



*Quality
with
Morality*

COURSE GUIDE

PHASE - 1 MBBS
SESSION 2023-2024



Chattagram International Medical College

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Introduction

Chattagram International Medical College (CIMC) is a Non- Government Medical College in Chattogram, Bangladesh, established in 2012 by Development For Education Society & Health (DESH). The college is adjacent to the Chandgaon Residential Area in Chattogram, Bangladesh in Permanent Campus.

Chattagram International Medical College (CIMC) is approved by the Ministry of Health and Family Welfare, Government of the people's Republic of Bangladesh, recognised by the Bangladesh Medical and Dental Council (BM&DC), affiliated by the Chittagong Medical University.

Chattagram International Medical College (CIMC) offers a Five-Years Course for Bachelor of Medicine and Bachelor of Surgery (MBBS) and One-Year Residential Internship Training at Chattagram International Medical College Hospital (CIMCH).

Our teachers are experienced, skilled and knowledgeable in their own fields. They not only teach the theoretical aspects but also trained up the future doctors from the view point of practical aspects.

The CIMCH is a Tertiary Care Referral Hospital and provides excellent training to Undergraduate students and Doctors. It is well equipped with modern facilities to provide quality health care to the public at reasonable cost and free of cost to the poor people. The entire hospital staff is dedicated to excellent service.



Principal MESSAGE



It is our great pleasure to welcome you to Chattagram International Medical College. Medical education is a fast developing advanced field which necessitates extensive supervision to the student, well equipped laboratory support and practical hospital training.

we believe our experienced teachers' care, study environment, academic discipline, continuous extra-curricular activities etc will make us different from others.

At present we also have 500 bedded general hospital (CIMCH). It has exclusive facilities for patients and students under various department. Our future plan is to build another 17 storied 750 bedded hospital and more academic buildings to facilitate study and research work of our students and teachers.

Chattagram International Medical College beckons you to join our professionally planned educational facilities.

(Professor Dr. Md. Tipu Sultan)

Principal

Chattagram International Medical College



Vice Principal **MESSAGE**



Medical Profession is not only a part of education but also a great opportunity to change lives. we are committed to establish and maintain a good academic standard in Chattagram International Medical College (CIMC). We are also bound to keep our teaching knowledge and skill up-to-date through continuous professional development.

To develop the academic standard, ethical values and legal responsibilities among the students, we have an active Quality Assurance Body (QAB) aiming at controlling the quality of teacher to produce Quality doctors. It is devoted to ensure a coordinated efforts between the teachers and the students. Our Phase co-ordinators and subject co-ordinators regularly monitors the students' attendance, academic performance, results etc and report it to the weekly academic session, directly conducted by the principal. we have a special team of teachers to help the students to overcome their poor performances.

I am grateful to all who actively participate with us in managing the academic activities smoothly.

(Professor Dr. Md. Muslim Uddin)

Vice Principal & Academic coordinator
Chattagram International Medical College



Phase-I Co-ordinator **MESSAGE**



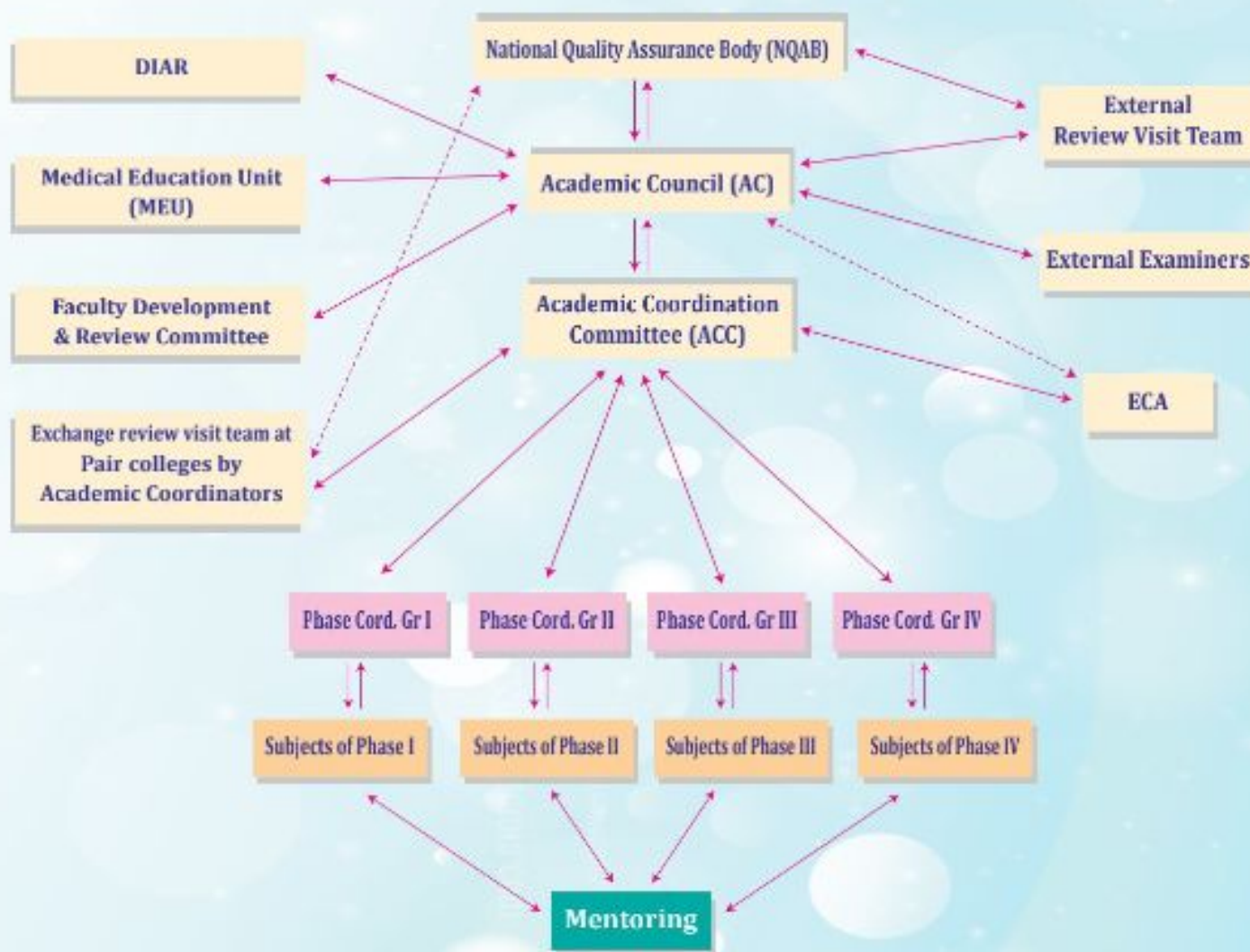
Dear freshers and youngsters, a warm welcome to our amazing Chattagram International Medical College campus! Your dreams of becoming a noble, white-coated professional will be fulfilled with the grace of the almighty. We only need your cooperation, dedication, and perseverance. The motto of our institute is "Quality with Morality," which has been practiced from the grassroots level to the highest position. So, you also need to follow it starting from your proper dress code according to the instructions of the authority, personality, and overall modesty. The medical curriculum has been updated and the incorporation of 'Integrated teaching' and 'Generic topic' is a step forward to make a 5-star doctor by the Government of Bangladesh. The different subjects of each phase will be taught based on cards that include various items (fragmentation of topics). You need to attend all classes in just time with the appearance of every item, card exams then term exams which eventually prepare you for the 1st Professional exam under Chittagong Medical University at the end of phase I course. Your class attendance will be strictly maintained as it is one of the important criteria for eligibility for the professional exam. The details of various academic activities of each subject will be explained to you during the orientation of the different departments. Apart from being regular and sincere, we also encourage you to be involved in different 'extracurricular' activities like sports, cultural events, study tours, debate clubs, and blood donation activities, which are part of the curriculum and must be fulfilled to achieve 'Bangladesh Medical & Dental Council's yearly accreditation.

