



كلية دبي الطبية للبنات  
DUBAI MEDICAL COLLEGE FOR GIRLS

# Dubai Medical College for Girls

## PROGRAM HANDBOOK

BACHELOR OF MEDICINE AND SURGERY

2022-2023

## Table of Contents

<b>1. PROGRAM.....</b>	<b>4</b>
<b>2. ENTRY REQUIREMENTS .....</b>	<b>4</b>
<b>3. STUDENT INTAKE.....</b>	<b>4</b>
<b>4. TUITION FEES .....</b>	<b>5</b>
4.1 FEES STRUCTURE AND REFUND POLICY .....	5
4.2 REFUND POLICY OF TUITION FEES.....	5
4.3 MODE OF PAYMENT.....	5
4.4 ADMISSION PROCESS.....	6
<b>5. PROGRAM SPECIFICATIONS – MBBCH.....</b>	<b>12</b>
5.1 PROGRAM INFORMATION.....	12
5.2. PROGRAM LEARNING OUTCOMES .....	13
5.3. PROGRAM LEARNING OUTCOMES MATRIX.....	15
5.4 TEACHING PLAN.....	23
5.5. COLLEGE COURSES (SYLLABUS) .....	24
<b>6. DETAILED SYLLABUS OF EACH COURSE .....</b>	<b>26</b>
ANA1101.....	26
BIO1102.....	31
CM1103* .....	34
HISTO1106* .....	37
PHYS1111* .....	40
MI1113.....	43
MP1125 .....	46
COMS1114.....	49
ME1117 .....	51
MT1113 .....	54
CS1116 .....	56
HM1119.....	58
FI1120&FI1220.....	60
ANA1201.....	62
BIO1202.....	67
MICRO1207.....	70
G.PSY1215.....	72
PHC1226.....	74
EP1227 .....	76
GEN21.....	78
MOB21.....	83
GIT21.....	89
CVS22.....	93
RES22 .....	101
REN22 .....	104
MIS22.....	109
ENR31 .....	113

NSC31 .....	118
CIC329 .....	123
OBG431 .....	127
PED423 .....	132
<b>SUR535</b> .....	141
<b>MED521</b> .....	145
<b>7. STUDENT ASSESSMENT .....</b>	<b>152</b>
7.1 GRADING SCHEME .....	152
7.2 ACADEMIC PROGRESS .....	152
7.2.1 <i>Basic Science phase</i> .....	152
7.2.2 <i>Clinical Sciences phase:</i> .....	153
7.3 EXAMINATION AND ASSESSMENT.....	153
7.3.1 <i>Examinations in basic science Phase</i> .....	154
7.3.2 <i>Assessment and Evaluation of Clinical Phase</i> .....	158
7.4 MARKS DISTRIBUTION.....	166
7.4.1 <i>Marks Distribution in the basic science phase</i> .....	166
7.4.2 <i>Marks distribution in Clinical Phase</i> .....	167
<b>8. LIST OF FACULTY MEMBERS .....</b>	<b>168</b>
8.1 TEACHING FACULTY (BASIC SCIENCE).....	168
<b>9.GLOSSARY .....</b>	<b>170</b>
<b>10. APPENDICES .....</b>	<b>171</b>
<b>APPENDIX 1. SCHEME OF PEDAGOGY &amp; ASSESSMENT .....</b>	<b>171</b>
<b>APPENDIX 2. STUDENT ASSESSMENT RUBRICS .....</b>	<b>173</b>
<b>APPENDIX 3. PBL FORM.....</b>	<b>177</b>
<b>APPENDIX 4. EXTERNAL EXAMINER FORM .....</b>	<b>180</b>
<b>APPENDIX 5. ELECTIVE PROJECT FORM .....</b>	<b>181</b>
<b>APPENDIX 6. DMCG COURSE PLAN &amp; EVALUATION REPORT .....</b>	<b>182</b>
<b>APPENDIX 7. COURSE CHANGE ADD PROPOSAL FORM.....</b>	<b>187</b>
<b>APPENDIX 8. COURSE EQUIVALENCY FORM (STUDENTS) .....</b>	<b>189</b>
<b>APPENDIX 9. TIME TABLE ( TEMPLATE ).....</b>	<b>190</b>

## 1. PROGRAM

<b>INSTITUTION:</b>	<b>Dubai Medical College for Girls</b>
<b>DEGREE:</b>	<b>a) Bachelor of Medicine and Surgery</b>
<b>LENGTH &amp; MODE:</b>	<b>5 Years Course &amp; 1 Year Internship</b> <b>2 years &amp; 6 Months – Basic science</b> <b>2 years &amp; 6 Months – Clinical</b> <b>1 Year Internship</b>

## 2. ENTRY REQUIREMENTS

### **Admission Requirements**

The following are the necessary prerequisites for admission to the M.B.B.Ch Program:

1. Higher Secondary Certificate in Science subjects.
2. Such a certificate must be of the same year, or a year before, and duly attested by the competent authority.
3. The applicant must complete 12 years of education in school.
4. A minimum High School Average of 90% for Advanced Track or 85% for Elite Track or equivalent in Standardized International Systems is required with no admission of General Track applicants.
5. Equivalence certificate from the Ministry of Education for the grade 12 passed (as equivalent to the higher secondary certificate of the Ministry of Education – UAE).
6. Standardized English Examination (EmSAT Achieve – English with a minimum grade of at least 1100 grades or TOEFL above 61 or IELTS above 5). (Institutional TOEFL is NOT ACCEPTABLE).
7. An EmSAT score of 800 for Arabic Language.
8. An EmSAT score of 900 in Mathematics or equivalent.
9. An EmSAT score of 900 in two of the three science subjects (Chemistry, Biology or Physics).
10. Passing the interview conducted by DMCG.
11. For international students: Passing the entrance exam in Biology, Chemistry, Physics & Mathematics subjects.
12. International students are required to fulfill all requirements for obtaining the equivalence certificate for the higher secondary education. Please refer to the following link: <https://www.moe.gov.ae/en/eservices/servicecard/pages/certequivalent-out.aspx>

## 3. STUDENT INTAKE

Student intake will be a maximum of 60 students.

## 4. TUITION FEES

### 4.1 Fees structure and refund policy

#### Fee schedule

<i>Particulars</i>	<i>Annual Fee</i>
<b>Tuition Fee</b>	120,000/-
<b>Transport</b> (Abu-Dhabi both sides weekly)	5000/-
<b>Transport</b> (Fujairah both sides weekly)	5000/-
<b>Transport</b> (Al Ain both sides weekly)	5000/-
<b>Transport</b> (Dubai daily: Muhaisnah, Mizher, Rashidiya, Tawar. Qusais, Nahda)	3000/-
<b>Transport</b> (Dubai daily: other areas )	4000/-
<b>Transport</b> (Sharjah daily)	5000/-
<b>Transport</b> (Ajman daily)	5000/-
<b>Annual Hostel Fee</b>	
Double Bed	12,000/-
Single Bed	18,000/-
Deluxe Room (Single Bed)	22,000/-
<b>Refundable insurance</b> (for hostel)	500/-
<b>Books</b> (Approximately)	2000/-

• **5% VAT is applicable** on tuition fee, transportation fee & books.

All amounts are in UAE Dirhams.

### 4.2 Refund Policy of Tuition Fees

Dubai Medical College admits only a very limited number of students. So, if any student after admission cancels her admission, this will create a vacancy which could have been used by another qualified student. Therefore, the College authorities are strict in their action for such students, and they will not refund the fees paid at the time of admission until and unless a valid reason is provided for cancellation of admission. The valid reasons can be:

- If a candidate faces visa difficulties from U.A.E. govt. that are out of College Control.
- If the guardian of the candidate faces sudden employment problems, such as termination, visa cancellation etc.
- If a candidate is granted a scholarship provided that it occurs after the date of fee payment.
- The refund usually is granted to student in first or second week after commencement of academic year to which they are admitted.

### 4.3 Mode of payment

- Direct payment to Finance Department of the College or through deposit in the college account in any branch of Dubai Islamic Bank in the UAE.

#### **4.4 Admission Process**

- Advertisement for the admission process in DMCG is placed in appropriate channels.
- The date of receipt of application will be announced. The applicant applies online at the website by filling up an application form. Screening of the applicants will be done by the admission office with regard to criteria of eligibility. The applicants are notified about their eligibility status. Candidates who are sponsored by grant are also required to fill up the application forms.
- The date of entrance exam will be notified to all eligible candidates. After the exam, the candidate is interviewed by selection committee. Selected candidates will receive an acceptance letter. Other candidates who are wait-listed will be considered later if required. On making the payments, the accepted students are enrolled in the M.B.B. Ch Program.

#### **Selection Policy**

The date of interview for selection will be decided by the admission committee.

Interview will be held in the Basic Science facility.

**Selection committee-** A committee, which includes the representatives from the clinical and Basic Science sections of DMCG, which conducts the interview of the candidate for admission.

Selection committee will include:

- Dean of the college
- Two faculty Members, one of them from the clinical faculty.

#### **Documents Required**

1. Higher Secondary certificate
2. Certificate showing results of standardized English examination
3. Character certificate
4. Fitness Certificate
5. Passport copy
6. Emirates ID copy
7. Birth certificate
8. Six personal photographs
9. Dhs. 200/-

A candidate who is looking for admission to M.B.B. Ch Program should fulfil the requirements of the College. Final selection of candidate is done on the basis of their higher secondary school scores, admission test scores and interview. They will be intimated by phone, email and hand to hand delivery

#### **Criteria for Selection**

Admission to College will be based on 3 parameters.

1. Score in Higher Secondary Examination:
2. The student's Score in the entrance examination.

3. Interview for personality assessment. The interview is conducted to choose the students with good moral ethics, right attitude & mature personality to pursue the career further after graduation. The interview is structured to make an objective evaluation of the candidate's personality.

**Department of Admission and Registration shall perform the following tasks:**

First, to see that admission requirements are fulfilled both in quantity and quality, in the following manner:

Maximum number of the candidates to be admitted to the Dubai Medical College shall be 60 in each year. An increase of 10% may be affected to it to accommodate distinguished girl students.

Second, to work for the realization of the following tasks and objectives:

- a. Giving opinion and counsel concerning the current policy of acceptance and admission.
- b. Preparing records and specimens of acceptance and admission.
- c. Suggesting ways and means of announcement and advertisement to attract distinguished female candidates for admission to the College in coordination with the Media Department of the Islamic Foundation for Education.
- d. Study of the effectiveness of the ways and means adopted to attract distinguished students to the College.
- e. Receiving applications for admission and monitoring the fulfilment of the conditions of admission and the equivalence of the academic certificates.
- f. Recommending those fulfilling the required conditions for personality and academic tests.
- g. Organizing the results of the personality test and academic tests in terms of the grades secured.
- h. Preparing the lists of candidates granted admission to the College.

**Provisional Admission**

If some students are found eligible for admission pending some documents which they are expected to be able to present in the near future without affecting their study, provisional admission is offered.

The student is asked to sign an undertaking.

**Conditions for provisional admission**

- If the student didn't provide the TOEFL/ IELTS/EmSAT certificate, the student is given 6 months to provide this document or leave the college
- Fulfilled the requirement of equivalence but the certificate is pending. The student is given 6 months to provide this document or leave the college
- International student attestations incomplete & equivalence pending. The student is given 6 months to provide this document or leave the college
-

**Transfer Policies:**

The following are the necessary stipulations for transfer to the DMCG from other medical Colleges:

1. Dubai Medical College (DMCG) accept transfer of students from accredited medical college with a curriculum that is comparable to that offered at DMCG.
2. Student applying for transfer to DMCG must spend more than 50% of teaching hours for all medical subjects at DMCG
3. The student must provide a letter of application to the Dean of the college specifying reason (s) for requesting transfer and desired date of transfer.
4. Dubai Medical College requires applicants to submit their transcripts for evaluation of transferable subject's /teaching hours from previous college experiences.
5. No student who has been dismissed from any medical college will be eligible for transfer to DMCG
6. All applicants must furnish conduct certificates from the dean and faculty of the medical college where they are currently enrolled.
7. Previous coursework deemed appropriate to the current course of study is evaluated for transfer into the college's program. Transferring previous teaching hours can help avoid overlap of subjects to complete the program degree.
8. All applicants should contact the admissions department to inquire about having their transcripts reviewed.
9. Before attending Dubai Medical College, attested records from the previous college and higher secondary school should be submitted to the Dean's secretary as soon as possible.
10. The student transferring from another accredited college may receive score for courses completed with a grade of "C" or better if the course is applicable to the student's program at Dubai Medical College.
11. The final decision for approval of transfer will be made by the faculty board after review of the transfer request by the chief academic officer of the college.
12. Deadline for receipt of transfer request for an academic year is in January of a given year
13. Before considering any application for transfer, existence of an appropriate seat for the student should be considered.

**Withdrawal policy**

The policy deals with DMCG students who leave through the processes of withdrawal, leave, dismissal, or discontinuation and who subsequently seek readmission to the College.

1. Withdrawal during the first year of medical school.
  - a. If withdrawal is required by a student, a written petition for withdrawal is made and approved by the Dean of the college.
  - b. If such a student wants readmission, an application for readmission is made in writing to the admission office.
  - c. A student who withdraws in the first year of medical school for other than health reasons and wishes to return to the school must reapply through the regular first year admissions process as if she were a new applicant.

- d. If the student withdraws because of illness during the first year, she will be allowed to apply for readmission through a valid medical certificate. Permission to reapply does not guarantee readmission.
2. Withdrawal subsequent to completion of the first year of medical school.
  - a. If withdrawal is required by a student, a petition for withdrawal is made and approved by the Dean of the college.
  - b. If such a student wants readmission, an application for readmission is made in writing to the admission office. This application must be accompanied by the relevant supporting documents, such as letters from the applicant's physician(s), employer(s), etc.
  - c. Withdrawal may be offered to a student in good standing who has completed one or more years of medical school. Good standing designates any student not subject to probation or disqualification. Permission to reapply does not guarantee readmission. Each re-application will be considered on a case-by-case basis.
  - d. The student will be informed in writing by the college at the time of the withdrawal whether she will be permitted to re-apply and under what circumstances.
3. Any absence of more than 1 year will be considered as permanent withdrawal from college.

**Leave of Absence from the college**

1. Students may seek a leave of absence for a particular purpose, for a defined period of time and with the intention of returning to medical school. Returning from such an approved leave of absence requires a re-admission petition.
2. The Dean of the college may grant a student up to a one-year leave of absence for personal, professional or medical reasons. This leave of absence may be renewed for up to one year at the discretion of the Dean in consultation with the Faculty Board.
3. The Dean may grant a student who is enrolled in a formal degree program at another university an extended leave of absence. The student must apply annually in writing for renewal of an extended leave of absence.
4. A student who is not enrolled in an external degree program and who requires a longer leave than two years, or who is denied an extension of her leave of absence, must petition for a withdrawal and is advised to consult with the Dean. If the student fails to obtain a withdrawal, the student will be discontinued.

**Procedures for review of applications for readmission with Advanced Standing.**

A student who has withdrawn (but subsequently wishes to return to school) must apply for readmission in writing and submit the required information, as stipulated by the School of Medicine at the time of withdrawal, to the Dean.

A Committee for Admission will review each student's written application for readmission in light of the entire record and including any required supporting documents. This Committee may recommend: 1) readmission without conditions; 2) readmission with conditions, 3) denial of readmission until further proof of readiness to return to school can be demonstrated; or 4) denial of readmission.

- This Committee shall consist of the Dean, Chief Academic Officer, Head of Student Affairs committee, Head of Admission Committee.
- Recommendations of this Committee are advisory to the Dean. The decision of the Dean for Education is final, and no appeals are allowed.

### **Enrolment Management Guidelines**

#### Objectives

Enrolment management is a strategy to support the efficient management of local area facilities based on departmental planning and assessment tools and to position colleges to manage enrolments in order to accommodate planned differentiation.

#### Principles

- College based decisions on differentiated curriculum delivery and enrolment practices requiring an asset solution must operate within the current built capacity of the college.
- The capacity model is used to assess how many students can be currently accommodated the college. The planning of further accommodation at any particular college is driven, in the first instance, by forecast resident student numbers. Detailed local needs are considered within the overarching frame of these departmental tools.

### **Management of the Enrolment Policy**

1. The Admission committee is responsible for developing and updating a supplementary enrolment plan that will establish specific enrolment targets for each Faculty.
2. Monitoring of, and changes to, the targets set out in this policy and the supplementary enrolment plan are the responsibility of the Dean.
3. Changes to the Enrolment Policy that constitute fundamental change to the principles set out in this policy require the approval of General Faculties Council.
4. The Deans in coordination with the admission committee and Enrolment Services, are responsible for achieving and maintaining the enrolment targets approved for their Faculty in the operational enrolment plan.
5. The Committee of Admissions and Transferability is responsible for ensuring that general undergraduate admissions and transfer policies are in accord with this policy in particular and the Academic Plan in general. The Faculty of Graduate Studies is responsible for equivalent graduate policies.
6. Enrolment Services is responsible for ensuring that recruitment, admissions, transfer and retention operations are in accord with this policy in particular and the Academic Plan in general. The Faculty of Graduate Studies is responsible for equivalent graduate operations.

### **Process of Enrolment Management**

- The dean of the college identifies the need for the college to revise the enrolment management plan.
- Consultation with Associate Dean of Academic Affairs and admission committee members so that all opinions can be considered and any issues that are raised be given due consideration.
- The Action Plan which is drafted by the admission committee should include:
  - The needs and expectations for the enrolment management plan supported by any statistics such as enrolment projections
  - The impact of the enrolment management plan on the community and surrounding colleges
  - Any other issues that the Dean should be aware of to make an informed decision.
- The enrolment management plan is part of the Strategy document.
- The draft enrolment management plan must be supported by an Action Plan and forwarded to the Associate Dean of Academic Affairs for approval.
- The Associate Dean of Academic Affairs will seek expert advice from the admission unit and Student Support Committee prior to seeking approval from the Faculty Board.
- An annual enrolment management plan should include the following:
  - rationale for the plan including the needs and expectations of all stakeholders (Stakeholders include students, parents, alumni, Community, DHA)
  - maximum enrolment capacity based on current built design capacity
- This takes into consideration, the following factors:
  - Current admissions criteria for selection
  - Admission process

## 5. PROGRAM SPECIFICATIONS – MBBCh

### 5.1 Program Information

The program is aligned with the Level 7 of the Qualifications Framework for the UAE approved by The Board of the National Qualifications Authority (NQA) known as the QF*Emirates*.

- **Program title:**
  - **Bachelor’s Degree in medicine and Surgery**
- **Program duration:**
  - MBBCh 5 years and 1-year internship
- **Degree conferred by** Dubai Medical College for Girls
- **Delivery Site:** Dubai Medical College for Girls
- **Acting Dean:** Prof. Yousif El Tayeb
- **Associate Dean Academic Affairs:** Prof. Samar Ahmed

## 5.2. Program Learning Outcomes

These program learning outcomes (PLO) are prepared in alignment with Level 7 (Bachelor’s Degree) of Qualifications Framework -Emirates (QF-E), as required by Commission of Academic Accreditation (CAA).

QF-E Strands	On successful completion of the MBBCH Program of DMCG, the graduate will be able to
Knowledge	<p><b>A-1</b> Demonstrate factual and theoretical knowledge with substantive depth in areas of core biomedical, psychosocial and clinical sciences and integrate this knowledge with general medical practice</p> <p><b>A-2</b> Apply the knowledge of these disciplines in clinical context for diagnosis, prevention and management of clinical conditions within the framework of ethical and legal regulations at the level of General Practitioner and in preparation for future specialist training.</p> <p><b>A-3</b> Critically analyze existing literature with an understanding of research tools and apply the knowledge of scientific basis to make decisions in patient care to promote health, prevent disease and treat illnesses in the community and specialized healthcare centers</p>
Skill	<p><b>B-1</b> Demonstrate clinical and cognitive skills/problem solving skills of obtaining and interpreting history, conducting clinical examination and synthesizing the findings to provide differential diagnosis and suggest the most likely diagnosis for a variety of clinical problems.</p> <p><b>B-2</b> Choose appropriate investigations and management strategies at the level of a general practitioner and the need for specialist referral, for a wide range of conditions during clinical encounter with patients</p> <p><b>B-3</b> Communicate effectively and compassionately with patients, relatives, teachers, peers and other professionals in verbal, written and electronic means using advanced communication and information technologies in a professional manner.</p>
Aspects of Competence (Autonomy & Responsibility, Role in context &Self Development)	<p><b>C-1</b> Develop approaches to evaluate and improve healthcare literacy and awareness, epidemiology of diseases and healthcare delivery systems, and provide suggestions for improving quality and optimizing patient safety through a continuous process of auditing</p> <p><b>C-2</b> Work individually and as a team member and leader of inter-professional healthcare teams demonstrating principles of handing-over and. emphasis on life-long learning</p> <p><b>C-3</b> Manage patientcare under supervision in a primary care setting to treat acute, chronic or emergency conditions of patients, within the limits permissible to an entry level General Medical Practitioner, with ability to properly refer cases that need specialist attention.</p> <p><b>C-4</b> Observe principles of medical ethics, anonymity and confidentiality; and demonstrate honesty, integrity, altruism, empathy and social responsibility in their interaction with peers, patients in a multicultural context.</p>

Prepared by Dr. Fouzia Shersad & Dr. Hajer Sheikh April, 2017. Reviewed by Prof. Hafez Ahmed April, 2017

**Reference:** QF Emirates Handbook [https://www.nqa.gov.ae/en/Documents/QF\\_Handbook\\_FINAL.pdf](https://www.nqa.gov.ae/en/Documents/QF_Handbook_FINAL.pdf)

Rewritten Section C in accordance with the QFE 2018 on 20<sup>th</sup> Feb 2018

As advised by CAA ERT Feb 2020, the Section C is revised from Autonomy & Responsibility to "Aspects of Competence". 30th March, 2020

**Literature reviewed:**

1. "Tomorrows Doctors" by GMC 2016 Dec. [http://www.gmc-uk.org/Tomorrow\\_s\\_Doctors\\_1214.pdf\\_48905759.pdf](http://www.gmc-uk.org/Tomorrow_s_Doctors_1214.pdf_48905759.pdf)
2. Learning objectives of several medical schools in USA like University of Nebraska, University of South Florida, University of Central Florida and University of Oregon
3. Program Learning outcomes of Gulf Medical University, RAK Medical and Health Sciences University, Zayed University
4. National Qualifications Authority- Qualification Framework for Emirates Handbook 20th Feb 2012 Abu Dhabi [www.nqa.gov.ae](http://www.nqa.gov.ae) accessed on 22nd March 2020  
[http://www.qualifications.ae/pdf/QF%20Handbook\\_v1b\\_28\\_Feb\\_2012.pdf](http://www.qualifications.ae/pdf/QF%20Handbook_v1b_28_Feb_2012.pdf)

### 5.3. Program Learning Outcomes Matrix

\* These Subjects will be continued in the second semester as well

Year & Semester	Course name	Course Code	CLO	PLO										
				A1	A2	A3	B1	B2	B3	C1	C2	C3	C4	
Y1S1	Anatomy and Embryology 1	(ANA1101)	K1	√										
	Anatomy and Embryology 1	(ANA1101)	K2	√										
	Anatomy and Embryology 1	(ANA1101)	K3	√										
	Anatomy and Embryology 1	(ANA1101)	S1				√							
	Anatomy and Embryology 1	(ANA1101)	S2				√							
	Anatomy and Embryology 1	(ANA1101)	A1											√
Y1S1	Biochemistry 1	(BIO1102)	K1			√								
	Biochemistry 1	(BIO1102)	K2	√										
	Biochemistry 1	(BIO1102)	K3			√								
	Biochemistry 1	(BIO1102)	K4		√									
	Biochemistry 1	(BIO1102)	K5		√									
	Biochemistry 1	(BIO1102)	S1						√					
Y1S1	Medical Informatics	(MI1113)	K1			√								
	Medical Informatics	(MI1113)	K2			√								
	Medical Informatics	(MI1113)	K3			√								
	Medical Informatics	(MI1113)	K4								√			
	Medical Informatics	(MI1113)	K5										√	
	Medical Informatics	(MI1113)	K6								√			
	Medical Informatics	(MI1113)	K7								√			
	Medical Informatics	(MI1113)	K8										√	
	Medical Informatics	(MI1113)	K9			√								
	Medical Informatics	(MI1113)	K10											√
Y1S1	Medical Professionalism	(MP1125)	K1	√										
	Medical Professionalism	(MP1125)	K2	√										
	Medical Professionalism	(MP1125)	K3		√									
	Medical Professionalism	(MP1125)	K4	√										
	Medical Professionalism	(MP1125)	K5		√									
	Medical Professionalism	(MP1125)	K6								√			
	Medical Professionalism	(MP1125)	K7										√	
	Medical Professionalism	(MP1125)	S1			√			√		√			
	Medical Professionalism	(MP1125)	A1							√				
Y1S1	Communication Skills	(COMS1114)	K1	√										
	Communication Skills	(COMS1114)	K2	√										
	Communication Skills	(COMS1114)	S1						√					
	Communication Skills	(COMS1114)	S2						√					
	Communication Skills	(COMS1114)	S3						√					
	Communication Skills	(COMS1114)	S4						√					
Y1S1	Medical Education	(ME1117)	K1	√										
	Medical Education	(ME1117)	K2	√										

	Medical Education	(ME1117)	K3	√														
	Medical Education	(ME1117)	K4	√														
	Medical Education	(ME1117)	K5		√													
	Medical Education	(ME1117)	K6		√													
	Medical Education	(ME1117)	S1					√										
	Medical Education	(ME1117)	S2					√										
	Medical Education	(ME1117)	A1												√			
Y1S1	Medical Terminology	(MT1112)	K1	√														
	Medical Terminology	(MT1112)	K2	√														
	Medical Terminology	(MT1112)	K3	√														
	Medical Terminology	(MT1112)	S1							√								
Y1S1	Clinical Skills	(CS1116)	K1					√										
	Clinical Skills	(CS1116)	K2					√										
	Clinical Skills	(CS1116)	S1					√										
	Clinical Skills	(CS1116)	S2					√										
	Clinical Skills	(CS1116)	S3					√										
	Clinical Skills	(CS1116)	S4					√										
	Clinical Skills	(CS1116)	S5					√										
Y1S1	History of Medicine	(HM1119)	K1	√														
	History of Medicine	(HM1119)	K2		√													
	History of Medicine	(HM1119)	S1					√										
	History of Medicine	(HM1119)	S2						√									
	History of Medicine	(HM1119)	A1											√				
Y1S1	Fiqh Islamic 1	(FI1120)	K1	√														
	Fiqh Islamic 1	(FI1120)	K2		√													
	Fiqh Islamic 1	(FI1120)	K3			√												
	Fiqh Islamic 1	(FI1120)	S1					√										
	Fiqh Islamic 1	(FI1120)	A1														√	
Y1S2	Anatomy and Embryology 2	(ANA1201)	K1	√														
	Anatomy and Embryology 2	(ANA1201)	K2	√														
	Anatomy and Embryology 2	(ANA1201)	K3	√														
	Anatomy and Embryology 2	(ANA1201)	S1						√									
	Anatomy and Embryology 2	(ANA1201)	S2						√									
	Anatomy and Embryology 2	(ANA1201)	A1															√
Y1S2	Biochemistry 2	(BIO1202)	K1		√													
	Biochemistry 2	(BIO1202)	K2		√													
	Biochemistry 2	(BIO1202)	K3			√												
	Biochemistry 2	(BIO1202)	S1						√									
Y1S2	Microbiology and immunology	(MICRO1207)	K1	√														
	Microbiology and immunology	(MICRO1207)	K2		√													
	Microbiology and immunology	(MICRO1207)	S1						√									
Y1S2	General Psychology	(G.PSY1215)	K1	√														
	General Psychology	(G.PSY1215)	K2	√														

	General Psychology	(G.PSY1215)	K3		√														
	General Psychology	(G.PSY1215)	S1								√								
	General Psychology	(G.PSY1215)	S2								√								
	General Psychology	(G.PSY1215)	A1														√		
Y1S2	PHC 1	(PHC1226)	K1		√														
	PHC 1	(PHC1226)	S1							√									
	PHC 1	(PHC1226)	S2							√									
	PHC 1	(PHC1226)	S3							√									
	PHC 1	(PHC1226)	S4							√									
	PHC 1	(PHC1226)	S5							√									
	PHC 1	(PHC1226)	S6							√									
	PHC 1	(PHC1226)	S7							√									
	PHC 1	(PHC1226)	S8																
Y1S2	Elective project	(EP1227)	K1	√															
	Elective project	(EP1227)	K2		√														
	Elective project	(EP1227)	K3							√									
	Elective project	(EP1227)	K4							√									
	Elective project	(EP1227)	S1								√								
	Elective project	(EP1227)	S2								√								
	Elective project	(EP1227)	A1															√	
Y1S2	Fiqh Islamic 2	(F1220)	K1	√															
	Fiqh Islamic 2	(F1220)	K2		√														
	Fiqh Islamic 2	(F1220)	K3							√									
	Fiqh Islamic 2	(F1220)	S1								√								
	Fiqh Islamic 2	(F1220)	A1																√
Y1S1 & S2	Community Medicine	(CM1103)	K1	√															
	Community Medicine	(CM1103)	K2							√									
	Community Medicine	(CM1103)	K3	√															
	Community Medicine	(CM1103)	K4		√														
	Community Medicine	(CM1103)	K5	√	√	√	√	√	√	√									
	Community Medicine	(CM1103)	K6							√									
	Community Medicine	(CM1103)	S1								√								
	Community Medicine	(CM1103)	S2									√							
	Community Medicine	(CM1103)	S3									√							
	Community Medicine	(CM1103)	S4										√						
Y1S1&S2	Histology	(HISTO1106)	K1		√														
	Histology	(HISTO1106)	K2		√														
	Histology	(HISTO1106)	K3							√									
	Histology	(HISTO1106)	K4		√														
	Histology	(HISTO1106)	K5		√														
	Histology	(HISTO1106)	K6		√														
	Histology	(HISTO1106)	K7		√														
	Histology	(HISTO1106)	S1								√								

	Histology	(HISTO1106)	S2				√							
	Histology	(HISTO1106)	S3				√							
	Histology	(HISTO1106)	S4				√							
	Histology	(HISTO1106)	S5				√							
	Histology	(HISTO1106)	S6				√							
	Histology	(HISTO1106)	S7						√					
	Histology	(HISTO1106)	A1											√
Y1S1 &S2	Physiology	(PHYS1111)	K1		√									
	Physiology	(PHYS1111)	K2		√									
	Physiology	(PHYS1111)	K3	√										
	Physiology	(PHYS1111)	K4	√										
	Physiology	(PHYS1111)	K5		√									
	Physiology	(PHYS1111)	K6		√									
	Physiology	(PHYS1111)	A1							√				
Y2S1	General Module	(GEN21)	K1	√										
	General Module	(GEN21)	K2	√										
	General Module	(GEN21)	K3	√										
	General Module	(GEN21)	K4	√										
	General Module	(GEN21)	K5	√										
	General Module	(GEN21)	K6	√										
	General Module	(GEN21)	K7	√										
	General Module	(GEN21)	K8	√										
	General Module	(GEN21)	K9	√										
	General Module	(GEN21)	K10				√							
	General Module	(GEN21)	K11				√							√
	General Module	(GEN21)	S1				√	√	√					
	General Module	(GEN21)	S2				√	√	√					
	General Module	(GEN21)	S3				√	√	√					
	General Module	(GEN21)	S4					√	√					
	General Module	(GEN21)	S5				√	√						
Y2S1	Molecular Biology Module	(MOB21)	K1	√										
	Molecular Biology Module	(MOB21)	K2	√										
	Molecular Biology Module	(MOB21)	K3	√										
	Molecular Biology Module	(MOB21)	K4		√									
	Molecular Biology Module	(MOB21)	K5	√										
	Molecular Biology Module	(MOB21)	K6	√										
	Molecular Biology Module	(MOB21)	K7	√										
	Molecular Biology Module	(MOB21)	K8		√									
	Molecular Biology Module	(MOB21)	K9		√									
	Molecular Biology Module	(MOB21)	K10	√										
	Molecular Biology Module	(MOB21)	K11	√										
	Molecular Biology Module	(MOB21)	K12		√									
	Molecular Biology Module	(MOB21)	K13	√										

	Molecular Biology Module	(MOB21)	K14	√										
	Molecular Biology Module	(MOB21)	K15	√										
	Molecular Biology Module	(MOB21)	K16	√										
	Molecular Biology Module	(MOB21)	K17	√										
	Molecular Biology Module	(MOB21)	K18	√										
	Molecular Biology Module	(MOB21)	S1					√						
	Molecular Biology Module	(MOB21)	S2					√						
	Molecular Biology Module	(MOB21)	S3					√						
	Molecular Biology Module	(MOB21)	A1											√
	Molecular Biology Module	(MOB21)	A2											√
Y2S1	GI module	(GIT21)	K1	√										
	GI module	(GIT21)	K2		√									
	GI module	(GIT21)	K3			√								
	GI module	(GIT21)	S1					√	√					
	GI module	(GIT21)	S2					√						
	GI module	(GIT21)	A1											√
	GI module	(GIT21)	A2											√
Y2S2	Cardiovascular Module	(CVS22)	K1	√										
	Cardiovascular Module	(CVS22)	K2	√										
	Cardiovascular Module	(CVS22)	K3	√										
	Cardiovascular Module	(CVS22)	K4		√									
	Cardiovascular Module	(CVS22)	K5			√								
	Cardiovascular Module	(CVS22)	K6		√									
	Cardiovascular Module	(CVS22)	K7		√									
	Cardiovascular Module	(CVS22)	K8		√									
	Cardiovascular Module	(CVS22)	K9	√										
	Cardiovascular Module	(CVS22)	K10		√									
	Cardiovascular Module	(CVS22)	K11		√									
	Cardiovascular Module	(CVS22)	S1					√						
	Cardiovascular Module	(CVS22)	S2					√						
	Cardiovascular Module	(CVS22)	S3					√						
	Cardiovascular Module	(CVS22)	S4					√						
	Cardiovascular Module	(CVS22)	A1											√
	Cardiovascular Module	(CVS22)	A2											√
Y2S2	Respiratory Module	(RES22)	K1	√										
	Respiratory Module	(RES22)	K2	√										
	Respiratory Module	(RES22)	K3	√										
	Respiratory Module	(RES22)	K4	√										
	Respiratory Module	(RES22)	K5		√									
	Respiratory Module	(RES22)	K6		√									
	Respiratory Module	(RES22)	K7	√										
	Respiratory Module	(RES22)	K8			√								
	Respiratory Module	(RES22)	S1					√						
	Respiratory Module	(RES22)	S2					√						

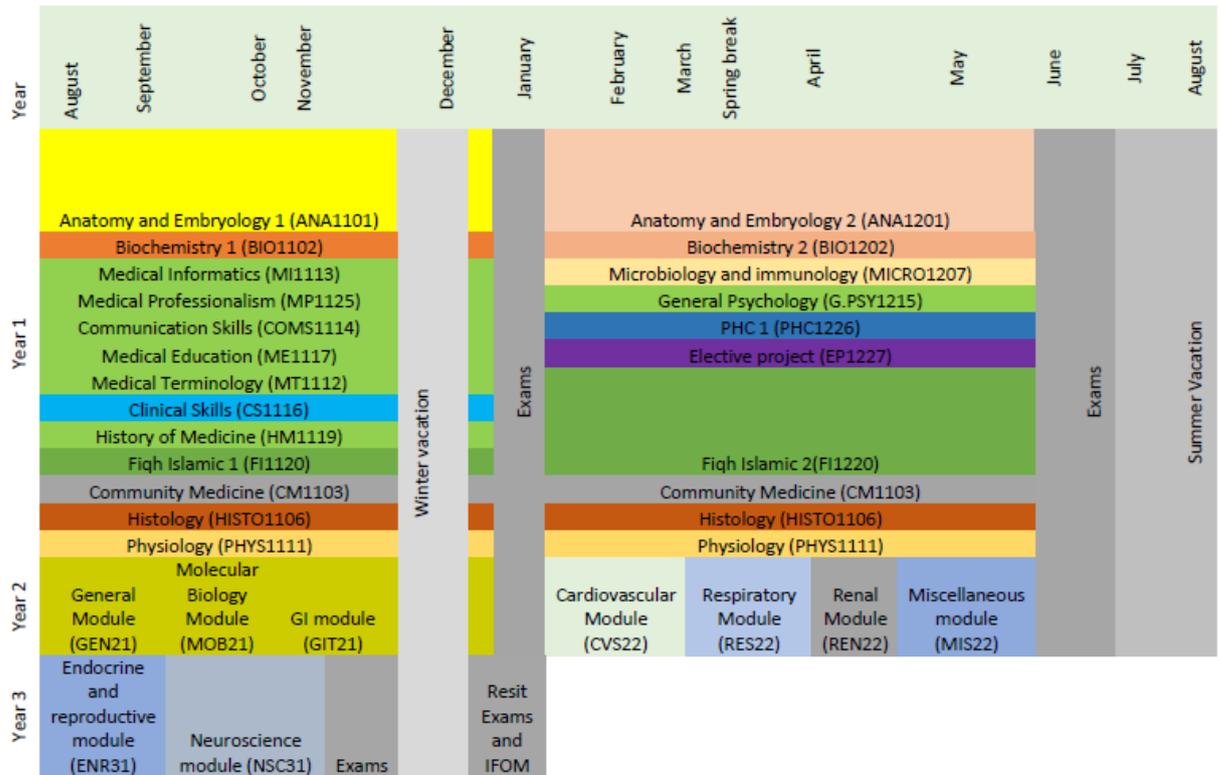


	Clinical Introductory Course	(CIC329)	K2	√											
	Clinical Introductory Course	(CIC329)	S1				√		√						
	Clinical Introductory Course	(CIC329)	S2				√		√						
	Clinical Introductory Course	(CIC329)	S3					√							
	Clinical Introductory Course	(CIC329)	S4					√							
	Clinical Introductory Course	(CIC329)	A1									√			
	Clinical Introductory Course	(CIC329)	A2				√		√						√
Y3S2 &Y4S1	Obstetrics and Gynecology	(OBG431)	K1	√											
	Obstetrics and Gynecology	(OBG431)	K2		√										
	Obstetrics and Gynecology	(OBG431)	K3		√										
	Obstetrics and Gynecology	(OBG431)	K4		√										
	Obstetrics and Gynecology	(OBG431)	K5		√										
	Obstetrics and Gynecology	(OBG431)	S1				√								
	Obstetrics and Gynecology	(OBG431)	S2					√							
	Obstetrics and Gynecology	(OBG431)	S3					√							
	Obstetrics and Gynecology	(OBG431)	S4					√							
	Obstetrics and Gynecology	(OBG431)	A1									√			
	Obstetrics and Gynecology	(OBG431)	A2												√
Y3S2 &Y4S1	Pediatrics	(PED423)	K1	√											
	Pediatrics	(PED423)	K2	√				√							
	Pediatrics	(PED423)	K3		√										
	Pediatrics	(PED423)	S1				√								
	Pediatrics	(PED423)	S2						√						
	Pediatrics	(PED423)	S3					√							
	Pediatrics	(PED423)	S4					√							
	Pediatrics	(PED423)	S5					√							
	Pediatrics	(PED423)	A1												√
	Pediatrics	(PED423)	A2										√		
	Pediatrics	(PED423)	A3								√				
Y4&5	PHC 2	(PHC526)	K1		√										
	PHC 2	(PHC526)	K2		√										
	PHC 2	(PHC526)	K3		√										
	PHC 2	(PHC526)	K4		√										
	PHC 2	(PHC526)	S1				√								
	PHC 2	(PHC526)	S2									√			
	PHC 2	(PHC526)	S3								√				
	PHC 2	(PHC526)	S4								√				
	PHC 2	(PHC526)	S5					√							
	PHC 2	(PHC526)	S6					√							
	PHC 2	(PHC526)	S7						√						
	PHC 2	(PHC526)	S8							√					√
	PHC 2	(PHC526)	A1												√
	PHC 2	(PHC526)	A2												√

