (Critical Care) BSc Nursing Advanced Diploma in Nursing Paediatrics
		Lekule	MSc Nursing (Critical care) MSc Public Health BSc Nursing Diploma in Nursing
		Mariam Barabara	MScNursing (Midwifery) BSc Nursing Diploma in Nursing
KBLM 3512	Leadership & Management	Upendo Mamchome	MSc Health System Management BSc Nursing Diploma in Nursing
		Marycelina Msuya	MSc Public Health Diploma in Nursing Education Diploma in Nursing
KBCH 3515	Community Health Nursing	Paulo Lino Kidayi	MSc Epidemiology/ Applied Biostatistics BSc Nursing Advanced diploma in Nursing Education(ADNE) Diploma in Nursing
		Julieth Chugulu	MSc in Health Education and Health Promotion Diploma in Nursing Education

			Diploma in Nursing
KBNE 3516	Nursing Education	Yuda Sumaye	MSc Nursing Education BSc Nursing Diploma in Nursing
YEAR 3, SEMESTER 6			
Codes	Title of module	Name of academic Staff	Academic Qualification
KBAS 3609	Advanced Nursing Science	Rogathe Machange	MSc Nursing (clinical research) BSc Nursing Diploma in Nursing
		Vivian Saria	MSc Nursing (Critical Care) BSc Nursing
		Isaack Lekule	MSc Nursing (Critical Care) MSc Public Health BSc Nursing Diploma in Nursing
		Mariam Barabara	MSc Nursing (Midwifery) BSc Nursing Diploma in Nursing
KBCH 3615	Community Health Nursing	Paulo Lino Kidayi	MSc Epidemiology & Applied Biostatistics BSc Nursing Advanced diploma in Nursing Education(ADNE) Diploma in Nursing
		Dora Mrema	MSc International Health BSc Nursing Diploma in Nursing
KBNE 3616	Nursing Education	Yuda Sumari	MSc Nursing (Education) BSc Nursing Diploma in Nursing
KBNI 3618	Nursing Informatics	Yuda Sumari	MSc Nursing (Education) BSc Nursing Diploma in Nursing
KBPC 3619	Palliative care	Paulo Lino Kidayi	MSc Epidemiology & Applied Biostatistics BSc Nursing Advanced diploma in Nursing Education(ADNE) Diploma in Nursing
		Julieth Chugulu	MSc in Health Education and Health Promotion Diploma in Nursing Education Diploma in Nursing

Table

9.0. List of academic staff with qualifications directly related to the proposed or reviewed programme as indicated in table below;

Table

S/N	Name of Academic Staff	Nationality	Age (yrs)	Academic Rank	Academic Qualification	Duration of Studies (yrs)	Classification & GPA	Conferring Institution	Year Qualification obtained	Employment Status (Full time/Part time)	Teaching experience	Research and publication in the last 3 years
	Basic Sciences											
	Prof Reginald A. Kavishe	Tanzanian	44	A.Professor	PhD MSc BSc	4yrs 2yrs 4yrs	NA NA 3.9	KCMUCo/ Radboud University Medical Centre -KCMUCo -UDSM	2009 2005 1999	Full time	18	3
	Elimsaada Kituma	Tanzanian	40	Ass Lecturer	MSc BSc BSc	2yrs 3yrs 3yrs	3.7 3.2 4.3	-KCMUCo -UDSM -SUA	2008 2002 2011	Full time	12	
	Julius S. Kauki	Tanzanian	47	Ass Lecturer	MSc BSc	2yrs 3yrs	NA 3.3	KCMUCo/ Radboud University Nijmegen -UDSM	2004 1998	Full time	17	
	Prof Augustine Mallya	Tanzanian	67	Professor	-MMed -MD	3yrs 5yrs	NA NA	UDSM UDSM	1983 1977	Full time	32	-
	Dr Kajiru Kilonzo	Tanzanian	41	Senior Lecturer	MMed MD	4yrs 5yrs	NA NA	KCMUCo UDSM	2011 2002	Full time	6	2
	Dr Sara Urassa	Tanzanian	41	Lecturer	MMed MD	4yrs 5yrs	B+ NA	KCMUCo Makerere university	2007 2001	Part time	9	3
	Dr Hadija Semnvua	Tanzanian	50	Lecturer	PhD MSc Bpharm	3 yrs 2yrs 4yrs	NA B+ NA	-Radboud University, Nijmegen -KCMUCo -MUHAS	2014 2006 1995	Part time	18	

	Dr Eva P. Muro	Tanzanian	57	Senior Lecturer	PhD MSc Bpharm	3yrs 2yrs 4yrs	NA NA NA	-Radboud University, Nijmegen -KCMUCo/ University Medical College Nijmegen -MUHAS	2014 2003 1985	Part time	16	
	Prof Noel Sam	Tanzanian	-	Professor	MMed MD	3yrs 5yrs	NA NA	-UDSM -UDSM		Full time	32	
	Prof John Shao	Tanzanian	72	Professor	PhD MScM MD	3yrs 2yrs 5yrs	NA NA NA	-University of Havana -Brunel University -UDSM	1977 1982 1972	Full time	32	
	Dr Debora Kajeguka	Tanzanian	38	Lecturer	PhD MSc BSc	3yrs 2yrs 3yrs	NA B+ 3.2	KCMUCo KCMUCo UDSM	2017 2010 2004	Full time	9	4
	Petro Nambunga	Tanzanian	33	Ass Lecturer	MSc BSc	2yrs 3yrs	B 4	KCMUCo UDSM	2013 2009	Full time	7	-
	Prof Mramba Nyindo	Tanzanian	79	Professor	PhD MSc BSc BSc	3yrs 2yrs 5yrs 3yrs	NA NA NA NA	University of Illinois-USA University of Illinois-USA University of East Africa-Nairobi University of Panjab-Lahole Pakistan	1975 1972 1969 1965	Full time	25	2
	Dr Jovin Kitau	Tanzanian	36	Senior Lecturer	PhD MSc BSc	4yrs 2yrs 3yrs	NA B+ 3.7	KCMUCo KCMUCo UDSM	2015 2007 2005	Full time	11	-
	Dr Jonson Matowo	Tanzanian	47	Senior Lecturer	PhD MSc BSc	3yrs 2yrs 3yrs	NA B+ 3.6	KCMUCo KCMUCo BSc	2012 2007 1998	Full time	16	1
	Nursing Specific Programme											
	Rogathe Machange	Tanzanian	42	Ass Lecturer	MScN BScN	2yrs 3yrs	3.6 NA	Duke KCMUCo	2011 2008	Full Time	12	1