Finally, I want to extend my heart to hear all your queries, my door is always open to you to share your academic and beyond problems. Let us solve the problems together. Stay blessed and good wishes for a bright career once again.

(Professor Dr. Shaheda Ahmed)

Phase I Co-ordinator,
Head, Department of Biochemistry,
Chattagram International Medical College

FRAMEWORK AND LINE OF COMMUNICATION FOR QAB



Basic Information about MBBS Course

Name of the course : Bachelor of Medicine & Bachelor of Surgery (MBBS)
Medium of Instruction : English
Duration : MBBS course comprises of 5 Years followed by Logbook Based rotatory internship for one year

Phase	Duration	Subjects	Examination
1 st phase	1½ years	<ul style="list-style-type: none"> ● Anatomy ● Physiology ● Biochemistry 	First Professional MBBS
2 nd phase	1 years	<ul style="list-style-type: none"> ● Pharmacology & Therapeutics ● Forensic Medicine & Toxicology <p>Only lecture, small group teaching (practical, tutorial etc.), clinical teaching (as applicable) & formative assessment will be conducted in following subjects- General Pathology part of Pathology, General Microbiology part of Microbiology, Medicine & Allied subjects, Surgery & Allied subjects</p>	Second Professional MBBS
3 rd phase	1 years	<ul style="list-style-type: none"> ● Community Medicine & Public Health ● Pathology ● Microbiology <p>Only lecture, small group teaching (practical, tutorial etc.), clinical teaching (as applicable) & formative assessment be conducted in following subjects- Medicine & Allied subjects, Surgery & Allied subjects, Obstetrics and Gynaecology.</p>	Third Professional MBBS
4 th phase	1½ years	<p>Medicine & Allied subjects Surgery & Allied subjects Obstetrics and Gynaecology</p>	Final Professional MBBS

NB: All academic activities including professional examination of each phase must be completed within the specified time of the phase.

Special note: After taking admission into the first year of MBBS course, a student must complete the whole MBBS course (pass the final professional MBBS examination) within 12 years timeline.

Phase wise distribution of teaching-learning & assessment: 1st Phase

Organization of the course: The Course is offered in 3 terms (1st, 2nd & 3rd) and total 1 & 1/2 years for phase-1 MBBS course

1 st Phase: Hour Distribution										
Subject	Lecture (in hours)	Tutorial (in hours)	Practical (in hours)	Dissection and others (in hours)	Integrated teaching	Formative Exam		Summative Exam		Total (in hours)
						Prepa ratory leave	Exam time	Prepa ratory leave	Exam time	
Teaching-learning, both formative and summative assessment	Anatomy	115	53	52	307					527
	Physiology	120	120	97	-	36 hrs	35 days	42 days	30 days	337
	Biochemistry	117	100	100	-					317
	Total	352	273	249	307	36	77 days	60 days		1181+36 (IT) = 1217
Generic Topics on Medical Humanities: (i) Behavioral science, (ii) Medical Sociology, (iii) Etiquette in using of Social Medias, (iv) Self-directed learning inculding team learning & (v) Medical ethics will be taught within 1 st phase.										8
Grand Total										1225
Time for integrated teaching, examination, preparatory leave of formative & summative assessment is common for all subjects of the phase.										
Related behavioral, professional & ethical issues will be discussed in all teaching learning sessions										

Teaching & Learning Methods

The following teaching and learning methods will be followed: Large Group Teaching:

- Lecture
- Seminar Integrated teaching : 102 topics
- Phase I: 12 topics
- Phase II: 7 topics
- Phase III: 10 topics
- Phase IV: Common 42 topics + Departmental 31 topics = 73 topics
- (Departmental topics Medicine 10 topics + Surgery 11 topics + Gynae & Obs 10 topics)

Small Group Teaching:

- Problem Based Learning (PBL)
- Tutorial
- Demonstration
- Students interaction Practical session:
- Use of practical manual
- Performing the task/examination by the student
- Writing the practical note book

Field Placement (Community based medical education):

- In small groups for performing activities by the student themselves Clinical teaching:
- In ward, OPD, ED, ambulatory care teaching, OT, POW, ICU, etc.
- By concerned persons
- NB: Ambulatory care teaching, there should be a ratio of 1:4 (25% ambulatory care teaching and 75% indoor teaching).
- Encourage to learn ICT through computer lab of the college.

Assessment:

- A. There will be in-course/formative (item/card/term) and end-course/summative (professional) assessment for the students in each phase (1st, 2nd, 3rd & 4th phase) of the course i.e. formative and professional examination.
- B. Formative assessment will be done through results of items, card and term ending examination weightage from integrated teaching & class attendance.

- C. For formative assessment, 10% marks of written examination of each paper of each subject is allocated.
- D. In written examination for MCQ of each paper, 20% marks are allocated. Out of that Single based answer (SBA) type of MCQ will be 50% and Multiple true false (MTF) type of MCQ 50% in formative and summative assessment of all subjects of MBBS course. There will be separate answer script for MCQ part of examination. Total number of MCQ will be 20 for 20 marks out of which 10 marks for SBA and 10 marks for MTF.
- E. Short Answer Question (SAQ) and Structured Essay Question (SEQ) will be in written examination of each paper, 70% marks are allocated. Out of 70 marks Structured essay question (SEQ) will be around 25% along with short answer question (SAQ) around 75% in formative and summative assessment of all subjects of MBBS course.
- F. Oral part of the examination will be Structured Oral examination (SOE).
- G. OSPE/OSCE will be used for assessing skills/competencies. Traditional long & short cases will be also used for clinical assessment.

I. Eligibility for appearing in the professional examination:

- ⇒ Certificate from the respective head of departments regarding students obtaining at least 75% attendance in all classes (theory, practical, tutorial, residential field practice, clinical placement etc.) during the phase.
- ⇒ Obtaining at least 60% marks in formative examinations.
- ⇒ No student shall be allowed to appear in the professional examinations unless the student passes in all the subjects of the previous professional examinations.

J. Pass Marks:

Pass marks is 60%. Student shall have to pass written (SBA & MTF-MCQ +SEQ+ SAQ + formative), oral, practical and clinical examination separately.

K. Examinations & distribution of marks:

First Professional Examination

Subjects	Written Exam Marks	Structured Oral Exam Marks	Practical Exam Marks	Formative Exam Marks	Total Marks
Anatomy	180	150	150	20	500
Physiology	180	150	150	20	400
Biochemistry	180	150	150	20	400
Total					1300

L. Common Rules for Examinations

- a) University professional MBBS examination will be conducted on May and November.
- b) University professional MBBS examinations will be completed within the specified time of the concerned phase.
- c) After passing all the subjects of first professional MBBS examination, students can appear in Second professional MBBS examination if all other prerequisites for appearing in second professional examination are fulfilled as per curriculum.
- d) To appear in third professional MBBS examination students will have to Pass all the subjects of the second professional MBBS examination and all other prerequisites for appearing in Third Professional MBBS examination must be fulfilled as per curriculum.
- e) To appear in 4th (final) professional MBBS examination students have to pass all the subjects of previous 3rd professional MBBS examination if all other Prerequisites are fulfilled. In the mean time students can attend clinical ward placement, teaching learning.