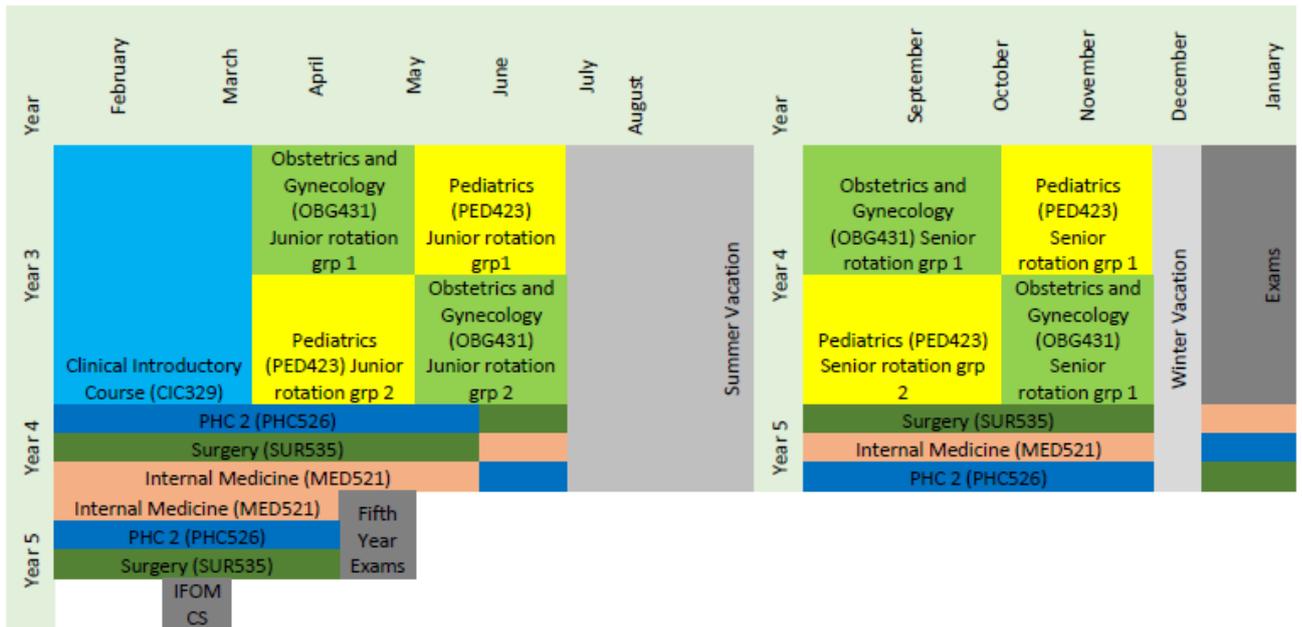
Y4S2 &Y5	Surgery	(SUR535)	K1	√															
	Surgery	(SUR535)	K2	√															
	Surgery	(SUR535)	K3		√														
	Surgery	(SUR535)	K4			√													
	Surgery	(SUR535)	S1				√												
	Surgery	(SUR535)	S2						√										
	Surgery	(SUR535)	S3						√		√								
	Surgery	(SUR535)	S4				√												
	Surgery	(SUR535)	S5				√												
	Surgery	(SUR535)	S6		√				√										
	Surgery	(SUR535)	S7						√										
	Surgery	(SUR535)	A1																√
	Surgery	(SUR535)	A2																√
Y5	Internal Medicine	(MED521)	K1		√														
	Internal Medicine	(MED521)	K2		√														
	Internal Medicine	(MED521)	K3			√													
	Internal Medicine	(MED521)	K4		√														
	Internal Medicine	(MED521)	K5			√													
	Internal Medicine	(MED521)	K6			√													
	Internal Medicine	(MED521)	K7		√														
	Internal Medicine	(MED521)	K8		√														
	Internal Medicine	(MED521)	S1						√										
	Internal Medicine	(MED521)	S2				√												
	Internal Medicine	(MED521)	S3				√												
	Internal Medicine	(MED521)	S4				√												
	Internal Medicine	(MED521)	S5							√									
	Internal Medicine	(MED521)	S6						√										
	Internal Medicine	(MED521)	A1																√
	Internal Medicine	(MED521)	A2																√
	Internal Medicine	(MED521)	A3																√
	Internal Medicine	(MED521)	A4										√						
Internal Medicine	(MED521)	A5											√						
Internal Medicine	(MED521)	A6																√	

## 5.4 Teaching Plan

Curriculum Map 1



Clinical Rotations



## 5.5. College Courses (Syllabus)

### BACHELOR OF MEDICINE AND SURGERY

FIRST YEAR							
First Semester							
Code	Domain	Courses	Prerequisite	Co-requisite	Theory	Practical	Total Hours
ANA1101	MS	Anatomy, Embryology	High school Biology	Histology, Physiology, Biochemistry	61	20	81
BIO1102	MS	Biochemistry	High school Biology or chemistry	Histology, Physiology, Anatomy	81	21	102
CM1103	MS	Community Medicine	High school Biology	Histology, Physiology, Anatomy	46	12	58
HISTO1106	MS	Histology	High school Biology	physiology, biochemistry and anatomy	47	22	69
PHYS1111	MS	Physiology	High school Biology	Histology, Physiology, Anatomy	33	0	33
MI1113	GE	Medical Informatics	High school	nil	20	0	20
MP1125	GE	Medical Professionalism	High school	Basic sciences	14	0	14
COMS1114	GE	Communication Skills	High school	Basic sciences	10	0	10
ME1117	GE	Medical Education	High school	Basic sciences	14	0	14
MT1112	GE	Medical Terminology	High school	Basic sciences	20	0	20
CS1116	CS	Clinical Skills	High school	Basic sciences	3	9	12
HM1119	GE	History of Medicine	High school	Basic sciences	10	0	10
FI1120	GE	Fiqh Islamic Arabic/English	High school	Basic sciences	32	0	32
<b>TOTAL</b>			-	-	<b>381</b>	<b>84</b>	<b>475</b>
Second Semester							
Code	Domain	Courses	Prerequisite	Corequisite	Theory	Practical	Total Hours
ANA1201	MS	Anatomy, Embryology	Anatomy Y1S1	Basic sciences	69	26	95
BIO1202	MS	Biochemistry	Biochemistry Y1S1	Basic sciences	88	14	102
CM1103*	MS	Community Medicine	Community Medicine Y1S1	Basic sciences	23	10	33
HISTO1106*	MS	Histology	Histology Y1S1	Basic sciences	21	10	31
MICRO1207	MS	Microbiology & Immunology	Y1S1 courses	Basic sciences	26	2	28
PHYS1111*	MS	Physiology	Physiology Y1S1	Basic sciences	47	13	60
G.PSY1215	GE	General Psychology	High school	Basic sciences	9	1	10
PHC1226	CS	PHC		Basic sciences			20
FI1220	GE	Fiqh islami	Fiqh islami Y1S1	Basic sciences			32
EP1227	MS	Elective Project	Y1S1 courses	Basic sciences			31
<b>TOTAL</b>			-	-	<b>283</b>	<b>76</b>	<b>442</b>
SECOND YEAR							
First Semester							
Code	Domain	Courses	Prerequisite	Corequisite	Theory	Practical	Total Hours
GEN21	MS	General Module	Anatomy Physiology Biochemistry	Microbiology Pathology Parasitology Community Medicine	139	27	166
MOB21	MS	Molecular Biology					

GIT21	MS	GI Module	MBBS – YEAR -1, Second year General and Molecular Module		168	52	220
<b>Total</b>					<b>307</b>	<b>79</b>	<b>386</b>
<b>Second Semester</b>							
CVS22	MS	Cardiovascular Module	Y2S1	Medicine, surgery, Obs.& Gyna.			172
RES22	MS	Respiratory Module	cardiovascular Module, General Module				159
REN22	MS	Renal Module	Y2S1	Medicine, Surgery, Gynecology			86
MIS22	MS	Miscellaneous	MBBS – Year1				52
<b>TOTAL</b>							<b>469</b>
<b>THIRD, FOURTH, FIFTH YEAR</b>							
ENR31	MS	Endocrine and Reproductive	Year 2 S2				134
NSC31	MS	Neuroscience Module	MBBCh Y1, Y2 (Autonomic Nervous System, Head & Neck)		150	P:35, others:35	216
CIC329	CS	Clinical introductory course	Completion of all Basic science sciences	None	60	24	84
OBG431	CS	Obs/Gynae	Completion of Basic sciences	None	64	240	304
PED423	CS	Pediatrics	completion of all Basic science sciences	None	73	353	426
PHC526	CS	PHC	Completion of basic sciences	None	40	296	336
SUR535	CS	Surgery	Completion of basic sciences	None	118	620	738
MED521	CS	Internal Medicine	Completion of basic sciences	None	150	400	550
<b>TOTAL</b>					<b>505</b>	<b>1933</b>	<b>2438</b>

\* These Subjects will be continued in the second semester as well

Domains:

MS Basic medical sciences

GE General Education

CS Clinical Sciences

## 6. Detailed Syllabus of Each Course

### ANA1101

1. Course title: <i>Anatomy</i>		Course Code: ANA1101	
2. Credit/contact hours:	81		
3. Number of weeks	16		
4. Level/year at which this course is offered:	Year 1, Sem 1		
5. Pre-requisites for this course (if any): <b>Human Biology</b>			
6. Co-requisites for this course (if any): <b>Histology, Physiology, Biochemistry</b>			

### Course Description

Anatomy course in sem 1, is designed to introduce students to the gross anatomy of the musculoskeletal system (bone, joints, muscles and neurovascular structures) of the lower limb regions of the human body and general embryology. This course emphasizes functional anatomy and includes surface anatomy and imaging. This course entails weekly lectures and laboratory components whereby students will explore the human body through cadaveric prosections, imaging and other materials.

### Course Learning Outcomes

CLOs		Aligned-PLOs
1	<b>Knowledge</b>	
K1	Describe the general structural plan of the body with regard to the layers one encounters when dissecting from superficial to deep in lower limb.	A1
K2	Explain how movements are produced in the lower limbs and predict what functional disability will result from injuries to a particular anatomical structure of the lower limb.	A1,
K3	Describe the development of the human body from fertilization to birth, including cleavage, blastocyst formation, formation of bilaminar disk, gastrulation	A1
	<b>SKILLS</b>	
S1	<b>Analyze</b> the normal structural images of body organs as they appear in X-ray films & C.T scans.	B1
S2	Demonstrate by inspection, palpation & percussion important bony landmarks, muscles, tendons, blood vessels, nerves & viscera on the living body	B1
	<b>ASPECTS OF COMPETENCE(Attitude)</b>	
A1	<b>Demonstrate</b> an appreciation of ethical and legal factors while handling, preserving and disposing biological material (plastinated specimens, cadavers, bones) and exercising care while handling material for furthering medical education	c4

### Course Content

No	List of Topics	Contact	Hours
----	----------------	---------	-------

Introduction to Anatomy I	1h
Introduction to Anatomy II	1h
Ethics in Anatomy	1h
Bone: Skeleton, Features I	1h
Introduction to Anatomy IV	1h
Introduction to Anatomy V	1h
Introduction to Anatomy VI	
Introduction to Anatomy VII	1h
Introduction to Anatomy VIII	1h
Bone: Features II, Skin and Fascia	1h
Review, anatomy of the male and female reproductive tracts	1h
Introduction to Anatomy IX	1h
Introduction to Anatomy X	1h
Anterior thigh - Fascia I	1h
Anterior thigh - Fascia II	1h
Hip bone	1h
Gametogenesis, oogenesis, spermatogenesis, abnormal gametes	1h
Anterior thigh - Femoral triangle	1h
Anterior thigh - Adductor canal	1h
Assessment	1h
Anterior thigh - Vessels and nerves I	1h
Femur	1h
Hormonal control: Ovarian cycle	1h
Hormonal control: Menstrual cycle	1h
Anterior thigh - Vessels and nerves II	1h
Femoral triangle, vessels and nerve	1h
Fertilization I: capacitation	1h
Fertilization II: abnormal implantation	1h
Anterior thigh - Muscles I	1h
Anterior thigh - Muscles II	1h
Introduction to sports injuries	1h
Muscles of anterior thigh, Medial thigh , Bone: Tibia	2h
Cleavage and blastocyst formation	1h
Bilaminar Embryonic disc	1h
Medial thigh I	1h
Medial thigh II	1h
Gluteal region I	1h
Gluteal region I , Fibula	1h
Trilaminar embryonic disc, primitive streak and mesoderm	1h
Fate of germ layers	1h
Gluteal region II	1h
Gluteal region III	1h
Gluteal region II Posterior thigh, Popliteal fossa	2h
Molecular control of Embryogenesis I	1h
Molecular control of Embryogenesis II	1h
Posterior thigh	1h
Popliteal fossa I	1h
Introduction to Radiological anatomy	1h

Introduction to Radiological anatomy	1h	
Front of the Leg	1h	
Embryo folding	1h	
Chorion and placenta I	1h	
Hip Joint I	1h	
Hip Joint II	1h	
Front of Leg I	1h	
Skeleton of foot	1h	
Chorion and placenta II	1h	
Amnion	1h	
Front of Leg II	1h	
Yolk sac, allantois, umbilical cord	1h	
Teratology: ectocology	1h	
Front of Leg III	1h	
Revision, Joints, Foot I	2h	
Teratology: mechanism	1h	
Growth phase, multiple pregnancy	1h	
Dorsum of foot	1h	
Foot II	2h	
IVF I	1h	
IVF II	1h	
Lateral leg	1h	
Posterior leg I	1h	
X-ray Lower Limb, Revision	2h	
surface Anatomy of Lower limb	1h	
Knee joint ,Ankle joint,Joints of foot	1h	
Sports Injuries	1h	
Revision	1h	
Sole of the foot I	1h	
Sole of the foot II	1h	
Arches of the foot & gait	1h	
<b>Total</b>		81

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>Knowledge</b>			
K1	Describe the general structural plan of the body with regard to the layers one encounters when dissecting from superficial too deep in lower limb.	Interactive lectures (SBIL), SDL, SGD, SP, Practical.	Oral Practical EMQs Mcq.
K2	Explain how movements are produced in the lower limbs and predict what functional disability will result from injuries to a particular anatomical structure of the lower limb.	Interactive lectures (SBIL), SDL, SGD, Practical.	Oral Practical EMQs,MCQ.

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K3	Describe the development of the human body from fertilization to birth, including cleavage, blastocyst formation, formation of bilaminar disk, gastrulation to abnormalities.	Interactive lectures (SBIL), SDL, SGD, SP, Collaborative learning project.	EMQ, Mcq, Practical.
	<b>SKILLS</b>		
S1	<b>Analyze</b> the normal structural images of body organs as they appear in X-ray films & C.T scans.	SGD, Practical	Practical exam
S2	Demonstrate by inspection, palpation & percussion important bony landmarks, muscles, tendons, blood vessels, nerves & viscera on the living body	SGD, Practical	Practical exam
	<b>ASPECTS OF COMPETENCE</b>		
A1	<b>Demonstrate</b> an appreciation of ethical and legal factors while handling, preserving and disposing biological material (plastinated specimens, cadavers, bones) and exercising care while handling material for furthering medical education		Practical

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment	Throughout semester	30%
2	Oral , practical, EMQ, MCQ	Week 16(Final sem exam)	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	•
<b>Essential References Materials</b>	<ol style="list-style-type: none"> <li>1. <b>Departmental hand-out .</b></li> <li>2. Clinically Oriented Anatomy by Keith Moore</li> <li>3. Gray’s Anatomy by Peter L. Williams</li> <li>4. Clinical Neuroanatomy for Medical Students by Snell Richard So Langman's Medical Embryology by Sadler T W</li> <li>5. Supporting:</li> <li>6. A Color Atlas of Human Anatomy by McMinn R.M.H, Hutchings</li> <li>7. Grant’s atlas of anatomy by Anne M.R. Agur o Clinical Anatomy for Medical Students by Snell Richard S.</li> <li>8. McMinn’s Color Atlas of Hstudents by Ellis Harold o Netter's clinical anatomy by Hansen, John T., David R. Lambert</li> </ol>

	<p>9. Case files: gross anatomy by Toy Eugene C. et al o Illustrative Embryology by El-Rakhawy M.T.</p> <p>10. o Clinical Embryology for Medical Students by Snell Richard S</p>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>LMS departmental handout, AMBOSS</li> </ul>
<b>Other Learning Materials</b>	Library resources.

## 2. Facilities Required

Item	Resources
<p><b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)</p>	(Classrooms, laboratories, demonstration rooms/labs, etc.)
<p><b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)</p>	Smart board, Av, Software (3D complete Anatomy), AMBOSS.
<p><b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p>	Human dissection lab with cadavers, platinate, bones, radiographs.

**BIO1102**

1. Course Name: <b>Biochemistry</b>		Course Code: <b>BIO1102</b>
2. Credit/contact hours:	<b>102</b>	
3. Number of weeks	<b>16</b>	
4. Level/year at which this course is offered:	<b>Year 1- Semester 1</b>	
5. Pre-requisites for this course (if any): High school Biology or chemistry		
6. Co-requisites for this course (if any): <b>No</b>		

**Course Description**

<p>This course discusses the molecular basis of cell function and the biochemical basis of structures and functions of the body</p> <ul style="list-style-type: none"> <li>• Special emphasis is given to disease states with biochemical or molecular biological bases and genetic abnormalities.</li> <li>• The broad objective of the course is to contribute to the formation of a comprehensive well-integrated foundation of basic medical knowledge for concurrent and future comprehension of pathogenesis, clinical presentation, complications, diagnoses and the use of different therapeutic modalities.</li> </ul> <p>Practical laboratory sessions reinforce basic theoretical concepts and demonstrate the biochemical bases of key metabolic diseases. Clinical case scenarios and presentations with group discussions are used for enhancing the development of integrated application of biochemical knowledge in understanding disease processes and presentation</p> <p>This course lays the foundation for students to understand intermediary metabolism which will be taught in Y1S2.</p>
---

**Course Learning Outcomes**

CLOs		Aligned-PLOs
1		
K1	Describe the structure, classification, and properties of carbohydrates, lipids, proteins, enzymes, vitamins, minerals, nucleotides, DNA and RNA.	A3
K2	Describe the structure, function and disease effects of sub-cellular organelles and the control of acid base balance in health and disease.	A1
K3	Correlate molecular structures and chemical properties of macro-molecules to their functions	A3
K4	Explain the role of nutrients in sustaining the normal functions of the body	A2
K5	Explain the mechanisms of normal and abnormal acid base balance in human body	A2
K.6	Identify sign and symptoms of nutritional deficiency disease states.	A3
S1	Identify laboratory instruments, apparatuses and glass ware and their practical uses.	B3

CLOs		Aligned-PLOs
S2	Demonstrate the calculation of concentration of compounds.	B1
S3	Practice the basics of safety measures in the laboratory and how to use these equipment and tools.	B1

### Course Content

No	List of Topics	Contact Hours
1	Cell chemistry	6
2	Protein and Amino Acids	10
3	Carbohydrates	15
4	Lipid	12
5	Enzymes and acid base balance	12
6	Nutrition	19
7	Bioenergetics and Oxidative Phosphorylation	6
8	Globular hemoproteins and Fibrous protein	11
9	Physical chemistry	4
<b>Total</b>		

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K1	Describe the structure, classification, and properties of carbohydrates, lipids, proteins, enzymes, vitamins, minerals, nucleotides, DNA and RNA. Describe the structure, function and disease effects of sub-cellular organelles and the control of acid base balance in health and disease.	Lectures, Laboratory practical lessons	Written exam (Mcq, match, Short account) Practical exam Oral test Quizzes Student presentation Assignments
K2	Correlate molecular structures and chemical properties of macro-molecules to their functions	SGD, Lecture	Written exam (Short account) Practical exam  Oral test
K3	Explain the role of nutrients in sustaining the normal functions of the body	SP, Practical	Written exam (Short account) Practical exam  Oral test
K4	Explain the mechanisms of normal and abnormal acid base balance in human body	Lecture, CBL	Written exam (Short account) Practical exam  Oral test
S5	Identify laboratory instruments, apparatuses and glass ware and their practical uses.	Practical, SGD	Practical

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year Assessment	16	30%
2	Oral	16	15%
3	Practical	16	20%
4	MCQ	16	35%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>Harper's Biochemistry: Maray, Granner, Mayes, and Rodwell a Lang medical book. Apleton &amp; Lange San Mateo, CA/Norwalk,CT.</li> <li>Biochemistry Stryer, Lubert Freeman ISBN O-7167-1306-3</li> <li>Biochemistry: Ian D.K.Halkerston, Lan Series for Independent study Williams &amp; Wilkins Harwal Publishing Company, Malvern, Pennsylvania</li> <li>Biochemistry Illustrated: Peter, Campbell, Anthony and Smith Churchill Livingstone Wilture Enterprises (International) Ltd.</li> <li>Lippincott's Illustrated Results: Pamela Champe, J.B. Lippincott Company</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li><b>All handout and power point presentations were given to students</b></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>LMS course content ,LMS quizzes, MS Office tools ,Demonstration videos</li> </ul>
<b>Other Learning Materials</b>	Library

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Laboratory, Classrooms, Demonstration rooms
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Data show, Smart board, Wi-Fi
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Test tubes, Chemicals, Heaters

**CM1103\***

1. Course Name: Community Medicine.		Course Code: CM1103
2. Credit/contact hours:	58	
3. Number of weeks	32	
4. Level/year at which this course is offered:	Year 1, Sem 1,sem 2	
5. Pre-requisites for this course (if any):		
6. Co-requisites for this course (if any): Basic Physiology,Biochemistry.		

**Course Description**

This course is designed to introduce Year 1 students to the principles of environmental health and highlights basic principles of nutrition in relation to public health. Public health programs are one of the most important components of the syllabus. The course explains principles of epidemiology and research methodology.

**Course Learning Outcomes**

CLOs		Aligned-PLOs
1	<b>Skills:</b>	
K1	Explain principles to protect environmental health	A1
K2	Correlate the knowledge of Nutrition with good health and to explain prevention of malnutrition and obesity	A3
K3	Explain the basic concepts of Epidemiology	A1
S1	Apply the knowledge of Disability in cases encountered in field visits	B2
S2	Demonstrate the ability to apply principles of School Health program in school field visits	B3
K4	Explain the basic principles of Biostatistics	A2
S3	Apply the knowledge in practical scenario-based exercises	B2
K5	Enumerate the basic principles of Primary Health Care	A3
S4	Apply basic principles of PHC maternal and child-care	B3
K6	Apply theories of Health Education in designing a health education program.	A3

**Course Content**

No	List of Topics	Contact Hours
1.	Environmental health	8
2.	Nutrition	8
3	Primary health care	2
4	Public Health programs	12
5	Epidemiology	5
6.	Medical Statistics and research methodology	22
<b>Total hours</b>		<b>58</b>

## Teaching and Assessment

### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Skills</b>		
K1	Explain principles to protect environmental health	Interactive lectures (SBIL), SDL, SGD, SP.	Oral Short Accounts Mcq.
K2	Correlate the knowledge of Nutrition with good health and to explain prevention of malnutrition and obesity	Interactive lectures (SBIL), SDL, SGD.	Oral Short Accounts Mcq.
K3	Explain the basic concepts of Epidemiology	Interactive lectures (SBIL), SDL, SGD.	Oral Short Accounts Mcq.
S1	Apply the knowledge of Disability in cases encountered in field visits	Practical, Clinical skills	Field visit
S2	Demonstrate the ability to apply principles of School Health program in school field visits	Interactive lectures (SBIL), SDL, SGD.	Field visit
K4	Explain the basic principles of Biostatistics	Interactive lectures (SBIL), SDL, SGD.	Oral Short Accounts Mcq.
S3	Apply the knowledge in practical scenario-based exercises	Interactive lectures (SBIL), SDL, SGD.	spotters
K5	Enumerate the basic principles of Primary Health Care	Interactive lectures (SBIL), SDL, SGD.	Oral Short Accounts Mcq.
S4	Apply basic principles of PHC maternal and child-care	Practical, Clinical skills	Field visits
K6	Apply theories of Health Education in designing a health education program.	Interactive lectures (SBIL), SDL, SGD.	Oral Short Accounts Mcq.

### 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment	Throughout semester	30%
2	Oral , practical, Account, MCQ	Week 16(Final sem exam)	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

### Learning Resources and Facilities

#### 1. Learning Resources

<b>Required Textbooks</b>	Text books & other resources 1- Preventive Medicine and Public Health, Brett J. Cassens. 2- A Dictionary of Epidemiology, Miquel Porta 3- Basic Epidemiology Second Edition, R Bonita, et al. WHO 4- Principles of Epidemiology in Public Health Practice, Third Edition: An Introduction. CDC 5- Epidemiology: An Introduction 2nd Edition, KENNETH J ROTHMAN 6- Textbook of Community Medicine, Rajvir Bhalwar 7- EMHJ. Eastern Mediterranean Health Journal. W
<b>Essential References Materials</b>	Lecture Handouts, Lectures notes, PowerPoint presentations, quizzes, worksheets, case scenarios
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• LMS departmental handout, AMBOSS, Access Pharmacy</li> </ul>
<b>Other Learning Materials</b>	Library resources.

#### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	(Classrooms, laboratories, demonstration rooms/labs, etc.)
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart board, Av, AMBOSS.
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

**HISTO1106\***

<b>1. Course Name: Histology</b>		<b>Course Code: HISTO1106</b>	
<b>2. Credit/contact hours:</b>	<b>69</b>		
<b>3. Number of weeks</b>	<b>32</b>		
<b>4. Level/year at which this course is offered:</b>	<b>Year 1 (Semester 1 and Semester 2)</b>		
<b>5. Pre-requisites for this course (if any):</b> Biology AS & A level			
<b>6. Co-requisites for this course (if any):</b> Physiology, Biochemistry and Anatomy			

**Course Description**

This course is designed to introduce year 1 students to the principles of Histology and enhance their understanding of the structure and function of cell organelles. Different teaching methodologies are employed to familiarize the students with microscopic structure of cells and tissues. It provides the students with the necessary foundational knowledge for pathology.

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-PLOs</b>
<b>knowledge</b>		
k1	Correlate between the structure of the different organelles and their function.	A2
k2	Explain the neuronal structure, types of ganglia and functions of neuroglia in relation to their structure.	A2
K3	Interpret with reference to the structure of types of epithelia their sites of distribution	A3
K4	Correlate between the signs and symptoms in case of C.T. disorders.	A2
K5	Correlate between the structure of blood cells and their functions	A2
K6	Explain the functions of different lymphoid organs based on their structure.	A2
K7	Correlate between types of cartilage and their sites.	A2
<b>CLOs</b>		<b>Aligned-PLOs</b>
<b>Skills:</b>		
1		
S1	Identify the different organelles under the electron microscope	B1
S2	Demonstrate different ganglia and receptors under the light microscope	B1
S3	Differentiate between the types of muscles under the microscope.	B1
S4	Identify under the microscope types of epithelia	B1
S5	Differentiate between types of Connective tissue under the microscope	B1
S6	Differentiate between blood cells under the microscope	B1
S7	Communicate effectively with your peers during preparation and staining of blood film	B3
<b>CLOs</b>		<b>Aligned-PLOs</b>
<b>Attitude</b>		
A1	Demonstrate ethics, Honesty and integrity while collaborating with your classmates and instructors in classrooms and laboratory	C4

### Course Content

No	List of Topics	Contact Hours
1	Cytology	9
2	Nervous tissue	6
3	Muscular tissue	5
4	Epithelial tissue	6
5	Connective tissue	5
6	Blood and lymphoid organs	11
7	Cartilage and bone	5
	<b>Theory Hours</b>	47
	<b>Practical hours</b>	22
	<b>Total course</b>	69

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1	Identify the structure of the different organelles and correlate between their structure and function and explain the reason for hereditary diseases.	L SP SGD SDL Practical	Essay MCQ, Oral Practical
2	Identify the neuronal structure, types, differences between different ganglia.	L SP SGD SDL Practical	Essay MCQ, Oral Practical
3	Differentiate between the types of muscles	L SP SGD SDL Practical	Essay MCQ, Oral Practical
4	Identify the microscopic structure of types of epithelia and interpret the relation between the structure and sites of epithelium.	Practical	Practical
5	Differentiate between types of Connective tissue under the microscope.	Practical	Practical
6	Correlate between the signs and symptoms in case of C.T. disorders	L SP SGD SDL	Essay MCQ, Oral
6	Correlate between the structure of blood cells and their functions	L SP SGD SDL PBL	Essay MCQ, Oral Practical

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
		Practical	
7	Explain the functions of different lymphoid organs based on their structure.	L SP SGD SDL PBL Practical	
8	Differentiate between the types of cartilage and their sites. Identify the types of bone under the microscopy.	L SGD SDL Practical	Essay MCQ, Oral Practical

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessments (quizzes, student presentation, written assignments, group project, Reflective essay)	Throughout the semester	30%
2	Final Exam (Essay, MCQ, Oral, OSPE)	June-July	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	Basic Histology, Text & Atlas Junqueira & Carneiro.
<b>Essential References Materials</b>	Histology, A Text and Atlas Michael H. et. Al. Williams & Wilkins.
<b>Electronic Materials</b>	Amboss
<b>Other Learning Materials</b>	Colored Atlas prepared by the department (soft copy), handout, PowerPoint prepared by the department

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, Dry Laboratories
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	AV, Smart Board, Microscope with camera
<b>Other Resources</b> (Specify, e.g., if specific laboratory equipment is required, list requirements or attach a list)	Laptop, Library resources

**PHYS1111\***

1. Course Name: <b>Physiology – Y1-S1 &amp; 2-</b>		Course Code: <b>PHYS1111*</b>
2. Credit/contact hours:	93	
3. Number of weeks	30 (*continuous in S1 & S2)	
4. Level/year at which this course is offered:	Year 1- Semester 1 & 2	
5. Pre-requisites for this course (if any): Anatomy, Histology and Biochemistry		
6. Co-requisites for this course (if any): Histology, Biochemistry, and Immunology		

**Course Description**

The course describes the structure of the cell and correlates it to the function. It describes the different processes of transport mechanisms across the cell membrane. It describes the basic electrophysiology of the nerve and muscle. It emphasizes the principles of metabolism and mechanisms of homeostasis of body temperature and body weight. The course describes the structure of the hemopoietic system and correlates it to the function of each component. It provides the foundation of immunology and describes the mechanism of immune response. The course describes the structure and function of the autonomic nervous system with emphasis on the related neurotransmitters and the basis of autonomic pharmacology.

**Course Learning Outcomes**

CLOs		Aligned-PLOs
K1	Correlate the structure of the cell to the function.	A2
K2	Describe the different processes of transport across the cell membrane.	A2
K3	Describe the basic electrophysiology of the nerve and muscle.	A1
K4	Describe the principles of metabolism and mechanism of homeostasis of body temperature and body weight.	A1
K5	Correlate the hemopoietic and the immune systems to the function of each component and the principle of the pathophysiology of the common hematological disorders.	A2
K6	Describe the structure and function of the autonomic nervous system with emphasis on the related neurotransmitters and the basis of autonomic pharmacology.	A2
A1	Appreciate working in a group	C1

**Course Content**

No	List of Topics	Contact Hours
1	Introduction, cell Physiology and transport	8
2	The Physiology of the Nerve & Muscle	25
3	Metabolism	10
4	Blood	36
5	Autonomic Nervous system	14
<b>Total</b>		<b>93</b>

**Teaching and Assessment****1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.1	Correlate the structure of the cell to the function.	Lectures SGD, SDL SP, CBL Laboratory SGD SBIL CBL	Written exam (MCQs & Short account) Scientific activity
K2	Describe the different processes of transport across the cell membrane.	SGD, SDL	Written exam (MCQs & Short account) Scientific activity
K3	Describe the basic electrophysiology of the nerve and muscle.	SP, CBL	Written exam (MCQs & Short account) Scientific activity
K4	Describe the principles of metabolism and mechanism of homeostasis of body temperature and body weight.	Laboratory	Written exam (MCQs & Short account) Scientific activity
K5	Correlate the hemopoietic and the immune systems to the function of each component and the principle of the pathophysiology of the common hematological disorders.	SGD	Written exam (MCQs & Short account) Scientific activity Practical exam
K6	Describe the structure and function of the autonomic nervous system with emphasis on the related neurotransmitters and the basis of autonomic pharmacology.	SBIL	Written exam (MCQs & Short account) Scientific activity
Appreciate working in a group			

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Marks of Total Assessment Score
1	Year Assessment (in-course)	Throughout the year	30%
2	MCQ, Account, Practical, Oral	July	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

### Learning Resources and Facilities

#### 1. Learning Resources

<b>Required Textbooks</b>	<ol style="list-style-type: none"> <li>Guyton &amp; Hall Textbook of Medical Physiology, by Arthur C, Guyton &amp; John. E. Hall, 14<sup>th</sup> Ed, Published by Saunders</li> <li>Ganong's Review of Medical Physiology/Kim E. Barrett, Susan M. barman, Scott Boitano and Heddwen L. Brooks, 26<sup>th</sup> Ed.</li> <li>Costanzo, Linda S. Physiology. Philadelphia, PA: Saunders/Elsevier, 7<sup>th</sup> Ed.</li> </ol>
<b>Essential References Materials</b>	
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>LMS course content</li> <li><a href="https://accesspharmacy.mhmedical.com/">https://accesspharmacy.mhmedical.com/</a></li> <li>Demonstration videos</li> <li>LMS quizzes</li> <li>MS Office tools</li> <li>Interactive physiology</li> <li>Online calculators</li> <li>Online conversion</li> <li>Online medical dictionary</li> </ul>
<b>Other Learning Materials</b>	Library

#### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Laboratory, Classrooms, Demonstration rooms
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Data show, Smart board, Wi-Fi
<b>Other Resources</b> (Specify, e.g. if specific laboratory is required, list requirements or attach a list)	Biometric measurements, scale for height & weight, thermometers, models for blood sample collection, equipment for blood grouping, ESR, Hemoglobin & PCV.

**MI1113**

1. Course Name: Medical Informatics		Course Code: MI1113	
2. Credit/contact hours:	20 hours		
3. Number of weeks	15		
4. Level/year at which this course is offered:	Year 1 Sem1		
5. Pre-requisites for this course (if any): non			
6. Co-requisites for this course (if any): non			

Course Description

This course introduces students to healthcare informatics.

Course Learning Outcomes

CLOs		Aligned-PLOs
1		
K1	Define data, information and informatics	A3
K2	Describe the process of information management	A3
K3	Describe the major hardware components of a computer system; know how to select high quality information	A3
K4	Demonstrate understanding of information systems concepts, components, and principles	C2
K5	Identify the roles of information systems played in health care organizations;	C4
K6	Recognize time management principles	C2
K7	Analyze the importance of the different applications of health information technology; and communications systems (PACS) play in enhancing the operation and efficiency of medical imaging departments	C2
K8	Explain the importance and contents of the electronic health record (HER)	C4
K9	Review the standards in coding and exchanging medical data	A3
K10	Relate data, information and knowledge (DIK) hierarchy and explain its concepts and relevance to health care and health IT	C4

Course Content

No	List of Topics	Contact Hours
1	Data, Information, & Informatics	3
2	Time management	5
3	Quality of Information	3
4	Computer-assisted communication	3
5	HIS & EMR	6
<b>Total</b>		<b>20</b>

Teaching and Assessment

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
K1	Define data, information, and informatics	Lecture	MCQ
K2	Describe the process of information management	Lecture	MCQ
K3	Describe the major hardware components of a computer system; know how to select high quality information	Lecture, Discussion, forum	MCQ, Discussion forum
K4	Demonstrate understanding of information systems concepts, components, and principles	Lecture, Discussion, forum	MCQ, Discussion forum

K5	Identify the roles of information systems played in health care organizations;	Lecture	MCQ
K6	Recognize time management principles	Lecture, CAL	
K7	Analyze the importance of the different applications of health information technology; and communications systems (PACS) play in enhancing the operation and efficiency of medical imaging departments	Lecture, Discussion forum, Assignment	MCQ, Discussion forum, Assignment
K8	Explain the importance and contents of the electronic health record (HER)	Lecture, Assignment	MCQs & Assignment
K9	Review the standards in coding and exchanging medical data	Lecture, Assignment	MCQs & Assignment
K10	Relate data, information and knowledge (DIK) hierarchy and explain its concepts and relevance to health care and health IT	Lecture, Assignment	MCQs & Assignment

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment	Throughout semester	30
2	Final Exam (MCQ)	12	70

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

[Learning Resources and Facilities](#)

**1.Learning Resources**

<b>Required Textbooks</b>	<p>1- Health Information Management Concepts, Principles, and Practice Pamela K Oachs, Amy Watters.2016.</p> <p>2- Managing Technological Change Organizational Aspects of Health Informatics Nancy M. Lorenzi, Robert T. Riley. 2010.</p> <p>3-Healthcare Digital Transformation How Consumerism, Technology and Pandemic are Accelerating the Future Edward W. Marx, Paddy Padmanabhan.2020.</p> <p>4-Leadership, Policy, &amp; Systems in Health Informatics &amp; Bioinformatics Dr. Lisa Marie Portugal . 2021 .</p> <p>5- Nursing Informatics and the Foundation of Knowledge Dee McGonigle, Kathleen Mastrian. 2021.</p>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>• <b>Lecture notes uploaded on LMS</b></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>•</li> </ul>

<b>Other Learning Materials</b>	LMS course content LMS quizzes LMS Assignments LMS discussion MS Office tools Internet search engines Demonstration videos
---------------------------------	--

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart Board MS Office tools Internet search engines Demonstration videos
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

**MP1125**

1. Course Name: Medical Professionalism		Course Code: (MP1125)
2. Credit/contact hours:	15	
3. Number of weeks	15	
4. Level/year at which this course is offered:	Year 1, Sem 1	
5. Pre-requisites for this course (if any): <b>Grade 12 Higher Secondary school certificate</b>		
6. Co-requisites for this course (if any): <b>Communication skills, basic sciences, Exposure to patient care</b>		

**Course Description**

This is a 15-hour course provided to first year medical students to introduce the concept of social responsibility and professional commitment to the medical profession. It is aimed to sensitize the students to the professional conduct displayed by their role-model teachers and motivate them to imbibe professional skills throughout the program. This is evaluated by creative class assignments and a team-based project during the semester. The end of course exam is through an MCQ type and reflective exam using real-life scenarios.