	Paulo Lino Kidayi	Tanzanian	47	Ass Lecturer	MScEA B BScN ADNE	2yrs 3yrs 2yrs	B B+	KCMUCo KCM College	2014 2009	Full time	11	3
	Vivian Saria	Tanzanian	45	Ass Lecturer	MSCN BScN	2yrs 3yrs	3.8 B	MUHAS KCMUCo	2015 2009	Part time	2	-
	Mariam Barabara	Tanzanian	41	Ass Lecturer	MScM BScN DipN	2yrs 3yrs	NA NA	MUHAS KCMUCo	2017 2011	Part time	4	-
	Lekule	Tanzanian	45	Ass Lecturer	MScN MPH BSCN DipN	2yrs 2yrs 3yrs	- - -	MUHAS KCMUCo KCMUCo	2013 2009 2003	Part time	2	-
	Julieth Chugulu	Tanzanian	65	Lecturer	MPH DipNE DipN	2yrs 2yrs 4yrs	NA NA NA	-Leeds Metropolitan University -UDSM -MUHAS	1998 1980	Part Time	7	3
	Mpelo Matunga	Tanzanian		ASS Lecturer	MSCN BScN	2yrs 4yrs		UDOM MUHAS		Part time	2	-
	Yuda Sumaye	Tanzanian		Ass Lecturer	BScN MScNE DipN	3yrs 2yrs		Hurbert Kairuki Kenya Methodist		Part time		1
	Upendo Mamchome	Tanzanian	44	Ass Lecturer	MSc BScN DipN	2yrs 3yrs 4yrs	3.6 NA	Mzumbe University KCM College	2011 2007	Part time	9	-
	Marycelina Msuya	Tanzania	67	Lecturer	MSc Dip NE DipN	2yrs 2yrs 4yrs		Karolinska Institute Sweden UDSM	1999 1979 1975	Full time	18	2
	Dora Mrema	Tanzania	40	ASS Lecturer	MSc BScN	2yrs 3yrs	B NA	University of Bergen KCMUCo	2014 2008	Part time	2	1
	Rosemary Mallya	Tanzanian	43	Ass Lecturer	MScN BScN DipN	2yrs 3yrs 4yrs	NA NA	KCMUCo KCMUCo KCMCSN	2017 2009	Part time	7	-

	Elizabeth Msoka	Tanzanian	46	Ass Lecture	MScN BScN DipN	3yrs 2yrs 4yrs	NA NA	Nottighsm KCMUCo	2008 2006	Part time	10	1
	Happiness Kimaro	Tanzanian	47	Ass Lecturer	MScA BScN Adv DipOP Dip N	2yrs 3yrs 2yrs 4yrs	NA NA NA NA	KCMUCo KCMUCo KCMCSN	2017 2002 1999 1994	Part time	14	-
	Dr James Ngocho	Tanzanian	35	Ass Lecturer	MSc MD	2yrs 5yrs	B+ B	KCMUCo MUHAS	2014 2009	Part time	2	1
	Prof Sia Msuya	Tanzanian	47	A. Professor	PhD MPhil MD	6yrs 2yrs 5yrs	-NA -Pass with distinction -NA	-University of Oslo, Norway -University of Oslo, Norway -UDSM	2008 2000 1995	Part time	14	7
	Michael Mahande	Tanzanian	45	Senior Lecturer	PhD MPH BScAP	4yrs 1yrs 4yrs	High est distinction - B -3.3	-University of Bergen, Norway -KCMUCo -SUA	2013 2005 2000	Full time	15	6
	Prof Declare Mushi	Tanzanian	52	A. Professor	PhD M.A B.A	4yrs 2yrs 3yrs	NA B+ Upper 2 nd class	- Heidelberg University, Germany -UDSM -UDSM	2007 1995 1993	Full time	18	20
	Christina Chuki Mtuya	Tanzanian	41	ASS Lecturer	MPH B.A	2yrs 3yrs	B 3.3	KCMUCo UDSM	2013 2003	Full time	11	3
	Victor Katiti	Tanzanian	33	Tutorial Ass	MPH B.A	2yrs 3yrs	B 3.89	KCMUCo t. Augustine University	2015 2009	Full time	5	1
	Stella Tessua	Ugandan	34	Tutorial Assistant	B.A	3yrs	-	Makerere university	2007	Part time	5	-
	Robison Mchau	Tanzanian	44	Ass Lecturer	M.A DS B.D	2yrs 3yrs	B+ B+	UDSM Tumaini University	2006 1999	Full time	14	
	Rev Deogratius Msanya	Tanzanian	44	Ass Lecturer	MTh BD	2yrs 3yrs	B+ First class	Tumaini university Tumaini University	2008 2004	Full time	9	