M. Few directives and consensus about the following issues of assessment:

- i. In case of OSPE/OSCE- Instruments/equipment's to be taken to oral boards to ask open questions to the students apart form Structured Oral Examination (SOE). There will be scope of instruments related viva, specially in clinical subjects and where applicable. Central OSPE/OSCE from Dean Office after moderation will be encouraged.
- ii. In case of Structured Oral Examination (SOE), instead of preparing specific structured question, topics will be fixed considering wide range of contents coverage. Rating scale will be used for marking the students concurrently. Each student will be asked questions from all topics of the set. Equal or average duration of time will be set for every student.



Generic Topics on Medical Humanities to be taught in Phase-I

The following five topics will be taught within 1st phase under supervision of Phase-I coordination committee in collaboration with medical education unit (MEU). The sessions will be under the guidance of Principal & Vice-principal, coordinated by concerned departments and sessions will be delivered by concerned experts of the topics. Each session will be one and half hour. Attending these session will be mandatory and will be reflected in the formative & summative assessment of Phase-I.

Topics:

1. Behavioral science
2. Medical Sociology
3. Etiquette in using of Social Medias
4. Self- directed learning including team learning
5. Medical ethics

Topics	Learning Objectives	List of Contents	Method	Time
Behavioral science	<ul style="list-style-type: none"> • explain the concept of behavior, personality, trait, attitude, norms, value and healthy behaviors • explain the bio psychosocial model of health • state the importance of behavioral science in clinical practice • state the effective way to change behavior • mention means of good behavior with patient 	<ul style="list-style-type: none"> • Concept of behavior, personality, trait, attitude, norms, value and healthy behaviors • Bio psychosocial model of health • Importance of behavioral science in clinical practice • Effective way to change behavior • Means of good behavior with patient 	Interactive Lecture Or Seminar	One and half hour
Medical Sociology	<ul style="list-style-type: none"> • explain the term sociology & medical sociology • explain the importance and use of medical sociology • relate between culture and health • mention effect of sociology on health 	<ul style="list-style-type: none"> • The terminology: sociology & medical sociology • Importance and use of medical sociology • Relation between culture and health • Effect of sociology on health 	Interactive Lecture Or Seminar	One and half hour
Etiquette in using of Social Medias	<ul style="list-style-type: none"> • define etiquette use of Social Medias • explain current data on abuse of Social Medias • describe the importance of Social Medias in medical education • mention the importance of etiquette in using of Social Media • explain the ways of the etiquette in using Social Media 	<ul style="list-style-type: none"> • Definition of etiquette • Current data on abuse of Social Media • Importance of Social Media in medical education • Importance of etiquette in using of Social Medias • Ways of the etiquette in using Social Medias 	Interactive Lecture Or Seminar	One and half hour

Topics	Learning Objectives	List of Contents	Method	Time
Self-directed learning including	<ul style="list-style-type: none"> • explain the terminology: self-directed learning and team learning 	<ul style="list-style-type: none"> • The terminology: self-directed learning and team learning 	Interactive Lecture Or Seminar	One and half hour
team learning	<ul style="list-style-type: none"> • mention the advantages and disadvantages of self-directed and team learning • mention the strategies for effective self-directed and team learning • describe the means of better learning and examination performance in MBBS course 	<ul style="list-style-type: none"> • Advantages and disadvantages of self-directed and team learning • Strategies for effective self-directed and team learning • Means of better learning and examination performance in MBBS course 		
Medical ethics	At the end of the session students will be able to- <ul style="list-style-type: none"> • explain the concept of medical ethics • explain the principles, relevance and important issues of medical ethics • state the Hippocratic oath, the International code of medical ethics, the Declaration of Geneva and Important ethical codes of BMDC for a medical doctor 	<ul style="list-style-type: none"> • Concept of medical ethics, principles, purpose/ importance and issues/ example of medical ethics • Hippocratic oath • International code of medical ethics • Declaration of Geneva • Ethical codes of BMDC for medical doctors 	Interactive Lecture Or Seminar	One and half hour

Integrated Teaching in Phase-I

Teachers of all departments of Phase -I (Anatomy, Physiology & Biochemistry) must be present during these integrated sessions along with the concerned faculties those are mentioned in the column four in the table below. Teachers will be the speakers/facilitators in each session. The students must actively participate in these sessions and have to submit the summary of each session to the concerned teacher/department as their assignments. This assignment will be a part of practical note book in the summative assessment. Students need to get some 'take home message' from every session. Schedule for integrated teaching session will be set at the phase I committee meeting in collaboration with medical education unit (MEU).

Total 36 hours. Each session will be for 3 hour.

A) Term-I:

- Coronary artery disease
- Chronic obstructive pulmonary disease (COPD)
- Anaemia
- Jaundice

B) Term-II:

- Diarrhea
- Diabetes Mellitus (DM)
- Electrolyte imbalance
- Proteinuria

C) Term-III:

- Thyroid disorder
- Cerebro-vascular disease (CVD)
- Deafness
- Errors of refraction

Term I

Topics	Learning Objectives	Core content	Discipline involved
Coronary artery disease	At the end of the session the student will be able to: <ul style="list-style-type: none"> • explain the pattern of artery supply of heart • describe the coronary circulation and regulation • explain the appearance & disappearance of cardiac markers with oxygen supply to heart • correlate the knowledge of blood supply of heart obtained in phase I in real life situation 	<ul style="list-style-type: none"> • Peculiarity of coronary circulation and its regulation • Balance between supply of blood and demand • Nerve supply of heart and nature of referred pain • ECG changes in ischemic disease • Enumerate appearance and disappearance of cardiac markers following ischemic change of coronary artery 	Department of Anatomy/ Physiology/ Biochemistry/ Internal Medicine/ Cardiology/ Pathology Time: 3 hours
Chronic obstructive pulmonary disease (COPD)	At the end of the session the student will be able to: <ul style="list-style-type: none"> • explain the structure and function of respiratory tract • interpret results of spirometry in relation to COPD • differentiate obstructive lung disease from restrictive lung disease • explain the mechanism of acid-base balance, change of pH and PCO₂ in COPD patient • correlate the knowledge of respiratory mechanism in COPD patient obtained in phase I in real life situation 	<ul style="list-style-type: none"> • Different type of epithelium & its specific requirement of that location • Respiratory membrane and factors affecting transport of gases • Spirometry- Pulmonary volume and capacities • Acid-base status in COPD • Change of pH in COPD patient • Mechanism of increased PCO₂ in COPD patient 	Department of Anatomy/ Physiology/ Biochemistry/ Internal medicine/ Respiratory medicine Time: 3 hours
Anaemia	At the end of the session the student will be able to: <ul style="list-style-type: none"> • Define and classify anaemia • Explain role of Hb and RBC in anemia • Interpret red blood cell indices 	<ul style="list-style-type: none"> • Anaemia: Definition, classification • RBC: Erythropoiesis • Haemoglobin: Synthesis, types, functions • Red blood cell indices • Biochemical basis of different types of anaemia 	Department of Anatomy/ Physiology/ Biochemistry/ Internal medicine/ Haematology Time: 3 hours
Jaundice	At the end of the session the student will be able to: <ul style="list-style-type: none"> • mention structural and functional orientation of hepatocytes • state the steps of bilirubin metabolism • differentiate conjugated & unconjugated bilirubin • define & classify jaundice based on biochemical findings • correlate the knowledge of hepato-biliary system and metabolism obtained in phase I in real life situation 	<ul style="list-style-type: none"> • Role of specific orientation of hepatocyte • Relation of intrahepatic biliary tree and hepatocyte • Steps of bilirubin metabolism • Conjugated & unconjugated bilirubin • Jaundice based on biochemical findings 	Department of Anatomy/ Physiology/ Biochemistry/ Internal Medicine/ Haematology Time: 3 hours