We aim that the students should

- Demonstrate the ability to manage themselves professionally in the college setting and in a simulated/real clinical setting.
- Demonstrate positive attitudes, collaborative teamwork, project management skills, professional conduct and leadership.
- Demonstrate ability to reflect, empathize, evaluate and communicate their commitment towards the society and medical profession.

**Course Learning Outcomes**

CLOs		Aligned-PLOs
	<b>Skills:</b>	
K1	Define professional attributes required for medical professionals	A1
K2	Classify unprofessional behaviours according to the extent to which they are unprofessional and corrective strategies.	A1
K3	Interpret unprofessional behaviours and boundaries encountered in the practice of medicine	A2
K4	Enumerate components of Emotional Intelligence and apply the knowledge to analyse examples from History of medicine	A1
K5	Apply principles of professional behaviour in the professionalism charter to solve simulated scenarios of professional conflicts	A2
K6	Apply the principles and commitments of the professionalism charter in order to identify boundary crossings and violations	C2
K7	Propose effective strategies to deal with unprofessional behaviours and boundary violations	C4
S1	Demonstrate good teamwork and academic honesty in creating a magazine to increase awareness on professionalism	C2, B3, A3
A1	Demonstrate desire to serve community.	C1

**Course Content**

No	List of Topics	Contact Hours
1	Professional attributes (4A's) Pillars of Medical Professionalism; Empathy & Compassion	1
2	Professional behaviour misconduct Professional responsibilities -ACGME Competencies	1
3	Professional behaviour (4C's) Professionalism in medical students	1
4	Professional attitudes; peer assessment, misconduct (review)	1
5	Social Accountability essay brainstorming	1

6	Interprofessional collaboration & Organizational behaviour- EQ Emotional Intelligence	1
7	Employability, Time management, Communication skills,	1
8	21st century skills for the medical professionals (NTS)	1
9	Clinical scenario and brainstorming (OSCE)	1
10	Professionalism in Clinical setting Scenario	1
11	Conflicts in Professionalism, Boundaries in Professionalism	1
12	Professionalism Charter; Cultural sensitivity and socioeconomic awareness	1
13	Giving and accepting feedback; Leadership	1
14	e-Professionalism; revision	1
<b>Total</b>		<b>14</b>

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>Skills</b>			
K1	Define professional attributes required for medical professionals	Interactive lecture (role play, Fish Bowl)	Class discussions Reflective essay, MCQ
K2	Classify unprofessional behaviours according to the extent to which they are unprofessional and corrective strategies.	Interactive lecture (worksheets)	Worksheet, MCQ
K3	Interpret unprofessional behaviours and boundaries encountered in the practice of medicine	Interactive lecture (Think-pair- share)	Quiz, MCQ
K4	Enumerate components of Emotional Intelligence and apply the knowledge to analyse examples from History of medicine	Interactive lecture (Story telling)	MCQ
K5	Apply principles of professional behaviour in the professionalism charter to solve simulated scenarios of professional conflicts	Group activity & discussion forum on LMS	MCQ
K6	Apply the principles and commitments of the professionalism charter in order to identify boundary crossings and violations	Interactive Lect	Quiz, MCQ
K7	Propose effective strategies to deal with unprofessional behaviours and boundary violations	Small Group Discussion (Video and discussions)	MCQ
S1	Demonstrate good teamwork and academic honesty in creating a magazine to increase awareness on professionalism	Project submission in groups	Project
A1	Demonstrate desire to serve community.	Case based discussion and Reflection	Assignment

#### 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment (Reflective essays and case-based quizzes on LMS)	2, 4, 6,	30%
3	Final exam (MCQ format)	15	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

#### Learning Resources and Facilities

**1. Learning Resources**

Item	Resources
<b>Material Prepared by instructor</b>	Lecture, group discussion, fishbowl, role-playing, self and peer assessment, think/pair/share, mock OSCE, group project management and other teaching methods. Group project with individual qualitative feedback. Face to face
<b>Required Textbooks &amp; other resources</b>	<ul style="list-style-type: none"> <li>• Powerpoint presentations on the LMS</li> <li>• Optional reading material posted on LMS</li> <li>• Professionalism in medicine by John Spandorfer et al</li> <li>• Videos and articles from Open sources like Jefferson College, USMLE, Professionalism Charter, ACGME competencies</li> </ul>
<b>Technology Support:</b>	MS Office tools Demonstration videos Other software: LMS, surveymonkey, Turnitin, LMS quizzes, discussion forum and assignments

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	(Classrooms, small group discussion rooms, demonstration rooms/labs, etc.)
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart board, Av, LMS, surveymonkey,
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Turnitin, LMS quizzes, discussion forum and assignments

**COMS1114**

1. Course Name: Communication Skills		Course Code:COMS1114
2. Credit/contact hours:	10 contact hours	
3. Number of weeks	10 weeks	
4. Level/year at which this course is offered:	Y1S1	
5. Pre-requisites for this course (if any): English language at the standard of high school.		
6. Co-requisites for this course (if any): none		

**Course Description**

Students must demonstrate knowledge of the principles of communication and the skills and attitudes that allow effective interaction with patients, family’s healthcare workers, and others who affect the health and well-being of patients.

During this course training is done through simulation and Role play. During this course, the students will develop confidence in communication skills, so that taking history with real patients in clinical clerkship will be easier for them.

**Course Learning Outcomes**

CLOs		Aligned PLOs
K1	Identify the key components of the communication process.	A1
K2	Describe forms of communication and social behavior.	A1
S1	Apply general principles of good communication with patient in simulation	B3
S2	Demonstrate skills to overcome problems that can arise in the communication process.	B3
S3	Demonstrate use of strategies for managing specific contexts for communication, including giving presentations.	B3
S4	Demonstrate interviewing skills	B3

**Course Content**

No	List of Topics	Contact Hours
1	Basic communication skills	1 Theory and 4 Practical hours
2	Presentation skills	1 Theory and 2 practical hours
3	Breaking bad news	1 Practical
5	History taking	1 practical
<b>Total</b>		

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K1	Identify the key components of the communication process.	Lecture	MCQ
K2	Describe forms of communication and social behavior.	Lecture role play	MCQ
S1	Apply general principles of good communication with simulated patient	Video of history taking, role play, case based learning	Assignment video History taking
S2	Demonstrate skills to overcome problems that can arise in the communication process.	Video of history taking, role play	Simulation of history taking which is recorded

S3	Demonstrate use of strategies for managing specific contexts for communication, including giving presentations.	Video of history taking, role play	Simulation of history taking which is recorded
S4	Demonstrate interviewing skills	Video of history taking, role play	Simulation of history taking which is recorded
S.4	Demonstrate presentation skills	Lecture role model	Submit 5 minutes presentation at the end of rotation

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Video of history taking	10	10%
2	Video BB news	10	10%
3	Video presentation	10	10%
4	MCQ	70	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1. Learning Resources**

<b>Required Textbooks</b>	
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>• PPT BY PROFESSOR</li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• VIDEOS ON LINE</li> </ul>
<b>Other Learning Materials</b>	PPT on LMS, by the professor

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Simulation lab/ rooms for practice on history taking
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart board
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

**ME1117**

1. Course Name: Medical Education	Course Code: (ME1117)
2. Credit/contact hours:	12
3. Number of weeks	12
4. Level/year at which this course is offered:	Year 1, Sem 1
5. Pre-requisites for this course (if any): Grade 12 Higher Secondary school certificate	
6. Co-requisites for this course (if any): Communication skills, basic sciences.	

**Course Description**

This is a 12-hour course which helps the students to align with the medical profession and to be mentally prepared to face the challenges of the career path which involves life-long learning. The students have to be competitive and be aware of the importance of gaining knowledge, skills, and attitudes to internalize large amount of learning material. This course prepares the students to face international standardized examinations. The topics include Introduction to medical career; learning styles, teaching methods, study skills, critical thinking, teamwork, how to face the examination, international standardized examinations in the medical profession

**Course Learning Outcomes**

CLOs		Aligned PLOs
1	<b>Knowledge:</b>	
K1	Describe the different types of medical curricula	A1
K2	Describe the different types of assessment in medical education	A1
K3	Explain the different learning styles and the importance of each	A1
K4	Describe the different teaching modalities in medical education	A1
K5	Describe the basic concepts of research e.g., research question, hypothesis	A2
K6	Describe the process of data collection and interpretation in research	A2
2	<b>Skills:</b>	
S1	Apply the different learning styles in studying	B1
S2	Practice the different student-centered learning and teaching modalities.	B1
3	<b>Attitude:</b>	
A1	Appreciate the importance of different learning, teaching, and assessment modalities in medical education	C2

**Course Content**

No	List of Topics	Contact Hours
1	Overview of the medical curriculum at Dubai Medical College	1
2	Assessment and feedback process at Dubai Medical College	1
3	Teaching modalities-I	1
4	Teaching modalities-II	1
5	Teaching modalities-III	1
6	Teaching modalities-IV	1
7	Introduction to the science of learning and learning styles-I	1
8	Introduction to the science of learning and learning styles-II	1
9	Introduction to the science of learning and learning styles-III	1
10	Research for medical students-I	1
11	Research for medical students-II	1
12	Revision	1
<b>Total</b>		<b>12</b>

Teaching and Assessment

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1</b>	<b>Knowledge:</b>		
K1	Describe the different types of medical curricula	Didactic lecture	MCQ
K2	Describe the different types of assessment in medical education	Interactive lecture	MCQ
K3	Explain the different learning styles and the importance of each	Interactive lecture (Think-pair- share)	MCQ
K4	Describe the different teaching modalities in medical education	Interactive lecture (Think-pair- share)	MCQ
K5	Describe the basic concepts of research e.g., research question, hypothesis	Didactic lecture	MCQ
K6	Describe the process of data collection and interpretation in research	Didactic lecture	MCQ
<b>2</b>	<b>Skills:</b>		
S1	Apply the different learning styles in studying	Interactive session (Roleplaying)	MCQ
S2	Practice the different student-centered learning and teaching modalities.	Interactive session (Roleplaying)	MCQ
<b>3</b>	<b>Attitude:</b>		
A1	Appreciate the importance of different learning, teaching, and assessment modalities in medical education	Interactive session (Roleplaying)	MCQ

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Final exam (MCQ format) on LMS	15	70%
2.	Year assessment	Throughout semester	30%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

Learning Resources and Facilities

**1. Learning Resources**

Item	Resources
<b>Material Prepared by the instructor</b>	PowerPoint, Lecture note, videos, narrated lectures
<b>Required Textbooks &amp; other resources</b>	Powerpoint presentations on the LMS
<b>Technology Support:</b>	MS Office tools LMS course content, LMS quizzes, LMS dropbox, LMS discussion, MS Office tools, Internet search engines, Demonstration videos

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	(Classrooms, small group discussion rooms, demonstration rooms/labs, etc.)
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart board, Av, LMS,
<b>Other Resources</b> (Specify, e.g., if specific laboratory equipment is required, list requirements or attach a list)	Library, Round Hall for hand on experience on the different student-centered learning and teaching modalities e.g., BL, TBL

**MT1113**

1. Course Name: Medical Terminology		Course Code:MT1113	
2. Credit/contact hours:	20 contact hours (including 2 hours for exam)		
3. Number of weeks	15 weeks		
4. Level/year at which this course is offered:	Y1S1		
5. Pre-requisites for this course (if any): English language and Biology at the standard of high school.			
6. Co-requisites for this course (if any): none			

Course Description

This is an introductory course designed to sensitize the students to the language of health care professionals. This course will not in itself teach the students the whole range of terminology used in healthcare, yet this course will orient student to the concepts of medical terminology and enable them to self-learn medical terminology as they need it.

Course Learning Outcomes

CLOs		Aligned PLOs
K1	Apply the knowledge of word building to comprehend the meaning of common medical terms.	A1
K2	Recall the meaning of commonly used medical prefixes, suffices and word roots, medical abbreviation.	A1
K3	Recall the terms for different body organs/parts, and the terms for inflammation of each of them.	A1
S1	Apply the understanding of question terminology when answering questions in any essay based exam.	B3

Course Content

No	List of Topics	Contact Hours
1	Word Building	2
2	Prefix, suffix, word roots	8
3	abbreviation and plurals	2
4	body systems	3
5	question terminology and bloom's taxonomy	3

Teaching and Assessment

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K1	Apply the knowledge of word building to comprehend the meaning of common medical terms.	Lecture	MCQs
K2	Recall the meaning of commonly used medical prefixes, suffices and word roots, medical abbreviation.	Student presentations, Group discussions	MCQs
K3	Recall the terms for different body organs/parts, and the terms for inflammation of each of them.	Student presentations	Labelling diagrams

S1	Apply the understanding of question terminology when answering questions in any essay based exam.	Writing assignments during class, which are corrected at the same time	short assignments during class, which are corrected at the same time	Writing short assignments
----	---	--	--	---------------------------

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Final exam (MCQs and EMQs)	15	70%
2	Year assessment	Throughout semester	30 %

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1.Learning Resources**

<b>Required Textbooks</b>	Medical Terminology A Short Course 5th Edition • Davi-Ellen Chabner
<b>Essential References Materials</b>	•
<b>Electronic Materials</b>	
<b>Other Learning Materials</b>	Lecture notes on LMS by the Instructor

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart board
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

## CS1116

1. Course Name: Clinical Skills		Course Code:CS1116	
2. Credit/contact hours:	12 hours		
3. Number of weeks	6 weeks		
4. Level/year at which this course is offered:	Y1,S1		
5. Pre-requisites for this course (if any): none			
6. Co-requisites for this course (if any): Communication skills			

### Course Description

This course covered during the first year, in first semester introducing the students to the basic clinical skills Teaching methods involve demonstration and role-playing. clinical skills for individual students with feedback ,with emphasis on professionalism in communicating with the patient history taking and physical examination clinical procedures , at the end of the module has a summative OSCE in

### Course Learning Outcomes

CLOs		Aligned PLOs
1		
K1	Define Clinical Skills	B1
K2	Describe the procedure of hand washing - when and how?	B1
S1	Demonstrate history taking process.	B1
S2	Perform General Physical Examination	B1
S3	Demonstrate how to give an intravenous (IV) injection.	B1
S4	Demonstrate how to give an intravenous (IM) injection.	B1
S5	Calculate and comment on Body Mass Index (BMI).	B1

### Course Content

No	List of Topics	Contact Hours
1	Introduction to Clinical Skills	1
2	Infection Control and Hand Washing	2
3	History Taking:	2
4	General Physical Examination /vital signs	3
5	intravenous ( IV) injection	1
6	Intramuscular ( IM) Injection	1
7	Weight height waist circumference BMI	1

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Skills</b>		
K1	Define Clinical Skills	Lecture	none

K2	Describe the procedure of hand washing - when and how?	Simulation/role play	OSCE
K3	Describe management of needle injury	Lecture	MCQ
S1	Demonstrate history taking process.	Simulation/roleplay	OSCE
S2	Perform General Physical Examination	Simulation/role play	OSCE
S3	Demonstrate how to give an intravenous (IV) injection.	Simulation Task trainer ARM	OSCE
S4	Demonstrate how to give an intramuscular (IM) injection.	Simulation Task trainer	OSCE
S5	Calculate and comment on Body Mass Index (BMI).	Checking each other	MCQ

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	OSCE	6	80%
2	MCQ	6	20%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1. Learning Resources**

<b>Required Textbooks</b>	
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>Videos /demonstration by instructors</li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>CDC sites</li> </ul>
<b>Other Learning Materials</b>	Web site

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Simulation room
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smartboard
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Small task trainers ,Arm ,Buttocks ,scales ,injections needle

**HM1119**

1. Course Name: History of Medicine		Course Code: HM1119
2. Credit/contact hours:	10	
3. Number of weeks	10	
4. Level/year at which this course is offered:	Year-1- Semester-1	
5. Pre-requisites for this course (if any): Secondary school graduation		
6. Co-requisites for this course (if any): No		

**Course Description**

History of medicine is the development and prevention of medicine through the ancient and prehistoric times up until the 21st century. A brief course that is designed to understand the breakthroughs in medicine in different civilizations and at different times. A study about the pioneers in medicine, and the developments in hospitals, drugs and surgeries over time.

**Course Learning Outcomes**

CLOs		Aligned-PLOs
1	<b>Skills:</b>	
K.1	Identify the dynamic history of medical ideas and practices in different civilization.	A.1
K.2	Recognize the dynamic interrelationship between medicine and society through history.	A.2
S.1	Summarize strength and weaknesses of medicine in different ages Critically analyze medical achievements in deferent civilizations.	B.1
A.1	Demonstrate appreciation of pioneers and their unique contributions in medicine through history.	C.1
S.2	Apply the knowledge of history of hospitals, drug and surgeries in real life scenarios	B.2

**Course Content**

No	List of Topics	Contact Hours
1	Introduction to History of Medicine	1
2	Ancient Greek History	1
3	Ancient Egyptian History	1
4	Ancient Roman History	1
5	History of Drugs	1
6	History of Hospitals	1
7	History of Surgery	1
8	Modern Medicine and Pioneers of Medicine	1
9	Revision	1
<b>Total</b>		

**Teaching and Assessment****1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Skills</b>		
K.1	Identify the dynamic history of medical ideas and practices in different civilization.	Lecture, LMS quiz	LMS quiz and final exam
K.2	Recognize the dynamic interrelationship between medicine and society through history.	Lecture, LMS quiz	LMS quiz and final exam
S.1	Summarize strength and weaknesses of medicine in different ages Critically analyze medical achievements in deferent civilizations.	Lecture, LMS quiz	LMS quiz and final exam

A.1	Demonstrate appreciation of pioneers and their unique contributions in medicine through history.	Lecture, LMS quiz	LMS quiz and final exam
S.2	Apply the knowledge of history of hospitals, drug and surgeries in real life scenarios	Lecture, LMS quiz	LMS quiz and final exam

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment	Throughout the week	30 %
2	Final Exam (MCQ LMS test)	10	70 %

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

[Learning Resources and Facilities](#)

**1.Learning Resources**

<b>Required Textbooks</b>	up to date oxford handbook of history of medicine
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>• <b>PowerPoint, narrated lectures prepared by Lecturer</b></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• LMS course content</li> <li>• LMS quizzes</li> <li>• Internet search engines</li> </ul>
<b>Other Learning Materials</b>	

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Round Hall, DMCG
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Data show, Laptop, Software, LMS
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	No

**FI1120&FI1220**

1. Course Name: Islamic Fiqh 1 and 2		Course Code:(FI1120) (FI1220)
2. Credit/contact hours:	64	
3. Number of weeks	32	
4. Level/year at which this course is offered:	Year 1 semester 1 and 2	
5. Pre-requisites for this course (if any):		
6. Co-requisites for this course (if any):		

**Course Description**

This course will give an overview on pillars of faith and principles of Sharia. Students will study explanation of Surat Al Noor.

**Course Learning Outcomes**

CLOs		Aligned PLOs
<b>K</b>	<b>Knowledge</b>	
K1	Explain pillars of Faith	A1
K2	explain laws relating medical and healthcare professionals.	A2
K3	explain the position of Shariah in respect of contemporary problems, e.g. transplantation of body organs, cloning, plantation of embryo, clinical death, etc.	A3
S1	To recall Surat Al Noor, and to explain the interpretation of Surah al Noor	B1
A1	Value religion as an important driver in life	C3

**Course Content**

No	List of Topics	Contact Hours
1	Faith	15
2	Lawa relating healthcare professionals	15
3	Position of Shariah in respect of contemporary problems	15
4	Sural Al Noor	18
5		
<b>Total</b>		

**Teaching and Assessment****1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Skills</b>		
K1	Explain pillars of Faith	Lecture	MCQ, lecture
K2	explain laws relating medical and healthcare professionals.	Lecture and case based learning	MCQ, lecture
K3	explain the position of Shariah in respect of contemporary problems, e.g. transplantation of body organs, cloning, plantation of embryo, clinical death, etc.	Lecture and case based learning	MCQ, lecture
S1	To recall Surat Al Noor, and to explain the interpretation of Surah al Noor	Lecture	MCQ, lecture
A1	Value religion as an important driver in life	Lecture	MCQ, lecture

--	--	--	--

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment	Through out the semester	30
2	Final exam	End of semester	70

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1.Learning Resources**

<b>Required Textbooks</b>	Islamic Fiqh book produced by DMCG. Quran
<b>Essential References Materials</b>	•
<b>Electronic Materials</b>	•
<b>Other Learning Materials</b>	

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

**ANA1201**

1. <b>Course Name:</b> Anatomy		Course Code: (ANA1201)	
2. <b>Credit/contact hours:</b>	95		
3. <b>Number of weeks</b>	16		
4. <b>Level/year at which this course is offered:</b>	Year 1, Sem 2		
5. <b>Pre-requisites for this course (if any): code</b>			
6. <b>Co-requisites for this course (if any): Histology, Physiology, Biochemistry</b>			

**Course Description**

This course is offered to First year students and is designed to introduce students to the gross anatomy of the musculoskeletal system (bone, joints, muscles and neurovascular structures) of the Upper limb and Head and neck region of the human body. This course emphasizes functional anatomy and includes surface anatomy and imaging. This course entails weekly lectures and laboratory components whereby students will explore the human body through cadaveric prosections, imaging and other materials.

**Course Learning Outcomes**

CLOs		Aligned-POs
1	<b>Knowledge</b>	
K1	Recognize anatomical terms and structures correctly and comprehend the topographic anatomy of the regions of the upper limbs, head & neck by actual dissection.	A1
K2	Correlate and interpret the anatomical and embryological information given with each part of the body with some medical and surgical problems (applied Anatomy).	A1
K3	Classify the bones and joints, their general features, structure, functions & the mechanism of disability in trauma & other common diseases.	A1
	<b>Skills</b>	
S1	Analyze the normal structural images of body organs as they appear in radiographs	B2
S2	Demonstrate by inspection, palpation & percussion important bony land marks, muscles, tendons, blood vessels, nerves & viscera on the living body.	B2
	<b>ATTRIBUTES and COMPETENCE</b>	
A1	<b>Demonstrate</b> an appreciation of ethical and legal factors while handling, preserving and disposing biological material (plastinated specimens, cadavers, bones) and exercising care while handling material for furthering medical education	C4

**Course Content**

No	List of Topics Hours	Contact
----	----------------------	---------

1. Breast and Pectoral region I	1h	
2. Breast and Pectoral region II	1h	
3. Breast and Pectoral region III	1h	
4. Scapula and Clavicle I	1h	
5. Introduction to head and neck	1h	
6. Scalp	1h	
7. Axilla I Boundaries & content	1h	
8. Axilla II vessels		1h
9. Axilla III Brachial plexus		1h
10. Face I		1h
11. Face II		1h
12. Pectoral region - Breast Skull I: introduction/norma verticalis and occipitalis		2h
13. Back		1h
14. Cutaneous nerve supply of the upper limb		1h
15. Back Superficial veins of the upper limb		1h
16. Humerus - Axilla - Muscles of upper limb I		2h
17. Orbit and extraocular muscles		1h
18. Nerves and vessels in orbit		1h
19. shoulder region I		1h
20. shoulder region II		1h
21. shoulder region III		1h
22. Parotid gland		1h
23. Cranial cavity ,Dural venous sinuses I		1h
24. Skull II: norma frontalis/norma lateralis		2h
25. Superficial structure of free UL		1h
26. Front of the arm I		1h
27. Front of the arm II		1h
28. Radius - Ulna - Brachial plexus		2h
29. Cranial cavity ,Dural venous sinuses II		1h
30. Back of Arm		1h
31. Arteries of cranial cavity		1h
32. Diploic and Emissary veins		2h
33. Skull III: basalis externa/basalis interna I		1h
34. Back of Arm II		1h
35. Cubital fossa		1h
36. Clinical Cases of Arm		1h
37. Muscles of upper limb II - Vessels and nerves of upper limb I		2h
38. Cavernous sinus and pituitary gland		1h
39. Anterior Forearm I		1h
40. Anterior Forearm II		1h
41. Anterior Forearm III		1h
42. Cranial nerves		1h

43. Temporal and infratemporal region I	1h
44. Skull IV: basalis interna II	1h
45. Anterior Forearm IV	1h
46. Upper limb cases	1h
47. Posterior Forearm I	1h
48. Muscles of upper limb III –	
49. Temporal and infratemporal region II	1h
50. Temporal and infratemporal region III	1h
51. Posterior Forearm II	1h
52. Posterior Forearm III	1h
53. Temporal and infratemporal region IV	1h
54. Mandible - 1st rib - Vertebrae	1h
55. Dorsum of hand I	1h
56. Dorsum of hand II	2h
57. Skeleton of the hand - X-ray upper limb	1h
58. Submandibular region I	1h
59. Submandibular region II	2h
60. Dorsum of hand III	1h
61. Palm of hand I	1h
62. Palm of hand II	1h
63. Submandibular and sublingual gland	1h
64. Triangles of neck I	1h
65. Triangles of the neck I	1h
66. Palm of hand III	1h
67. Palm of hand IV	1h
68. Triangles of neck II	1h
69. Triangles of neck III	1h
70. Palm of hand V	1h
71. Palm of hand VI	1h
72. Elbow joint	1h
73. Triangles of neck IV	1h
74. Thyroid gland	1h
75. Triangles of the neck II	1h
76. Radiographs/CT scan	1h
77. Wrist joint	2h
78. Scalene muscles	1h
79. Suboccipital triangle and muscles of back	1h
80. Revision	1h
81. Development of the limbs	1h
82. Anomalies of the limb	2h
83. sports injuries/cranial injuries cases	1h
84. Lymphatic drainage of head and neck	1h

**Total**

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	<b>Knowledge</b>		
	Recognize anatomical terms and structures correctly and comprehend the topographic anatomy of the regions of the upper limbs, head & neck by actual dissection.	Interactive lectures (SBIL), SDL, SGD, SP, Practical.	Oral Practical EMQ Mcq.
	Correlate and interpret the anatomical and embryological information given with each part of the body with some medical and surgical problems (applied Anatomy).	Interactive lectures (SBIL), SDL, SGD, Practical.	Oral Practical EMQ Mcq.
	Classify the bones and joints, their general features, structure, functions & the mechanism of disability in trauma & other common diseases.	Interactive lectures (SBIL), SDL, SGD, Practical.	Oral Practical EMQ Mcq.
	<b>SKILLS</b>		
	Analyze the normal structural images of body organs as they appear in radiographs	SGD, Practical, Clinical skills	Oral Practical EMQ Mcq.
	Demonstrate by inspection, palpation & percussion important bony land marks, muscles, tendons, blood vessels, nerves & viscera on the living body.	Practical, Clinical skills	Practical, Clinical skills exam
	<b>ATTRIBUTES TO COMPETENCE</b>		
	<b>Demonstrate</b> an appreciation of ethical and legal factors while handling, preserving and disposing biological material (plastinated specimens, cadavers, bones) and exercising care while handling material for furthering medical education	Practical	Practical

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment	Throughout semester	30%
2	Oral , practical, EMQ, MCQ	Week 16(Final sem exam)	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1. Learning Resources**

<b>Required Textbooks</b>	•
<b>Essential References Materials</b>	<ol style="list-style-type: none"> <li>11. <b>Departmental handout .</b></li> <li>12. Clinically Oriented Anatomy by Keith Moore o Gray’s Anatomy by Peter L. Williams</li> <li>13. Clinical Neuroanatomy for Medical Students by Snell Richard S</li> <li>14. Langman’s Medical Embryology by Sadler T W</li> <li>15. Supporting:</li> <li>16. A Color Atlas of Human Anatomy by McMinn R.M.H, Hutchings</li> <li>17. Grant’s atlas of anatomy by Anne M.R. Agur o Clinical Anatomy for Medical Students by Snell Richard S.</li> <li>18. McMinn’s Color Atlas for students by Ellis Harold . Netter’s clinical anatomy by Hansen, John T., David R. Lambert</li> <li>19. Case files: gross anatomy by Toy Eugene C. et al o Illustrative Embryology by El-Rakhawy M.T.</li> <li>20. Clinical Embryology for Medical Students by Snell Richard S</li> </ol>
<b>Electronic Materials</b>	• LMS departmental handout, AMBOSS
<b>Other Learning Materials</b>	Library resources.

**2. Facilities Required**

<b>Item</b>	<b>Resources</b>
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	(Classrooms, laboratories, demonstration rooms/labs, etc.)
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart board, Av, Software (3D complete Anatomy), AMBOSS.
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Human dissection lab with cadavers, plastinate, bones, radiographs.

**BIO1202**

1. Course Name: Biochemistry – Y1-S2-		Course Code: <b>BIO1202</b>
2. Credit/contact hours:	102	
3. Number of weeks	16	
4. Level/year at which this course is offered:	Year 1- Semester 2	
5. Pre-requisites for this course (if any): Biochemistry Y1S1		
6. Co-requisites for this course (if any): No		

**Course Description**

<ul style="list-style-type: none"> <li>• This course discusses the molecular basis of cell function and the biochemical basis of structures and functions of the body.</li> <li>• Special emphasis is given to disease states with biochemical or molecular biological bases and genetic abnormalities.</li> <li>• The broad objective of the course is to contribute to the formation of a comprehensive well-integrated foundation of basic medical knowledge for concurrent and future comprehension of pathogenesis, clinical presentation, complications, diagnoses and the use of different therapeutic modalities.</li> <li>• Practical laboratory sessions reinforce basic theoretical concepts and demonstrate the biochemical bases of key metabolic diseases. Clinical case scenarios and presentations with group discussions are used for enhancing the development of integrated application of biochemical knowledge in understanding disease processes and presentation.</li> </ul>
---

**Course Learning Outcomes**

CLOs		Aligned-PLOs
1		
K1	Describe the medically significant metabolic pathways in carbohydrate, lipid, protein and nucleic acids in the body and how they are regulated.	A2
K2	Discuss the changes that affect different metabolic pathways in the human body in response to physiological or pathological demands and how they are integrated by hormones and other regulatory molecules.	A2
S1	Estimate the blood and urine level of the relevant bio-molecules and Correlate the changes in their concentrations of bio molecules in blood and urine with clinical conditions.	B2
K3	Analyze the relation of metabolic disorders to different relevant pathophysiological pictures in clinical problems.	A3

**Course Content**

No	List of Topics	Contact Hours
----	----------------	---------------

1	Carbohydrate Metabolism	26
2	Lipid metabolism	28
3	Protein Metabolism	12
4	Integration of metabolism / Metabolic disorders	12
5	Nucleotide metabolism, porphyrin and heme synthesis	6
6	Clinical Chemistry	14
<b>Total</b>		

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Skills</b>		
K1	Describe the medically significant metabolic pathways in carbohydrate, lipid, protein and nucleic acids in the body and how they are regulated.	Lectures, Laboratory practical lessons	Written exam (Short account &MCQ),oral,practical
K2	Discuss the changes that affect different metabolic pathways in the human body in response to physiological or pathological demands and how they are integrated by hormones and other regulatory molecules.	SGD, SDL	Written exam (Short account &MCQ),oral,practical
S1	Estimate the blood and urine level of the relevant bio-molecules.	SP,CAL	Written exam (Short account &MCQ),oral,practical
S1	Correlate the changes in their concentrations of bio molecules in blood and urine with clinical conditions.	Lecture, CBL	Class sharing, Scientific activity
K3	Analyze the relation of metabolic disorders to different relevant pathophysiological in clinical problems.	Lecture, CBL	Written exam (Short account &MCQ),oral,practical

#### 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment	16	30
2	Oral	16	15
3	Practical	16	20
4	MCQ	16	35

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

### Learning Resources and Facilities

#### 1.Learning Resources

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>• Harper's Biochemistry: Maray, Granner, Mayes, and Rodwell a Lang medical book. Apleton &amp; Lange San Mateo, CA/Norwalk,CT.</li> <li>• Biochemistry Stryer, Lubert Freeman ISBN O-7167-1306-3</li> <li>• Biochemistry: Ian D.K.Halkerston, Lan Series for Independent study Williams &amp; Wilkins</li> </ul>
---------------------------	---

	<p>Harwal Publishing Company, Malvern, Pennsylvania</p> <ul style="list-style-type: none"> <li>• Biochemistry Illustrated: Peter, Campbell, Anthony and Smith Churchill Livingstone Wilture Enterprises (International) Ltd.</li> <li>• Lippincott's Illustrated Results: Pamela Champe, J.B. Lippincott Company</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>• <b>Lecture notes are prepared by the Department and made available to students both in printed and electronic forms. The later is presented on the LMS used by DMC.</b></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• LMS course content LMS quizzes MS Office tools Demonstration videos Internet search engines</li> </ul>
<b>Other Learning Materials</b>	Library

## 2. Facilities Required

Item	Resources
<p><b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)</p>	Laboratory, Classrooms, Demonstration rooms
<p><b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)</p>	Data show, Smart board, Wi-Fi
<p><b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p>	Test tubes, Chemicals, Heaters

**MICRO1207**

1. Course Name: Microbiology and Immunology-		Course Code: MICRO1207
2. Credit/contact hours:	28	
3. Number of weeks	16	
4. Level/year at which this course is offered:	Year 1, semester 2	
5. Pre-requisites for this course (if any): Histology, biochemistry, physiology		
6. Co-requisites for this course (if any): physiology, histology and biochemistry		

**Course Description**

This course provides details about the physiological function of the immune system, the structure of the immune system (Innate immune system and Adaptive immune system). The role of immune system in protecting the human body from any foreign agent (Innate immune response and Adaptive immune response). This course will also discuss applied immunology e.g., hypersensitivity, organ transplant, immunodeficiency disorders, autoimmune disorders and tumor immunology.

**Course Learning Outcomes**

CLOs		Aligned-PLOs
1	<b>Skills:</b>	
K1	explain the structure and function of immune system (Innate and Adaptive immune systems)	A1
K2	explain the role of immune system in clinical disorders related to immunology.	A2
S1	Apply and analyze the serological methods for diagnosis of immunological diseases	B2

**Course Content**

No	List of Topics	Contact Hours
1	General Basic Immunology: Structure and function of the Immune system (Innate and Adaptive)	18
2	Applied Clinical Immunology	10

**Teaching and Assessment**
**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	<b>Skills</b>		
K1	Explain the structure and function of Immune system	Lect,CBL,PBL,SDL, practical	Oral Practical Short Accounts MCQs
K2	explain the role of immune system in clinical disorders related to immunology.	Lect,CBL,PBL,SDL, practical	Oral Practical Short Accounts

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
S1	Apply and analyze the serological methods for diagnosis of immunological diseases	Practical lab	MCQs Spotters

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Year assessment		30%
2	oral		14%
3	practical		20%
	MCQ		23%
	MCQ		13%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>1-Roitt's Essential Immunology</li> <li>2-Celluar and Molecular Immunology Abo Abass</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>1- Theoretical Lecture Handouts</li> <li>2-Practical Handouts,</li> <li>3-Power Point Presentation</li> <li>4- Audio</li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>LMS course content</li> <li>Demonstration videos</li> <li>LMS quizzes</li> <li>LMS drop box</li> <li>MS Office tools</li> <li>Internet search engines</li> <li>AMBOSS</li> </ul>
<b>Other Learning Materials</b>	Library resources

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Laboratory, Classrooms, Demonstration rooms #
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Data show, Smart board, Wi-Fi
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Slides, Stains, Microscopes

**G.PSY1215**

1. Course Name: General Psychology		Course Code: GPSY1215
2. Credit/contact hours:	10 contact hours	
3. Number of weeks	10 weeks	
4. Level/year at which this course is offered:	Y1S2	
5. Pre-requisites for this course (if any): English language and Biology at the standard of high school.		
6. Co-requisites for this course (if any): none		

Course Description

The course will provide students with the basic concept of Positive psychology, concentrating on optimal human functioning. Topics important to every day holistic wellbeing e.g. what makes people happier, more productive and more successful, to increase positive emotions, to develop resilience, priority/goal setting etc which needs to be a way of life for everyone will be taught during this course.

Course Learning Outcomes

CLOs		Aligned PLOs
K1	Describe the field of positive psychology	A1
S1	Create wheel of life	B3
K3	Explain body’s response to stress.	A2
S1	Demonstrate application of coping mechanism (relaxation, meditation) for stress	B3
S2	Demonstrate principles of applying gratitude.	B3
A1	Create SMART Goals to achieve satisfaction in all areas of your life	C2

Course Content

No	List of Topics	Contact Hours
1	Positive psychology	1 Theory hour
2	Wheel of Life	1 theory and 1 practical hour
3	Motivation and Goal setting	1 Theory and 1 Practical
4	Happiness and Gratitude	2 hours SGD
5	Stress and Resilience	1 Theory and 1 Practical
<b>Total</b>		

Teaching and Assessment

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K1	Describe the field of positive psychology	Lecture	MCQ
K2	Create wheel of life	Workshop	Submission of “wheel of life”
K3	Explain body’s response to stress.	Lecture	MCQ
S1	Demonstrate application of coping mechanism (relaxation, meditation) for stress	Simulation, role play Lecture Practical session	MCQ Continuous assessment
S2	Demonstrate principles of applying gratitude.	Simulation, role play	MCQ

A1	Create SMART Goals to achieve satisfaction in all areas of your life	Lecture and practical	Assignment submission
----	--	-----------------------	-----------------------

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	MCQ	10	70
2	Assignment “Wheel of life”	10	15
3	Assignment “SMART” goals	10	15

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1.Learning Resources**

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>Main Text Books: Introductory Psychology by Tony Malim</li> <li>Exploring Psychology, 9e by David Myers</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>Ppt by professor</li> </ul>
<b>Electronic Materials</b>	Recommended Websites: <a href="http://www.apa.org/">http://www.apa.org/</a> . <a href="http://www.assessmentpsychology.com/">http://www.assessmentpsychology.com/</a> <a href="http://psychcentral.com/">http://psychcentral.com/</a>
<b>Other Learning Materials</b>	PPT on LMS, by the professor

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Class room and Simulation lab
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart board
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Round hall to practice relaxation

## PHC1226

1. Course Name: PHC1226	
2. Credit/contact hours:	20 contact hours
3. Number of weeks	15
4. Level/year at which this course is offered:	Y1S2
5. Pre-requisites for this course (if any): <b>Completing communication skills and Clinical skills</b>	
6. Co-requisites for this course (if any): <b>none</b>	

### Course Description

This course is designed to give early clinical exposure to students.