Term II

Topics	Learning Objectives	Core content	Other discipline involved
Diarrhea	At the end of the session the student will be able to: <ul style="list-style-type: none"> • explain pattern and function of enteric nerve supply • explain movement of GIT with automatic effect on it • correlate the consequences of diarrhea 	<ul style="list-style-type: none"> • Enteric nervous system • Gastro-enteric gland distribution • Movements of GIT • Volume disorder occurs in diarrhea • Dehydration in children in diarrhea • Consequence of dehydration 	Department of Anatomy/ Physiology/ Biochemistry/ Internal Medicine/ Gastro-enterology/ Paediatrics/Microbiology/ Pharmacology Time: 3 hours
Diabetes Mellitus (DM)	At the end of the session the student will be able to: <ul style="list-style-type: none"> • mention the structure and functional relation of Islet of Langerhans • describe structure, mechanism of action, regulation of secretion of insulin • explain pathophysiologic effect of insulin deficiency • explain the metabolism of glucose and changes in DM • develop skill in laboratory diagnosis of DM 	<ul style="list-style-type: none"> • Structure and function of Islet of Langerhans • Islets of Langerhans of pancreas hormones, functions, mechanism of action, regulation of secretion • Pathophysiology of insulin deficiency • WHO criteria of laboratory diagnosis of DM • Interpretation of OGTT • Metabolic derangement in DM 	Department of Anatomy/ Physiology/ Biochemistry/ Internal Medicine/ Endocrinology Time: 3 hours
Electrolyte imbalance	At the end of the session the student will be able to: <ul style="list-style-type: none"> • explain homeostatic function of kidney for the regulation of electrolytes • correlate normal electrolyte level, its deviation & consequences of deviation 	<ul style="list-style-type: none"> • Homeostatic function of kidney • Regulation of electrolytes by hormones acting on kidney • Laboratory result of electrolyte profile • Consequences of different types of electrolytes imbalance 	Department of Physiology/ Biochemistry/ Internal Medicine/ Nephrology/ Anesthesiology Time: 3 hours
Proteinuria	At the end of the session the student will be able to: <ul style="list-style-type: none"> • describe glomerular membrane, GFR, effective filtration pressure • correlate the structure and function of filtration membrane Explain consequences of proteinuria. <ul style="list-style-type: none"> • explain consequences of proteinuria. 	<ul style="list-style-type: none"> • GRF: definition, determinants and control • Normal reabsorption process in kidney • Proteinuria: Detection, pathophysiology of developing proteinuria, important causes 	Department of Anatomy/ Physiology/ Biochemistry/ Internal Medicine/ Nephrology/ Paediatrics Time: 3 hours

Term III

Subject	Learning Objectives	Core content	Other discipline involved
Thyroid disorder	At the end of the session the student will be able to: <ul style="list-style-type: none"> • mention structure of thyroid gland • describe biosynthesis, storage, release, transport, mechanism of action, function and regulation of secretion of thyroid hormone • explain the importance iodine in thyroid hormone synthesis • interpret the thyroid function test 	<ul style="list-style-type: none"> • Structure of thyroid gland • Thyroid hormone biosynthesis, storage, release, transport, mechanism of action, function and regulation of secretion of thyroid hormone • Thyroid disorders: hypo and hyperthyroidism, cretinism, myxoedema and goitre • Importance of iodine in thyroid hormone synthesis • Thyroid function tests with their interpretation 	Department of Anatomy/ Physiology/ Biochemistry/ Internal medicine/ Endocrinology Time: 3 hours
Cerebro-vascular disease (CVD)	At the end of the session the student will be able to: <ul style="list-style-type: none"> • explain the blood supply of CNS • explain the pattern and functioning of blood brain barrier • explain effect of UMN & LMN lesion • interpret deep & superficial reflexes • correlate the knowledge of blood supply of CNS obtained in phase I in real life situation 	<ul style="list-style-type: none"> • Peculiarity of artery supply of CNS • Blood brain barrier • Ascending and descending tracts: name and functions. • UMN & LMN: definition, effect of lesion • Role of dyslipidemia in developing CVD. 	Department of Anatomy/ Physiology/ Biochemistry/ Internal medicine/ Neurology Time: 3 hours
Deafness	At the end of the session the student will be able to: <ul style="list-style-type: none"> • explain the role of different organs of hearing • explain sound wave transmission, excitation of auditory receptors, auditory pathway • interpret the result of Rinne test & Weber test. 	<ul style="list-style-type: none"> • Role of different parts/organs in hearing • Hearing: receptor, mechanism of sound wave transmission, auditory pathway. 	Department of Anatomy/ Physiology/ Biochemistry/ Otolaryngology Time: 3 hours
Errors of refraction	At the end of the session the student will be able to: <ul style="list-style-type: none"> • Summarise the structure of eye ball, refractive media, refractive index, diaptor, refractive power of cornea & lens, • types, causes of errors of refraction and their correction 	<ul style="list-style-type: none"> • Structure of eye ball • Vision: image formation in the eye, visual pathway, common errors of refraction. 	Department of Anatomy/ Physiology/ Biochemistry/ Ophthalmology Time: 3 hours



On World Teachers' Day 2023 felicitating to Dr. Mohammad Sheran, Associate Professor, Department of Microbiology, for being the 5th best teacher nationally and 1st best teacher at the private medical level. Along with Honorable Vice-Chancellor of Chittagong Medical University Dr. Md. Ismail Khan, the honorable chairman of the Executive Committee (DESH) Prof. Dr. Qazi Deen Mohammad, Secretary Professor Dr. Md. Muslim Uddin, chairman of the governing body Prof. Md. Nurunnabi and college principal Prof. Dr. Md. Tipu Sultan, Hospital Director Professor Md. Amir Hossain and other guests were presents the program.



Congratulations to those who obtained honors marks in various subjects in the MBBS professional examination held under Chittagong Medical University.

Chattagram International Medical College

Academic Calendar

MBBS Phase- 1 (June 2024 to November 2025)

June

Sat	Sun	Mon	Tue	Wed	Thu	Fri
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

July

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
		1	2	3	4	5	31					1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28	29	30

August

September

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
	1	2	3	4	5	6	1st Term Preparatory Leave + Exam	6	7	8	9	10	11
7	8	9	10	11	12	13	5	6	14	15	16	17	18
14	15	16	17	18	19	20	12	13	21	22	23	24	25
21	22	23	24	25	26	27	19	20	28	29	30	31	
28	29	30					26	27					

October

November

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
30						1		1	2	3	4	5	6
2	3	4	5	6	7	8	7	8	9	10	11	12	13
9	10	11	12	13	14	15	14	15	16	17	18	19	20
16	17	18	19	20	21	22	21	22	23	24	25	26	27
23	24	25	26	27	28	29	28	29	30	31			

December

January

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
				1	2	3	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28
25	26	27	28	29	30	31							

February

April

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
1	2	3	4	5	6	7				1	2	3	4
8	9	10	11	12	13	14	5	6	7	8	9	10	11
15	16	17	18	19	20	21	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25
29	30	31	2nd Term Preparatory Leave + Exam										
							26	27	28	29	30		

June

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
31					1	2		1	2	3	4	5	6
3	4	5	6	7	8	9	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28	29	30				

August

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
			1	2	3	4		31					1
5	6	7	8	9	10	11		3	4	5	6	7	8
12	13	14	15	16	17	18		10	11	12	13	14	15
19	20	21	22	23	24	25		17	18	19	20	21	22
26	27	28	29	30	31			24	25	26	27	28	29

October

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
Preparatory Leave &													
6	7	8	9	10	11	12	4	5	6	7	8	9	10
13	14	15	16	17	18	19	11	12	13	14	15	16	17
20	21	22	23	24	25	26	18	19	20	21	22	23	24
27	28	29	30	Term-III Examination				25	26	27	28	29	30
Preparatory Leave for 1st Professional Examination													
							2	3	4	5	6	7	8
31													

December

Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
1	2	3	4	5	6	7			1	2	3	4	5
8	9	10	11	12	13	14		7	8	9	10	11	12
15	16	17	18	19	20	21		14	15	16	17	18	19
22	23	24	25	26	27	28		21	22	23	24	25	26
29	30	1st Professional Examination & Result Publication											
								28	29	30	31		

2024: 1st June- Class Start*, 15th June to 25th June- Eid-ul-Azha, 17th July- Ashura, 21st July- Ashary Purnima, 15th August- National Mourning Day, 16th September- Eid-e-Miladunnabi, September- Preparatory Leave & Term-III Examination, 10th-12th October- Durga Puja, October- Preparatory Leave for 1st Professional Examination, November- 1st Professional Examination & Result Publication, 16th December- Victory Day, 25th December- Christmas Day.