### Course Learning Outcomes

CLOs		Aligned PLOs
1		
K1	Describe Primary Health Care components and functions	A2
S1	Structure an interview using the first assessment form	B1
S2	Communicate effectively with patients by role play .	B1
S3	interpretation of the child growth chart.	B1
S4	Measure weight length head circumference on low fidelity manikin	B1
S5	Conduct risk factor screening	B1
S6	Measure the vital signs for adults	B1
S7	Construct genogram	B1
S8	Assess couples for premarital counseling	

### Course Content

No	List of Topics	Contact Hours
1	Interviewing skills	2
2	Pedigree construction(genogram )	2
3	Assessment of growth and developments How to construct growth chart interpretation of growth charts	3
4	physical examination	2
5	premarital counseling	2
6	anatomical landmark	4
7	Assessment of risk factors	2
8	Immunization schedule	2
9	How to take informed consent	1
<b>Total</b>		

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K1	<b>Describe</b> Premarital counseling components	Lecture	non
K2	<b>Critically</b> appraise premarital counseling investigation	SGD	MCQ
S1	<b>Structure</b> an interview using the first assessment form	Clerkship, Simulation lab Using of form	assignment
S2	<b>Communicate</b> effectively with simulated patients	Clerkship, Simulation lab	OSCE
S3	interpretation of the child growth chart.	Low fidelity manikin Simulation lab	OSPE

S4	Measure weight, length, head circumference on manikin	Clerkship, Simulation lab	
S6	Measure vital signs	Clerkship, Simulation lab	OSCE
S7	Assess risk factors in simulated patient encountered	Clerkship, Simulation lab Role play	OSCE
S8	Identify Anatomical landmarks	Simulation Lab low fidelity manikin	OSPE

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	MCQ, OSPE	10	50%
2	OSCE	10	30%
3	Assignment	10	20%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

[Learning Resources and Facilities](#)

**1. Learning Resources**

<b>Required Textbooks</b>	Murtagh General Practice Companion Handbook
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>Lectures</li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>PPT</li> </ul>
<b>Other Learning Materials</b>	

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Clerkship, Simulation lab
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smartboard, videos
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Low fidelity manikin, diagnostic set Consent form, risk assessment form growth chart Initial assessment form

**EP1227**

## Academic Unit Profile

1. Course Name: Elective Project	Course Code: (EP1227)
2. Credit/contact hours:	12
3. Number of weeks	12
4. Level/year at which this course is offered:	Year 1, Sem 2
5. Pre-requisites for this course (if any): Grade 12 Higher Secondary school certificate	
6. Co-requisites for this course (if any): Communication skills, basic sciences	

## Course Description

Basic science elective project activities are open to all first- and second-year medical students. The activity aims to guide the DMCg students through the development of an instructional elective project for the current MBBCh curriculum, present at a conference, and post to an educational portfolio, topics that are relevant to their future roles as physicians, educators, and researchers. The activity enables the students to use a systematic instructional design process to discover, design, develop, and deploy an instructional project on a content area of their choice. The activity ensures vertical and horizontal integration between the different biomedical, clinical, and general subjects.

## Course Learning Outcomes

CLOs		Aligned PLOs
1	<b>Knowledge:</b>	
K1	Describe the normal structure and functions of the different body systems	A1
K2	Describe how the alterations in the structure and function of the different body systems contribute to the clinical manifestations frequently seen in the human body.	A2
K3	Explain common procedures used in diagnosing and managing different diseases.	A3
K4	Describe the relationship between biomedical basic science, clinical and general subjects.	A3
2	<b>Skills:</b>	
S1	Present in scientific activities	B1
S2	Work individually and in a team	B1
3	<b>Attitude:</b>	
A1	Demonstrate awareness of the importance of teamwork.	C2

## Course Content

No	List of Topics	Contact Hours
	Each Batch is formed of 17 groups ( 3-4 members) in each, therefore there are 17 elective projects in each. The topics of the elective projects vary according to the batch.	Y1 S1= Y1S2=31 Y2S1=20 Y2S2=20

## Teaching and Assessment

## 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1	<b>Knowledge:</b>		
K1	Describe the normal structure and functions of the different body systems	Student-centered activities and small group discussion	Student presentation
K2	Describe how the alterations in the structure and function of the different body systems contribute to the clinical manifestations frequently seen in the human body.	Student-centered activities and small group discussion	

K3	Explain common procedures used in diagnosing and managing different diseases.	Student-centered activities and small group discussion	
K4	Describe the relationship between biomedical basic science, clinical and general subjects.	Student-centered activities and small group discussion	
2	<b>Skills:</b>		
S1	Present in scientific activities	Student presentation	
S2	Work individually and in a team	Small group discussion	
3	<b>Attitude:</b>		
A1	Demonstrate awareness of the importance of teamwork.	Small group discussion	

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	The activity will be evaluated as the following: supervisor evaluation (60%), evaluator of the session (40%), and the assignment evaluation has been introduced to the activity starting from AY 2020-21 - B35. The assignment’s maximum number of words (1000 words). The plagiarism check tool (Turnitin) will be used to check the originality of the submitted assignment. (percentage of plagiarism accepted in the assignment should be LESS THAN 20%).The assignment is a formative assessment and not graded.	End of year	100% of the mark represents 5% of each subject

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1. Learning Resources**

Item	Resources
<b>Material Prepared by the instructor</b>	PowerPoint, Lecture note, videos,
<b>Required Textbooks &amp; other resources</b>	Powerpoint presentations on the LMS
<b>Technology Support:</b>	MS Office tools LMS course content, , LMS dropbox, LMS discussion, MS Office tools, Internet search engines, Demonstration videos

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	(Classrooms, small group discussion rooms, demonstration rooms/labs, etc.)
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smartboard, Av, LMS
<b>Other Resources</b> (Specify, e.g., if specific laboratory equipment is required, list requirements or attach a list)	Library, SPSS, Turnitin

**GEN21**

1. Course Name: General Module		Course Code: GEN21
2. Credit/contact hours:	166 Theory 139 Practicals 27	
3. Number of weeks	7	
4. Level/year at which this course is offered:	2 <sup>nd</sup> Year Semester1	
5. Pre-requisites for this course (if any): Anatomy Physiology Biochemistry		
6. Co-requisites for this course (if any): Microbiology Pathology Parasitology Community Medicine		

**Course Description**

The Aim of the module is to introduce the subjects of General Pharmacology, Pathology, Microbiology, Parasitology and Community Medicine to the students.

**General Pharmacology**

This course provides basic knowledge of general pharmacology including the subdivisions of pharmacokinetics and pharmacodynamics of drugs and helps to understand the mechanism and occurrence of the various drug interactions and adverse reactions.

**General Pathology**

This course provides basic knowledge and understanding of general pathology through elaborating common pathological processes, common diseases, their etiology, mechanisms, morphology, clinical features, and complications. It provides the students with the necessary information required for planning patients' treatment and for developing proper preventive strategies.

**General Microbiology**

This course describes the basic structure of bacteria, viruses and Molds and explains physiology, replication and immunopathogenesis of all microbes (bacteria, viruses and molds)

**General Parasitology**

This course provides basic knowledge of Parasitology to become familiar with the terminology and classification of medically important parasites

**Community Medicine**

This Course provides basic knowledge of the principles of epidemiology of communicable diseases and non-communicable diseases and list steps of surveillance infection control steps

**Course Learning Outcomes**

CLOs		Aligned-PLOs
GEN21	Upon completion of the course the student will be able to	
	<b>Knowledge</b>	
K1	Describe the basic structure of bacteria, viruses and molds	A1
K2	Describe the methods used for laboratory diagnosis of bacteria, viruses, yeasts and molds	A1
K3	Describe the types of medically important parasites and hosts	A1
K4	Describe the gross and microscopic changes induced by common diseases	A1
K5	Explain the etiology and pathogenesis of common diseases in human body	A1
K6	Discuss the morphological features of common diseases with their prognosis	A1
K7	Describe the sources, routes pharmacokinetics and pharmacodynamics of drugs	A1

CLOs		Aligned-PLOs
K8	Describe the agonist and antagonist effects of the various drugs acting on the adrenergic, cholinergic and autacoid receptors	A1
K9	List the uses, interactions and adverse effects of drugs used in viral, fungal, and malignant diseases	A1
K10	Describe the principles of epidemiology of communicable diseases and non-communicable diseases	A3
K11	List steps of surveillance and infection control	A3C3
Skills		
S1	Interpret various laboratory tests to confirm causative microbe of the suspected clinical case	B1B2B3
S2	Apply laboratory safety measures for proper specimen collection and transport to identify microbes using light microscope	B1 B2 B3
S3	Identify and describe the morphology of tissues/organs in various diseases through examination of gross specimens and microscopic slides	B1 B2 B3
S4	Recommend prescriptions for common fungal and viral infections	B2B3
S5	Calculate measurements of frequency of morbidity and mortality and screening indicators	B1 B2

**Course Content**

No	List of Topics	Contact Hours
	<b>Microbiology</b>	
1	Physiology Metabolism and Pathogenicity of Bacteria & Antimicrobial therapy	
2	Identification of bacteria-Traditional & Nontraditional methods	
3	Culture methods and types of media	
4	General properties, pathogenesis and lab diagnosis of viral and fungal infections	
5	Culture Media and Biochemical reactions	
	<b>Parasitology</b>	
6	General characters & Classifications of Protozoa, Trematodes, Nematodes	
7	Arthropods of Medical Importance	
	<b>Pathology</b>	
8	Cell Injury-Necrosis Apoptosis	
9	Acute & Chronic Inflammation, Granulomatous Diseases	
10	Repair, Pathologic Calcification, Pigmentation, Errors of Metabolism	
11	Thrombosis, Embolism, Ischemia and Infarction	
12	Autoimmune, Immunodeficiency diseases, Amyloidosis	
13	Cell Adaptation, Cytopathology, Neoplasia, Benign & Malignant Tumors	
14	Practical	
	<b>Pharmacology</b>	
15	Drug Terminology, Pharmacokinetics & Pharmacodynamics of drugs	
16	Drugs acting on the autonomic and autacoid receptors	
17	Treatment of Rheumatoid arthritis, Gout, Migraine, metal poisoning	
18	Treatment of glaucoma, Myasthenia & Phaeochromocytoma	
19	Immunopharmacology Antiviral Antifungal & Antineoplastic Drugs	
20	Prescription writing and Experimental Pharmacology	
	<b>Community Medicine</b>	
21	Epidemiology Principles of Prevention of communicable and non-communicable	
22	Immunization, Control of Diseases, Health Indicators & Disease Screening	
23	Hospital Acquired infection, Principles of Health Care Management & Patient Sa	
24	Screening & Surveillance: Exercises	

## Teaching and Assessment

### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Skills</b>		
K1	Describe the basic structure of bacteria, viruses and molds	Lectures, SP, SDL, Laboratory	Quiz, Assignments
K2	Describe the methods used for laboratory diagnosis of bacteria, viruses, yeasts and molds	Lectures, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
S1	Interpret various laboratory tests to confirm causative microbe of the suspected clinical case	Lectures, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
S2	Apply laboratory safety measures for proper specimen collection and transport to identify microbes using light microscope	Lectures, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
K4	Differentiate the general morphology, characteristics and life cycles of Trematodes, Cestodes, Nematodes, Protozoa and medically important Arthropods.	Lectures, SDL,, SP	Quiz, Assignments, Mid Comprehensive Exams
K5	Describe the gross and microscopic changes induced by common diseases	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
K6	Explain the etiology and pathogenesis of common diseases in human body	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
K7	Discuss the morphological features of common diseases with their prognosis	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
S3	Identify and describe the morphology of tissues/organs in various diseases through examination of gross specimens and microscopic slides	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
K7	Describe the sources, routes pharmacokinetics and pharmacodynamics of drugs	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
K8	Describe the agonist and antagonist effects of the various drugs acting on the adrenergic, cholinergic and autacoid receptors	Lectures, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
K9	List the uses, interactions and adverse effects of drugs used in viral, fungal, and malignant diseases	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
S4	Recommend prescriptions for common fungal and viral infections	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
K10	Describe the principles of epidemiology of communicable diseases and non-communicable diseases	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams
K11	List steps of surveillance and infection control	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
S5	Calculate measurements of frequency of morbidity and mortality and screening indicators	Lectures, SBIL, SP, SDL, Laboratory	Quiz, Assignments, Mid Comprehensive Exams

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Continuous Assessment	1-7	15%
2	Midsemester Exam	5	15%
3	Final Semester Exam	17	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	<p><b>Microbiology</b></p> <ul style="list-style-type: none"> <li>Lippincott’s illustrated review Microbiology –third edition (Richard, A.H.; Pamela, A. C.; William, A. S. and Harriet, R)</li> <li>Medical Microbiology (Jawetz, Melnick and Adelberg,s</li> <li>.Koneman,s Color Atlas and Text book of diagnostic Microbiology</li> <li>Roitt, s Essential Immunology (Peter, J. D; Seamus, J. D. and Ivan M. Roitt</li> </ul>
	<ul style="list-style-type: none"> <li><b>Parasitology</b></li> <li>Human Parasitology, Burtin J.Bogitsh et al</li> <li>Clinical Parasitology, A practical approach, Elizabeth A zeibig</li> <li>16.Paniker's textbook of Medical Parasitology</li> </ul>
	<p><b>Pathology</b></p> <ul style="list-style-type: none"> <li>Vinay Kumar, Abul K. Abbas, and Jon C. Aster: Basis Pathology of Disease: Elsevier, 10th edition, 2019</li> <li>Vinay Kumar, Abul K. Abbas, and Jon C. Aster: Pathologic Basis of Disease: Elsevier, 10th edition, 2019</li> <li>Vinay Kumar, Abul K. Abbas and Jon C. Aster: Essentials of Pathology: Elsevier, 1st edition, 2020</li> <li>Emanuel Rubbin and Howard Reisner: Essentials of Pathology, Wolter's Kluwer, 6th edition, 2014.</li> <li>Web-Pathology</li> </ul>
	<p><b>Pharmacology</b></p> <ul style="list-style-type: none"> <li>Essentials of Medical Pharmacology Tripathi</li> <li>Principles of Pharmacology HL Sharma</li> <li>Lippincott Pharmacology</li> <li>Basic &amp; Clinical Pharmacology Katzung &amp; Trevor</li> </ul>
	<p><b>Community Medicine</b></p> <ul style="list-style-type: none"> <li>Control of Communicable Diseases 21<sup>st</sup> Century</li> </ul>

<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>• <b>PowerPoints-Lecture notes, video animations</b></li> </ul>
<b>Electronic Materials</b>	LMS course content Demonstration videos LMS quizzes Other software LMS drop box LMS discussion MS Office tools Internet search engines
<b>Other Learning Materials</b>	

## 2. Facilities Required

<b>Item</b>	<b>Resources</b>
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Laboratory, Classrooms, Demonstration rooms
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Smart Board; Data Show, WIFI
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

**MOB21**

<b>1. Course Name: Molecular Biology Module</b>		<b>Course Code: MOB21</b>
<b>2. Contact hours: 43 hr</b>		
<b>3. Number of weeks</b>	<b>5 weeks</b>	
<b>4. Level/year at which this course is offered:</b>	<b>Year 2 semester 1</b>	
<b>5. Pre-requisites for this course: MBBS – YEAR -1</b>		

**Course Description**

The Course will be taught to year 2 students in semester 1 and is designed to offer an integrated approach to the learning of different levels of structure of human genome, At the end of this module the student should be able to have a better understanding of the molecular biology of healthy humans, and pathological states, from the molecular to the cellular level. The 2 week module integrates the disciplines of molecular biology in biochemistry, anatomy, pathology, pharmacology, parasitology, microbiology, physiology, and clinical practice. In this manner, students study the biomolecular structure of nucleic acids, learn about their role in molecular biology and genetics, and observe their functions inside the whole cell or within the cellular domain.

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-POs</b>
<b>1</b>	<b>Knowledge Outcome</b>	
K.1	Comprehend the basic concept related to the roles of DNA and RNA in protein synthesis in the cells.	A1
K.2	Apply the concepts of Molecular biology, to explain the effects of antibiotics and selected toxins on DNA and RNA.	A1
K.3	Relate the different stages of cell division with pathogenesis of neoplasia.	A1
K.4	Explain the key concepts in the genetic basis of cancer development.	A2
K.5	Describe the methods of cell-to-cell interaction and the effects of growth factors.	A1
K.6	Identify Bacterial chromosome, plasmids, transposons and bacteriophages	A1
K.7	Discuss microbial genetics in drug resistance	A1
K.8	Comprehend the uses PCR for diagnosis of infectious diseases	A2
K.9	Describe recombinant DNA vaccines against Microbes	A2
K.10	Explain the applications of molecular biological advances for clinical diagnosis.	A1
K.11	Describe different types of cell division and related abnormalities	A1
K.12	Explains causes, types, and effects of DNA mutation, repair systems and related disorders.	A2
K.13	List numerical and structural chromosomal aberrations	A1
K.14	Comprehend post-transcriptional and post-translational modifications and how they are targeted by different antibiotics and how it is linked to the tremendous variation in eukaryotic organisms in spite of relatively limited number of genes.	A2
K.15	Explain genetics of blood grouping.	A2
K.16	Distinguish the applications of molecular Techniques in parasitology	A1
K.17	Describe regulation of gene expression and its role in health and disease.	A2
K.18	Recognize drug preparation by DNA recombinant technology	A1

CLOs		Aligned-PLOs
<b>2</b>	Skills	
S.1	Identify different methods of vaccine preparation by DNA recombinant technology.	B2
S.2	Differentiate the microscopic characteristic features of the chromosomal abnormalities.	B1
S.3	Describes the steps of polymerase chain reaction and recombinant DNA technology.	B1
<b>3</b>	<b>Attitudes:</b>	
A.1	Identify the ethical concerns of gene cloning.	C4
A.2	Appreciate the importance of accuracy and confidentiality in paternity testing and DNA diagnostic testing.	C4

### Course Content

No	List of Topics	Contact Hours
MOB211	Types, causes, and mechanism of Chromosomal abnormalities	1hr
MOB212	Cell Division - mitosis and its abnormalities	1hr
MOB213	Meiosis and its abnormalities ,Spermatogenesis, Oogenesis	1hr
MOB214	Structure of DNA	1hr
MOB215	Organization of Eukaryotic DNA	1hr
MOB216	Intercellular communication: vasoactive factors	1hr
MOB217	Dermatographics/pedigree chart	1hr
MOB218	microscopic structure of chromosomes	1hr
MOB219	karyotyping and its importance	1hr
MOB2110	Intercellular communication: growth factors	1hr
MOB2111	cell cycle and steps in Prokaryotic DNA Synthesis	1hr
MOB2112	DNA mutation	1hr
MOB2113	DNA Repair1	1hr
MOB2114	DNA Repair2	1hr
MOB2115	Structure of RNA	1hr
MOB2116	Transcription.	1hr
MOB2117	Examples of numerical chromosomal aberrations1	1hr
MOB2118	Examples of structural chromosomal aberrations2	1hr
MOB2119	Barr body preparation and its importance	1hr
MOB2120	Genetics of blood groups	1hr
MOB2121	Biotechnology 1 practical	1hr
MOB2122	Post-Transcriptional Modification of RNA.	1hr
MOB2123	Steps in protein synthesis	1hr
MOB2124	Biotechnology 2 practical	1hr

MOB2125	Post- translational modifications	1hr
MOB2126	gene expression 1	1hr
MOB2127	Bacteriophages, Plasmids & Transposons	1hr
MOB2128	Bacterial Variations	1hr
MOB2129	Transformation & Transduction	1hr
MOB2130	Introduction & Molecular basis of carcinogenesis- 1	1hr
MOB2131	Molecular basis of carcinogenesis-2	1hr
MOB2132	Introduction to parasites' genomes	1hr
MOB2133	Applications of Molecular Techniques in Parasitology	1hr
MOB2134	Conjugation	1hr
MOB2135	Recombinant vaccine (Recombinant DNA technology & PCR ) 1	1hr
MOB2136	Recombinant vaccine (Recombinant DNA technology & PCR ) 2	1hr
MOB2137	Hallmarks of Cancer	1hr
MOB2138	Etiology of cancer: carcinogenic agents	1hr
MOB2139	Drugs prepared by DNA recombinant technology	1hr
MOB2140	DNA extraction	1h
MOB2141	Recombinant technology, PCR. Blotting Technique 1	1h
MOB2142	Recombinant technology, PCR. Blotting Technique 2	1h
MOB2143	gene expression 2	1hr

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Course Learning Outcomes	Teaching Strategies	Assessment Methods
Describe all basic concepts related to the roles of DNA and RNA in protein synthesis in the cells.	Oral Presentation	<ul style="list-style-type: none"> <li>- Comprehensive exam</li> <li>- class sharing</li> <li>- elective projects</li> <li>- clinical skills</li> <li>- End of year 2: OSPE stations to assess laboratory skills</li> </ul>
Explain the applications of PCR.	Teamwork	
Apply the concepts of Molecular biology, to explain the effect of antibiotics and selected toxins on DNA and RNA.	Problem Solving Skills	
Identify the different stages of cell division	CAL: computer assessed learning	
Identify the key concepts in the genetic basis of cancer development.	SDL: Student directed Learning; Lecture	
Elicit different ways of cell interaction and growth factors.	SP: Students Presentations	
Explain the principle of DNA electrophoresis.	SGD: small group discussion	
Explain the principle of PCR	SBIL: Student based interaction	
Explain the steps of DNA extraction	TBL: Team based learning	
Recognize the microscopic characteristic features of the chromosomal abnormalities.		
Awareness about the drugs formed by recombinant DNA technology		

Course Learning Outcomes	Teaching Strategies	Assessment Methods
Awareness to the importance of the regulation of gene expression and its impact on the degree of complexity of different organisms.		- End of year 2: written exam: MCQs and short essay questions.
oriented about different methods of vaccine preparation by DNA recombinant technology		
Acquire computing skills to gather, organize and appraise information including the use of information technology where applicable.		

## 2. Assessment Tasks for Students

Name of Assessment	Assessment Method	Marks	% from Total	Time of Assessment
Continuous Assessment	quizzes, assignments, class share, attendance, scientific activity, elective project	7	16.00%	first semester
Midsemester Exam	MCQ	7	16.00%	first semester
Final Exam	MCQ, OSPE, Oral	29	68%	first and second semester
Total		43	100%	

## Mark Distribution

Subjects	Teaching Hours	Marks	no. of questions	TOTAL Exam Marks of semester 1 (15%)	% of mark
Anatomy, embryology	2	0.5	2	9	5.6%
Biochemistry	18	2.5	10		
Histology	8	1	4	5	20.0%
Microbiology	6	1	4	12	8.3%
Parasitology	2	0.5	2	10	5.0%
Pathology	4	1	4	18	5.6%
Pharmacology	1	0	0	17	0.0%
Physiology	2	0.5	2	8	6.3%

## Blueprint of Molecular Biology Module

### Instructions:

1- Mapping the course topics and activities to the recommended measurement instruments (Course blueprint)

2- L = Lecture, T = Tutorial, S = Seminar, PBL = Problem-based Learning, LPS = Laboratory practical session, CPS = Clinical practical session,

ADL = Assessment during learning

No.	Topic	MCQs	SAQs	ADL	Spotter	OSPE	Mini CEX	Logbook	Portfolio
-----	-------	------	------	-----	---------	------	----------	---------	-----------

1	Dermatographics /pedigree chart	√							
2	Types, causes, and mechanism of Chromosomal abnormalities	√							
3	Cell Division - mitosis and its abnormalities	√							
4	Genetics of blood groups	√							
5	Meiosis and its abnormalities ,Spermatogenesis, Oogenesis	√							
6	Structure of DNA	√							
7	Organization of Eukaryotic DNA	√							
8	cell cycle and steps in Prokaryotic DNA Synthesis	√							
9	DNA mutation	√							
10	DNA Repair	√							
11	Structure of RNA	√							
12	Post-Transcriptional Modification of RNA.	√							
13	Steps in protein synthesis	√							
14	Post- translational modifications	√							
15	gene expression	√							
16	Transcription.	√							
17	Intercellular communication	√							
18	Molecular basis of carcinogenesis	√							
19	Hallmarks of Cancer	√							
20	Etiology of cancer: carcinogenic agents	√							
21	Introduction to parasites' genomes	√							
22	Applications of Molecular Techniques in Parasitology	√							
23	Drugs prepared by DNA recombinant technology	√							
24	Conjugation	√							
25	Bacteriophages, Plasmids & Transposones	√							
26	microscopic structure of chromosmes	√		√					
27	karyotyping and its importance	√		√					
28	Examples of numerical chromosomal aberrations	√		√					
29	Barr body preparation and its importance	√		√					
30	Biotechnology						√		
31	DNA extraction						√		
32	Recombinant technology, PCR Technique						√		

33	Recombinant vaccine (Recombinant DNA technology & PCR )					√			
34	Bacterial Variations	√							
35	Transformation and Transduction	√							

**Learning Resources and Facilities**

**1. Learning Resources**

References Books and other reading resources

Anatomy	Netter’s “Atlas of Human Anatomy-6th Edition Gray’s Anatomy-4th Edition Cunningam’s “Textbook of Anatomy’-12th Edition Snell’s Clinical Anatomy by regions-9th Edition Snell’s Clinical Neuroanatomy-7th Edition Last’s Anatomy-10th Edition Langman’s Medical Embryology-14th Edition The Developing Human “by Keith L Moore”-10th Edition
Histology	1. Anthony L. Mescher Junqueira’s Basic histology text and atlas. 15th ed.; 2018. ISBN798-1-259-07232-1 2. Leslie P. Gartner, James L. Hiatt; color Atlas and text, histology, 7th ed.; 2018. ISBN 978-1-4511-1343-3
Physiology	Guyton’s “Textbook of Medical Physiology”-13th edition Ganong’s “Review Of Medical Physiology”-25th Edition “Human Physiology-From cell to system” by Lauralee Sherwood-8th Edition
Biochemistry	<ul style="list-style-type: none"> <li>- Harper's Biochemistry: Maray, Granner, Mayes, and Rodwell a Lang medical book. Apleton &amp; Lange San Mateo, CA/Norwalk, CT.</li> <li>- Biochemistry Stryer, Lubert Freeman ISBN O-7167-1306-3</li> <li>- Biochemistry: Ian D.K.Halkerston, Lan Series for Independent study Williams &amp; Wilkins <ul style="list-style-type: none"> <li>o Harwal Publishing Company, Malvern, Pennsylvania</li> </ul> </li> <li>- Biochemistry Illustrated: Peter, Campbell, Anthony and Smith Churchill Livingstone Wilture Enterprises (International) Ltd.</li> <li>- Lippincott's Illustrated Results: Pamela Champe, J.B. Lippincott Company.</li> </ul>
Pharmacology	Katzung’s Basic and Clinical Pharmacology-12th Edition
Pathology	Robbin’s Basic Pathology-9th Edition
Technology Support:	LMS course content / LMS quizzes / LMS dropbox / LMS discussion / MS Office tools / Internet search engines / Demonstration videos.

**2. Facilities Required**

Item	Resources
Accommodation	Classrooms, laboratories,
Technology Resources	Smart Board, LMS course content/ LMS quizzes / LMS dropbox / LMS discussion / MS Office tools / Internet search engines / Demonstration videos

Item	Resources
Other Resources	PCR-machine Refrigerated high speed centrifuges. UV Camera Electrophoresis unit.

## GIT21

<b>1. Course Name:</b> Gastrointestinal module		<b>Course Code:</b> GIT21	
<b>2. Credit/contact hours:</b>	<b>Contact hours: Total = 220 Theory=168 Practical =52</b>		
<b>3. Number of weeks</b>	<b>9 Weeks</b>		
<b>4. Level/year at which this course is offered:</b>	<b>MBCh Phase-1 Year-2 S1</b>		
<b>5. Pre-requisites for this course (if any): MBBS – YEAR -1, Second year General and Molecular Module</b>			
<b>6. Co-requisites for this course (if any):</b>			

### Course Description

The Module is designed to offer an integrated approach to the learning of the normal Structure, Function, and Development of the Alimentary system and its accessory organs, using different strategies, and, applying the knowledge and skills acquired, in understanding the pathophysiology of various disorders of these systems. The basic principles of management of these disorders with a focus on disease prevention will be described. PBL week will address causes, epidemiology, pathogenesis, and principles of management of the liver disease. The introduction of clinical skill sessions aims to provide the student with basic clinical and communication skills in preparation for clinical clerkship and to vertically integrate learning.

### Course Learning Outcomes

CLOs		Aligned-PLOs
<b>1.</b>	<b>Knowledge</b>	
K1	Describe the normal structure and functions of the Gastrointestinal system and its accessory glands.	A1
K2	Describe how the alterations in the structure and function of the alimentary system contribute to the clinical manifestations frequently seen in gastrointestinal disorders.	A2
K3	Explain common procedures used in diagnosing and managing gastrointestinal system diseases.	A3
<b>2.</b>	<b>Skills</b>	
S1	Interpret results of laboratory and radiological investigations commonly performed in diagnosing and managing patients with gastrointestinal system diseases.	B2, B3
S2	Explain the principles of management of common gastrointestinal disorders.	B2
<b>3.</b>	<b>Attitude</b>	

CLOs		Aligned-PLOs
A1	Demonstrate awareness of the importance of the psychosocial aspects related to the etiology and the management of gastrointestinal diseases.	C3
A2	Demonstrate awareness of the impact of common gastrointestinal disorders on the quality of life of the individual and community.	C3

**Course Content**

No	List of Topics	Contact Hours
1	Abdominal Hernia	19
2	Swallowing Disorders and Peptic Ulcer	47
3	Liver and Biliary tract diseases	23
4	Enteric diseases	41
5	Bowel diseases	34
<b>Total</b>		

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K1	Describe the normal structure and functions of the Alimentary system and its accessory glands.	Didactic lecture, Scenario-based interactive lecture, SGD, Practical, PBL and TBL	MCQ, EMQ, OSPE
K2	Describe how the alterations in the structure and function of the alimentary system contribute to the clinical manifestations frequently seen in gastrointestinal disorders.	Didactic lecture, Scenario-based interactive lecture, SGD, Practical, PBL and TBL	MCQ, EMQ, OSPE , OSCE
K3	Explain some regular procedures used in diagnosing and managing alimentary system diseases.	Didactic lecture, Scenario-based interactive lecture, SGD, Practical, Clinical Skills, PBL and TBL	MCQ, EMQ, OSPE , OSCE
S1	Interpret results of laboratory and radiological investigations commonly performed in diagnosing and managing patients with the alimentary system diseases.	Didactic lecture, Scenario-based interactive lecture, SGD, Practical, Clinical Skills, PBL and TBL	MCQ, EMQ, OSPE , OSCE
S.2	Explain the principles of management of common gastrointestinal disorders.	Didactic lecture, Scenario-based interactive lecture, SGD, Practical, Clinical Skills, PBL and TBL	MCQ, EMQ, OSPE , OSCE
A1	Demonstrate awareness of the importance of the psychosocial aspects related to the etiology and the management of alimentary diseases	SGD, Practical, Clinical Skills, PBL and TBL	OSPE , OSCE
A2	Demonstrate awareness of the impact of common gastrointestinal disorders on the	SGD, Practical, Clinical Skills, PBL and TBL	OSPE , OSCE

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	quality of life of the individual and community.		

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Module Comprehensive MCQ	AY W 16, Module W 9	15%
2	Continuous class work assessment	1-9	15%
3	End of the module assessment, MCQ, OSPE, and OSCE	AY W 17-18	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1. Learning Resources**

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>• Gray’s Anatomy of Human body, 2008</li> <li>• Grant’s Atlas of Anatomy, 12h edition, 2009 by Lippincott, Williams &amp; Wiklkins. Anthony L. Mescher Junqueira’s Basic histology text and atlas. 13th ed.; 2013. ISBN798-1-259-07232-1</li> <li>• Leslie P. Gartner, James L. Hiatt; color Atlas and text, histology, 6 th ed.; 2009. ISBN 978-1-4511-1343-3</li> <li>• Textbook of Medical Physiology by Arthur C, Guyton &amp; John. E. Hall, 14<sup>th</sup> Ed, Published by Saunders</li> <li>• Lipincott’s Illustrated Review: Biochemistry By: Pamela Champe &amp; Richard A. Harvey (3rd Ed 2005)Publisher:Lipincott, William &amp; Wilkins Robins’ Pathologic basis of Diseases – Kumar, Abhas, Fausto (7th Edition) OR Robbins Basic Pahtology –byRobbins, Cotran and Kumar (7th Edition 2002)</li> <li>• General Pathology: J.B.Walter &amp; I.C.Talbot,Publisher Elsevier.7th Edition. ISBN 978-81-312-1956-0</li> <li>• Jawetz, Melnick &amp; Adelberg,s Textbook of Medical microbiology.26th ed. The McGRAW-Hill; 2010. ISBN 978-0-07-179031-4</li> <li>• Richard A. Harvey, Pamelc. Champe and Druce d. Fisher textbook of Microbiology Lippincott,s illustrated Reviews.2nd ed, 2007</li> <li>• Community Medicine With Recent Advances, by Jaypee Brothers, Medical Publishers, 2010, A. H.Suryakantha.,Jaypee Brothers, Medical Publishers, 2010. ISBN: 9380704313, 9789380704319</li> <li>• Maxcy-Rosenau-Last public health &amp; preventive medicine: by Kenneth Fuller Maxcy, Milton JosephRosenau, John M. Last, Robert B. Wallace</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>• <b>Material prepared by instructors, PowerPoint, Lecture note, videos, narrated lectures</b></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• www.cdc.gov</li> <li>• www.who.int</li> <li>• Demonstration videos</li> <li>• Interactive Physiology (IP10)</li> </ul>

	<ul style="list-style-type: none"> <li><a href="https://accesspharmacy.mhmedical.com/">https://accesspharmacy.mhmedical.com/</a></li> </ul>
<b>Other Learning Materials</b>	Educational and Instructional websites

## 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom, Laboratories, PBL rooms, Simulation Lab
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	LMS course content, LMS quizzes, LMS dropbox, LMS discussion, MS Office tools, Internet search engines, Demonstration videos
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Library, Round Hall for TBL sessions

**CVS22**

<b>1. Course Name: Cardiovascular module</b>		Course Code: <b>CVS22</b>
<b>2. Credit/contact hours:</b>	<b>172</b>	
<b>3. Number of weeks</b>	<b>6 weeks</b>	
<b>4. Level/year at which this course is offered:</b>	<b>Y2S2</b>	
<b>5. Pre-requisites for this course (if any): Y2S1</b>		
<b>6. Co-requisites for this course (if any): Medicine, surgery, Obs.&amp; Gyna.</b>		

**Course Description**

The Course is designed to be delivered to Y2 students and to offer an integrated approach to the learning of the normal Structure, Function and Development of the cardiovascular system using different strategies, and, applying the knowledge and skills acquired, in understanding the pathophysiology of various disorders of these systems. The basic principles of management of these disorders with a focus on disease prevention will be described. PBL week will address causes, epidemiology, pathogenesis and principles of management of cardiovascular diseases. The introduction of clinical skill sessions aims to provide the student with basic clinical and communication skills in preparation for clinical clerkship and to vertically integrate learning

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-PLOs</b>
	At the end of this module students will be able to:	
K1	Describe the gross and microscopic structure, development of CVS components (heart and blood vessels)	A1
K2	Describe properties of cardiac muscle, cardiac cycle, cardiac work and cardiac reserve	A1
K3	Discuss cardiac output, venous return, regulation of blood pressure and principles of ECG	A1
K4	Relate the etiopathogenesis, morphological and functional alterations to the clinical manifestations of common cardiovascular disorders	A2
K5	Solve the scenario cases related to CVS diseases and suitable prescription for the current disease	A3
K6	Discuss common cardiovascular pathogens, their mode of transmission and the clinical presentation of each infection and disease	A2
K7	Compare the hosts, stages, life cycle and mode of infection for each of parasites inhabit or cause disease in cardiovascular, blood & lymph vessels.	A2
K8	Correlate the clinical manifestations to pathogenesis for each of parasites inhabit or cause disease in cardiovascular, blood & lymph vessels.	A2
K9	Explain the epidemiology of common cardiovascular disorders	A1
K10	Outline the principles of management of common cardiovascular disorders,	A2
K11	Explain the different roles of medications used in treatment of CVS diseases	A2
S1	Interpret the data obtained from history taking, clinical examination, and investigation of common cardiovascular disorders	B1

CLOs		Aligned-PLOs
S2	Perform a focused physical examination of a patient presenting with cardiovascular symptoms,	B1
S3	Demonstrate the main characteristic microscopic features of common disorders of the cardiovascular System on microscopic slides/images.	B1
S4	Measure the blood pressure	B1
A1	Demonstrate Awareness to the importance of the psychosocial aspects related to etiology and the management of cardiovascular diseases.	C1
A2	Advocate the vaccines used to prevent CVS infection	c1

### Course Content

No	List of Topics	Contact Hours
1	<b>I. <u>Introduction &amp; Rheumatic heart</u></b> 1. Introduction to Bony Thorax 1 2. Superior Mediastinum 1 3. Anterior & Middle Mediastinum 1 4. Pericardium 1 5. Bony thorax 2 6. Surface Anatomy of the Heart: External Features 1 7. Early development of the heart 1 8. Cardiac Muscles and Valves 1 9. Conducting System of the Heart 1 10. Practical 1 11. Introduction 1 12. Properties of cardiac muscle -I 1 13. Properties of Cardiac muscle -II 1 14. Properties of cardiac muscle -III 1 15. Properties of cardiac muscle -IV 1 16. The Principles of ECG-I 1 17. The Principles of ECG - II 1 18. The Principles of ECG - III 1 19. Diseases of the Pericardium 1 20. Rheumatic Heart Disease I 1 21. Rheumatic Heart Disease II 1 22. Valvular Heart Diseases I 1 23. Valvular Heart Diseases II 1 24. Practical - Rheumatic Heart Disease 1 25. Viral, Bacterial & Fungal Pericarditis 1 26. Streptococci (ARF, acute and subacute endocarditis) 1 27. Epidemiology of Rheumatic Heart Disease 1	28
2	<b>II. <u>Ischemic heart</u></b> 1. Superior & Posterior Mediastinum 1 P, PBL 2. Interior of the Heart I 1 3. Interior of the Heart II 1 4. Blood supply of the heart 1 5. Great vessels: Asc. aorta, Pulmonart artery, Sup. vena cava, phrenic nerve 1 6. Posterior mediastinum I 1	30

	<ul style="list-style-type: none"> <li>7. Posterior mediastinum II 1</li> <li>8. Development of primitive heart 1</li> <li>9. The Principles of ECG - IV 1</li> <li>10. Practical - Recording of ECG 1</li> <li>11. Practical - Determination of electrical axis of the heart 1</li> <li>12. The Cardiac cycle-I 1</li> <li>13. The cardiac cycle - II 1</li> <li>14. Cardiac output -I 1</li> <li>15. Cardiac output-II 1</li> <li>16. Cardiac output -III 1</li> <li>17. Cardiac output-IV 1</li> <li>18. Myocarditis, Degenerative Diseases &amp; Tumors of the Heart 1</li> <li>19. Cardiomyopathy 1</li> <li>20. Ischemic Heart Disease I 1</li> <li>21. Ischemic Heart Disease II 1</li> <li>22. Practical - Diseases of the Myocardium 1</li> <li>23. Infective endocarditis (Bacterial) 1</li> <li>24. Myocarditis (Viral, Bacterial &amp; Fungal) 1</li> <li>25. Antianginal Drugs I 1</li> <li>26. Antianginal Drugs II 1</li> <li>27. Antianginal Drugs III 1</li> <li>28. History taking 1</li> <li>29. Epidemiology of Coronary Heart Disease 1</li> </ul>	
3	<p><b>III. Congestive heart</b></p> <ul style="list-style-type: none"> <li>1. Internal &amp; external features of the heart (Heart Features) 2</li> <li>2. Septation of the heart I - atrial 1</li> <li>3. Blood Vessels I 1</li> <li>4. Blood Vessels II 1</li> <li>5. Cardiac output-IV 1</li> <li>6. Practical - The arterial pulse curve 2</li> <li>7. Venous Return-I 1</li> <li>8. Venous return - II 1</li> <li>9. Practical - The Jugular Venous Pulse 1</li> <li>10. Cardiac reserve 1</li> <li>11. Cardiac work 1</li> <li>12. Diseases of myocardial dysfunction I 1</li> <li>13. Diseases of myocardial dysfunction II 1</li> <li>14. Atherosclerosis I 1</li> <li>15. Atherosclerosis II 1</li> <li>16. Practical - Diseases of the Blood Vessels I 1</li> <li>17. Anemia I 1</li> <li>18. Anemia II 1</li> <li>19. trypanosomiasis (African and american) 1</li> <li>20. Toxoplasmosis 1</li> <li>21. Cardiac Glycosides 1</li> <li>22. Other inotropics, 1</li> <li>23. Drugs in the treatment of Congestive Heart Failure III 1</li> <li>24. Drugs in the treatment of Congestive Heart Failure IV 1</li> <li>25. Treatment of iron deficiency &amp; megaloblastic anemia 1</li> <li>26. Practical 1</li> <li>27. Applied history taking/ CVS examination 1</li> </ul>	29
4	<p><b>IV. Disorders of rhythm and vessels</b></p> <ul style="list-style-type: none"> <li>1. Practical 1</li> <li>2. Septation of the heart II - ventricular and conotrunkal 1</li> <li>3. Development of pericardium and blood vessels 1</li> </ul>	26