November- 1st Professional Examination & Result Publication, 10th December- Christmas Day, 23rd December- Christmas Day.
2025: 21th February- International Mother Language Day, 13th March- Doljatra, 7th March- Bangabandhu's Historic Speech, 17th March- Bangabandhu's Birthday, 26th March- Independence Day, 28th March-10th April- Eid-ul-Fitr, 14th April- Bengali New Year, 1st May- Labour Day, 5th May- Buddha Purnima, 5th June- Eid-ul-Adha, 9th July- Ashura, 15th April- National Mourning Day, 5th September- Eid-e-Miladunnabi, September- Preparatory Leave & Term-III Examination, 2nd-4th October- Durga Puja, October- Preparatory Leave for 1st Professional Examination, November- 1st Professional Examination & Result Publication, 16th December- Victory Day, 25th December- Christmas Day.

Legend: ● Holiday ● Preparatory Leave & Term-I Examination ● Professional Examination

Department of Anatomy & Histology

Faculty Members



Professor (Dr.) Mohd. Habib Khan
Professor & Head



Dr. Towhida Naheen
Associate Professor



Dr. Sonia Sultana
Assistant Professor



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Lecturer



Dr. Abul Hasnat
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Dr. Abu Zubaer
Lecturer



Dr. Md. Nurnabi Islam
Lecturer



Dr. Md. Jamir Uddin
Lecturer

Distribution of Teaching-Learning Hours

Lecture	Tutorial	Practical (Histology)	Demon- stration +Dissec- tion+Card exam	Total Teaching hours	Integ- rated teaching for phase I	Formative Exam		Summative Exam	
						Preparatory leave+ post term leave	Exam time	Preparatory leave	Exam time
115 hrs	53 hrs	52 hrs	307 hrs	527 hrs	36 hrs	21+14= 35 days	42 days	30 days	30 days
<i>Time for integrated teaching, examination, preparatory leave of formative & summative assessment is common for all subjects of the phase</i>									
Related behavioral, professional & ethical issues will be discussed in all teaching learning sessions									

Teaching-Learning methods, teaching aids and evaluation

Teaching Methods			Teaching aids	In course evaluation
Large group	Small group	Self learning		
Lecturer Integrated teaching	Tutorial Practical Demonstration Dissection	Self-study & self-assessment	Computer/Laptop & Multimedia OHP, Transparency & Transparency marker White board & different coloured white board markers Black board & white and coloured chalks Cadavers, prosected parts, bones, viscera Histological slide, Microscope & Projection microscope Projection system and Virtual anatomy dissection table	<ul style="list-style-type: none"> • Item Examination • Card Examination • Term Final Examination (written, oral+ practical)

Related Equipments: Flip Chart, Photograph, Model, X-ray films (CT scan and other imaging films), View box, Diagram, Preserved Specimens, Living body for surface marking, Simulator, various Projection system and Virtual anatomy dissection table.

1st Professional Examination:

Marks distribution of Assessment of Anatomy Total Marks- 500

• Written=200 (Formative 20+MCQ (SBA+MTF) 40+(SAQ + SEQ)140) • SOE=150 • Practical = 150

Academic Calendar

Class/Exam	Hours (including class exam hrs)	First Term (14 working weeks)		Evaluation & Leave 04 weeks	Second Term (15 working weeks)		Evaluation & Leave 04 weeks	Third Term (14 working weeks)	
Lecture & Review	115	* General Anatomy	12 hrs		* General Histology	10 hrs		* General Histology	02 hrs
		* Human Genetics	02 hrs		* Systemic Histology	14 hrs		* Systemic Histology	02 hrs
		* General Histology	08 hrs		* General Embryology	05 hrs		* Systemic Embryology	07 hrs
		* Systemic Histology	02 hrs		* Systemic Embryology	17 hrs		* Neuroanatomy	18 hrs
		* General Embryology	13 hrs		* Neuroanatomy	02 hrs			
		* Neuroanatomy	01 hrs						
Tutorial/ Review	53	* Thorax Card	11 hrs	Evaluation & Leave 04 weeks	* Abdomen Card	14 hrs	Evaluation & Leave 04 weeks	* Head & Neck	09 hrs
		* Sup Ext Card	08 hrs		* Inf Ext Card	07 hrs		* CN & Eyeball	04 hrs
Dissection & Demonstration	307	* Thorax Card	32 hrs		* Abdomen Card	83 hrs		* Head & Neck	74 hrs
		* Sup Ext Card	33 hrs		* Inf Ext Card	33 hrs		* CN & Eyeball	35 hrs
Card Comple- tion Exam		* Thorax Card	06 hrs		* Abdomen Card	06 hrs		* Head & Neck	05 hrs
		* Sup Ext Card	01 hrs		* Inf Ext Card	01 hrs		* CNS & Eyeball	01 hrs
Cell Biology & Histology Tutorial/Practical	52	* Card-1	17 hrs		* Card-2	17 hrs		* Card-3	18 hrs
Grand Total	527								

1. Evaluation & preparatory leave for first prof-08 weeks
2. Evaluation & preparatory leave for third term; 03 weeks

N.B. Card completion examinations will be arranged on discussion with other departments (Physiology, Biochemistry)
Prerequisite for 1st professional examination

1. A Student must pass all term exam before appearing 1st professional exam
2. Class attendance must be 75% Minimum

Lecture - 115 hours
Cell biology & Histology - 52 hours
(Practical)

Dissection & Demonstration
Card Completion Examination } 307 hours

Tutorial - 53 hours
Total - 527 hours

Date	Programme
5th June	Orientation Programme
6th June	Regular Classes as per schedule

Term Duration	Classes	Subjects	Term Exam
1st Term	Lecture	* General Anatomy	October'24
		* General Histology	
		* General Development Anatomy	
	Practical	* Cards - Thorax & Superior Exterimity	
		* Card - General Histology	
2nd Term	Lecture	* General Anatomy	March'25
		* Systemic Histology	
		* Systemic Developmental Anatomy	
	Practical	* Card-Abdomen & Inferior Exterimity	
		* Card-Systemic Histology	
3rd Term	Lecture	* Systemic Histology	September'25
		* Systemic Developmental Anatomy	
		* Neuroanatomy	
	Practical	* Cards-Head and Neck & C.N.S with	
		* Cards-Systemic Histology	
Revision time : October'25			
Preparatory leave : October'25			

1st Professional MBBS Examination will be held in November'25

75% attendance is mandatory separately in lecture, dissection, tutorial and histology practical.

Passing the 3 term exam with atleast 60% pass mark in compulsory.