	<p>4. Blood supply of the heart &amp; Chest radiology: X-ray and CT 2</p> <p>5. Recording of E. C. G 1</p> <p>6. Practical - The Heart Sounds 1</p> <p>7. Heart Rate-I 1</p> <p>8. Heart rate -II 1</p> <p>9. Blood flow 1</p> <p>10. Regulation of blood flow - I 1</p> <p>11. Regulation of blood flow - II 1</p> <p>12. Anemia III 1</p> <p>13. Practical Pathology of Anemia 1</p> <p>14. Aneurysms 1</p> <p>15. Vasculitis I 1</p> <p>16. Vasculitis II 1</p> <p>17. Tumors of Blood Vessels 1</p> <p>18. Laboratory diagnosis of cases of CVS infection 1</p> <p>19. Vasculitis, Haemorrhagic fevers &amp; FUO 1</p> <p>20. Filariasis 1</p> <p>21. Cysticercosis 1</p> <p>22. Hypolipidemics 2</p> <p>23. Antiarrhythmic Drugs 2</p> <p>24. Applied clinical skills 1</p>	
5	<p><b>V. Circulatory disorders &amp; Hypertension</b></p> <p>1. Fetal circulation and CVS anomalies 1</p> <p>2. Practical - Revision 1</p> <p>3. Biophysics of CVS parameters-I 1</p> <p>4. Biophysics of CVS parameters-II 1</p> <p>5. The physiology of ABP and its regulation - I 1</p> <p>6. The physiology of ABP and its regulation - II 1</p> <p>7. The physiology of ABP and its regulation - III 1</p> <p>8. Practical - The Heart Sounds 1</p> <p>9. The physiology of ABP and its regulation - IV 1</p> <p>10. Effect of Exercise on CVS 1</p> <p>11. Diseases and tumors of Veins &amp; Lymphatics 1</p> <p>12. Practical pathology, Diseases of BI vessels I 1</p> <p>13. Gangrene &amp; Haemorrhage 1</p> <p>14. Hypertension I 1</p> <p>15. Hypertension II 1</p> <p>16. Hypertension III 1</p> <p>17. Shock, Hemorrhage &amp; Edema 1</p> <p>18. Congenital Heart Diseases I 1</p> <p>19. Congenital Heart Diseases II 1</p> <p>20. Transfusion of Blood &amp; its Components 1</p> <p>21. Practical - Bacteria, Viruses &amp; Fungi causing CVS infection 1</p> <p>22. ACE Inhibitors 1</p> <p>23. Ca channel blockers 1</p> <p>24. Vasodilators 1</p> <p>25. Drugs in Treatment of Shock I 1</p> <p>26. Drugs in Treatment of Shock II 1</p> <p>27. Practical 2</p> <p>28. Epidemiology of Hypertension 1</p> <p>29. Epidemiology of Blood-Borne Diseases I (Hepatitis) 1</p> <p>30. Applied clinical skills 1</p>	31
6	<p><b>VI. Hematological disorders</b></p> <p>1. Practical - Measurement of ABP2</p>	28

	2. Circulation through special region I 1 3. Circulation through special region II 1 4. Circulation through special region III 1 5. Practical - Effect of exercise & posture on CVS 2 6. Practical - Diseases of the Blood Vessels II 1 7. Disorders of WBCs & Lymph nodes 1 8. Neoplastic Proliferation of WBCs I 1 9. Neoplastic Proliferation of WBCs II 1 10. Neoplastic Proliferation of WBCs III 1 11. Bleeding disorders 1 12. Coagulation disorders 1 13. Practical 1 14. Anticoagulants I 1 15. Anticoagulants II 1 16. Antiplatelet drugs 1 17. Thrombolytics 1 18. Practical 1 19. Treatment of Malaria I 1 20. Treatment of Malaria II 1 21. Malaria I 1 22. Malaria II 1 23. Practical 2 24. Epidemiology of Blood-Borne Diseases II (Malaria) 1	
<b>Total</b>		172

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	the end of this module students will be able to:		
K1	Describe the gross and microscopic structures and development of CVS (heart and blood vessels)	Lect, SBIL	Quiz, Assignments
K2	Describe properties of cardiac muscle, cardiac cycle, cardiac work and cardiac reserve	Lect, SBIL ,	Quiz, Assignments
K3	Discuss cardiac output, venous return, regulation of blood pressure and principles of ECG	Lect, SBIL ,	Quiz, Assignments
K4	solve the scenario cases related to CVS diseases and a suitable prescription for the current disease	Lect, CBL, TBL, SBIL	Quiz, Assignments
K5	Demonstrate the main characteristic microscopic features of common disorders of the cardiovascular System on microscopic slides/images.	Lect, practical	Quiz, Assignments
K6	Describe the common cardiovascular pathogens, their mode of transmission and clinical presentation of each pathogen.	Lect, CBL, TBL, SBIL	Quiz, Assignments
K7	Compare the hosts, stages, life cycle and mode of infection for each of parasites inhabit or cause disease in cardiovascular, blood & lymph vessels.	Lect., SDL., SP, and Practical	Formative assessments, Comprehensive MCQs

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K8	Correlate the clinical manifestations to pathogenesis for each of parasites inhabit or cause disease in cardiovascular, blood & lymph vessels.	Lect., SDL, SP, and Practical	Formative assessments, Comprehensive MCQs
K9	Explain the epidemiology of common cardiovascular disorders	Lect, CBL, SBIL	Quiz, Assignments
K10	Outline the principles of management of common cardiovascular disorders,	Lect, CBL, TBL , SGD , SP SBIL	Quiz, Assignments
K11	Explain the different roles of medications used in treatment of CVS diseases	Lect, CBL, TBL, SBIL	Quiz, Assignments
S1	Interpret the data obtained from history taking, clinical examination, and investigation of common cardiovascular disorders	Lect, CBL, SGD, SBIL	Quiz, Assignments
S2	Perform a focused physical examination of a patient presenting with cardiovascular symptoms,	Lect, CBL, TBL, S SBIL	Quiz, Assignments
S3	Relate the etiopathogenesis, morphological and functional alterations to the clinical manifestations of common cardiovascular disorders	Lect, CBL, TBL, SGD, SBIL, practical	Quiz, Assignments
S4	Measure the blood pressure	practical	Quiz
A1	Demonstrate Awareness to the importance of the psychosocial aspects related to etiology and the management of cardiovascular diseases.	Lect,	Quiz, Assignments
A2	Advocate the vaccines used to prevent CVS infection	Lect,	Quiz, Assignments

## 2. Assessment Tasks for Students

Name of Assessment	Assessment Method	% From Total	Time of Assessment
Continous year assesment	Class sharing, student activity, PBL, EP, CS	30%	during the CVS 6 weeks S2
Final exam	MCQs	70%	final exam S2
	OSPE, spotter		
	Oral		
	Practical		

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## Learning Resources and Facilities

### 1.Learning Resources

<b>Required Textbooks</b>	<b>TEXTBOOKS &amp; OTHER RESOURCES</b> <ol style="list-style-type: none"> <li>1) Gray’s Anatomy of Human body, 2008</li> <li>2) Junqueira's basic histology</li> <li>3) Atlas of histology with functional correlation</li> </ol>
---------------------------	---

	<ol style="list-style-type: none"> <li>4) Grant’s Atlas of Anatomy, 12h edition, 2009 by Lippincott, Williams &amp; Wiklkins.</li> <li>5) Anthony L. Mescher Junqueira’s Basic histology text and atlas. 13th ed.; 2013. ISBN798-1-259-07232-1</li> <li>6) Leslie P. Gartner, James L. Hiatt; color Atlas and text, histology, 6th ed.; 2009. ISBN 978-1-4511-1343-3</li> <li>7) Textbook of Medical Physiology by Arthur C, Guyton &amp; John. E. Hall, 14th Ed, Published by Saunders</li> <li>8) Lipincott’s Illustrated Review: Biochemistry By: Pamela Champe &amp; Richard A. Harvey (3rd Ed 2005) Publisher: Lipincott, William &amp; Wilkins</li> <li>9) Robins Pathologic basis of Diseases – Kumar, Abhas, Fausto (7th Edition) OR Robbins Basic Pahtology – by Robbins, Cotran and Kumar (7th Edition 2002)</li> <li>10) General Pathology: J.B.Walter &amp; I.C.Talbot,Publisher Elsevier.7th Edition. ISBN 978-81-312-1956-0</li> <li>11) Jawetz, Melnick &amp; Adelberg,s Textbook of Medical microbiology.26th ed. The McGRAW-Hill; 2010. ISBN 978-0-07-179031-4</li> <li>12) Richard A. Harvey, Pamelc. Champe and Druce d. Fisher textbook of Microbiology Lippincott,s illustrated Reviews.2nd ed, 2007</li> <li>13) Community Medicine with Recent Advances, by Jaypee Brothers, Medical Publishers, 2010, A. H. Suryakantha., Jaypee Brothers, Medical Publishers, 2010. ISBN: 9380704313, 9789380704319</li> <li>14) Maxcy-Rosenau-Last public health &amp; preventive medicine: by Kenneth Fuller Maxcy, Milton Joseph Rosenau, John M. Last, Robert B. Wallace</li> <li>15) Markell and Voge's: Medical Parasitology (Last Edition).</li> <li>16) Lynne S. Garcia and David A. Buckner: Diagnostic Medical Parasitology (Last Edition).</li> <li>17) Franklin A. Neva and Harold W. Brown: Basic Clinical Parasitology (Last Edition).</li> <li>18) Schmidt Gerald D, Roberts Larry S, Foundations of parasitology</li> <li>19) Zeibig Elizabeth A. Clinical Parasitology: A Practical Approach</li> <li>20) C.K Jayaram Panikar: Textbook of Medical Parasitology (Last Edition).</li> <li>21) <a href="http://dpd.cdc.gov/dpdx">http://dpd.cdc.gov/dpdx</a> (DPDx - CDC Parasitology Diagnostic Web Site)</li> </ol>
<p><b>Essential References Materials</b></p>	<ul style="list-style-type: none"> <li>• <b>Lecture notes by instructor.</b></li> </ul>
<p><b>Electronic Materials</b></p>	<ul style="list-style-type: none"> <li>• LMS course content</li> <li>• LMS quizzes</li> <li>• LMS dropbox</li> <li>• LMS discussion</li> <li>• Internet search engines</li> <li>• Demonstration videos</li> </ul>
<p><b>Other Learning Materials</b></p>	

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Laboratory, Classrooms, Demonstration rooms
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Data show, Smart board, Wi-Fi
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

**Blueprint of CVS module:**

Topic	MC Qs	SAQs	AD L	OSPE	Spotte r	Mini CEX	Logbook	Portfolio
<b>** Gross structure of Pericardium and mediastinum</b>	ü				ü			
<b>Gross structure of heart</b>	ü				ü			
<b>development of heart</b>	ü				ü			
<b>Microscopic structure of heart</b>	ü				ü			
<b>Microscopic structure of blood vessels</b>	ü				ü			
<b>Properties of cardiac muscles</b>	ü				ü			
<b>Principles of ECG</b>	ü				ü			
<b>Cardiac cycle</b>	ü				ü			
<b>Cardiac output</b>	ü				ü			
<b>Venous return</b>	ü				ü			
<b>Regulation of ABP</b>	ü				ü			
<b>Valvular and rheumatic heart diseases</b>	ü			ü	ü			
<b>Ischemic heart diseases</b>	ü			ü	ü			
<b>Myocardial diseases</b>	ü			ü	ü			
<b>Vascular diseases</b>	ü			ü	ü			
<b>Blood diseases</b>	ü			ü	ü			
<b>Microbial infections of CVS</b>	ü			ü	ü			
<b>Parasitic infections of CVS</b>	ü			ü	ü			
<b>Epidemiology of preventable CVS diseases</b>	ü							
<b>Management of ischemic heart diseases</b>	ü				ü			
<b>Management of Congestive heart failure and hypertension</b>	ü				ü			
<b>Management of arrhythmia</b>	ü				ü			
<b>Management of blood diseases and hyperlipidemia</b>	ü				ü			
<b>Clinical Skills</b>					ü			

**RES22**

<b>1. Course Name:</b> Respiratory Module		<b>Course Code:</b> RES22
<b>2. Credit/contact hours:</b>	159	
<b>3. Number of weeks</b>	5 weeks	
<b>4. Level/year at which this course is offered:</b>	Y2S2	
<b>5. Pre-requisites for this course (if any):</b> cardiovascular Module, General Module		
<b>6. Co-requisites for this course (if any):</b>		

**Course Description**

- The Respiratory Module is a 5 week module you will follow during semester 2 of your second year medical curriculum. You will learn about the normal structure and function of the respiratory tract. After which you will be in a position to appreciate the abnormalities of this system and how it affects the human body. Respiratory diseases are a major cause of morbidity and mortality globally. Recurrent and chronic respiratory problems result in a significant loss of productivity and man hours in a country. During this module we will cover the important areas of respiratory problems in adults and children. Meanwhile, all disorders of this system will not be covered in such a short time period. Therefore, the emphasis should be on active learning and self study by the student, using the respiratory module as a guide. A list of suggested reading material is annexed at the end of each course handouts and we suggest that you use the internet and other supplementary readers where necessary to further your knowledge. Teaching of this module will be in the form of lectures, tutorials, problem based learning, practical sessions and others. At the end of this module, you will have a comprehensive exam.

**Course Learning Outcomes**

CLOs		Aligned-PLOs
1		
K1	Describe normal structure and function of the lungs	A1
K2	Enumerate the most common disorders of the respiratory tract	A1,
K3	Describe the etiology and the pathogenesis of common respiratory disorders and basic management of the respiratory disorders	A1
K4	Describe principles of the pharmacological basis in the treatment of respiratory disorders	A1
K5	Correlate clinical features to the pathophysiology of the respiratory diseases	A2
K6	Describe the impact of social, occupational and environmental factors in respiratory disorders	A2
K7	Outline epidemiology of preventable respiratory diseases	A1
K8	Plan out investigations to diagnose and manage respiratory disorders	A3
S1	perform a clinical examination to diagnose respiratory tract disorders in simulated environment.	B1
S2	Perform under supervision simple bed side and laboratory investigations to confirm/ assist clinical diagnosis.	B1
A1	Demonstrate respect to Academic integrity	C4

**Course Content**

No	List of Topics	Contact Hours
1	Upper respiratory tract diseases	36
2	Infectious and allergic pulmonary diseases	37
3	Chronic lung/Pulmonary diseases	35
4	Tuberculosis	35
5	Tumours and Misc.infections of the lung	17
<b>Total</b>		

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Skills</b>		
K1	Describe normal structure and function of the lungs	<ul style="list-style-type: none"> <li>➤ Problem based Learning</li> <li>➤ Lectures</li> <li>➤ SDL</li> <li>➤ SBIL</li> <li>➤ CBL</li> <li>➤ ICM</li> <li>➤ Clinical skills</li> <li>➤ SP</li> <li>➤ Comprehensive exam</li> <li>➤ Formative assesments</li> <li>➤ Class sharing</li> <li>➤ PBL discussion</li> <li>➤ Elective projects</li> <li>➤ Final Exam in form of written, oral and OSPE</li> </ul>	
K2	Enumerate the most common disorders of the respiratory tract		
K3	Describe the etiology and the pathogenesis of common respiratory disorders and basic management of the respiratory disorders		
K4	Describe principles of the pharmacological basis in the treatment of respiratory disorders		
K5	Correlate clinical features to the pathophysiology of the respiratory diseases		
K6	Describe the impact of social, occupational and environmental factors in respiratory disorders		
K7	Outline epidemiology of preventable respiratory diseases		
K8	Plan out investigations to diagnose and manage respiratory disorders		
S1	perform a clinical examination to diagnose respiratory tract disorders in simulated environment.		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
S2	Perform under supervision simple bed side and laboratory investigations to confirm/ assist clinical diagnosis.		
A1	Demonstrate respect to Academic integrity		

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
2	Final exam (written, Oral and OSPE)	At the end of S2	70
3	Year Assessments	Throughout the year	30

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li><a href="https://accesspharmacy.mhmedical.com/">https://accesspharmacy.mhmedical.com/</a></li> </ul>
<b>Other Learning Materials</b>	

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

**REN22**

<b>1. Course Name:</b> Renal Module		<b>Course Code:</b> (REN22)	
<b>2. Credit/contact hours:</b>	<b>86 hours</b>		
<b>3. Number of weeks</b>	<b>3</b>		
<b>4. Level/year at which this course is offered:</b>	<b>Year 2 semester 2</b>		
<b>5. Pre-requisites for this course (if any): Year2 Semester1</b>			
<b>6. Co-requisites for this course (if any): Medicine, Surgery, Gynecology</b>			

**Course Description**

The course is designed to impart an integrated approach to the learning of normal development, structure and functions and pathophysiology of the Renal system using different modalities of teaching. Knowledge regarding alterations in the structure and function of the Renal system which contributes to the clinical manifestations seen in diseases of the system will also be imparted.

Regular procedures used in diagnosing and managing Renal system diseases, and interpretation of laboratory data and radiological investigations commonly performed in patients with Renal system diseases will be explained.

Management of common Renal system disorders will be described.

PBL and TBL sessions will be held to explain causes, epidemiology, pathogenesis and management of common renal disorders.

Clinical skills and ICM sessions will be conducted for development of clinical and communication skills and vertical integration of learning

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-PLOs</b>
<b>Knowledge</b>		
K1	Describe the structures of renal system organs	A1
K2	Explain the gross and microscopic features of the renal system organs in health and disease	A1
K3	Explain the biochemical changes in renal disease	A1
K4	Describe how common pathogens and parasites affect structural and functional changes in the organs of the renal system	
K5	Correlate the etiopathogenesis, morphological and functional alterations in renal disorders with clinical features.	A2
K6	Analyze and interpret clinical scenarios of Renal system diseases, utilizing knowledge of basic sciences,	A3
<b>Skills</b>		
S1	Interpret laboratory data obtained in renal function tests for diagnosing common renal disorders	B2
S2	Identify the key structures of the renal system organs on gross and microscopy in health and disease in the laboratory	B2
S3	Elicit a relevant clinical history & examine a case of renal disease	B1

CLOs		Aligned-PLOs
S4	Plan/create model prescription for different medications used in renal diseases	B3
<b>Attitude</b>		
A1	Demonstrate the ability for collaboration and teamwork in evaluating clinical scenarios and laboratory results related to renal diseases.	C1

### Course Content

No	List of Topics	Contact Hours
1	Normal structure of Kidney & Suprarenal Development of the urinary system organs Congenital anomalies of the urinary system	10
2	Normal histology & Microcirculation of kidney Normal histology of Urinary Bladder, Ureters & Urethra	5
3	Functions of Renal System, Functions of the nephron & Juxta glomerular apparatus Renal Blood Flow and its regulation Dynamics of the glomerular filtration Functions of renal tubules Renal Handling of Glucose, Sodium, Potassium, Chloride, Bicarbonate and calcium & phosphate Tubular load & tubular transport maximum & H <sub>2</sub> O Renal regulation of blood and extracellular fluid volume Diuresis and diuretics Role of Kidney in Acid-Base Balance Formation of ammonia & excretion of acids & alkalis Mechanism and neural control of Micturition	24
4	Biochemical changes in renal diseases Investigations of renal function, Case study about renal function test. Urine analysis: Physical & Chemical properties	6
5	Congenital and acquired diseases of kidney Renal Tumors Renal failure Infections & tumors of urinary bladder	16
6	Organisms causing urinary tract infections (Bacteria, viruses, Fungi) Post-Strep-acute glomerulonephritis Hospital acquired U T I (Nosocomial infection) Laboratory diagnosis of UTI Urinary Schistosomiasis	9
7	Treatment of UTI Diuretics Antidiuretics	13
8	History taking and physical examination for urology	3
Total		86 hours (75theory +11 P)

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>Knowledge</b>			
K1	Describe the structures of renal system organs	L SBIL SDL Practical Session TBL	MCQs, spotter, OSPE
K2	Explain the gross and microscopic features of the renal system organs in health and disease	L CBL PBL SBIL SDL Practical Session TBL	MCQs, spotter, OSPE
K3	Explain the biochemical changes in renal disease	L Practical Session	MCQs
K4	Describe how common pathogens and parasites affect structural and functional changes in the organs of the renal system	L SBIL CBL Practical Session	MCQs, spotter
K5	Correlate the etiopathogenesis, morphological and functional alterations with clinical features in renal disorders	L SBIL CBL SDL Practical Session	MCQs, spotter
K6	Analyze and interpret clinical scenarios of Renal system diseases, utilizing knowledge of basic sciences,	Clinical skills-Practical	OSCE
<b>Skills</b>			
S1	Identify the key structures of the renal system organs on gross and microscopy in health and disease in the laboratory	Practical	Spotter, OSPE
S2	Interpret laboratory data obtained in renal function tests for diagnosing common renal disorders	Practical	OSPE
S3	Elicit a relevant clinical history & examine a case of renal disease	Clinical skills	OSCE
S4	Plan/create model prescription for different medications used in renal diseases	Practical	OSPE
<b>Attitude</b>			
A1	Demonstrate the ability for collaboration and teamwork in evaluating clinical scenarios and laboratory results related to renal diseases.	PBL	MCQs, SAQ

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Mid semester Comprehensive Exam	Week 3	15%
2	Continuous assessments (Attendance, Quiz, elective projects, group discussion, Assignments, PBL, TBL, Clinical Skills)	Throughout the module	15%
3	Final examination- MCQs, Oral, Practical	End of semester	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

Learning Resources and Facilities

1. Learning Resources

<b>Required Textbooks</b>	<ol style="list-style-type: none"> <li>1. Gray’s Anatomy of Human body, 2008</li> <li>2. Grant’s Atlas of Anatomy, 12h edition, 2009 by Lippincott, Williams &amp; Wilkins.</li> <li>3. Anthony L. Mescher Junqueira’s Basic histology text and atlas. 15<sup>th</sup> ed.; 2018. ISBN798-1-259-07232-1</li> <li>4. Leslie P. Gartner, James L. Hiatt; color Atlas and text, histology, 7<sup>th</sup> ed.; 2018. ISBN 978-1-4511-1343-3</li> <li>5. Textbook of Medical Physiology by Arthur C, Guyton &amp; John. E. Hall, 14<sup>th</sup> Ed, Published by Saunders</li> <li>6. Robbins Basic Pathology – by Robbins, Cotran and Kumar (10<sup>th</sup> Edition 2002)</li> <li>7. Jawetz, Melnick &amp; Adelberg,s Textbook of Medical microbiology.26<sup>th</sup> ed. The 978-81-312-1956-0 McGRAW-Hill; 2010. ISBN 978-0-07-179031-4</li> <li>8. Lippincott,s illustrated Reviews.2<sup>nd</sup> ed, 2007</li> <li>9. M. Last, Robert B. Wallace Elsevier, 10th edition, 2019</li> </ol>
<b>Essential References Materials</b>	<ol style="list-style-type: none"> <li>1. Robins Pathologic basis of Diseases – Kumar, Abbas, Fausto (10<sup>th</sup> Edition)</li> <li>2. General Pathology: J.B.Walter &amp; I.C.Talbot,Publisher Elsevier.7th Edition. ISBN</li> <li>3. Richard A. Harvey, Pamelc. Champe and Druce d. Fisher text book of Microbiology</li> <li>4. Vinay Kumar, Abul K. Abbas and Jon C. Aster: Essentials of Pathology: Elsevier , 1st edition, 2020</li> <li>5. Emanuel Rubin and Howard Reisner: Essentials of Pathology, Wolter's Kluwer, 6th edition, 2014.</li> </ol>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• Web-Pathology</li> <li>• Web medicine-Utah</li> <li>• Amboss</li> <li>• UpToDate</li> <li>• <a href="https://accesspharmacy.mhmedical.com/">https://accesspharmacy.mhmedical.com/</a></li> </ul>

<b>Other Learning Materials</b>	Library resources, Handouts
---------------------------------	-----------------------------

**2. Facilities Required**

<b>Item</b>	<b>Resources</b>
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, laboratories, demonstration rooms, simulation lab, Museum
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	AV, data show, Smart Board, LMS
<b>Other Resources</b> (Specify, e.g., if specific laboratory equipment is required, list requirements or attach a list)	Projection microscope, Lab equipment and glassware for Microbiology, Parasitology and Biochemistry Practicals

**MIS22**

1. Course Name: <i>Miscellaneous Module</i> Course code: <i>MIS22</i>	
2. Credit/contact hours:	<b>52 hours</b>
3. Number of weeks	<b>2 WEEKS</b>
4. Level/year at which this course is offered:	<b>Year 2 Semester 2</b>
5. Pre-requisites for this course (if any): <b>MBBS – Year1</b>	
6. Co-requisites for this course (if any):	

**Course Description**

The Course will be taught to year 2 students in semester 2 and is designed to offer an integrated approach to the learning of the normal Structure, Function and Development of the skin and musculoskeletal system, using different strategies, and, applying the knowledge and skills acquired, in understanding the pathophysiology of various disorders of this system. The basic principles of management of these disorders with a focus on disease prevention will be described. Only one PBL will be included in this module, and it will address causes, epidemiology, pathogenesis, and principles of management of skin diseases and diseases related to the musculoskeletal system. The introduction of clinical skill sessions aims to provide the student with basic clinical and communication skills in preparation for clinical clerkship and to vertically integrate learning.

**Course Learning Outcomes**

CLOs		Aligned-PLOs
1	<b>Knowledge outcome:</b>	
K1	Describe the structure; pathogenesis, morphological and management of common skin and musculoskeletal diseases.	A1
K2	Explain the epidemiology of common skin and musculoskeletal disorders.	A1
K3	Describe cycle of infection of parasitic skin diseases.	A1
K4	Outline microbiological aspects of Nosocomial infections	A1
	<b>Skills</b>	
S1	Elicit a relevant clinical history related to skin and musculoskeletal illnesses.	B2
S2	Recognize the microscopic characteristic features of the skin and musculoskeletal system on microscopic slides/images.	B2
S3	Perform a focused physical examination of a patient presenting with skin and musculoskeletal symptoms	B2
3	<b>Attitude:</b>	
A1	Demonstrate awareness of the importance of lifestyle factors in promoting health and preventing skin and musculoskeletal related illnesses.	C2
A2	Improve student teamwork	C4

**Course Content**

No	List of Topics	Contact Hours
1	Thick skin	2
2	Skin, Hair follicle	3

3	Skin Adenxia	1
4	Skin infections	1
5	Epidemiology & Prevention of diseases under international health regulation	3
6	Pathological conditions related to skin and Musculoskeletal system	16
7	Parasitic diseases	16
8	Bacterial Infections of the Skin	1
9	Applied Clinical Skills in skin and Musculoskeletal disorders	2
10	Dermatological Pharmacology	6
11	Elder Health	1
<b>Total</b>		<b>52</b>

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>KAP</b>			
k.1	Describe the structures of skin and musculoskeletal diseases components and relate this to the main functions.	L	
K.2	Relate the etiopathogenesis, morphological and functional alterations to the clinical manifestations of common skin and musculoskeletal diseases.	L SBIL SDL SGD	
K.3	Explain the epidemiology of the common skin and musculoskeletal disorders.	L SBIL SDL SGD Practical Session TBL CAL SP	
K.4	Describe cycle of infection of parasitic skin diseases.	L SBIL SDL SGD Practical Session SP	
K.5	Describe cycle of infection of parasitic skin diseases.	L SBIL SDL SGD Practical Session SP	
K.6	Describe the measures taken to prevent common skin and musculoskeletal including some infectious diseases.	L SBIL	
S.1	Identify the main structural and morphological features of skin and musculoskeletal system on prosected specimens.	L SGD Practical Session	

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
S.2	Recognize the microscopic characteristic features of the skin and musculoskeletal system on microscopic slides/images.	L SBIL SDL SGD Practical Session TBL CAL SP	
S.3	Elicit a relevant clinical history related to skin and musculoskeletal illnesses.	L SBIL SDL SGD Practical Session	
S.4	Perform a focused physical examination of a patient presenting with skin and musculoskeletal symptoms	L SBIL SDL SGD Practical Session	
A.1	Demonstrate awareness of the importance of lifestyle factors in promoting health and preventing skin and musculoskeletal related illnesses.	L SBIL SDL SGD	
A.2	Awareness about the importance of lifestyle factors in promoting health and preventing skin and musculoskeletal related illnesses.	L SBIL SDL SGD SP	

## 2. Assessment Tasks for Students (There is no assessment for Miscellaneous Module)

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	quizzes, written assignments, presentations, group test	Along the module	30
2	Final exam	End of semester	70

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

### Learning Resources and Facilities

#### 1. Learning Resources

Required Textbooks	
--------------------	--

<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>• <b>Grant’s Atlas of Anatomy, 12h edition, 2009 by Lippincott,Williams &amp; Wiklkins.</b></li> <li>• <b>Anthony L. Mescher Junqueira’s Basic histology text and atlas. 13th ed.; 2013. ISBN798-1-259-07232-1</b></li> <li>• <b>Robins’ Pathologic basis of Diseases – Kumar, Abhas, Fausto (7th Edition) OR Robbins Basic Pahtology – by Robbins, Cotran and Kumar (7th Edition 2002)</b></li> <li>• <b>General Pathology: J.B.Walter &amp; I.C.Talbot,Publisher Elsevier.7th Edition. ISBN 978-81-312-1956-0</b></li> <li>• <b>Jawetz, Melnick &amp; Adelberg,s Textbook of Medical microbiology.26th ed. The McGRAW-Hill; 2010. ISBN 978-0-07-179031-4</b></li> <li>• <b>Richard A. Harvey, Pamelc. Champe and Druce d. Fisher text book of Microbiology Lippincott,s illustrated Reviews.2nd ed, 2007</b></li> <li>• <b>Community Medicine With Recent Advances, by Jaypee Brothers, Medical Publishers, 2010, A. H. Suryakantha., Jaypee Brothers, Medical Publishers, 2010. ISBN: 9380704313, 9789380704319</b></li> <li>• <b>Maxcy-Rosenau-Last public health &amp; preventive medicine: by Kenneth Fuller Maxcy, Milton Joseph Rosenau, John M. Last, Robert B. Wallace</b></li> <li>• <b>C.K Jayaram Panikar: Textbook of Medical Parasitology (Last Edition).</b></li> <li>• <b>Basic Histology, Text &amp; Atlas Junquiera &amp; Carneiro.</b></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>Other Learning Materials</b>	

## 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, laboratories, demonstration rooms, simulation lab, Museum
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	(AV ; data show, Smart Board, LMS)
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Projection microscope, Lab equipment and glassware for Microbiology, Parasitology Practical

**ENR31**

<b>1. Course Name:</b> Endocrine and Reproductive Module <b>Course Code:</b> (ENR31)	
<b>2. Credit/contact hours:</b>	134
<b>3. Number of weeks</b>	5
<b>4. Level/year at which this course is offered:</b>	Year 3
<b>5. Pre-requisites for this course (if any):</b> Year 2 S2	
<b>6. Co-requisites for this course (if any):</b>	

**Course Description**

This course is offered to 3rd year medical students to aptly prepare them for the clinical phase. It is intended to consolidate the knowledge gained in previous courses, in an integrated and holistic approach, to learn the development, structure and function of the Endocrine and Reproductive systems. It enables the learners to apply the foundational principles for diagnosis and management of disorders in these systems, with a focus on disease prevention. It adopts many student-centered strategies like Problem Based Learning (PBL), directed self-learning, clinical skills, and Integration of Clinical Medicine (ICM) sessions, with integrated theoretical and practical assessment at the end of the semester.

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-PLOs</b>
<b>Knowledge:</b>		
K1	Describe the embryological development, gross and microscopic appearance of the Endocrine and Reproductive organs in health and disease.	A1
K2	Explain the functional physiology of hormones in relation to homeostasis and metabolism, including their effect on growth and the health of reproductive organs.	A1
K3	Correlate alterations in the structure and function of the Endocrine and Reproductive organs it with frequently associated clinical manifestations of diseases of these systems.	A2
K4	Describe the use of hormones, their derivatives, and other pharmacological agents used in the treatment of various endocrine and reproductive disorders.	A1
K5	Apply the principles of basic sciences for management of common Endocrine and Reproductive disorders in clinical scenarios.	B2
K6	Describe the Public health issues associated with the common endocrine and reproductive diseases in the region and elsewhere in the world.	A1
K7	Analyze clinical scenarios of Endocrine and Reproductive systems diseases, utilizing knowledge of basic sciences and diseases	A3
<b>Skills:</b>		
S1	Take history and perform a focused physical examination of a patient presenting with Endocrine and Reproductive symptoms.	B1
S2	Interpret results of commonly performed invasive (Hematological, serological, cytological, histopathological, microbiological etc.) and non-invasive (radiological) investigations used for diagnosing and managing patients with Endocrine and Reproductive system diseases.	B2

CLOs		Aligned-PLOs
S3	Write model prescription for different medications used in management of Endocrine and Reproductive problems.	B3
<b>Attitudes:</b>		
A1	Demonstrate awareness of the impact of common Endocrine and Reproductive disorders on the quality of life of the individual and community and plan preventive strategies.	C1
A2	Demonstrate the ability to work independently and through teamwork for management of common clinical presentations of Endocrine and Reproductive disorders.	C2

### Course Content

No	List of Topics	Contact Hours
1	Pituitary gland and pineal bodies	7
2	Thyroid Gland	8
3	Parathyroid Gland	6
4	Endocrine Pancreas	13
5	Adrenal Glands	12
6	Male External Genital Tract	6
7	Testis and epididymis	8
8	Prostate and seminal vesicles	8
9	Female External Genital Tract	8
10	Cervix	7
11	Uterus, fallopian tubes	10
12	Ovaries	8
13	Pregnancy and placenta	7
14	Breast	3
	Total Theory	111
	Total Practical	23
<b>Total</b>		<b>134</b>

### Teaching and Assessments

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>Knowledge</b>			
K1	Describe the embryological development, gross and microscopic appearance of the Endocrine and Reproductive systems in health and disease.	L SBIL CBL SDL SGD PBL Practical Session	MCQ's Oral OSPE
K2	Explain the functional physiology of hormones in relation to homeostasis and metabolism, including their effect on growth and the health of reproductive organs.	L SBIL CBL SDL SGD PBL Practical Session	MCQ's Oral OSPE

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K3	Correlate alterations in the structure and function of the Endocrine and Reproductive organs it with frequently associated clinical manifestations of diseases of these systems.	L SBIL CBL SDL SGD PBL Practical Session	MCQ's Oral OSPE
K4	Describe the use of hormones, their derivatives, and other pharmacological agents used in the treatment of various endocrine and reproductive disorders.	L SBIL CBL SDL SGD PBL	MCQ's Oral
K5	Apply the principles of basic sciences for management of common Endocrine and Reproductive disorders in clinical scenarios	L SBIL CBL SDL SGD PBL Practical Session	MCQ's Oral OSPE
K6	Describe the Public health issues associated with the common endocrine and reproductive diseases in the region and elsewhere in the world.	L SDL SGD SP PBL	MCQ's Oral OSPE
K7	Analyze clinical scenarios of Endocrine and Reproductive systems diseases, utilizing knowledge of basic sciences and diseases	SBIL CBL PBL	MCQ's OSPE
<b>Skills</b>			
S1	Take History and Perform focused physical examination of a patient presenting with Endocrine and Reproductive symptoms	Practical Session (Clinical Skills)	OSPE
S2	Interpret results of commonly performed invasive (Hematological, serological, cytological, histopathological, microbiological etc.) and non-invasive (radiological) investigations used for diagnosing and managing patients with Endocrine and Reproductive system diseases.	L SBIL CBL SDL SGD PBL Practical Session	MCQ's Oral OSPE
S3	Write model prescription for different medications used in Endocrine and Reproductive problems.	Practical Session	OSPE
<b>Attitude</b>			
A1	Demonstrate awareness of the impact of common Endocrine and Reproductive disorders on the quality of life of the individual and community and plan preventive strategies.	L SDL SGD SP PBL	MCQ's Oral OSPE
A2	Demonstrate the ability to work independently and through teamwork for management of common clinical	SDL PBL	MCQ's OSPE

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	presentations of Endocrine and Reproductive disorders.		

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	First comprehensive Exam (MCQ's)	Week 5	19.3%
2	Continuous assessments (Attendance, Quiz, projects, Assignments, Presentations Clinical Skills)	Throughout the module	10.3%
3	Final comprehensive exam (MCQ's, Oral, OSPE)	End of semester	70.4%

\*Assessment task (i.e., written test, oral test, oral presentation, group project etc.)

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>Gray's Anatomy of Human body, 2008</li> <li>Grant's Atlas of Anatomy, 12h edition, 2009 by Lippincott, Williams &amp; Wiklkins.</li> <li>Anthony L. Mescher Junqueira's Basic histology text and atlas. 13<sup>th</sup> ed.; 2013. ISBN798-1-259-07232-1</li> <li>Leslie P. Gartner, James L. Hiatt; color Atlas and text, histology, 6<sup>th</sup> ed.; 2009. ISBN 978-1-4511-1343-3</li> <li>Textbook of Medical Physiology by Arthur C, Guyton &amp; John. E. Hall, 14<sup>th</sup> Ed, Published by Saunders</li> <li>Jawetz, Melnick &amp; Adelberg,s Textbook of Medical microbiology.26<sup>th</sup> ed. The 978-81-312-1956-0 McGRAW-Hill; 2010. ISBN 978-0-07-179031-4</li> <li>Maxcy-Rosenau-Last public health &amp; preventive medicine: by Kenneth Fuller Maxcy, Milton Joseph Rosenau, John M. Last, Robert B. Wallace Elsevier, 10th edition, 2019</li> <li>Vinay Kumar, Abul K. Abbas and Jon C. Aster: Essentials of Pathology: Elsevier, 1st edition, 2020</li> <li>Vinay Kumar, Abul K. Abbas and Jon C. Aster: Basis Pathology of Disease: Elsevier, 10th edition, 2019</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>Vinay Kumar, Abul K. Abbas and Jon C. Aster: Pathologic Basis of Disease: Elsevier, 10th edition, 2019</li> <li>Emanuel Rubin and Howard Reisner: Essentials of Pathology, Wolter's Kluwer, 6th edition, 2014.</li> <li>Community Medicine with Recent Advances, by Jaypee Brothers, Medical Publishers, 2010, A. H. Suryakantha., Jaypee Brothers, Medical Publishers, 2010. ISBN: 9380704313, 9789380704319</li> <li>Robins Pathologic basis of Diseases – Kumar, Abhas, Fausto (10<sup>th</sup> Edition)</li> <li>General Pathology: J.B.Walter &amp; I.C.Talbot,Publisher Elsevier.7th Edition. ISBN</li> <li>Richard A. Harvey, Pamelc. Champe and Druce d. Fisher text book of Microbiology</li> </ul>

	<ul style="list-style-type: none"> <li>• Lippincott,s illustrated Reviews.2<sup>nd</sup> ed, 2007</li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• Amboss</li> <li>• Aquifer</li> <li>• Access-pharma</li> <li>• Web-Pathology</li> <li>• Up to date</li> <li>• <a href="https://accesspharmacy.mhmedical.com/">https://accesspharmacy.mhmedical.com/</a></li> </ul>
<b>Other Learning Materials</b>	Library resources, Handouts

## 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, laboratories, demonstration rooms, simulation lab, Museums
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	AV, data show, Smart Board, LMS
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Projection microscope

**NSC31**

<b>1. Course Name:</b> Neuroscience Module <b>Course Code:</b> NSC31	
<b>2. Credit/contact hours:</b>	<b>Total Contact hours:</b> 216 <b>Theoretical:</b> 150 <b>Practical:</b> 35 <b>Others:</b> 35
<b>3. Number of weeks</b>	8 weeks
<b>4. Level/year at which this course is offered:</b>	MBBCh Y3- Semester 1
<b>5. Pre-requisites for this course (if any):</b> MBBCh Y1, Y2 (Autonomic Nervous System, Head & Neck)	
<b>6. Co-requisites for this course (if any):</b>	

**Course Description**

<ul style="list-style-type: none"> <li>This module will provide a detailed understanding of the structure and function of the nervous system. Basic neurosciences will be distributed fairly over eight weeks under specific integrated themes.</li> </ul> <p>1 -Overall Aims of Course:</p> <ul style="list-style-type: none"> <li>To provide a broad understanding of the structure and function of the nervous system with a depth of knowledge in cellular/molecular or behavioural/cognitive perspectives.</li> <li>To enable students to use neuroscience research techniques to conduct research.</li> <li>To enable the development and application of appropriate professional attitudes, communication and problem-solving skills.</li> <li>To provide students with an appropriate background covering the common and important Neurological disorders and emergencies.</li> </ul>
---

**Course Learning Outcomes**

CLOs		Aligned-PLOs
K1	Describe the macrostructure and microstructure and functions of the brain, spinal cord, meninges and the supporting tissue in health and disease.	A1
K2	Explain the underlying causes of major classes of nervous system disease and explain major clinical findings based on pathophysiologic principles	A2
K3	Relate the changes in emotions, behavior and personality by recalling the structure and functions of limbic system	A3
K4	Describe the mechanisms of action and therapeutic targets of the major therapeutic classes used in the treatment of nervous system diseases, and the various types of drugs of abuse.	A3
K5	Describe the pathways of special senses (vision, hearing, smell and taste) and discuss the pathologic features of major diseases of the eye.	A1
K6	Corelate the potential sites of neurological lesions based on neurological dysfunction signs and symptoms.	A2
K7	Descibe a logical therapeutic approach to nervous system disease based on pathoanatomy, pathophysiology, and pharmacology principles.	A2

CLOs		Aligned-PLOs
K8	List the major psychiatric disorders' diagnostic classification, clinical features, differential diagnoses, typical course and prognosis, as well as their common comorbid conditions and mental status findings.	A1
S1	Analyze results of laboratory and radiological CT scans and MRI's to diagnose and manage patients with neurological diseases and analyze clinical signs and symptoms of nervous system diseases in order to organize/build a differential diagnosis.	B2
A1	Demonstrate awareness of the impact of common nervous system diseases as well as psychological disorders on the quality of life of the individual and community and the preventive strategies.	C1

**Course Content**

No	List of Topics	Contact Hours
1	Introduction to Nervous system	35
2	Management of Chronic Neuropathic pain	35
3	Meningoencephalitis	35
4	Stroke	35
5	Cerebellar Ataxia	35
6	Neurodegenerative Diseases	35
7	Vestibular Schwannoma	35
8	Depression and anxiety	35
<b>Total</b>		

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
k1	Describe the macrostructure and microstructure and functions of the brain, spinal cord, meninges and the supporting tissue in health and disease.	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
k2	Explain the underlying causes of major classes of nervous system disease and explain major clinical findings based on pathophysiologic principles	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
k3	Relate the changes in emotions, behavior and personality by recalling the structure and functions of limbic system	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
k4	Outline the mechanisms of action and therapeutic targets of the major therapeutic classes used in the treatment of nervous system diseases, and discuss the various types of drugs of abuse.	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
k5	Describe the pathways of special senses (vision, hearing, smell and taste) and	L	Mid-comprehensive Final comprehensive

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	discuss the pathologic features of major diseases of the eye.	SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	OSPE/OCE Practical
s1	Interpret the potential sites of neurological lesions based on neurological dysfunction signs and symptoms.	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
s2	Develop a logical therapeutic approach to nervous system disease based on patho-anatomy, pathophysiology, and pharmacology principles.	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
s3	Analyze results of laboratory and radiological CT scans and MRI's to diagnose and manage patients with the neurological diseases Analyze clinical signs and symptoms of nervous system diseases in order to organize/build a differential diagnosis.	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
s4	Practice the major psychiatric disorders' diagnostic classification, clinical features, differential diagnoses, typical course and prognosis, as well as their common comorbid conditions and mental status findings.	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
s5	Practice the major psychiatric disorders' diagnostic classification, clinical features, differential diagnoses, typical course and prognosis, as well as their common comorbid conditions and mental status findings.	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical
A1	Demonstrate awareness of the impact of common nervous system diseases as well as psychological disorders on the quality of life of the individual and community and plan preventive strategies.	L SBIL/ CBL/ SDL/ SGD/ PBL/ TBL ICM Practical	Mid-comprehensive Final comprehensive OSPE/OCE Practical

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
2	Continuous assessments (Attendance, Quiz, projects, Assignments, Presentations Clinical Skills, mid term)	Throughout the module	30%
3	Final comprehensive exam (MCQ's, Oral, OSPE)	End of semester	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project etc.)

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>- A textbook of neuroanatomy</li> <li>- BRS Neuroanatomy</li> <li>- Medical Neuroanatomy- A problem oriented approach.</li> <li>- Neuroanatomy and neuroscience at a glance</li> <li>- Nolte’s The Human Brain- An introduction to its functional anatomy.</li> <li>- Clinical Neuroanatomy</li> <li>- Clinical Neuroanatomy and Neuroscience</li> <li>- Atlas of functional neuroanatomy</li> <li>- Neuroanatomy in Clinical Context-An Atlas of Structures, Sections, Systems, and Syndromes</li> <li>- Snell’s clinical Neuroanatomy-</li> <li>- Clinical Neurology and Neuroanatomy-A localization based approach.</li> <li>- Neuroanatomy and Neuroanatomical skills</li> <li>- Anthony L. Mescher Junqueira’s Basic histology text and atlas. 15th ed.; 2018. ISBN798-1-259-07232-1</li> <li>- Leslie P. Gartner, James L. Hiatt; color Atlas and text, histology, 7th ed.; 2018. ISBN 978-1-4511-1343-3</li> <li>- Guyton and Hall Textbook of Medical Physiology 14th ed</li> <li>- Ganong’s Review of Medical Physiology 26th ed</li> <li>- Kumar, Vinay, Abul K. Abbas, and Jon C. Aster.. Robbins Basic Pathology. 10th ed. Robbins Pathology. Philadelphia, PA: Elsevier - Health Sciences Division. 2017</li> <li>- Raphael Rubin, David S. Strayer, Emanuel Rubin, Jay M. McDonald (M.D.) Rubin's Pathology: Clinicopathologic Foundations of Medicine. Lippincott Williams &amp; Wilkins, 2008</li> <li>- Medical Microbiology- Jawetz, Melnick &amp; Adelberg</li> <li>- Review of Medical Microbiology and Immunology- Warren Levinson, Peter chin-hong, Elizabetha</li> <li>- Human Parasitology, Burton J. Bogitsh et al.</li> <li>- Paniker`s textbook of medical parasitology</li> <li>- Markel and vogue textbook</li> <li>- Control of Communicable Diseases Manual, 21st edition</li> <li>- Occupational Health And Safety A Complete Guide - 2020 Edition</li> <li>- Principles of pharmacology by H L Sharma</li> <li>- Essentials of Medical Pharmacology by Kd Tripathi</li> <li>- Lippincott Illustrated Reviews: Pharmacology</li> <li>- Basic and clinical pharmacology by Bertram G Katzung</li> <li>- Katzung and Trevor's pharmacology: examination and board review</li> <li>- Pharmacotherapy: A pathophysiologic approach by Josiph Dipiro</li> <li>- Pharmacology recall by Anand Ramachandran.</li> <li>- Case files pharmacology</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>• Lectures notes Lecture materials will be posted on LMS in either PowerPoint® or Microsoft® Word format at least 24 hours in advance. Students are expected to read over the lecture material prior to coming to class.</li> </ul>

<p><b>Electronic Materials</b></p>	<ul style="list-style-type: none"> <li>• EBSCO e-Books Clinical Collection:</li> <li>• ClinicalKey Student Foundation from Elsevier</li> <li>• Amboss</li> <li>• Access-pharmacy</li> <li>• Up to date</li> <li>• Medline Complete</li> </ul>
<p><b>Other Learning Materials</b></p>	<ul style="list-style-type: none"> <li>• <a href="https://nba.uth.tmc.edu/neuroscience/m/index.htm">https://nba.uth.tmc.edu/neuroscience/m/index.htm</a></li> <li>• <a href="https://learninglink.oup.com/access/neuroscience-sixth-edition-student-resources#tag_animations">https://learninglink.oup.com/access/neuroscience-sixth-edition-student-resources#tag_animations</a></li> </ul>

**2. Facilities Required**

Item	Resources
<p><b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)</p>	<p>Classrooms, laboratories, demonstration rooms, simulation lab, Museums</p>
<p><b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)</p>	<p>LMS, AV, data show, Smart Board</p>
<p><b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p>	

**CIC329**

<b>1. Course Name: Clinical Introductory</b> <b>Course Code: CIC329</b>		
<b>2. Credit/contact hours:</b>	<b>Theory Hours</b> 60	<b>Practical Hours</b> 24
<b>3. Number of weeks</b>	4	
<b>4. Level/year at which this course is offered:</b>	Y3S2	
<b>5. Pre-requisites for this course (if any):</b> Completion of all Basic science		
<b>6. Co-requisites for this course (if any):</b> None		

**Course Description**

This is an academic unit offered to 3rd year medical students during the transition part of the pre-clerkship phase. It is intended to consolidate the skills gained in previous individual organ system blocks/courses in an integrated and holistic approach to the human body. It enables the learners to acquire professional attitudes ensuring patient safety and maintaining a caring fiduciary relationship with patients. It adopts a mainly student-centered strategy through directed self-learning & practical assessment

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-PLOs</b>
	<b>Knowledge</b>	
K1	Define professional attributes required for medical professionals	A1
K2	Describe the general principals, methods and concepts of scientific research and the fundamentals statistics	A1
	<b>Skills</b>	
S1	Interview patients (history taking) with clinical presentations pertaining to medical conditions	B1, B3
S2	Perform physical examination of patients with clinical presentations of different body system	B1 ,B3
S3	Demonstrate good practice of patient-doctor communication skills (I.e.: <u>Breaking Bad News, Communicating with Relatives</u> )	B2
S4	Decide, for each of the common medical conditions, according to presenting symptoms and signs, the laboratory tests and/or imaging studies to confirm the diagnosis, and the plan for initial management	B2
	<b>Attitude</b>	
A1	Demonstrate the ability to work as a team member and the ability to deal with other paramedical health professionals	C2
A2	Observe the measures that ensure the safety of patients during the different consultation encounters	B1, B3, C4

**CourseContent**

<b>No</b>	<b>List of Topics</b>	<b>Contact Hours</b>
1	Introduction to clinical disciplines	4
2	Communication skills	3

3	Electronic patient record system	3
4	Medical ethics	2
5	History of Medicine	3
6	Patient Safety	2
7	Introduction to Quality	6
8	Medical Errors	1
9	Library Resource	2
10	Evidence Based Medicine	3
11	Professionalism	1
12	Radiology	4
13	Consultation	7
14	Medical Statistics	5
15	Growth Charts	1
16	Value Based Care	8
17	Medical Informatics	4
18	History taking and examination	24

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>Knowledge</b>			
K1	Define professional attributes required for medical professionals	Lectures	80% Attendance
K2	Describe the general principals, methods and concepts of scientific research and the fundamentals statistics	Lectures	80% Attendance
<b>Skills</b>			
S1	Interview patients with clinical presentations pertaining to medical conditions	Clinical skills and Lectures	80% Attendance
S2	Perform physical examination of patients with clinical presentations of different body system	Clinical skills and Lectures	80% Attendance
S3	Demonstrate good practice of patient-doctor communication skills (Include BBN, Communication with Relatives)	Clinical skills and Lectures	80% Attendance
S4	Decide, for each of the common medical conditions, according to presenting symptoms and signs, the laboratory tests and/or imaging studies to confirm the diagnosis, and the plan for initial management	Clinical skills and Lectures	80% Attendance
<b>Attitude</b>			
A1	Demonstrate the ability to work as a team member and the ability to deal with other paramedical health professionals	Clinical Skills	80% Attendance
A2	Observe the measures that ensure the safety of patients during the different consultation encounters	Clinical Skills	80% Attendance

## 2. Assessment Tasks for Students

80% Attendance is must.

### Learning Resources and Facilities

#### 1. Learning Resources

<p><b>Required Textbooks</b></p>	<ul style="list-style-type: none"> <li>• Macleod's Clinical Diagnosis, 1e, Alan Japp and Colin Robertson. Churchill Livingstone</li> <li>• Text book of physical diagnosis and history taking. Mark H. Swartz. Saunders</li> <li>• <b>Special Tests in Musculoskeletal Examination: An evidence-based guide for clinicians, 1e. by Paul Hattam and Alison Smeatham. Churchill Livingstone.</b></li> <li>• <b>Orthopedic Physical Assessment, 5e by David J. Magee. Saunders</b></li> <li>• <b>Bates Guide to Physical Examination and History-Taking by Lynn S. Bickley. Lippincott/Williams and Wilkins</b></li> <li>• <b>Essential Examination: step-by-step system-based guide to clinical examination with practical tips and key facts... by Alasdair K.B. Ruthven</b></li> <li>• Clinical Examination: A Systematic Guide to Physical Diagnosis, 6e by Nicholas J. Talley and Simon O'Connor</li> </ul>
<p><b>Essential References Materials</b></p>	<ul style="list-style-type: none"> <li>• A guide to physical examination and history taking, by Barbara Bates - Latest Edition.</li> <li>• Macleod's Clinical Examination by John Munro and C. Edwards.</li> <li>• Clinical Examination - 2<sup>nd</sup> Edition by Nicholas Talley and Simon O'Connor.</li> <li>• <b>Macleods' Clinical Examination 13e, Graham Douglas, Fiona Nicol and Colin Robertson. Churchill Livingstone</b></li> <li>• <b>Hutchison's Clinical Methods: An Integrated Approach to Clinical Practice by Michael Glynn and William M Drake. Saunders</b></li> </ul>
<p><b>Electronic Materials</b></p>	<ul style="list-style-type: none"> <li>• <a href="http://stanfordmedicine25.stanford.edu/Videos/">http://stanfordmedicine25.stanford.edu/Videos/</a></li> <li>• <a href="https://batesvisualguide.com/multimedia.aspx?categoryID=21787#21768">https://batesvisualguide.com/multimedia.aspx?categoryID=21787#21768</a></li> <li>• <a href="https://batesvisualguide.com/">https://batesvisualguide.com/</a></li> <li>• <a href="http://www.learnerstv.com/Free-medical-Video-lectures-ltv032-Page1.htm">http://www.learnerstv.com/Free-medical-Video-lectures-ltv032-Page1.htm</a></li> <li>• <a href="http://www.med-ed.virginia.edu/Courses/pom1/videos/index.cfm">http://www.med-ed.virginia.edu/Courses/pom1/videos/index.cfm</a></li> <li>• <a href="https://videos.med.wisc.edu/modules/18">https://videos.med.wisc.edu/modules/18</a></li> <li>• <a href="https://www.youtube.com/watch?v=yAR9fJHIPY">https://www.youtube.com/watch?v=yAR9fJHIPY</a></li> <li>• Macleod's Clinical Examination – DVD</li> <li>• Clinical assessment of the musculoskeletal system – DVD</li> <li>• <a href="http://www.doctorshangout.com/page/urogenital-system-physical-examination-male">http://www.doctorshangout.com/page/urogenital-system-physical-examination-male</a></li> </ul>
<p><b>Other Learning Materials</b></p>	

**2. Facilities Required**

Item	Resources
<p><b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)</p>	<p>Clinical skills laboratory and simulation laboratory</p>
<p><b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)</p>	<p>Online and computer-based digital resources library</p>
<p><b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p>	<p>Volunteers and simulated patients</p>

**OBG431**

<b>1. Course Name: Gynecology &amp; Obstetrics Course Code: OBG431</b>		
<b>2. Credit/contact hours:</b>	<b>Theory Hours</b> 64	<b>Practical Hours</b> 240
<b>3. Number of weeks</b>	<b>16</b>	
<b>4. Level/year at which this course is offered:</b>	<b>Y3S2, Y4S1</b>	
<b>5. Pre-requisites for this course (if any): Completion of Basic sciences</b>		
<b>6. Co-requisites for this course (if any): none</b>		

**Course Description**

This is an academic duration during which students will consolidate previously learned foundational knowledge and skills relevant to the practice of obstetrics and gynecology and gain further experience relevant to the different health issues and problems pertinent to women's health. Clinical experience will be gained during rotations in ambulatory and in-patient services. It is mainly hospital based. It includes clinical rounds, antenatal referred clinical attendance & labour room attendance. The skills lab and simulation facilities will be utilized to fulfil objectives of the course. Activities and skills are to be documented in a logbook and a portfolio. Performance of students will be continuously monitored and assessed using the various WPBA instruments

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-PLOs</b>
	<b>Knowledge:</b>	
K1	Explain the normal and pathological conditions of pregnancy, antepartum, intrapartum and post-partum including contraception.	A1
K2	Describe the epidemiologic and preventive aspects of common conditions related to Obstetrics and Gynaecology.	A2
K3	Explain the normal and pathological conditions of menstrual cycle including puberty and menopause and abnormal uterine bleeding	A2
K4	Explain etiology and evaluation of infertility, including abortion.	A2
K5	Describe common benign and malignant gynecological conditions including risk factors, signs and symptoms and initial evaluation.	A2
	<b>Skills</b>	
S1	Demonstrate competence in the medical interview and physical examination of Obstetrical and Gynecological conditions.	B1
S2	Identify the conditions in Obstetrics and Gynecology where you need to intervene urgently	B2

CLOs		Aligned-PLOs
S3	Select the most appropriate and cost-effective investigation to reach the proper diagnosis, considering the patient rights and abilities and the capabilities of the health system services.	B2
S4	Formulate the management plan based on the findings of history, examination and investigation; including the need for referral or consultation with senior medical officer.	B2
<b>Attitude</b>		
A1	Interact effectively with the obstetrical and gynecological health team.	C2
A2	Apply the contemporary ethical principles of medical practice, respect patients' autonomy and confidentiality.	C4

### Course Content

No	List of Topics	Contact Hours
1	Obstetric History and Examination	
2	Antenatal care	
3	Normal fetal development and growth	
4	Assessment of fetal wellbeing	
5	Prenatal diagnosis	
6	Antenatal obstetric complications	
7	Multiple Pregnancy	
8	Preterm Labour	
9	Hypertensive Disorders of Pregnancy	
10	Medical Complications of Pregnancy	
11	Perinatal Infections	
12	Labour: Normal and Abnormal	
13	Operative Delivery	
14	Obstetric emergencies	
15	The puerperium	
16	The neonate	
17	The development and anatomy of the female sexual organs and pelvis	
18	Gynecological History, examination, and investigations	
19	Menstrual cycle normal and abnormal.	
20	Contraception	
21	Subfertility	
22	Menopause and post-reproductive health	
23	Genitourinary problems	
24	Benign conditions of the female genital tract	
25	Premalignant and Malignant conditions of the female genital tract	
26	Genital tract infection	
27	Gynecological surgery and therapeutics	
<b>Total</b>		

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	<b>Skills</b>		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K1	Explain the normal physiological changes of pregnancy, antepartum, intrapartum and post partum.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
K2	Describe the epidemiological profile of the population and society, their heritage and cultural, social, geographic, legislative and economic characteristics, and relationship of all those to obstetrical and gynecological practice.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S1	Apply the knowledge and skills necessary to identify the obstetrical and gynecological problems of a patient and their management, including emergency situations, normal and abnormal pregnancy, and gynecological diseases including health promotion, prevention, treatment, rehabilitation and follow up.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S2	Use the required communication skills for taking appropriate history and conducting physical examination.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S3	Apply the foundational structure and function knowledge and the underlying pathophysiological processes relevant to obstetrical and gynecological practice, and the diagnosis and management of pregnancy and complications and other illnesses and ill-health in patient and community.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S4	Apply the knowledge and skills necessary to identify the obstetrical and gynecological problems of a patient and their management including emergency situation, normal and abnormal pregnancy and gynecological diseases including health promotion, prevention, treatment, rehabilitation and follow up.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S5	Select the most appropriate and cost-effective investigation to reach the proper diagnosis, considering the patient rights and abilities and the capabilities of the health system services.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
			feedback using logbooks and portfolios and final OSCEs
S6	Obtain a pertinent history, performing physical examination and planning an approach to diagnosis and management in all branches of the Specialty: Booking antenatal, intranatal, postnatal, family planning, Gynaecology, infertility and Endocrinology.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
A1	Interact effectively with the obstetrical and gynecological health team, and other health teams, providing family or reproductive health	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Embedded (WBPA) assessment	Weekly	30%
2	Final (written exam, spotter exam, DOCE and OSCE)	Final	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1. Learning Resources**

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>Obstetrics by Ten Teachers, 20th Edition, By: Louise C. Kenny &amp; Jenny E. Myers</li> <li>Gynaecology by Ten Teachers, 20th. Edition, By: Louise C. Kenny &amp; Helen Bickerstaff</li> <li>Obstetrics Illustrated, 7th. Edition, By: Kevin P. Hanretty</li> <li>Gynaecology Illustrated, 6th. Edition, By: Catrina M. Bain, Kevin Burton &amp; C. Jay McGavigan</li> <li>Clinical Obstetrics and Gynecology, 3rd. Edition, By: Brain A. Magowan, Philip Owen &amp; Andrew Thomson</li> <li>Oxford Handbook of obstetrics and Gynaecology, 3rd. Edition, By: Sally Collins, Sabaratnam Arulkumaran, Kevin Hayes, Simon Jackson &amp; Laurence Impey</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li><a href="https://www.amboss.com/us/knowledge/OB/GYN:_history_and_physical_examination">https://www.amboss.com/us/knowledge/OB/GYN:_history_and_physical_examination</a></li> </ul>
<b>Other Learning Materials</b>	

**2. Facilities Required**

Item	Resources
<p><b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)</p>	<p>Training, sites and Clinical skills laboratory and simulation laboratory</p>
<p><b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)</p>	<p>Online and computer-based digital resources library</p>
<p><b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p>	<p>Volunteers and simulated patients</p>

**PED423**

<b>1. Course Name: Pediatrics</b>		<b>Course Code: PED423</b>	
<b>2. Credit/contact hours:</b>	Theory Hours 73	Practical Hours Clinical training: 296 Case discussion session: 57	
<b>3. Number of weeks</b>	<b>18</b>		
<b>4. Level/year at which this course is offered:</b>	<b>Y3 S2. And Y4S1</b>		
<b>5. Pre-requisites for this course (if any): completion of all basic sciences</b>			
<b>6. Co-requisites for this course (if any): none</b>			

**Course Description**

The pediatrics clerkship is a sixteen-week clinical experience designed to provide medical students with the knowledge and skills that are fundamental to caring for infants, children, and adolescents. Through interactive didactic sessions and clinical training, medical students learn about growth, development, the diagnosis and management of both common acute and chronic pediatric illnesses. During this clerkship, students will learn the skills and techniques that will aid them in the approach and evaluation of pediatric patients. Pediatrics clerkships enable students to develop and apply of appropriate professional attitudes, communication and problem solving skills.

During this rotation, students will have opportunities to learn and observe pediatric care in a variety of clinical environments, which may include: inpatient ward services, outpatient primary care & specialty clinics, and the neonatal care units.

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-PLOs</b>
<b>Knowledge</b>		
K1	Describe etiology, clinical features, investigations and management of common pediatric diseases and important disorders in Neonates, infants and children	A1
K2	Describe normal and abnormal patterns of growth during infancy and different ages of childhood and their appropriate management	A1
k3	Define the clinical symptoms, clinical manifestations of common emergency pediatric conditions and management and appropriate plan of action.	A2
<b>Skill</b>		
S1	Demonstrate an ability to obtain information in an age-appropriate from a child and or the accompanying adult including: neonatal history, immunizations, nutrition history, growth & development& family history.	B1
S2	Develop compassionate and respectful communication skills adapted to the clinical setting (e.g. wards, ambulatory) that facilitate an age-appropriate and culturally sensitive with children, adolescents and their families	B3
S3	Demonstrate competency in performing the physical examination of different body systems in children & adolescents, explain the diagnostic correlation of physical exam findings and interpret them	B2
S4	Perform physical growth assessment and anthropometric measurement	B2

CLOs		Aligned-PLOs
	& Perform the basic developmental milestones assessment of toddlers & children.	
S5	Demonstrate improving clinical problem-solving and critical thinking skills through development of a reasonable differential diagnosis, appropriate investigation and interpretation of results (labs & imaging) and plan of care using evidence	B2,
Attitude		
A1	Demonstrate the attitudes and professional behavior and ethics with colleagues, teachers, patients and their families appropriate for clinical pediatric practice	C4
A2	Recognize the community problems related to child health.	C3
A3	Adopt the strategies of health promotion that pertain to infants, children, including disease prevention (assessing immunization status) and anticipatory guidance about nutrition during a health care visit	C1

### Course Content

No	List of Topics	Contact lectures Hours	Contact clinical Hours	Total
1	Case clerking in Pediatrics	0		
2	Normal growth & development and disorders	1		
3	Immunizations & complication of immunization	1		
4	Infant and child nutrition and their disorders	2		
5	Pediatric infections			
6	Neonatology and Diseases in Neonates	5		
7	Chromosomal disorders & common genetic syndromes in infants	2		
8	Pediatric emergency	4		
9	Respiratory System Diseases	5		
10	Gastrointestinal and liver diseases	6		
11	Hematological disorder	6		
12	Congenital & acquired heart diseases	5		
13	Renal diseases in pediatrics	5		
14	Convulsions & abnormal movements	1		
15	IDDM & other endocrine disorders	5		
16	Neuromuscular & neurodevelopmental disorders	4		
17	Immunity disorders	1		
18	Oncology diseases in Pediatrics	4		
19	Specific connective tissue disorders in children	3		
20	Inborn error of metabolism	1		
<b>Total</b>				

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
K1	Describe etiology, clinical features, investigations and management of common pediatric diseases and important disorders in Neonates, infants and children	Lectures, case discussion, clinical rounds, Aquifer cases	MCQ-based exams at mid term , end of term quizzes. Workplace based assessment activities multi-source feedback and portfolios . Final MCQs based written exam , final OSPE
K2	Describe normal and abnormal patterns of growth during infancy and different ages of childhood. and their appropriate management	Lecture, Clinical rounds, Child health clinics- PHC	Workplace-based assessment activities using portfolios ,and final OSPE
k3	Define the clinical symptoms, clinical manifestations of common emergency pediatric conditions and describe management and appropriate plan of action.	Lectures, case discussion. Clinical round	MCQ-based written exams at end of term quizzes. Workplace based assessment activities using multi-source feedback and portfolios Final MCQs based written exam and final OSPE
S1	Demonstrate an ability to obtain information in an age-appropriate from a child and or the accompanying adult including: neonatal history, immunizations, nutrition history, growth & development, home environment & family history.	Clinical rounds, simulation session ,outpatient clinics , Students case presentation	Workplace-based assessment activities using Mini-Clex and portfolios feedback, end of term clinical assessment and final OSCE
S2	Develop compassionate and respectful communication skills adapted to the clinical setting (e.g. wards, ambulatory) that facilitate an age-appropriate and culturally sensitive therapeutic alliance with children, adolescents and their families	Clinical rounds, outpatient clinics, simulation session	Workplace-based assessment activities using Mini-Clex and portfolios feedback, final OSCE
S3	Demonstrate competency in performing the physical examination of different body systems in children & adolescents, explain the diagnostic correlation of physical exam findings and interpret them	Clinical rounds, outpatient clinics , simulation session	Workplace-based assessment activities using portfolios feedback, end of term clinical assessment, final OSCE
S4	Perform physical growth assessment and anthropometric measurement & Perform the basic developmental milestones assessment of toddlers & children.	Clinical rounds, Child health clinics- PHC	Workplace-based (PHC) assessment activities using portfolios feedback , final OSCE
S5	Show improving clinical problem-solving and critical thinking skills through development of a reasonable differential diagnosis, suggest appropriate investigation and interpretate of results (labs & imaging) and plan of care using evidence	PHC visits, topic discussions, Case discussion	MCQ-based written exams, end of term quizzes. Workplace-based assessment activities using portfolios feedback , student case presentation

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
			evaluation and final OSPE
A1	Demonstrate the attitudes and professional behavior and ethics with colleagues, teachers, patients and their families appropriate for clinical pediatric practice	Clinical rounds, outpatient clinics, PHC	Workplace-based assessment activities, student case presentation evaluation and final OSCEs
A2	Identify and analyze the community problems related to child health.	Clinical rounds, outpatient clinics, PHC visit	MCQ-based written exams, end of term quizzes. Workplace-based assessment activities using portfolios and final MCQs written exam
A3	Apply the strategies of health promotion that pertain to infants, children, including disease prevention (assessing immunization status) and anticipatory guidance about nutrition during a health care visit	Clinical rounds, Outpatient clinics PHC visit	

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Embedded (WBPA) assessment		30%
2	Final (written exam, OSPE exam and OSCE)	Final	70%

\*Assessment task (i.e., written MCQs test, OSPE, clinical examination assessment, oral case presentation).

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>- R. Behrman, R.Kliegman. <i>Nelson Essentials of Paediatrics</i>. W.B Saunders. 9<sup>th</sup> Edition</li> <li>- Illustrated Textbook of Pediatrics. Tom Lissauer and Graham Clayden. Mosby international. 6<sup>th</sup> Edition</li> <li>- Manual of Clinical Paediatrics. Mansour N. Al Howasi 8<sup>th</sup> Edition</li> <li>- Hutchinson Clinical method 24<sup>th</sup> Edition</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>Nelsons Textbook of Paediatrics</i>. 21<sup>st</sup> Edition</li> <li>• F.Oski. <i>Principles and practice of Paediatrics</i></li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.amboss.com/us/knowledge/Pediatrics_clerkship/">https://www.amboss.com/us/knowledge/Pediatrics_clerkship/</a></li> </ul>
<b>Other Learning Materials</b>	

### 2. Facilities Required

Item	Resources
<b>Accommodation</b>	Training in healthcare facilities and simulation laboratory

Item	Resources
(Classrooms, simulation lab room , demonstration rooms .)	
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Online and computer-based digital resources library
<b>Other Resources</b> (High fidelity mannequin )	Volunteers and simulated patients

**PHC526**

<b>1. Course Name: Primary Healthcare Course Code: PHC2526</b>			
<b>2. Credit/contact hours:</b>	<b>Theory</b>	<b>Practical bed side</b>	<b>Simulation</b>
	40	252	44
	<b>Total</b>		
	336		
<b>3. Number of weeks</b>	<b>14</b>		
<b>4. Level/year at which this course is offered:</b>	<b>Y 5</b>		
<b>5. Pre-requisites for this course (if any): Completion of basic sciences</b>			
<b>6. Co-requisites for this course (if any): none</b>			

**Course Description**

In this course students will be exposed to the principles, content and practice of the family medicine and primary health care. The course emphasizes the central characteristics and core competencies of the discipline of family medicine. The students will learn the difference in practice of medicine between the hospital and Primary Health Care settings. The students will be trained in Primary Health Care Centers (PHCCs) to understand and practice concepts of primary, comprehensive and continuing care to the individuals, families and to the community by and large. The students will learn also specific problem-solving skills that enable them to use epidemiological knowledge of community prevalence of illness and risk factors to make their hypothesis and diagnosis about the problems presented in PHC settings. During the course the students will see how the family physician views his or her practices as a population at risk and organize the practice to ensure that patients' health is maintained whether or not they are visiting the practice. The art of family physician in providing person centered care and holistic approach using the bio-psychosocial model of illness will be demonstrated to the student during the clerkship period. It's compulsory to conduct a research/audit

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned PLOs</b>
<b>1</b>	<b>Skills:</b>	
K.1	Describe the concept of primary health care and family practice	A2,
K.2	recognize the structure of health center PHC team	A2
S.1	Demonstrate the ability to Interview and communicate properly with patients presenting in PHC settings, taking a proper history and a focused clinical examination	B1
S.2	Manage with guidance, common, chronic and psychosocial health problems in PHC settings according to up to date evidence-based protocols and guidelines	C3
S.3	Assess the health status and various risk factors in patients and different family members and intervene by providing anticipatory guidance, evidence-based health promotion, prevention, and health education	C1
K.3	Assess the health needs of the community and special groups.	A2
S.4	demonstrate an understanding of the demographic, epidemiological, environmental and cultural factors affecting these needs and the way they modify peoples' use of the health care services	C1

K.4	Recognize common acute problems in PHC	A2
S.5	manage with guidance common acute problem in Primary Health Care according to up to date evidence-based protocols and guidelines	B2
S.6	Demonstrate appropriate skills of using equipment, office procedures and special tests available in PHC settings	B2
S.7	<b>Demonstrate</b> —a person-centered approach in dealing with patients and their problems in the context of the patient's circumstances	B3
S.8	Recognize the importance of keeping sound medical records and making appropriate referrals to other levels of care for preserving the effectiveness of continuity of care	C1
A.1	Adhere to contemporary ethical principles of medical practice, respect patients' autonomy, confidentiality,	C4
A.2	Educate the patient perception experience of illness	C4
S.8	enable the patient to make an informed choice	C4

**Course Content**

No	List of Topics	Contact Hours
1	Concept of family medicine and primary health care	1
2	Family life cycle	1
3	The difficult consultation BBN dealing with angry patients	3
4	Research methodology type of study conducting a study	8
5	Headache	1p 1l simulation
6	Mental disorders	5 hours
7	Consultation skills in PHC	4
8	Immunization Program	3
9	Periodic medical examination and evidence-based health maintenance protocols (wellness promotion)	4
10	Medical audit / project	10 h
11	PPD,P.P.BLUE	6
12	Childhood respiratory and ENT disorders ASTHMA OTITIS MEDIA	5
13	Principles of chronic disease management in PHC (e.g. diabetes, hypertension, hyperlipidaemia and coronary heart disease, asthma, backache)	16H
14	UTI / Cystitis/ Dysuria	4 H
15	Adult respiratory ,COBD ,ASTHMA ,CANCER	8
16	Common skin problems	2
17	Evidence based practice	2
18	COUNSELLING PREMARITALCOUNSELING ,SMOKING ,	4
19	ELDERLY HEALH GERIATRIC MEDICINE ,OSTOPOROSIS	4
<b>Total</b>		

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Skills</b>		
K.1	Describe the concept of primary health care and family practice	Lecture PHC centers, Clinical skills simulation sessions	Continuous and final OSCEs
K.2	recognize the structure of health center PHC team	Health center visit	MCQ

S.1	Demonstrate the ability to Interview and communicate properly with patients presenting in PHC settings, taking a proper history and a focused clinical examination	PHC centers, Clinical skills simulation sessions CBL Aquifer	CEX, academic day direct observation eportoflio
S.2	Manage with guidance, common, chronic and psychosocial health problems in PHC settings according to up to date evidence-based protocols and guidelines	CBL PHC centers, Clinical skills CBL tutorial simulation sessions Aquifer	Logbook students case presentations Formative assessment CEX and final OSCEs
S.3	Assess the health status and various risk factors in patients and different family members and intervene by providing anticipatory guidance, evidence-based health promotion, prevention, and health education	PHC centers, Clinical skills simulation sessions	Case presentation Logbook Continuous and final OSCEs
K.3	Assess the health needs of the community and special groups.	PHC centers, Clinical skills simulation sessions	Continuous and final OSCEs Log book Research
S.4	demonstrate an understanding of the demographic, epidemiological, environmental and cultural factors affecting these needs and the way they modify peoples' use of the health care services	PHC centers, Clinical skills simulation sessions Lectures Aquifer	Continuous and final OSCEs MCQ Logbook eportoflio
K.4	Recognize common acute problems in PHC	PHC centers, Clinical skills simulation sessions	Continuous and final OSCEs MCQ
S.5	manage with guidance common acute problem in Primary Health Care according to up to date evidence-based protocols and guidelines	PHC centers, Clinical skills simulation sessions	Continuous and final OSCEs
S.6	Demonstrate appropriate skills of using equipment, office procedures and special tests available in PHC settings	PHC centers, Clinical skills simulation sessions	Continuous and final OSCEs
S.7	<b>Demonstrate</b> —a person-centered approach in dealing with patients and their problems in the context of the patient's circumstances	PHC centers, Clinical skills simulation sessions	MCQ-based written exams, Workplace-based assessment activities using multi-source feedback using logbooks and portfolios and final OSCEs
S.8	Recognize the importance of keeping sound medical records and making appropriate referrals to other levels of care for preserving the effectiveness of continuity of care		
A.1	Adhere to contemporary ethical principles of medical practice, respect patients' autonomy, confidentiality,		
A.2	Educate the patient perception experience of illness		

S.8	enable the patient to make an informed choice		
-----	---	--	--

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Embedded (WBPA) assessment	Weekly	30%
2	Final (written exam, spotter exam, DOCE and OSCE)	Final	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1. Learning Resources**

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>• Fraser, Clinical methods in General Practice.</li> <li>• Raket , textbook of Family Practice</li> <li>• Swanson , Family Practice Review</li> <li>• 10. Bope MCQs Book (Based on Raket)</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.guideline.gov">www.guideline.gov</a></li> <li>• <a href="http://www.aafp.org/clinicalrecs.xml">http://www.aafp.org/clinicalrecs.xml</a></li> <li>• <a href="http://www.nice.org.uk">www.nice.org.uk</a></li> <li>• <a href="http://www.bmjournals.com">www.bmjournals.com</a></li> <li>• <a href="http://www.icsi.org">www.icsi.org</a></li> <li>• <a href="http://www.sign.ac.uk/guidelines/">http://www.sign.ac.uk/guidelines/</a></li> </ul>
<b>Other Learning Materials</b>	

**2. Facilities Required**

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Training sites and Clinical skills laboratory and simulation laboratory
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Online and computer-based digital resources library
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Volunteers and simulated patients

**SUR535**

<b>1. Course Name: Surgery</b>		<b>Course Code: SUR535</b>	
<b>2. Credit/contact hours:</b>	Theory Hours 118	Practical Hours 620	
<b>3. Number of weeks</b>	<b>20 weeks</b>		
<b>4. Level/year at which this course is offered:</b>		<b>Y4S2, Y5</b>	
<b>5. Pre-requisites for this course (if any): Completion of Basic sciences</b>			
<b>6. Co-requisites for this course (if any): none</b>			

**Course Description**

The surgical clerkship is intended to allow the students to acquire and consolidate their surgical knowledge, surgical skills, and attitudes. The clerkship capitalizes on knowledge and skills acquired by the medical students from previous pre-clerkship courses and other rotations with emphasis to foster clinical skills by covering the essential surgical problems in order to enable the students to manage those surgical problems in the community after their graduation. Special emphasis will be laid on emergency surgery, traumatology and lifesaving procedures.