Term	Card	Dissection & Demonstration	Tutorial Review			Part Completion Examination	Total Hours
			Living (surface) Anatomy	Anatomy of radiology & Images	Clinical Anatomy		
First Term	Thorax	34	6	1	3	1	45
	Superior Exterimity	33	4	2	3	1	43
Second Term	Abdomen	89	6	1	6	1	103
	Inferior Exterimity	33	4	2	2	1	42
Third Term	Head, Neck Central	77	4	2	3	1	87
	Nervous System and Eye ball	35	00	1	3	1	40
Grand Total Hours		301	24	9	20	6	360

Time allocation in anatomy

Lecture & Review - 115 hours

Term	Genral Anatomy Hours	Cell Biology Hours	General Histology Hours	Systemic Histology Hours	General Embryology Hours	Systemic Embryology Hours	Neuro Anatomy Hours	Human Genetics Hours	Total Hours
First Term	12	06	10	02	13	-	01	02	46
Second Term	-	-	02	14	05	17	02	-	40
Third Term	-	-	02	02	-	07	18	-	29
Grand Total Hours (Class+ Exam)	12	06	14	18	18	24	21	02	115

Cell Biology & Histology- Tutorial & Practical- 52 hours

Term	Class Hours (Including Item Exam hours)	Card Completion Exam Hours	Total Hours
First Term (Card-1)	15	2	17
Second Term (Card-2)	15	2	17
Third Term (Card-3)	16	2	18
Grand Total Hours	46	6	52

Topics of ANATOMY & HISTOLOGY

Lecture : 115 Hrs

1st TERM

S.L	Topics	Hrs	S.L	Topics	Hrs
1	Anatomical terms & planes & position, definition of Anatomy. Its sub division & its importance.	2	12	Introduction & Terminologies of embryology	1
2	Skeletal System Bones; Its classification, Composition, Properties, functions, parts & blood supply of a developing long bone, periosteum Ossification-definition, processes.	3	13	Cell divisions	1
3	Joint- Classification with examples, characteristics, movement, function, stability.	2	14	Gametogenesis & maturation of germ cells	2
4	Cell biology	6	15	Fertilization	1
5	Epithelial tissue	4	16	1st week of development including implantation	1
6	Connective Tissue - General	2	17	2nd week of development	2
7	Connective Tissue - Special - Cartilage	1	18	3rd week of development	2
8	Connective Tissue - Special - Bone	2	19	Germ layers & their derivatives	2
9	Muscle - characters, classification	1	20	Teratology & Fetal	1
10	Muscle - types & histology	2	21	Applied aspect - infertility, IVF, Amniocentesis, chorionic villus sampling	2
11	Respiratory system	1	22	Development of respiratory system	1

2nd TERM

S.L	Topics	Hrs	S.L	Topics	Hrs
1	Blood vessel	3	8	Muscular skeletal system development	2
2	Digestive system	3	9	Body cavities & diaphragm development	1
3	Urinary system	2	10	Digestive system with glands development	3
4	Male reproductive system	2	11	Limbs development	1
5	Female reproductive system	2	12	Urinary system development	2
6	Placenta & fetal membranes	1	13	Reproductive system development	3
7	Twins	1			

3rd TERM

S.L	Topics	Hrs	S.L	Topics	Hrs
1	Cardiovascular system development	3	14	Brain stem	2
2	Development Head & Neck structures	3	15	Cerebellum	1
3	Nervous system development	2	16	Cerebrum	2
4	Glands - pituitary & adrenal gland development	1	17	Autonomic Nervous system	2
5	Eye & ear development	1	18	Spinal cord	3
6	Exocrine gland	2	19	Meninges, CSF, ventricles	2
7	Endocrine gland	1	20	Diencephalon	1
8	Lymphoid system	2	21	Limbic system & reticular system	1
9	Neurobiology	2	22	Basal ganglia	1
10	Nervous tissue	1	23	Functional columns & cranial nerve nuclei	2
11	Special sense organ	1	24	Olfactory, auditory & visual pathway	1
12	Skin	1	25	Visual reflexes	2
13	Classification of nervous system & nerve fibers, receptors & synapse	1	26	Blood supply of nervous system	1
			27	Genetics	5

Assessment In Anatomy

Component	Marks	Total Marks
Formative Assessment	10+10	20
WRITTEN EXAMINATION		
paper: I- MCQ (SBA+MTF)	20	180
(SAQ+SEQ)	70	
paper: II- MCQ (SBA+MTF)	20	
(SAQ+SEQ)	70	
ORAL EXAMINATION (Structured)		
Board I	75	150
Board II	75	
PRACTICAL EXAMINATION	Board IBoard II	
Objective structured practical Exam (OSPE)	3030	75+75
Dissection	1015	
Anatomy of Radiology and imaging	1010	
Lucky slides	1010	
Living Anatomy	1010	
Practical Khata	05-	
	Grand Total	500

- Topics: Board I: CNS & Eyeball, Head & Neck, Thorax (Gross anatomy, Clinical anatomy, Histology, Embryology). Cell biology & Genetics. General Histology: Epithelial Tissue, Nervous Tissue, General Anatomy: Angiology, Neurology.
Board II: Abdomen, Inferior & Superior Extermity (Gross anatomy, Clinical anatomy, Histology, Embryology).
General Embryology. General Histology: Connective Tissue, Muscle Tissue General Anatomy: Osteology, Arthrology, Myology.
- Each student will appear in Board I & Board II in separate date/day for oral and practical examination
- Pass marks 60% in each of theoretical, oral and practical examination

Sample Questions for Anatomy

MCO (write T for true and F for false)

01. Contents of middle mediastinum

- a) Heart (T)
- b) Vagus nerve (T)
- c) Thymus (F)
- d) Phrenic nerve (T)
- e) Proximal part of pulmonary trunk (T)

Single best answer:

The chief extensor of hip joint is:-

- a) Gluteus Maximus (T)
- b) Semitendinosus
- c) Semimembranosus
- d) The long head of Biceps femoris
- e) Sartorius

SAQ

How superior vena cava is formed?

Where it drains?

How base and apex of heart is formed? (1+1+3)

SEQ

Write briefly on Appendix emphasizing the following point: (2+1+2)

- a) Normal position of appendix with percentage.
- b) Arterial supply of appendix
- c) Mc Burney's points and its important.

Problem Based Question

04. A 25 years old medical student came to surgical OPD of a hospital with the history of acute colicky pain around the umbilicus, before and vomiting a day before and now he was feeling pain in the region of right iliac fossa. On examination, the surgeon found the area of maximum tenderness at Mc Burney's point and guarding of the anterior abdominal wall in the region of right iliac fossa.

- 01. What can be the pain due to in the right iliac fossa? (1)
- 02. What is Mc Burney's point and what is its clinical significance? (2)
- 03. Why pain is usually felt around umbilicus first? (2)

Book-List

S.L	Discription	Book	Reference
01	Dissection & Regional Anatomy	Text Book	Cunningham Manual of Practical anatomy current edition Human Anatomy- Vol-1,2,3 by Vishram Singh * Regional Anatomy Volume 1, 2, 3, BD Chaurasia
02	Gross Anatomy	Text Book	Clinical Anatomy for Medical Student Richard S. Snell Current Edition Clinical anatomy by Neeta kulkarni
		Reference book	Gray's Anatomy Current Edition Gray's Anatomy Student Edition Grant's Atlas of Anatomy Current Edition Netters Atlas of Anatomy Current Edition
03	Neuroanatomy	Text Book	Clinical Neuroanatomy for Medical Students Richard S.Snell Current Edition
		Reference book	Neuroanatomy By Vishram Singh-Current Edition
04	Histology	Text Book	1. Basic Histology-Junquera Current Edition 2. Text Book of Human Histology by Gunasengaram 3. Atlas of Histology-di Fiore's current Edition
		Reference book	1. Histology-Text & Atlas by Ross 2. Weater's Functional Histology-A Text & colour atlas.
05	Embryology	Text Book	Langman's Medical Embryology-T.W. Sadler Current Edition Human Embryology by Vishram Singh
		Reference Book	Medical Embryology-Keigh L. Moore Current Edition Human Embryology-A.k. Dutta current Edition
06	General Anatomy	Text Book	General Anatomy by B.D. Chaurasia Current Edition General Anatomy By Vishram Singh Current Edition
07	Radiology & Surface Anatomy	Text Book	Essentials of Surface Anatomy & Radiology By-V. Kapoor & R.K Suri Surface & Radiological Anatomy By A. Halim
08	Genetics	Text Book	Emery's elements of Medical geneties by Rovert F. Mueel, Ian D. yong Genetics By A.K Dutta, Current Edition

All of these books are available at Central Library of CIMC
Students are advised to purchase book after consulting
with teachers of respective department.