**Course Learning Outcomes**

<b>CLOs</b>		<b>Aligned-PLOs</b>
	<b>Knowledge</b>	
K1	Describe the causes, manifestations, differential diagnosis of surgical diseases	A1
K2	Explain the risks and benefits of common surgical procedures	A1
K3	Discuss the management of surgical patients in the context of a surgical team	A2
K4	Apply the principles and techniques in research in healthcare and the translation of research evidence in practice.	A3
	<b>Skills</b>	
S1	Obtain an accurate history of patients presenting with features of what could suggest the possible diagnosis as a surgical problem.	B1
S2	Communicate with patients (to break bad news and good news) and to obtain informed consent for doing specific procedures	B3
S3	Interact with other professionals, medical and paramedical in the management of surgical patients.	B3, C2
S4	Perform a complete general and organ specific physical examination of patients presenting with possible surgical problem.	B1
S5	Demonstrate ability to make working or differential diagnosis	B1
S6	Select appropriate investigation/investigations to make diagnosis	B2, A2
S7	Outline briefly the management plan of surgical diseases	B2
	<b>Attitude</b>	
A1	Demonstrate respect of patient's privacy, confidentiality	C4
A2	Observe the various aspects of patients safety	C4

**Course Content**

<b>No</b>	<b>List of Topics</b>	<b>Contact Hours Theory</b>	<b>Contact Hours Practical</b>
-----------	-----------------------	-----------------------------	--------------------------------

1	General Surgery	39	360
2	Accident & Emergency	0	120
3	Ortho/Trauma	11	10
4	Vascular Surgery	10	10
5	Neurosurgery	9	10
6	Plastic Surgery	6	10
7	Cardio Thoracic Surgery	2	5
8	Urology	7	15
9	Anesthesia/Radiology	5	40
10	Rehabilitation	2	0
11	Histopathology	1	0
12	Forensic Medicine	14	0
13	ENT	6	20
14	Ophthalmology	6	20
<b>Total</b>		118	620

### Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>Knowledge</b>			
K1	Describe the causes, manifestations, differential diagnosis of surgical diseases	Lectures, Discussion, Demonstration of sign on clinical patients.	MCQ-based written exams, Workplace-based assessment activities using Mini-Cex
K2	Explain the risks and benefits of common surgical procedures	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex
K3	Discuss the management of surgical patients in the context of a surgical team	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
K4	Apply the principles and techniques in research in healthcare and the translation of research evidence in practice	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
<b>Skills</b>			
S1	Obtain an accurate history of patients presenting with features of what could suggest the possible diagnosis as a surgical problem	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S2	Communicate with patients (to break bad news and good news)	Clinical rounds, case discussions, lectures,	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and

	and to obtain informed consent for doing specific procedures	clinical skills and simulation lab sessions	multi-source feedback using logbooks and portfolios and final OSCEs
S3	Interact with other professionals, medical and paramedical in the management of surgical patients.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S4	Perform a complete general and organ specific physical examination of patients presenting with possible surgical problem.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S5	Demonstrate ability to make working or differential diagnosis	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S6	Select appropriate investigation/investigations to make diagnosis	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
S7	Outline briefly the management plan of surgical diseases	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
	<b>Attitude</b>		
A1	Demonstrate respect of patient's privacy, confidentiality	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs
A2	Observe the various aspects of patients safety	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	MCQ-based written exams, Workplace-based assessment activities using Mini-Clex and multi-source feedback using logbooks and portfolios and final OSCEs

**2. Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Embedded (WBPA) assessment	Weekly	30%
2	Final (written exam, spotter exam, DOCE and OSCE)	Final	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1. Learning Resources**

<p><b>Required Textbooks</b></p>	<ul style="list-style-type: none"> <li>• <b>Orthopedic Physical Assessment, 5e by David J. Magee. Saunders</b></li> <li>• <b>Bailey and Love – Short Practice of Surgery</b></li> <li>• <b>An introduction to the symptoms and signs of surgical disease - Norman L. Browse</b></li> <li>• <b>The Manual of clinical objectives in Surgery: Symptoms and Problem based approach. Prof. Abdul Jabbar Mehdi Salih – DMCG Publication</b></li> <li>• <b>Churchill’ pocketbook – Surgery - Churchill Livingston</b></li> </ul>
<p><b>Essential References Materials</b></p>	<ul style="list-style-type: none"> <li>• </li> </ul>
<p><b>Electronic Materials</b></p>	<ul style="list-style-type: none"> <li>• </li> </ul>
<p><b>Other Learning Materials</b></p>	

**2. Facilities Required**

<p><b>Item</b></p>	<p><b>Resources</b></p>
<p><b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)</p>	<p>Training sites and Clinical skills laboratory and simulation laboratory</p>
<p><b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)</p>	<p>Online and computer-based digital resources library</p>
<p><b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p>	<p>Volunteers and simulated patients</p>

**MED521**

<b>1. Course Name: Internal Medicine      Course Code: MED521</b>		
<b>2. Credit/contact hours:</b>	<b>Theory Hours</b> 150	<b>Practical Hours</b> 400
<b>3. Number of weeks</b>	<b>20 weeks</b>	
<b>4. Level/year at which this course is offered:</b>	<b>Y4S2, Y5</b>	
<b>5. Pre-requisites for this course (if any): Completion of basic sciences</b>		
<b>6. Co-requisites for this course (if any): none</b>		

**Course Description**

The Internal Medicine Clinical Clerkship is a required rotation done at one of several clerkship sites in UAE healthcare facilities. This course is designed to develop the students' logical approach to the diagnosis and treatment of common medical conditions. This involves obtaining a complete history, eliciting and assessing information from the patient, performing a competent physical examination, and formulating a differential diagnosis list in order of probability with a diagnostic and management plan.

The overall objective of the clerkship in Internal Medicine is to ensure that every student develops a systematic and effective approach to clinical problem solving in adult patients. Each student will obtain a precise, thorough, and reliable medical history and perform a complete and accurate physical examination on two to three new patients every week. The student is expected to integrate medical facts and clinical data, weigh alternatives, and understand the limits of knowledge and incorporate risk and benefit analysis in the care of the patients they are following. Finally, the student is expected to demonstrate integrity, respect, professionalism and compassion.

The internal medicine rotation consists of lectures, seminars, data interpretation and case scenarios, plus students will practice medicine in the hospital doing rounds, attending clinics and evaluating the patients.

**Course Learning Outcomes**

	<b>Knowledge CLOs</b>	<b>Aligned-PLOs</b>
K1	Describe the common medical problems presenting to doctors at different health care levels with emphasis on their diagnosis, prevention and treatment.	A2
K2	Describe the causes, clinical manifestations, and the management of cardiovascular, haematologic, respiratory, gastrointestinal, endocrine, musculoskeletal, urinary, dermatologic, neural, and psychological problems	A2
K3	Apply the principles of body defense mechanisms against infections and describe Primary and secondary immune defense mechanisms and various strategies for the prevention and the prophylaxis against infections.	A3
K4	Discuss the normal aging process in terms of physiologic and clinical manifestations and identify age related diseases and variable causes of disability in the elderly.	A2
K5	Correlate genetics with health and disease status knowing the basic principles of gene therapy and genetic counseling.	A3
K6	Point out appropriate measures for prevention of diseases.	A3

<b>Knowledge CLOs</b>		<b>Aligned-PLOs</b>
K7	Describe the clinical manifestations and differential diagnosis of the common medical disorders with an emphasis on the incidence of the different manifestations and their relative importance in establishing	A2
K8	Describe the Epidemiology of the common adult infectious diseases, and develop a diagnostic approach for the common infectious diseases	A2
<b>Skills CLOs</b>		<b>Aligned PLOs</b>
S1	Decide, for each of the common medical conditions, the etiology and pathophysiology, the natural history, the presenting symptoms and signs, the laboratory tests and/or imaging studies to confirm the diagnosis, and the plan for initial management	B2
S2	Obtain from a patient an accurate focused or complete medical history based on the presenting complaint and appropriate to the clinical setting	B1
S3	Perform an accurate focused or complete physical examination appropriate to the clinical setting.	B1
S4	Prioritize patients' problems, formulate appropriate differential diagnoses, and develop plans for diagnosis and management	B1
S5	Communicate to patients, families and caregivers the diagnosis, prognosis and treatment plan for their condition, and educate them about beneficial lifestyle behaviors and preventive health measures.	B3
S6	Perform in a simulator environment routine procedure commonly required for the evaluation and care of patients, including venipuncture, bladder catheterization, arterial puncture, insertion of peripheral intravenous catheters, fecal occult blood tests, electrocardiograms, insertion of nasogastric tubes, use of sterile technique, and use of universal precautions.	B2
<b>Attitude CLOs</b>		<b>Aligned PLOs</b>
A1	Respect the patient's best interest is the main motivation and reason to put management and not physician financial best interest.	C4
A2	Recognize the basics of health and patient's safety during clinical practice.	C4
A3	Prioritize to patients' triage based on their clinical conditions, seriousness but not on gender, nationality or culture	C4
A4	Prepare and maintain in an accepted format the medical record of the evaluation and care of inpatients and outpatients, including written or electronic entry of a complete history and physical examination, progress notes, procedure notes, clinic visit notes, physician's orders, and prescriptions for medications.	C1
A5	Communicate orally with other members of the health care team regarding the evaluation and care of a patient. This includes giving case presentations to ward teams, attending physicians, and consultants, and verbal instructions to ancillary health care personnel.	C2
A6	Implement clinical practice at the level of general medical practitioner with supervision of consultants/specialists in primary care setting knowing the limitations of each level.	C3

**Course Content**

<b>No</b>	<b>List of Topics</b>	<b>Contact Hours</b>
1	Cardiology	16
2	Pulmonology	13
3	Gastro-enterology	13
4	Neurology	13

5	Hematology	12
6	Nephrology	13
7	Rheumatology	13
8	Endocrinology and diabetology	16
9	Psychiatry	10
10	Infectious disease	12
11	Critical care	11
12	Dermatology	8
<b>Total</b>		<b>150</b>

**Teaching and Assessment**

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and Skills</b>		
K1	Describe the common medical problems presenting to doctors at different health care levels with emphasis on their diagnosis, prevention and treatment.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
K2	Describe the causes, clinical manifestations, and the management of cardiovascular, haematologic, respiratory, gastrointestinal, endocrine, musculoskeletal, urinary, dermatologic, neural, and psychological problems	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
K3	List the principles of body defense mechanisms against infections and describe Primary and secondary immune defense mechanisms and apply various strategies for the prevention and the prophylaxis against infections.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
K4	Demonstrate familiarity with the normal aging process in terms of physiologic and clinical manifestations and identify age related diseases and variable causes of disability in the elderly.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
K5	Correlate genetics with health and disease status knowing the basic principles of gene therapy and genetic counseling.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
K6	Point out appropriate measures for prevention of diseases.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
S1	Describe the clinical manifestations and differential diagnosis of the common medical disorders with an emphasis on the incidence of the different manifestations and their relative importance in establishing the diagnosis, and the early manifestations of serious diseases (e.g. malignancy, emergencies ...etc.)	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
S2	Describe the Epidemiology of the common adult infectious diseases, and develop a diagnostic approach for the common infectious diseases	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
S3	Describe, for each of the common medical conditions, the etiology and pathophysiology, the natural history, the presenting symptoms and signs, the laboratory tests and/or imaging studies to confirm the diagnosis, and the plan for initial management	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
S4	Obtain from a patient an accurate focused or complete medical history based on the presenting complaint and appropriate to the clinical setting	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
S5	Perform an accurate focused or complete physical examination appropriate to the clinical setting.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
A1	Make a candidate realize the patient's best interest is the main motivation and reason to put management and not physician financial best interest.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
A2	Observe the basics of health and patient's safety during clinical practice.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
A3	Learning to prioritize to patients' triage based on their clinical conditions, seriousness but not on gender, nationality or culture	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
A4	Prepare and maintain in an accepted format the medical record of the evaluation and care of inpatients and outpatients, including written or electronic entry of a complete history and physical examination, progress notes, procedure notes, clinic visit notes, physician's orders, and prescriptions for medications.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs
A5	Communicate orally with other members of the health care team regarding the evaluation and care of a patient. This includes giving case presentations to ward teams, attending physicians, and consultants, and verbal instructions to ancillary health care personnel.	Clinical rounds, case discussions, lectures, clinical skills and simulation lab sessions	Workplace-based assessment activities using Mini-Cex and and final OSCEs

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Embedded (WBPA) assessment	Weekly	30%
2	Final (written exam, spotter exam, DOCE and OSCE)	Final	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**Learning Resources and Facilities**

**1.Learning Resources**

<p><b>Required Textbooks</b></p>	<ul style="list-style-type: none"> <li>• A guide to physical examination and history taking, by Barbara Bates -Latest Edition.</li> <li>• Macleod's Clinical Examination by John Munro and C. Edwards.</li> <li>• Clinical Examination - 2nd Edition by Nicholas Talley and Simon O'Connor.</li> <li>• Macleod's Clinical Diagnosis, 1e, Alan Japp and Colin Robertson. Churchill Livingstone</li> <li>• Text book of physical diagnosis and history taking. Mark H. Swartz. Saunders</li> <li>• <b>Special Tests in Musculoskeletal Examination: An evidence-based guide for clinicians, 1e. by Paul Hattam and Alison Smeatham. Churchill Livingstone.</b></li> <li>• <b>Orthopedic Physical Assessment, 5e by David J. Magee. Saunders</b></li> <li>• <b>Bates Guide to Physical Examination and History-Taking by Lynn S. Bickley. Lippincott/Williams and Wilkins</b></li> <li>• <b>Essential Examination: step-by-step system-based guide to clinical examination with practical tips and key facts... by Alasdair K.B. Ruthven</b> <ul style="list-style-type: none"> <li>• Clinical Examination: A Systematic Guide to Physical Diagnosis, 6e by Nicholas J. Talley and Simon O'Connor</li> </ul> </li> </ul>
<p><b>Essential References Materials</b></p>	<ul style="list-style-type: none"> <li>• Clinical Medicine - A textbook for Medical students and doctors. P.J Kumar and M.L. Clark "Latest Edition"</li> <li>• Textbook of Medicine - by Souhami and Moxham - Latest Edition</li> <li>• Davidson's Principles and Practice of Medicine, 22nd Edition</li> <li>• Kumar and Clark's Clinical Medicine, 8th Edition</li> <li>• Harrison's Principles of Internal Medicine, 18th Edition</li> <li>• A guide to physical examination and history taking, by Barbara Bates -Latest Edition.</li> <li>• Macleod's Clinical Examination by John Munro and C. Edwards.</li> <li>• Clinical Examination - 2<sup>nd</sup> Edition by Nicholas Talley and Simon O'Connor.</li> <li>• <b>Macleods' Clinical Examination 13e, Graham Douglas, Fiona Nicol and Colin Robertson. Churchill Livingstone</b></li> <li>• <b>Hutchison's Clinical Methods: An Integrated Approach to Clinical Practice by Michael Glynn and William M Drake. Saunders</b></li> </ul>
<p><b>Electronic Materials</b></p>	<ul style="list-style-type: none"> <li>• <a href="http://stanfordmedicine25.stanford.edu/Videos/">http://stanfordmedicine25.stanford.edu/Videos/</a></li> <li>• <a href="https://batesvisualguide.com/multimedia.aspx?categoryID=21787#21768">https://batesvisualguide.com/multimedia.aspx?categoryID=21787#21768</a></li> <li>• <a href="https://batesvisualguide.com/">https://batesvisualguide.com/</a></li> </ul>

	<ul style="list-style-type: none"> <li>• <a href="http://www.learnerstv.com/Free-medical-Video-lectures-ltv032-Page1.htm">http://www.learnerstv.com/Free-medical-Video-lectures-ltv032-Page1.htm</a></li> <li>• <a href="http://www.med-ed.virginia.edu/Courses/pom1/videos/index.cfm">http://www.med-ed.virginia.edu/Courses/pom1/videos/index.cfm</a></li> <li>• <a href="https://videos.med.wisc.edu/modules/18">https://videos.med.wisc.edu/modules/18</a></li> <li>• <a href="https://www.youtube.com/watch?v=yAR9IfJHIPY">https://www.youtube.com/watch?v=yAR9IfJHIPY</a></li> <li>• <a href="http://www.doctorshangout.com/page/urogenital-system-physical-examination-male">http://www.doctorshangout.com/page/urogenital-system-physical-examination-male</a></li> <li>• Macleod's Clinical Examination – DVD</li> <li>• Clinical assessment of the musculoskeletal system – DVD</li> </ul>
<b>Other Learning Materials</b>	

## 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Training, sites and Clinical skills laboratory and simulation laboratory
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Online and computer-based digital resources library
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Volunteers and simulated patients

## General Education Courses 2022-2023

### Aims

The general education course aims at creating well-rounded individuals with knowledge, values, ethics and skills to be productive global citizens.

### Course Mission:

To enable students to be lifelong learners who will acquire knowledge from different sources and cultural movements to make logical judgement. This course will motivate them to engage in critical reflection and intellectual discovery which they will effectively communicate while contributing positively to the society.

### Course outcomes:

The outcomes of each General education course are given in the preceding pages where each description and CLOS of of each course of college is given.

### Course Outline:

The current distributions of courses are as follows:

Timing	Course code	Subjects	Hours allotted
Y1S1	MI1113	Medical Informatics	20
	MP1125	Medical Professionalism	15
	COMS1114	Communication Skills	10
	ME1117	Medical Education	12
	MT1112	Medical terminology	20
	HM1119	History of Medicine	10
	FI1120	Fiqh Islami	32
Y1S2	G.PSY1215	General Psychology	10
	FI1220	Fiqh Islami	32
Total			<b>161 hours</b>

### Student assessment:

All general education courses are now evaluated as pass/fail.

## 7. STUDENT ASSESSMENT

### 7.1 Grading Scheme

Students are given grades for each of the courses in the pre-clerkship and clerkship phases.

- Excellent 85% and above
- Very Good 75-84.9 %
- Good 65-74.9 %
- Pass 60-64.9 %

### 7.2 Academic Progress

The student should pass in all the courses in each academic year in the Basic science and clinical years to be promoted to the next year.

The total allocation of marks for the clinical phase are 2000 (similar to the allotment of marks for the Basic Science course), and the allocation of marks is calculated from the following table:

#### 7.2.1 *Basic Science phase*

S.No	SUBJECTS	MAXIMUM MARKS ALLOTTED	MINIMUM PASSING MARKS
1.	Biochemistry	220	132
2.	Anatomy	360	216
3.	Physiology	360	216
4.	Histology	150	090
5.	Pathology	220	132
6.	Pharmacology	220	132
7.	Microbiology	150	090
8.	Parasitology	100	060
9.	Community Medicine	120	072
10.	Fiqh Islami	100	060
<b>TOTAL</b>		<b>2000</b>	<b>1200</b>

### 7.2.2 ***Clinical Sciences phase:***

<b>S.No</b>	<b>SUBJECTS</b>	<b>MAXIMUM MARKS ALLOTTED</b>	<b>MINIMUM PASSING MARKS</b>
1.	Medicine, Surgery & PHC	<b>1200</b>	<b>720</b>
2.	Logbook & Research	<b>200</b>	<b>120</b>
3.	Pediatrics	<b>300</b>	<b>180</b>
4.	Obst/Gynae	<b>300</b>	<b>180</b>
<b>TOTAL</b>		<b>2000</b>	<b>1200</b>

The table illustrates the maximum marks and the minimum marks for passing that are allocated to each subject.

#### **The requirements for graduation are: -**

- Successfully complete and pass exams of all the courses in the Basic science and clinical phases.
- Successfully complete the internship training phase.

### **7.3 Examination and Assessment**

Our Goals of Assessment and Examination are meant to determine the academic level of a student's achievement in both the theoretical and practical aspects of the subject on completion of the prescribed syllabus. This will enable the authorities monitoring the performance of the students to decide as to whether or not the student concerned should be passed on to the next class. It also aims at ascertaining the effectiveness of the prescribed courses in achieving the goals of the College as well as in producing capable students with sharpened skills so that they may take their due place in the job market with competence comparable to graduates of other universities and institutions.

#### **Rules to be followed in the Examination Hall**

1. No mobile phones are allowed in the exam hall. The student will be prevented from taking the exam if found to be carrying a mobile phone.
2. Students are required to bring their ID cards to the exam hall.
3. Their names and ID nos. should be entered only on the name slips on the answer books.
4. Students are required to bring all stationery needed by them. They are not allowed to borrow stationery in the exam hall.
5. Students should not write anything other than the answers in the answer books.
6. Students are instructed not to write any prayer or anything that might indicate the identity of the candidate.
7. Answers should be only on answer books and answer sheets. If answered on question papers, they will not be valued unless specified otherwise.
8. Answers may only be inked in black or blue. Pencil and other colours may only be used for drawing.
9. Students should not remove any paper from the exam hall or add any paper to the answer book.
10. No student shall be admitted to the examination hall after a passage of ten minutes from the scheduled start of the exam, except with the permission of the Dean of the College.

11. The Dean may order a special exam supervisory arrangement in exceptional cases, such as fracture due to which the student is rendered unable to write her own exam provided the arrangement is done inside the College and concurrently with the general exam.
12. The student may be allowed to go to the bathroom in the company of one of the invigilators. It must, however, be ensured that she carries no paper or mobile phone or any other material with him/her.
13. Students will not be allowed to quit the exam hall before half of the allotted time for exam has passed.
14. Any incidence of cheating or attempted cheating or disturbance during the exam will be reported to the Head of the Surveillance Committee.

### **7.3.1 Examinations in Basic Science Phase**

#### **In the first year:**

In the first semester Computers & Medical Terminology Exams are conducted after completion of the respective courses. There are mid semester exams (only written exams) for Anatomy, Biochemistry and Community Medicine. At the end of the semester there are midyear exams (only written exams) for Histology and Physiology and final exams (written, oral & practical) for the rest of the subjects.

In the second semester there are mid semester exams (only written exams) for Anatomy, Biochemistry and Immunology. At the end of the semester there are final exams (written, oral & practical) for all the subjects.

#### **In the second year:**

In the first semester there are mid semester exams (only written exams) for all the subjects except Biochemistry. At the end of the semester there is a midyear exam (only written exam) for Biochemistry and final exams (written, oral & practical) for the rest of the subjects.

In the second semester there are 2 mid semester exams in the form of comprehensive exams for Cardiovascular and Respiratory modules. At the end of the semester there are final exams (written, oral & practical) for all the subjects.

#### **In the third year:**

In the first semester there are 2 mid semester exams in the form of comprehensive exams for Neurosciences module and Endocrine & Reproductive system modules. At the end of the semester there are final exams (written, oral & practical) for all the subjects.

## **Policies for Marks Distribution in the Basic Science Phase**

### **Final Exam**

- Written Exam: 35% of the total marks of the subject
- Oral and Practical Exams: 35% of the total marks of the subject provided that the distribution should be done according to the regulations particular to each subject.

#### **1. Subjects requiring oral and written exams only:**

- Internal assessment: 30% of the total marks of the subject, to be distributed as spelt out previously.
- Written Exam: 50% of the total marks of the subject.
- Oral Exam: 20% of the total marks of the subject.

#### **2. Subjects requiring written exam only:**

- Internal assessment: 30% of the total marks of the subject, to be distributed as spelt out previously.
- Written Exam: 70% of the total marks of the subject.

### Rules of Compilation of Grades:

- A student shall be considered successful in a subject if she scores a minimum of 60% of the total marks.
- Scoring a minimum of 30% marks in the written exam by a student would be an essential requirement for totalling the grades in the subject concerned. Failure to do so shall put her in the 'failed' category and give her the 'extremely weak' status in the subject.
- The student's case shall be referred to the Faculty Board for award of the required grace marks if he/she falls short by *two* % each in a maximum of two subjects or of *four* % in a solitary subject.

The following shall be the scale of grades

Pass:	60% to 64.9%
Good:	65% to 74.9%
Very Good:	75% to 84.9%
Excellent:	85% or more

- In the event of a candidate's failing in subjects requiring more than one final exam during one academic year, he/she will have to re-sit in all the prescribed portions of the subject And in case where the existing rules permit the student to be sent up to the next class, in spite of her failure to clear one subject or more, the student shall take the exam in the subject/subjects thus remaining to be cleared, as per the exam schedule fixed for the subject/subjects for the year from which she was promoted. No grades for internal assessment for the subject/subjects concerned shall, however, be taken into account in that case.

### Re-examination:

- A student failing in any subject will be allowed to re-sit for the examination. If she passes the examination, he/she will only be awarded 60% of the total marks in the subject. There is only one re-sit attempt. Should a student fail him/her re-sit attempt, he/she will be forced to repeat the year. Should he/she fail a subject during her repeat year, he/she will be asked to leave the school.
- Students must pass all subjects in a particular year to pass to the next year.

### 3. In the re-sit exam:

- Candidate's internal assessment grades shall not be taken into consideration.
- In case of passing, only the minimum pass marks shall be allotted to him/her unless the re-sit was necessitated for acceptable and genuine reasons, in which case grades actually scored by him/her shall be credited to her account.
- Maximum attempts allowed to a candidate in a subject shall be *four*. In the event of his/her failure to clear the subject in these attempts, his/her name shall be struck off the rolls of the College.
- A student repeating the year shall be treated like a new entrant except in the matter of total marks in the subject concerned for which he/she will only be allotted the minimum pass marks unless the repeat exercise was necessitated by an acceptable reason in both the regular and re-sit exams.
- The re-sit exam shall be held in the courses prescribed for the academic year in which the exam is being held.

**Announcement of Results:**

- Exam results shall be announced at the end of the exams or at the end of each semester.
- Exam results shall be put up on the notice board of the College concerned as well as on the web site of the College. The website shall contain only the ID Nos. of the students without mentioning their names.
- Results thus advertised shall be considered as enough evidence that the students have been duly notified.
- Result of the student not clearing up her College dues in part or in full shall be withheld.

**Inability to Take the Exam:**

- In the event of the student's inability to take the exam the reason or excuse shall be brought to the notice of the College Dean within 24 hours of the scheduled examination.
- No excuses for non-appearance at the exam shall be entertained except in the following cases:
- The student having being admitted as an in-door patient in a hospital.
- In case of the death of one of the student's next of kin (first degree relative), not more than one week before the scheduled date of the exam.
- Emergencies, such as the candidate having met with an accident that renders him/her unable to take the exam provided that he/she submits a formal report certified by the competent authority.

If the excuse given by the student is accepted, he/she shall be allowed to take his/her exam in the subject concerned along with the re-sit exams on the following terms:

- All the three parts of the exam- written, oral and practical- shall have to be gone through.
- The student shall get the grades she actually scores in the re-sit exam.

**Punishable Offences in Examinations:**

1. If the faculty has detected any of the following offences, it has to be brought to the notice of The Head of Control of Examinations. Head of the Surveillance Committee (Head of Control) shall deny entry to a student into the exam hall in the following situations:
  - Reporting more than ten minutes late for the exam.
  - Should he/she insist on carrying a mobile phone with him/her?
  - Should he/she neglect the rules for wearing the Islamic dress and refuses to relent?
2. Head of the Surveillance Committee (Head of Control) shall order a student out of the room during the exam in the following situations:
  - If his/her behaviour creates difficulties or obstacles in the smooth conduct of the exam for other students.
  - If his/her physical condition does not allow him/her to continue with his/her exam.
3. If a candidate is caught cheating or making an attempt at cheating:
  - Head of the Surveillance Committee (Head of Control) shall order him/her out of the examination hall.

- Head of the Surveillance Committee (Head of Control) shall submit a report to the College Dean about the incident with the evidence of cheating or attempted cheating in support.
- The student caught in the physical act of cheating or attempted cheating shall be brought before the Disciplinary Committee comprising the Dean of College and two faculty members. At least one of them must be a lady.
- The Disciplinary Committee shall examine the captured cheating or attempted cheating material as well as the report of the Head of the Supervisory and Disciplinary Committee.
- The Disciplinary Committee shall question the student about the details of cheating or attempted cheating.
- The Committee may call witnesses and get their version.
- If the charge of cheating is proved, the Committee shall take the decision to expel the student from the College for one or two years provided it is the first instance for the candidate, with the approval of the College Council. If, however, the student is caught cheating the second time, he/she shall be permanently expelled from the College.
- In case the charge proved is of 'attempted cheating' the Disciplinary Committee shall take a decision to deprive him/her of all the previous and forthcoming exams of the semester, and an indication to this effect shall be made in the result. This will mean his/her deprivation from the exam. The decision shall be referred to the College Council for ratification.

### **Expulsion from College and Detention from Final Exam**

*A student shall be expelled from College in the following cases:*

- 1) If he/she is proved guilty of a major violation of the prevailing rules and regulations of the College provided that the offence is documentarily proved after giving him/her the right of defence.
- 2) If he/she repeatedly fails, i.e. four times, in one subject or more.
- 3) If the general average achieved by him/her in the final exam in the first academic year is below 30%.
- 4) If the charge of cheating in the final exams is proved against him/her.

### **Readmission of Expelled Students**

Readmission shall not be granted to a student expelled under the provisions given above.

### **Debarring Students from final exams:**

A student shall be debarred from the final exams in the following situations:

1. If the charge of cheating or attempted cheating in the exam is proved against him/her as per the rules contained in Article 1 of the Charter.
2. Absence from theoretical lectures and practical periods, in keeping with the following rules:
  - Any student who is absent in 5% of the teaching hours for any subject, will be given first warning.
  - Any student who is absent in 10% of the teaching hours for any subject, will be given second warning.

- Any student who is absent in 15% of the teaching hours for any subject, will be given notice to parents.
- Any student who is absent in 20% or more of the teaching hours for any subject, will not be allowed to enter the exam of that subject.

### Promotion to the Next Class and Graduation

Students must pass (obtain 60%) in all subjects in a particular year to be promoted to the next year. On request the student may be given a testimonial affirming his/her academic level. When the student has successfully completed all the requirements of graduation, he/she will be granted the Degree *Bachelor of Medicine and Bachelor of Surgery*.

The requirements for graduation are:

- To secure at least 60% in all the courses from first year till fifth year.
- The maximum number of years that a student can take to complete the program will be 4 years in the Basic science phase and four years in the clinical phase, making it a maximum total period of 8 years.

### **7.3.2 Assessment and Evaluation in Clinical Phase**

The learning assessment tools applied in the college ensure that the assessment is fair, reliable, valid, and transparent.

Most importantly, we aim specifically to plan the various assessment methods against learning objectives "Blueprinting" to ensure there is a match between students learning and their ongoing or eventual assessment. We employ multiple approaches that include several different measurement methods and several different raters in order to ensure that results are similar, and the findings are robust.

We also make the students aware that the primary goal should of their assessment is to ensure that the learning objectives are being achieved and not mere paper certification. We believe that students need to be involved both as assessors of their own learning and as resources to other students. We are working on tools where students can get descriptive feedback from the teachers as they learn.

#### **Types of assessment used in the medical college:**

- Formative assessment: "assessment for learning". "Classroom assessment".
- Summative assessment used to gauge the intended learning outcomes of a module or programme."

#### **Conduct of assessment:**

We keep in mind that assessment methods are designed while maintaining the reliability, validity, educational impact, acceptability, as well as cost – effectiveness of tools used.

#### **Assessment tools testing knowledge and its application (Clinical Years) :**

##### **1) Multiple choice questions**

The MCQ used in both formative and summative assessments throughout the college years. They are mostly a "One best response" type while keeping the "all the above or none of the above" ones to minimum. The college has moved a long way from when the multiple choice questions where initially a true or false kind into negative marking and finally into the single best answer type now. The main advancement in the MCQs however, is that the stem moved from being a question of a mere recall of factual knowledge into a more scenario like stem that needs thinking and linking of the information provided.

**2) OSCE UNMANNED:**

This is a form of exam where instead of a single best answer, there is a standard question displayed on the screen for the students that needs to be read, interpreted and answered accordingly in their answer booklet. The questions can take the form of:

- a) Matching type: This format consists of two lists of statements or words, which have to be matched with one another with specific instructions. The two lists should contain different number of items to avoid cueing.
- b) Multiple true-false where there is a stem (a picture, ecg, x-ray, rash) followed by four or five true or false statements.
- c) Modified essay questions (MEQ); this consists of a case followed by a series of questions that relate to the case and must be answered in the sequence asked. This format assesses the candidate's reasoning skills and understanding of concepts instead of mere recall of factual knowledge

**3) Distinction Viva:**

For those students who achieve an overall "Excellent" mark they will be called for a distinction viva. There, the candidate is questioned by one, two or a group of examiners in an interview or discussion-like format. It mostly focuses on examining communication skills, ethical issues, attitudes and professionalism.

**Assessment tools testing clinical competence:****1) Clinical cases:**

a) Objective structured long examination record (OSLER).

We have moved from using a long case in the final clinical exams into the Objective structured examination record. Here the students have 20 minutes instead of the old 40 minutes used in the long case together a history, perform a clinical examination, carry out appropriate side laboratory investigations and arrive at a clinical diagnosis. Students are examined by a set of examiners, asking the students about the case and related topics. Examiners use a structured record or mark sheet to assess the candidate. The OSLER is a 10 item analytic record of the traditional long case in an attempt to improve on the objectivity, validity, and reliability. All the candidates are assessed over 20-30 min by the examiners on the same items. The 10 items consist of 4 on history, including communication skills, 3 on physical examination include examination technique and establishment of correct physical findings while the remaining three items are based on appropriate investigation, management and clinical acumen. In addition, case difficulty is identified by the examiners; it takes about the same time with the traditional long case. OSLER demands sufficient cases and greater number of examiners than the traditional long case raising the issue of practicality in resource limited countries.

**1) Manned OSCE**

All the students sequentially rotate around a series of structured clinical cases called stations. Using the principle of blueprinting, stations are structured to cover a wide range of competencies. At each station, the students are assigned a specific task to perform in a specified time. Each station is designed to test a particular skill such as history taking etc., The OSCE consists of active stations, e.g., examination of the oculomotor nerves and inactive station e.g., data or image interpretation A bell is used to signal the end of the period for each station and the students move to the next station. Each station has a checklist, or a structured marking scheme used by a staff member who observes the students especially in the active stations.

Even though we will continuously try to implement assessment procedures that will result in medical students exercising and developing critical thinking skills from the time of matriculation through their life-long practice of medicine. Application questions have been defined as requiring an examinee to reach a conclusion, make a prediction, or select a course of action

**How we ensure that the exam covers the intended outcomes:**

We code exam questions. We will ensure that this is done throughout the years and specialties rather than part of them. The way it is done now is that before the final (med/surg) exam each faculty member is provided with a hard copy of each exam and an excel spreadsheet (coding sheet) that corresponded to each individual exam. The reviewers coded exam questions independently to determine the "type" of question that was asked; and to determine if the exam question was a recall, application, or competence question. Next year, we are moving towards an even more integrated exam when Primary health care (PHC) will be part of the final (Med/surg) exam and therefore we will apply the coding process to all those fields. We will discuss this in our faculty board meeting with the Pediatrics and Ob/Gyn specialties and plan on implementing it in the near future to those subjects as well.

The theoretical framework that we applied to our coding of exam questions was based on Moore's framework (attached), where we expected the exam questions to fall into one of three categories, Level 3a, 3b, or 4.

**Comparing to MRCP/ NBME questions:**

We are trying to improve our exams to better prepare our medical students for successful completion of USMLE step exams as well as MRCP part 1. Therefore, we are developing and preparing in-house faculty experts to assist with the development and maintenance of high quality application, competence, and beyond exam questions."

**Assessment and Evaluation of Clinical Competence**

The assessment and evaluation of students is divided into 2 main parts:

1. **Formative Assessment** consisting of continuous appraisals during the clerkships and throughout the clinical phase.

The Formative Assessment aims to ascertain the effectiveness of the teaching methods used and to pick up deficiencies in individual students early enough for remedial measures to be applied. During this assessment the students have an opportunity to give their impression of their clerkships and teaching, either verbally to the Head of the Department or by filling in special forms.

During this period, students also have a number of mock examinations in the various departments to ascertain their level of understanding, of knowledge and professional development.

**Mini Clinical Evaluation Exercise**

**Evaluator:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Student:** \_\_\_\_\_ **Batch:** \_\_\_\_\_ **Year:** \_\_\_\_\_  
**Patient Problem /Dx:** \_\_\_\_\_  
**Setting:**  Ambulatory  In-Patient  ED  Other  
**Patient:** Age:\_\_\_\_ Sex:\_\_\_\_  New  Follow-up  
**Complexity:**  Low  Moderate  High  
**Focus:**  Data Gathering  Diagnosis  Therapy  Counseling

1. Medical Interviewing Skills ( <input type="checkbox"/> Not Observed)	1 2 3 UNSATISFACTORY	4 5 6 SATISFACTORY	7 8 9 SUPERIOR
2. Physical Examination Skills ( <input type="checkbox"/> Not Observed)	1 2 3 UNSATISFACTORY	4 5 6 SATISFACTORY	7 8 9 SUPERIOR
3. Humanistic Qualities / Professionalism ( <input type="checkbox"/> Not Observed)	1 2 3 UNSATISFACTORY	4 5 6 SATISFACTORY	7 8 9 SUPERIOR
4. Clinical Judgment ( <input type="checkbox"/> Not Observed)	1 2 3 UNSATISFACTORY	4 5 6 SATISFACTORY	7 8 9 SUPERIOR
5. Counselling Skills ( <input type="checkbox"/> Not Observed)	1 2 3 UNSATISFACTORY	4 5 6 SATISFACTORY	7 8 9 SUPERIOR
6. Organization Efficiency ( <input type="checkbox"/> Not Observed)	1 2 3 UNSATISFACTORY	4 5 6 SATISFACTORY	7 8 9 SUPERIOR
7. Overall Clinical Competence ( <input type="checkbox"/> Not Observed)	1 2 3 UNSATISFACTORY	4 5 6 SATISFACTORY	7 8 9 SUPERIOR

**Mini-CEX Time: Observing** \_\_\_\_\_ Mins. **Providing Feedback:** \_\_\_\_\_ Mins.

Evaluator Satisfaction with Mini-CEX  
 LOW 1 2 3 4 5 6 7 8 9 HIGH

Student Satisfaction with Mini-CEX  
 LOW 1 2 3 4 5 6 7 8 9 HIGH

**Comments:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 Student's Signature \_\_\_\_\_ Evaluator's Signature

**THE SIX GENERAL COMPETENCIES\***

- **Patient Care and Procedural Skills (PCPS)**  
Students must be able to provide patient care, including the safe and effective use of procedures that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
- **Medical Knowledge (MK)**  
Students must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.
- **Practice- Based Learning and Improvement (PBLI)**  
Students must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and lifelong learning.
- **Interpersonal and Communication Skills (IPCS)**  
Students must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families and health professionals.
- **Professionalism (P)**  
Students must demonstrate a commitment to carrying out professional responsibilities and adherence to ethical standards.
- **Systems- Based Practice (SBP)**  
Students must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

*\*Six general competencies adapted by ABMS/ACGME in 1999.*

*Please insert this divider sheet between duplicate sets*

## EXAMPLES OF CLINICAL SKILLS EVALUATED

### Medical Interviewing (PCPS, MK, IPCS)

- Facilitates accurate collection of a patient's history
- Effectively uses questions/ directions to obtain accurate information needed
- Responds appropriately to non- verbal cues
- Shows respect, compassion, empathy, and establishes trust
- Attends to a patient's needs of comfort, modesty, confidentiality and information

### Physical Examination (PCPS, MK)

- Follows efficient, logical sequence
- Balances screening/ diagnostic steps for problem
- Sensitive to a patient's modesty and comfort

### Informed Decision Making/ Counseling Skills (PCPS, MK, IPCS)

- Explains rationale for test/ treatment, obtains a patient's consent
- Educates/ counsels regarding disease management
- Discussion is prioritized, timely and concise

### Clinical Judgment/ Reasoning (PCPS, MK, PBLI, SBP)

- Selectively orders/ performs appropriate diagnostic studies
- Considers risks and benefits of prescribed treatment

### Overall Clinical Competence (PCPS, MK, PBLI, IPCS, P, SBP)

- Demonstrates judgment, synthesis, caring, effectiveness and efficiency in patient care

DMCG recognizes that not all the general competencies can be easily assessed and evaluated by observing clinical skills. The listed examples are intended to demonstrate examples of how the Mini- CEX could facilitate competency- based assessment and evaluation.

## GUIDELINES FOR IMPLEMENTING THE MINI- CEX

The DMCG Mini- Clinical Evaluation Exercise (Mini-CEX) is intended to facilitate formative assessment of core clinical skills. It can be efficiently used by faculty as a routine, seamless evaluation of students in any setting.

The Mini-CEX is a 10- 20 minute direct observation assessment or “snapshot” of a student- patient interaction. Faculty are encouraged to perform at least one Mini-CEX per clinical rotation. To be most useful, faculty should provide timely and specific feedback to the student after each Mini-CEX of a student-patient encounter.

### Setting to Conduct Mini- CEXs

- Out-patient clinic
- In-patient service (CCU/ ICU, general medical floor)
- Emergency department

### Clinical Skills Evaluated

- Medical interviewing
- Physical examination
- Informed decision making/ counseling
- Clinical judgment/ reasoning

### Mini- CEX Evaluators

- General faculty
- Core faculty
- Chief medical residents

### Rating Scale

The Mini- CEX utilizes a nine- point rating scale:

- 1 through 3 is unsatisfactory
- 4 through 6 is satisfactory\*
- 7 through 9 is superior

\*A rating of 4, while classified as satisfactory, is defined as “marginal” and conveys the need to improve performance through program recommended remediation. Faculty using this assessment tool are expected to develop a common understanding of the criteria for each of these ratings through program which faculty development activities.

The recommended two- step approach for using the nine- point scale includes:

1. Determine if the performance was satisfactory, unsatisfactory , or superior
2. Determine which of the three possible ratings best reflects the observed student- patient encounter within the selected performance category

### **Final Summative Examinations:**

These are the following

#### **a. The Final Summative Examinations – Paediatrics & Obstetrics/Gynaecology**

The Summative examinations of Paediatrics and Obstetrics/Gynaecology is carried out at the end of the attachment in these areas towards the end of the first semester of 4 th year of study. The process is as per attached document.

#### **b. The Final Summative Examinations – Medicine & Surgery & PHC**

The Final Summative Assessment in Medicine, Surgery and PHC is carried out as a Combined Examination towards the end of the 5th year.

The grading of marks :< 60%	fail
60 to 64.9%	Pass
65 to 74.9%	Good
75 to 84.9%	Very Good
85 – 100%	Excellent

### **Note 2:**

Students that have attained marks of 85% or over are invited for a Distinction Viva. This Viva examination is carried out exclusively by the External Examiners and Heads of Academic Units in attendance.

There are no marks given in this except ‘Distinction’ or ‘No Distinction’.

### **Assessment of students during the Primary Health Care (PHC Rotation)**

The students of the Batch in the medical course attend the PHC in 3 groups for a period of between 14 to 20 weeks. Each group will have a continuous formative assessment during their rotation and allocation of marks is according to the schema described below.

Each group; will have their end-of-rotation (summative) examination immediately after their individual rotation, so that by the end of the medical course the results from all the three groups will have been submitted to the Dean office.

Students who fail the final (summative assessment at the end of their rotation) will be given a chance to re-sit their examination with the next group.

### **Methods of Assessment in PHC:**

#### **1. Continuous Formative Assessment**

- Attendance
- Log Book activities
- Project (audit/research) groups
- Assessed by Professor in PHC, and Senior Lecturers.

All the students participate in the research project during their rotation in PHC. The final report is presented by 4 students selected from among the group by the students themselves. All the students in the group are involved in the discussion of the project and its presentation.

#### **2. Final Summative Assessment (which is part of combined exam of PHC, Medicine and surgery)**

- OSCE
- MCQ

### **Final Examination in Medicine, Surgery and PHC:**

This final examination is carried out at the end of the clinical course and its aim is to ascertain the suitability of the candidate to get her diploma and to be able to cope with the duties that she would have to undertake as an intern.

The format of the examination and the allocation of marks will be as following

#### **GENERAL RULES FOR FINAL Clinical Phase Exams (SUMMATIVE EXAMINATION)**

The grading of marks :< 60%	fail
60 to 64.9%	Pass
65 to 74.9%	Good
75 to 84.9%	Very Good
85 – 100%	Excellent

The Final Summative Examination can be taken on 4 occasions – the examination at the end of the course and 3 Re-Sit examinations that are permitted.

The student will have to pass all the final (Summative) examinations within a period of 2 years following the end of the medical course.

The student will be expected to attend remedial clinical teaching sessions that will be organized by the Academic Head of the clinical academic department involved.

#### **Student Attendance Policy for Clinical Phase:**

A student should attend a minimum of 80% of clinical sessions and lectures to be eligible for final summative exams. This rule also applies to resit students, who should attend at least a minimum of 80% of the rota arranged especially for them, in order to be eligible for resit exams.

#### **Non-Attendance at Final Examination**

Non-attendance at an examination will be considered as a failed attempt at the examination.

However, the following may be considered as good reasons for non-attendance:

- A) Admission to a hospital as an inpatient
- B) Death of a near relative within one week of the date of the examination
- C) Inability to attend because of having been involved in an accident (evidence from an official authority must be submitted).

Acceptance of one these reasons will allow the student to be eligible to sit the examination at the next available re-sit examination without forfeiting one of her chances.

#### **Disqualification from the Examination**

The following actions will disqualify a student from the examination and the attempt will be considered as a failed attempt, thus forfeiting one of her chances.

- A) Arriving for the examination more than 15 minutes after the start of the examination
- B) Insisting on carrying a mobile phone or other means of communication into the examination hall
- C) Unruly behaviour during the examination
- D) Cheating or attempts to cheat.

If the student is considered to have acted in such a manner, she should be made to leave the examination hall and her case is reported to the Dean.

- The Dean will convene a disciplinary committee consisting of himself and 2 other senior members of the faculty to hear the case.
- The student will have the right to present her own version of the incident to the committee.
- Their findings are submitted to the Faculty Board and eventually to the college council for further action.
- This may include expulsion from the college.

#### **Results of the Final Examination**

The results of the final examination will be reviewed by the Dean, the Faculty Board, and then they are published.

The total allocation of marks for the clinical phase are 2000 (similar to the allotment of marks for the basic science course), and the allocation of marks is calculated from the following table:

The table illustrates the maximum marks and the minimum marks for passing that are allocated to each subject.

S.No	SUBJECTS	MAXIMUM MARKS ALLOTTED	MINIMUM PASSING MARKS
1.	Medicine, Surgery & PHC	1200	720
2.	Log Book & Research	200	120
3.	Pediatrics	300	180
4.	Obst/Gynae	300	180
<b>TOTAL</b>		<b>2000</b>	<b>1200</b>

## **7.4 Marks Distribution**

### **7.4.1 Marks Distribution in the basic science phase**

Total marks of each subject for that semester are distributed as follows:

Internal Assessment - 30%

Oral & Practical – 35%

Written – 35%

**7.4.2 Marks distribution in Clinical Phase**

**Total Marks distribution in Clinical Phase**

Subject	Maximum	Minimum
Medicine, Surgery & PHC	1200	720
Logbook & Research	200	120
Pediatrics	300	180
Obst/Gynae	300	180
TOTAL	2000	1200

**Y4 MBBCh FINAL EXAM MARKS DISTRIBUTION  
Pediatrics**

**Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Embedded (WBPA) assessment		30%
2	Final (written exam, OSPE exam and OSCE)	Final	70%

\*Assessment task (i.e., written MCQs test, OSPE, clinical examination assessment, oral case presentation .)

**Y4 MBBCh FINAL EXAM MARKS DISTRIBUTION  
Obstetrics and Gynecology**

**Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Embedded (WBPA) assessment	Weekly	30%
2	Final (written exam, spotter exam, DOCE and OSCE)	Final	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

**FINAL MBBCh EXAM MARKS DISTRIBUTION (Y5)  
Internal Medicine, General Surgery and Primary Healthcare**

**Assessment Tasks for Students**

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Embedded (WBPA) assessment	Weekly	30%
2	Final Med (written exam, spotter exam, DOCE and OSCE)	Final	70%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## 8. LIST OF FACULTY MEMBERS

### 8.1 TEACHING FACULTY (Basic science)

Name	Designation	Email ID
Yousif El Tayeb	Acting Dean and Chair of Clinical Sciences Department	yeltayeb@dmcg.edu
Nadia Mahmoud Mohamed Aly El Rouby	Professor	nadiah@dmcg.edu
Fouzia Shersad	Associate Professor	Fouzia@dmcg.edu
Abeer Abd El Moneim Said Ibraheem	Professor	abeer@dmcg.edu
Naglaa Raafat AbdRaboh Soliman	Professor	naglaa@dmcg.edu
Iman Irfan Abdeen	Lecturer	iman@dmcg.edu
Shefaa M. Gawish	Professor	shefaa@dmcg.edu
Hajer Nisar Sheikh	Assistant Lecturer	hajer@dmcg.edu
Sadiyah Jamil	Teaching Assistant	sadia@dmcg.edu
Samia Mahmoud Hasan Farghaly	Professor	Samia@dmcg.edu
Haba Faiz A. Al Samman	Lecturer	hiba@dmcg.edu
Magda Abdel Rahman Ismail	Professor	magda@dmcg.edu
Heba Ismail Abdel Reheem Elshafey	Teaching Assistant	hiba@dmcg.edu
Ghazala Mehdi	Professor	ghazala@dmcg.edu
Rasha Ali Abdelrazek Eldeeb	Associate Professor & (Acting) Associate Dean of Research and Graduate Studies	Dr.rasha@dmcg.edu
Tasneem Sandozi	Professor	Prof.tasneem@dmcg.edu
Shifan Khanday	Associate Professor	dr.shifan@dmcg.edu
Badriya AbdulRaouf Abdulrahman Alawar	Professor	balawar@dmcg.edu
Amina Begum	Teaching Assistant	amina@dmcg.edu
Sara Safwat Ibrahim	Teaching Assistant	dr.sarah @dmcg.edu
Momna Basheer Muhammad Basheer	Teaching Assistant	momna@dmcg.edu
Rania Hamed Abdelaty Shalaby	Assistant Professor	dr.rania@dmcg.edu
Sahar Helmi Abdelmaqsoud	Associate Professor & (Acting) Chair of Public Health and Behavioral Sciences Department	Dr. Sahar@dmcg.edu
Sumbal Riaz	Teaching Assistant	sumbal@dmc.edu
Eslam Mohammed	Assistant Professor & Associate Director of Quality Assurance	dr.eslam@dmcg.edu
Mariam Shadan	Assistant Professor	dr.mariam@dmcg.edu

Mohamed Hussein Elsaid Elmasry	Assistant Professor & Head of Research Coordination Unit	Dr.m.hussin@dmcg.edu
Dina Mohamed Saleh	Assistant Professor	dmohamed@dmcg.edu
Maha Ayman	Lecturer	mayman@dmcg.edu
Nujood Al Shirawi	Teaching Assistant	nujood@dmcg.edu
Parickisamy Kannan	Associate Professor & Associate Dean of Health and Community Services	dr.packiri@dmcg.edu
Raja Haqqi	Assistant Professor	dr.raja@dmcg.edu
Abdelmoniem Elmardi	Professor & Chair of Biomedical Sciences Department	dr.abdelmoniem@dmcg.edu
Samar Ahmed	Professor & Associate Dean of Academic Affairs	prof.samar@dmcg.edu
Youness Zidoun	Director - Simulation Center	youness@dmcg.edu

## 9. Glossary

ADAA	<i>Associate Dean of Academic Affairs</i>
CRC	<i>Curriculum Review Committee</i>
CPE Reports	<i>Course Plan and Evaluation Reports</i>
DMCG	<i>Dubai Medical College for Girls</i>
DPCG	<i>Dubai Pharmacy College for Girls</i>
DHA	<i>Dubai Health Authority</i>
QA manual	<i>DMCG Quality Assurance Manual</i>
EIU	<i>Educational Informatics Unit</i>
FH	<i>Faculty Handbook</i>
GPD	<i>Graduate Program Director</i>
IE	<i>Institutional Effectiveness</i>
MOH	<i>Ministry of Health</i>
PPM	<i>Policies and Procedure Manual</i>
PH	<i>Program Handbook</i>
PER	<i>Program Effectiveness Report</i>
QFE	<i>Qualification Framework-Emirates</i>
SH	<i>Student Handbook</i>

### **Teaching Methods**

L	<i>Lecture</i>
CBL	<i>Case based Learning</i>
PBL	<i>Problem based Learning</i>
TBL	<i>Team based Learning</i>
SBIL	<i>Scenario based Interactive Learning</i>
ICM	<i>Introduction to Clinical Medicine</i>
SP	<i>Student Presentations</i>
SGD	<i>Small group Discussions</i>
CAL	<i>Computer assisted learning</i>
SDL	<i>Self-Directed learning</i>
PHC	<i>Primary Healthcare centre visits</i>

# 10. Appendices

## Appendix 1. Scheme of Pedagogy & Assessment

Scheme of Pedagogy & Assessment																								
No.	Course Code	Course Title	Pedagogy									Assessment							Assessment Tasks					
			Lec	CBL	PBL	TBL	SBIL	ICM	Tutorial	SP	Practical lab	SGD	CAL	SDL	PHC	Field trip	Bedside teaching	Simulation lab	Year Assessment (continuous assessment)	Mid semester exam	Video of history taking, BB news, Presentation	OSCE	Oral, Practical, EMQ, MCQ	
1	ANA1101	Anatomy, Embryology	✓	✓								✓	✓		✓					30%				70%
2	BIO1102	Biochemistry	✓	✓						✓	✓	✓	✓							30%				70%
6	MI1113	Medical Informatics	✓																	30				70
7	MP1125	Medical Professionalism	✓						✓		✓	✓	✓							30				70
8	COMS1114	Communication Skills									✓	✓										30%		70%
9	ME1117	Medical Education	✓						✓											30				70
10	MT1112	Medical Terminology	✓								✓	✓	✓							30				70
11	CS1116	Clinical Skills	✓								✓											80		20
12	HM1119	History of Medicine	✓								✓		✓							30				70
13	FI1120 & FI1220	Fiqh islamic Arabic/English	✓						✓		✓		✓							30				70
14	ANA1201	Anatomy, Embryology	✓	✓						✓	✓	✓	□	✓						30%				70%
15	BIO1202	Biochemistry	✓	✓						✓	✓	✓	✓	✓						30%				70%
16	CM1103*	Community Medicine	✓	✓						✓	✓	✓		□		✓				30%				70%
17	HISTO1106*	Histology	✓	✓						✓	✓	✓	✓							30				70
18	MICRO1207	Microbiology & Immunology	✓	✓				✓			✓		✓							30				70

MBBCh PROGRAM HANDBOOK

19	PHYS1111*	Physiology	✓	✓				☐			✓	✓		✓				30				70	
20	G.PSY1215	General Psychology	✓						✓			✓	☐	✓				30				70	
21	PHC1226	PHC	✓						✓			✓	☐	✓				20			30	50	
23	EP1227	Elective Project	✓						☐	✓		✓	☐	✓									
24	GEN21	General Module	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15	15			70	
25	MOB21	Molecular Biology	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	16	16			68	
26	GIT21	GI Module	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15	15			70	
27	CVS22	Cardiovascular Module	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	30				70	
28	RES22	Respiratory Module	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	30				70	
29	REN22	Renal Module	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15	15			70	
30	MIS22	Miscellaneous	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	30				70	
42	ENR31	Reproductive & Endocrine	✓	✓	✓	☐	✓	✓	☐	☐	✓	✓	☐	✓	✓	☐		10.3	19.3			70.4	
43	NSC31	CNS Module	✓	✓	✓	☐		✓	☐	☐	✓	✓	☐	✓	✓	☐		30				70	
44	CIC329	Introductory Course	✓	✓					✓	✓		✓		✓	✓		✓	☐					
45	OBG431	Gynaecology & Obstetrics	✓	✓					✓	✓		✓		✓	✓		✓	✓	30			70	
46	PED423	Pediatrics	✓	✓					✓	✓		✓		✓	✓		✓	✓	30			70	
47	PHC526	Primary Health Care	✓	✓					✓	✓		✓		✓	✓		✓	✓	30			70	
48	SUR535	Surgery	✓	✓					✓	✓		✓		✓	✓		✓	✓					
49	MED521	Internal medicine	✓						✓	✓		✓		✓	✓		✓	✓					

\* These Subjects have final Exams in the second semester

## Appendix 2. Student Assessment Rubrics

### Oral Examination Rubrics

#### Rubrics for Oral examination

Criteria	Poor	Fair	Good	Excellent
	<b>1 point</b>	<b>2 points</b>	<b>3 points</b>	<b>4 points</b>
<b>Criterion 1 Fluency</b>	Communication fluency -not clear and not understandable	Communication fluency -not clear, but just understandable	Communication fluency -moderately clear and understandable	Communication -very clear and understandable
<b>Criterion 2 Promptness</b>	unable to answer even with prompting	Numerous prompts needed from examiner to get incomplete answer	Up to 3 prompts needed from examiner to get the answer	No prompts needed from examiner to get the answer
<b>Criterion 3 overall understanding</b>	Farfetched answer with lack of understanding of subject	Inaccurate answer showing poor understanding of subject	Accurate answer showing acceptable understanding of subject	Accurate answer showing in-depth understanding of subject
<b>Criterion 4 Correlation and coherence</b>	Basic concepts are not clear and unable to think even after prompting.	unable to make connections between topics, even though the topics are individually clear	Able to make moderately clear connections between topics which have been covered in syllabus.	Able to make connections between topics of one discipline and another to derive conclusions even beyond what is covered in course.
<b>Criterion 5 Confidence and attentiveness</b>	Either not polite or complete lack of confidence	Showing either over-confidence or poor confidence	Shows politeness and moderate level of confidence.	Shows politeness: professional level of confidence, with being overconfident
<b>Overall Score</b>	Poor	Fair	Good	Excellent
	<b>4 to 8</b>	<b>9 to 13</b>	<b>14 to 17</b>	<b>18 to 20</b>

**Assignment Assessment Form**

Name of the Student : \_\_\_\_\_

Student ID : \_\_\_\_\_

Course : \_\_\_\_\_

Date of assessment : \_\_\_\_\_

Criteria for Assessment	Poor Effort	Inadequate /Incomplete Effort	Satisfactory Effort	Good Effort	Excellent Effort	Score
	1	2	3	4	5	
Provides summary overview and introduction of topic						
Points covered (accuracy of all major and minor areas)						
Shows initiative in gathering different sources of information: e.g., interviews, information centre, libraries, websites, journals, books						
Displays confidence in presenting a unique opinion indicative of professional judgment						
Utilizes appropriate language and grammar for submission; includes page numbers						
Citation structure and format follow acceptable protocols						
Acknowledges other people’s work and critically emphasizes different points of view with credit given to previous work						
Produces a professional visual presentation for the assignment						
<b>Total Marks:</b>						Out of 40

General Comments:

.....  
 .....  
 .....

Marks: \_\_\_\_\_

Assessed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Approved by: \_\_\_\_\_

Signature: \_\_\_\_\_

**Rubric for Oral presentation / Journal Club**

Student Presenter: \_\_\_\_\_ Student ID: \_\_\_\_\_ Date: \_\_\_\_\_

Knowledge & content	Poor Effort 1	Inadequate /Incomplete Effort 2	Satisfactory Effort 3	Good Effort 4	Excellent Effort 5	Score
Organization and Presentation	Hard to follow; sequence of information jumpy	Many parts of information presented in sequence	Most of information presented in sequence	Information presented in logical sequence; easy to follow	Information presented as interesting story in logical, easy to follow sequence	
Background content	Material not clearly related to topic or background dominated	Many parts are sufficient for clear understanding but not clearly presented	Material sufficient for clear understanding & moderately clearly presented	Material sufficient for clear understanding & Effectively presented	Material sufficient for clear understanding AND exceptionally presented	
Contribution of work	Significance not mentioned or just hinted	Significance mentioned in some areas	Significance mentioned in most areas	Significance explained	Significance exceptionally well explained	
Knowledge of subject	Does not have grasp of information; answered only rudimentary questions	At ease with information; answered many questions	At ease with information; answered most questions	At ease; answered all questions but failed to elaborate	Demonstrated full knowledge; answered all questions with elaboration	
<b>Presentation Skills</b>						
Graphics (use of PowerPoint)	Uses graphics that rarely support text and presentation	Uses some graphics that relate to text and presentation in some areas	Uses graphics in many areas that relate to text and presentation	Uses graphics in most areas to explain text and presentation	Uses graphics that explain and reinforce text and presentation	
Language and grammar	Presentation has more than 10 misspellings and/ or grammatical errors	Presentation has no more than 6-7 misspellings and/or grammatical errors	Presentation has no more than 4-5 misspellings and/or grammatical errors	Presentation has no more than 2 misspellings and/or grammatical errors	Presentation has no misspellings or grammatical errors	
Eye contact Body language, confidence and clarity	Reads most slides; no or just occasional eye Contact Voice is low; difficult to hear	Refers to slides most of the time; occasional eye contact Voice fluctuates from low to clear; difficult to hear at times	Refers to slides to make points; makes satisfactory eye contact Voice mostly clear; but difficult to hear occasionally	Refers to slides to make points; eye contact majority of time Voice is clear with few fluctuations; audience can hear well most of the time	Refers to slides to make points; engaged with audience Voice is clear and steady; audience can hear well at all times	
Time management	Short; less than 30 min	Short <30 min OR long >50	Barely appropriate time	Adequate 30-40 min	Appropriate (15+5) min)	
	Rushed OR dragging throughout	Rushed OR dragging in many parts	Some parts are Rushed OR dragging	Most of the seminar well-paced	Well-paced throughout	

General Comments: (Score: .....out of 40)

.....

Marks : \_\_\_\_\_

Assessed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Approved by: \_\_\_\_\_

Signature: \_\_\_\_\_

**Rubric for Assessment for Case Presentation**

Name of the Student : \_\_\_\_\_  
 Student ID : \_\_\_\_\_  
 Course : \_\_\_\_\_  
 Date of assessment : \_\_\_\_\_

Points for assessment	Below expectations			Meeting expectations	Surpasses expectations			UC*
	1	2	3	4	5	6	7	
Assessment and clinical examination								
Interpretation of clinical evidence								
Use of investigations								
Presentation and delivery								
Global rating								

General Comments:

.....  
 .....

Marks : \_\_\_\_\_

Assessed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Approved by: \_\_\_\_\_

Signature: \_\_\_\_\_

\*UC: Unable to comment

Courtesy: This form is adopted from RCPsych.

### Appendix 3. PBL Form

Dear Students,

*This survey will help you analyze how this PBL session has helped you achieve knowledge, skills and attitude. The data from this survey will be used for research and to improve the effectiveness of PBL sessions.*

Name.....Batch.....

PBL session Topic: .....

		Strongly Disagree				Strongly agree
	STUDENT SELF ASSESSMENT	1	2	3	4	5
Knowledge and reasoning skills	1. I feel confident of my knowledge of the topic. 2. I am able to interpret the problem and arrive at a hypothesis. 3. I was able to pick out the relevant problems. 4. I was able to support my clinical reasoning and decision making with evidence					
Self-directed learning	1. I set learning objectives 2. I utilized different Resources (library, internet, Textbooks, Journals ... etc.) 3. I pushed myself to the limits of my knowledge and abilities. 4. I established a concrete action plan to achieve my learning needs					
Team work	1. I learnt to work in a team. 2. I respected other people's opinion 3. I had equal chance to share in discussion					
Attitude	1. I studied and prepared for every class. 2. I showed responsibility and commitment in all the assigned tasks 3. I made an effort to suit my behavior to the occasion 4. I was open to criticism and reacted favorably					

*This part of the survey is anonymous and will help us evaluate the process. The data from this survey may be used for research purpose and to improve the effectiveness of PBL sessions.*

	STUDENT SATISFACTION ON PBL SESSION	Strongly Disagree 1	2	3	4	Strongly agree 5
PBL	1. Working was pleasant 2. It was interesting 3. Objectives and solutions were clearly interrelated 4. The problem was suitable for systematic approach by small groups. 5. The facilitator's guidance was helpful.					

**FACILITATOR ASSESSMENT OF STUDENTS' PARTICIPATION IN PBL TUTORIALS**

Name of facilitator: **Cerebrovascular Accident- Neuroscience Module**. Date: 1st 15 sep 2014 2nd.....

Topic covered in this session.....Number of students...1st  
 .....2nd.....

**PLEASE GRADE 1-10 (average for section)**

<b>Name of Student</b> Please write the names/initials														
<b>Application of Knowledge Base</b>														
<ul style="list-style-type: none"> <li>Shows evidence of thorough reading of documented sources</li> <li>Answers questions or shares her opinions about the topic without reading notes/books.</li> <li>Applies acquired knowledge about the topic to the problem.</li> </ul>	1st session													
	2nd session													
<b>Clinical Reasoning and Decision-Making skills</b>														
<ul style="list-style-type: none"> <li>Prioritizes the patient's problems...</li> <li>Supports her clinical reasoning and decision making with evidence about the problem</li> <li>Shows evidence and critical understanding of facts about the problem</li> <li>Shows ability to generate alternative diagnostic hypothesis according to new information given (differential diagnosis).</li> </ul>	1st session													
	2nd session													
<b>Self- Directed Learning (Self-study)</b>														
<ul style="list-style-type: none"> <li>Defines learning objectives &amp; meets them...</li> <li>Shows evidence of accomplishment of learning objectives</li> <li>If necessary, seeks counseling to orient her study</li> </ul>	1st session													
	2nd session													
<b>Collaborative Work</b>														
<ul style="list-style-type: none"> <li>Works towards achievement of the group's learning goals...</li> <li>Shares bibliographic sources with classmates about...</li> <li>Respects classmates' opinions.</li> <li>Helps classmates who lag behind.</li> </ul>	1st session													
	2nd session													
<b>Attitude during discussion and Professionalism</b>														
<ul style="list-style-type: none"> <li>Reacts positively to feedback and criticism</li> <li>Manages her impulsiveness adequately</li> <li>Attentive and arrived on time</li> <li>Is honest.</li> </ul>	1st session													
	2nd session													
<b>Overall average for each student for session 2</b> (It does not have to be mathematically calculated)														

-1<sup>st</sup> Session will be taken into account only if a student is absent in the 2<sup>nd</sup> session due to an accepted excuse.

-Please note that all questions may not be relevant to both sessions

**Scoring rubric**

- 1-2 extremely poor - needs counseling
- 3-4 very poor - may need counseling
- 5-6 satisfactory - but can improve
- 7-8 good/very good - there is still room for improvement
- 9-10 excellent - (10 can be a role model)

<p>Any comments</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
---

## Appendix 4. External Examiner Form

DMC External Examiner Report 2018

### External Examiners Report Form

Please complete a separate report form for each module on which you have acted as an External Examiner and submit it either to the faculty member as hard copy or electronically as an email attachment in the form of a Microsoft Word document to [magda@dmcg.edu](mailto:magda@dmcg.edu)

<b>Name of External Examiner</b>					
<b>Home Institution</b>					
<b>Module(s)/course(s) examined</b>					
<b>Program to which modules are attached to</b>					
<b>Type of Assessment examined</b>	Oral / Practical / OSCE / Written / Thesis / Project				
<b>Date of Assessment</b>					
<b>Did you receive information sufficient enough to help you perform as an External Examiner?</b>	Yes	No	<b>Did you receive sufficient information on the marking criteria/rubrics?</b>	Yes	No

#### Explanatory notes

In the following sections we ask that any areas you identify as requiring attention are categorised as follows:

- **Essential** = critical cause of concern that impacts academic standards. Remedial action must be taken before the start of the next academic year.
- **Advisable** = potential cause for concern that may impact academic standard if left. No immediate remedial action necessary but monitoring required.

Please note that the completed report form will be made available to Faculty and accreditation bodies.

Course Content and Assessment Strategy	Yes	No	Unable to comment
1. Was the syllabus of the course that you examined comparable to those of similar programs in other universities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Was the standard of the student performance comparable to those of similar programs in other universities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the amount and type of assessment appropriate to the course examined?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Did the existing assessment process measure the student achievement rigorously and fairly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Was there an appropriate balance between the various methods of assessment (eg in-course assessments, oral, practical and written assessments)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Please comment on the appropriateness of the assessment methods, the marking schemes or rubrics or any other areas related to the assessment strategy employed			
<b>Good Practice comments:</b>			

1/2

**Appendix 5. Elective Project Form**

**DUBAI MEDICAL COLLEGE FOR GIRLS**  
**ACADEMIC YEAR .....**

**Subject:** \_\_\_\_\_

S#	Name of the EP	Peer evaluation		self-evaluation	
		100	20.0	100.0	10.0
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

## Appendix 6. DMCG Course Plan & Evaluation Report

### 1. BASIC INFORMATION

Course Type

· Masters · MBBCh

Course Title:

Name of course eg.

Anatomy OR Biochemistry

Code:

Batch

Course Time:

Semester:

Academic Year






Classification (domain):

Basic sciences OR Clinical Science OR General Education

Number of Hours:

if applicable

Number of Credits

if applicable

Theory Hours

Number of Contact hrs.

Practical Hours

Number of Contact hrs.

Prerequisites:

Co-requisites:

Courses or topics which should have been covered earlier

: Other courses or topics which should be taken together with this course

### 2. COURSE SYNOPSIS

This course provides an introduction.....

Head of Departments / Course Coordinator:

Instructor 1

Instructor:

Name of Professors and Doctors

Page 2

### 3. COURSE LEARNING OUTCOMES (CLOs)

You may add up to 10 CLOs but 5 would be ideal.

CLOs and Alignment with Bloom's Taxonomy

Upon successful completion of this course the student will be able to:

CLO 1

Bloom's Taxonomy levels

	<ul style="list-style-type: none"> <li>· Recall ·</li> <li>Comprehension ·</li> <li>Application ·</li> <li>Analysis · Synthesis</li> <li>· Evaluation</li> </ul>
Enter the full text of each CLO	

Alignment of CLOs with program learning outcome (PLOs)

Knowledge= A1, A2, A3

Skills = B1, B2, B3,

Accountability and Engagement= C1, C2,

C3, C4

\*Please find the PLOs on DMCG website

Mapping of CLOs with knowledge and skills

CLO	A1	A2	A3	B1	B2	B3
	-	-	-	-	-	-

1

Mapping of CLOs with Accountability and engagement

CLO	C1	C2	C3	C4
	-	-	-	-

Page 3

**4. COURSE CONTENTS:**

Item 1					
Chapter (Group of Topics)	Weeks	Practical / Clinical	Others	Total Hours	Pedagogy
CLO	Assessment methods		% of the total course marks		
Provide the number of CLO with which the chapter is aligned					

**5. LEARNING & INFORMATION RESOURCES**

Material Prepared by instructor

Enumerate learning material e.g. PowerPoint /lecture notes/video/ narrated lecture etc.

Text books & other resources

Enumerate resources like Text books, websites, ( Up-to-date, Access medicine, Aquifer )

Technology Resources:

Technology Support:

- LMS course content · LMS quizzes · LMS drop box · LMS discussion · MS Office tools · Internet search engines · Demonstration videos · Other software

**6.PLAN FOR STUDENT ASSESSMENT**

Assessment Tool	Score Distribution (%)

Page 4 -Course Evaluation

Course Evaluation (End of Semester)

**7. COURSE COVERAGE**

Students enrolled	% of course covered	If not fully covered, mention titles of topics

Mention reasons for not covering each topic (if course coverage is less than 100%):

Strategies to be implemented to complete the course in the coming years:

**8. EXAMINATION STRATEGY & STUDENT PERFORMANCE**

Placement of the Course (Select from drop-down menu)

Examination Blueprint

Chapter (group of topics)	Percentage of total teaching hours	Year assessment	Oral marks	Practical marks	MCQ marks	Account Marks	Total Marks

Examination Blueprint

Specialties (groups of topics)	Percentage of total teaching hours/Weightage	Pre-Final Exam/end of rotation exam	Written Exam	Clinical Exam	Total Marks

Comment on how successfully you have implemented the above blueprint. (whether you have deviated)

Student Score for each Assessment tool (Number of Students)

Modules	Examination Tool	>85%	75-84.9%	65-74.9%	60-64.9%	<60%	Incomplete/Absent

Student Score for each Assessment tool (Percentage of Students)

Modules	Examination Tool	>85%	75-84.9%	65-74.9%	60-64.9%	<60%	Incomplete/Absent

Comments on the extent to which learning outcomes are met

---

Mention any deviation from planned student teaching and assessment methods and specific comments on assessment findings & suggestions.

**DMCG CRITERIA FOR SUCCESS (KPIs)**

80% or more students should get 60% or above in theory exam.	More than 75% should get 75% or above in practical
????	???
75% or more students should score 75% or above marks in oral	75% or more students should get 75% or above in manned OSCE
???	????

**9. COURSE EVALUATION (INDIRECT ASSESSMENT)**

External Feedback: From External Examiner or External Source

---

Student feedback score obtained for this course:

Scale 1- 5

Response rate

---

Department

---

Student Feedback

**Survey Question**

**Score Obtained (Weighted Average 1 - 5 )**

---



---

Student Feedback

**Survey Question**

**Score Obtained (Weighted Average 1 - 5 )**

---



---

Other assessment results like student attendance percentage

---

**10. SELF-REVIEW BY DEPARTMENT (Please rate the following. Scale 1= Poor, 5= Excellent)**

appropriateness of the course learning outcomes  
· 1 · 2 · 3 · 4 · 5

appropriateness of assessment instruments in relation to learning outcomes  
· 1 · 2 · 3 · 4 · 5

extent to which learning outcomes were met (with evidence)  
· 1 · 2 · 3 · 4 · 5

appropriateness of prerequisites  
· 1 · 2 · 3 · 4 · 5

appropriateness of the balance of assessment  
· 1 · 2 · 3 · 4 · 5

appropriateness of textbooks and other learning resources  
· 1 · 2 · 3 · 4 · 5

Comments on results of student feedback and department self-review

---

**11. PROPOSED ACTIONS PLANNED FOR NEXT SEMESTER (To be followed up in next year's report)**

Based on the assessment results, what changes, if any, are planned to increase student success? When will they be implemented? Please check any appropriate boxes and provide a brief description with a timeline for changes.

**12 ACTION PLANS & INTENDED OUTCOMES FOR NEXT SEMESTER:** (For each action, include implementation dates planned)

---

Choose one or more summary statements.

- Results are positive—no changes to be made
- Conduct further assessment related to the problem encountered and outcome
- Use new or revised teaching methods (e.g., more use of group work, new lecture, etc.)
- Develop new methods of evaluating student work
- Plan purchase of new equipment or supplies needed for modified student activities
- Make changes in staffing plans (e.g., modified job descriptions, requests for new positions, etc.)
- Engage in professional development about best practices for this type of class/activity
- Revise the course sequence or prerequisites
- Revise the course syllabus or outline (e.g., change in course topics)



Signature:	Date :
------------	--------

**D. REQUIRED APPROVALS**

<b>Head of the Department</b>	<input type="checkbox"/> Approved	<input type="checkbox"/> Not approved
Signature:	Date :	
<b>Program Review and Assessment Committee</b>	<input type="checkbox"/> Approved	<input type="checkbox"/> Not approved

<b>Endorsed by:</b>
<b>The Dean                  Chair,                  Program Review and Assessment Committee</b>

## Appendix 8. Course Equivalency Form (Students)

### Course Equivalency Request Form

To:	The Dean
Program:	
Date:	
Student Name:	
Name of the University/institution last attended:	
Year last attended:	

I request to transfer the .....College.

Student Signature \_\_\_\_\_

=====

<b><i>For Official Use ONLY:</i></b>	
<input type="checkbox"/> <b>Approved</b>	<input type="checkbox"/> <b>Not Approved</b>
<b>List of Courses Approved</b>	
Chief Academic Officer Name: _____ Signature _____ Date _____	

.....  
 Endorsed by the Dean  
 Prof. Saeed Ahmed Khan

***Requests must be submitted to the Dean's Office***

# Appendix 9. Time Table (Template)

**Academic year 2017-2018 | 1st Semester**  
 First Year | Batch 32 | Week 2



كلية دبي الطبية  
 DUBAI MEDICAL COLLEGE

	SUNDAY 17 September 2017	MONDAY 18 September 2017	TUESDAY 19 September 2017	WEDNESDAY 20 September 2017	THURSDAY 21 September 2017
07:30					
08:30					
09:30	Short Break				
09:45					
10:40					
11:35					
12:30	Prayer Break				
01:00					
02:00					Student activity

Prof. Dr. Mohammed Galal El Din,  
 Dean of Dubai Medical College

**Academic year 2017-2018 / First Semester**  
**Second Year - Batch 31**  
 Week 3 – Introduction/Molecular Biology Module

كلية دبي الطبية  
 DUBAI MEDICAL COLLEGE

	SUNDAY 17 September 2017	MONDAY 18 September 2017	TUESDAY 19 September 2017	WEDNESDAY 20 September 2017	THURSDAY 21 September 2017
07:30					
08:30					
09:30	Short Break				
9:45					
10:40					
11:35					
12:30	Prayer break				
01:00					
02:00					

Prof. Dr. Mohammed Galal El Din,  
 Dean of Dubai Medical College