Department of Physiology

Faculty Members



Prof. Dr. Asma Kabir Shoma
Professor & Head



Dr. Sharmin Jahan
Assistant Professor



Dr. Jawairia Rajwana
Assistant Professor



Dr. Sayeda Mokaddesa Ahmed
Lecturer



Dr. Zahirul Islam
Lecturer



Dr. Imranul Hoque Shakib
Lecturer



Dr. Mohammad Shaif Uddin
Lecturer



Dr. Abrar Fuad
Lecturer



Dr. Samia Islam Nipun
Lecturer

Departmental Objectives

At the end of the course in physiology the **MBBS** students will be able to:

- Demonstrate basic knowledge on the normal functions of human body and apply it as a background for clinical subjects.
- Explain normal reactions to environment and homeostatic mechanism.
- Interpret normal function with a view to differentiate from abnormal function.
- Demonstrate knowledge & skill for performing and interpreting physiological experiments.
- Develop knowledge and skill to proceed to higher studies and research in physiology in relation to need and disease profile of the country.
- Develop sound attitude for continuing self-education to improve efficiency & skill in physiology.

List of Competencies to acquire :

Medical courses in physiology teach the essentials of the processes of life.

The physiology courses are very clinically relevant because the knowledge of the processes underlying the normal physiological functions of all the major organ systems is crucial for understanding pathology, pharmacology, and for competent clinical practice. In fact, all of medicine is based on understanding physiological functions.

In the process of completing these courses, students acquire the following competencies:

- Describe transport across the plasma membrane, the basis of resting membrane potential, the genesis and propagation of action potentials. Explain muscle excitation and contraction.
- Describe the heart and circulation and how the circulatory system functions as a dual pump and dual circulatory system with the knowledge of properties of cardiac muscle, cardiac cycle, hemodynamics, heart rate and blood pressure.
- Explain respiratory processes with the knowledge of structures, ventilation, diffusion, blood flow, gas transport, mechanics of breathing, and control of ventilation.
- Identify how the kidney plays an important role in the maintenance of homeostasis by regulating both the composition and volume of ECF compartment.
- Explain how the brain works at the neuronal systems level. The role of electrical & chemical signals in information transmission & processing. Brain circulation, metabolism, neurotransmitter release & receptors,
- Describe the physiological mechanism underlying sensory perception, motor control & maintenance of homeostasis as well as higher cortical functions. Understanding autonomic nervous system.
- Describe endocrine physiology: describe the synthesis, secretion, functions & mechanism of action of the endocrine hormones.
- Explain human reproduction, functional changes in the reproductive tract, the formation of sperm & ovum, fertilization & hormonal regulation of fertility, role of hormones in pregnancy, parturition & lactation.
- The students will be able to equip themselves with adequate knowledge and develop skill for performing physiology laboratory tests and interpreting these normal functions with a view to differentiate from abnormal conditions. such as
- Measurement of blood pressure
- Examination of radial pulse.
- Recording & analysis of normal ECG (electrocardiogram) (12 Lead).
- Auscultation of heart sounds, breath sounds & bowel sound.
- Estimation of Hb concentration.
- Estimation of total count of red blood cell (RBC).
- Estimation of total and differential count of white blood cell (WBC).
- Determination of bleeding time & clotting time.
- Determination of blood grouping & cross matching.
- Determination of erythrocyte sedimentation rate (ESR).

- Determination of packed cell volume.
- Measurement of pulmonary volumes & capacities.
- Examination of urine for volume, specific gravity/osmolality and water diuresis.
- Elicitation of reflexes (e.g., knee jerk, ankle jerk, planter response, biceps jerk, triceps jerk).
- Recording of body temperature.
- Elicitation of light reflex.
- Interpretation of Snellen's chart and colour vision chart.
- Conduction and interpretation of Rinne test.
- Conduction and interpretation of Weber test.

Organization of the Course:

The course is offered in 3 terms (1st, 2nd & 3rd) total one & half years for phase -I MBBS Course.

Distribution of teaching - learning hours

Lecture	Tutorial	Practical	Total Teaching hours	Integrated teaching for Phase I	Formative Exam		Summative Exam	
					Preparatory leave	Exam time	Preparatory leave	Exam time
120 hrs	120 hrs	97 hrs	337 hrs	36 hrs	35 days	42 days	30 days	30 days
<i>Time for integrated teaching, examination, preparatory leave of formative & summative assessment is common for all subjects of the phase</i>								
Related behavioral, professional & ethical issues will be discussed in all teaching learning sessions.								

Teaching/learning methods, teaching aids and evaluation

Teaching methods			Teaching aids	In course evaluation
Large group	Small group	Self learning		
Lecture Integrated teaching	Tutorial Practical Demonstration	Assignment, self assessment & self study	Computer & Multimedia & other IT materials Chalk & board White board & markers OHP Slide projector Flip Chart Models Specimens projector Study guide & manuals.	Item examination (oral) Practical item examination (Oral & practical) Card completion examination (written) Term final Examination (Written, oral & practical)

1st Professional Examination:

Marks distribution of Assessment of Physiology

Total marks - 400 (Summative)

- Written = 200 (SAQ + SEQ) 140 + MCQ (SBA+MTF) 40+Formative 20)
- SOE = 100
- Practical = 100 (OSPE40 + Traditional 50 +Note Book 10)

Related Equipments:

Microscope, test tube, glass slide, centrifuge machine, micro pipette, chemicals & reagents, Sphygmomanometer, Stethoscope, ECG machine, Spirometer, Peak flow meter, Urinometer, clinical hammer, cotton, pin, clinical thermometer, spirit, pencil torch, Ishihara charts, Snellen's chart, tuning fork, models, specimens, Haemocytometer, Shahlis haemometer, haematocrit tube, westergren ESR tube & ESR stand etc.

Academic Calendar

Date	Program
5th June 2024	Regular Classes as per schedule

Term & Duration	Classes	Topics	Term Examination
1st Term	Lecture	Cellular Physiology	October '24
		Physiology of Blood	
		Cardiovascular Physiology	
	Tutorial & Practical	Cellular Physiology	
		Physiology of Blood	
		Cardiovascular Physiology	
2nd Term	Lecture	Respiratory Physiology	March '25
		Gastrointestinal Physiology	
		Renal Physiology	
	Tutorial & Practical	Respiratory Physiology	
		Gastrointestinal Physiology	
		Renal Physiology	
3rd Term	Lecture	Endocrine Physiology	September '25
		Physiology of Reproduction	
		Neurophysiology	
		Physiology of Body Temperature	
		Physiology of Special Senses	
	Tutorial & Practical	Endocrine Physiology	
		Physiology of Reproduction	
		Neurophysiology	
		Physiology of Body Temperature	
		Physiology of Special Senses	
October '25 November '25		Revision classes + Preparatory leave 1st Professional MBBS Examination	

Academic Calendar for physiology

		1st Term		2nd Term		3rd Term	
Teaching/ Learning Method	Teaching hours including examination	20 working weeks	E V A L U A T I O N & L E A V E 4 W E E K S	20 working weeks	E V A L U A T I O N & L E A V E 4 W E E K S	18 working weeks	E V A L U A T I O N & L E A V E 4 W E E K S
Lecture	120 Hours	GP- 05 hours Blood- 15 hours CVS- 18 hours		Respiratory Physiology- 12 hours GIT- 10 hours Renal- 12 hours		Endocrine & Reproduction- 20 hours Nervous system & Body Temp 20 hours Special Senses- 08 hours	
Tutorial	120 Hours	GP- 06 hours Blood- 16 hours CVS- 18 hours		Respiratory Physiology- 14 hours GIT- 08 hours Renal- 10 hours		Endocrine & Reproduction- 20 hours Nervous system & Body Temp 20 hours Special Senses- 08 hours	
Practical	97 Hours	GP- 02 hours Blood- 36 hours		Blood- 09 hours CVS- 18 hours GIT- 02 hours		Respiration-08 hours, Renal- 02 hours Endocrine- 02 hours Neuro physiology- 08 hours Body temp- 02 hours Special Senses- 08 hours	

Distribution of Teaching Hours

	Systems	Lecture Hours	Tutorial Hours	Practical Hours	Intergated teaching hours
1	Cellular Physiology	5	6	2	
2	Physiology of Blood	15	16	45	1
3	Cardiovascular Physiology	18	18	18	2
4	Respiratory Physiology	12	14	8	1
5	Gastrointestinal Physiology	10	8	2	2
6	Renal Physiology	12	10	2	1
7	Endocrine Physiology & Physiology of Reproduction	20	20	2	2
8	Neurophysiology & Physiology of Body Temperature	20	20	10	2
9	Physiology of Special Senses	08	8	8	1
	Total	120	120	97	12

Time allocation in Physiology in different term

Term	Lecture hours	Tutorial hours	Practical hours	Integrated teaching hours	Total hours
1st Term	38	40	35	03	113
2nd Term	34	32	32	04	98
3rd Term	48	48	30	03	126
Grand Total	120	120	97	10	337

Topics of Physiology

[1st TERM]

S.L	Topics	Lect.	Tute.	S.L	Topics	Lect.	Tute.
1	Physiology	1	1	16	WBC	1	1
2	Hemeostasis	1	1	17	Platelet	1	1
3	The cell	1	2	18	Hemostasis	2	2
4	The cell membrane transport	2	2	19	Coagulation	1	1
5	Membrane potential	1	1	20	Bleeding disorder	1	1
6	Action potential	2	2	21	Blood Clotting factors and Fibrinolysis	1	2
7	Mechanism of skeletal Muscle Contraction & relaxation	2	2	22	Blood grouping	1	1
8	Neuro muscular junction	2		23	Hazards of blood transfusion & Rh incompatibility	1	1
9	Blood: composition & functions	1	1				
10	Plasma proteins	1	1	24	Cardiac muscle Junctional tissues of the heart Generation and conduction of cardiac impulse	2	2
11	Development and normal values of formed elements	1	1	25	Cardiac cycle Heart sound ECG, Heart block	2	2
12	RBC	1	1	26	Blood vessels Blood Flow	1	1
13	Hemoglobin	1	1	27	Pulse (radial pulse) Heart rate, cardiac output Venous return SV, EDV, ESV, Ejection fraction	2	2
14	Red blood cell indices	1	1	28	Blood pressure Peripheral resistance	2	2
15	Anaemia, polycythemia & Janudice	2	2	29	Circulatory adjustment during exercise Cardiac arrhythmias Shock:	1	1
					Total	38	40

2nd TERM

S.L	Topics	Lect.	Tute.	S.L	Topics	Lect.	Tute.
1	Physiological anatomy of Respiratory system Pulmonary and alveolar ventilation Pulmonary volumes and capacities Dead space Lung function tests	3	3	7	Movement of the GIT GI reflexes Pyloric pump, Function of stomach, small intestine and large intestine	3	2
2	Composition of atmospheric, alveolar inspired and expired air. Respiratory unit, Respiratory membrane Pulmonary circulation Diffusion of Gases through the respiratory membrane. Ventilation- perfusion ration.	3	3	8	Functions of kidneys, Nephron Renal circulation	2	2
3	Oxygen and carbon dioxide transport, oxy-hemoglobin dissociation, curve, Bohr effect, Haldane effect, Chloride shift.	3	3	9	Urine formation GFR Auto regulation of RBF and GFR	2	2
4	Regulation of respiration	3	3	10	Renal tubular reabsorption and secretion Renal threshold, Plasma clearance Tubular load Plasma load Diuresis	3	3
5	Clinical aspects: Hypoxia, Cyanosis dyspnea hypercapnea & periodic breathing Oxygen therapy in hypoxia	3	3	11	Mechanism of formation of dilute and concentrated urine	3	2
6	Physiological anatomy of GIT Enteric nervous system Local hormones of GIT Neural and hormonal control of GI function	3	3	12	Micturition reflex Abnormalities of micturition	3	3
Total						34	32

3rd TERM

S.L	Topics	Lect.	Tute.	S.L	Topics	Lect.	Tute.
1	Endocrine glands Hormones	3	3	11	Sensory systems of the body	3	3
2	Hypothalamic hormones Pituitary hormones	3	3	12	Reflex, Muscle spindle Golgi tendon organ, Muscle tone	3	3
3	Thyroid hormones	3	3	13	Motor systems of the body	3	3
4	Hormones of Islets of Langerhan's of pancreas	3	3	14	Cerebellum	2	2
5	Adrenocortical Hormones	3	3	15	Basal Ganglia, Thalamus, CSF, Blood brain barrier	3	3
6	Parathyroid Hormones	2	2	16	Hypothalamus Body temperature	2	2
7	Introduction of reproductive physiology Male reproductive system	2	2	17	Automatic Nervous system	2	2
8	Female reproductive system	2	2	18	Vision	2	2
9	Placental hormones, Mammogenesis	2	2	19	Hearing	2	2
10	Major levels of central nervous system (CNS) Neuro, Nerve fiber, Synapse, Neurotransmitters	2	2	20	Smell Taste	2	2
Total						48	48

Summative Assessment of Physiology

(First Professional Examination)

Assessment Systems and mark distribution

Components	Marks	Total Marks	Contents
WRITTEN EXAMINATION Paper-1- Formative Assessment+ MCQ (SBA+MTF) SAQ+SEQ Paper-2- Formative Assessment+ MCQ(SBA+MTF) SAQ+SEQ	10+20+70=100 10+20+70=100	200	Paper-1 1. Cellular Physiology 2. Physiology of Blood 3. Cardiovascular Physiology 4. Respiratory Physiology 5. Grastrointestinal Physiology
PRACTICAL EXAMINATION OSPE Traditional Practical methods and experiments Practical Note Book	40 50 10	100	Paper-2 1. Renal Physiology 2. Endocrine Physiology & Physiology of Reproduction 3. Neurophysiology & Temperature Regulation 4. Physiology of Special Senses
ORAL EXAMINATION SOE (Structured Oral Examination) 2 boards	Board-1 = 50 Board-2 = 50	100	
Grand Total		400	

- Pass marks 60% in each of written, oral and practical.

Department of Physiology

Students In course Evaluation Card. (Card for card completion & Term final examination of Physiology for individual student)

Student name.....

Roll No.

Session

Year **Batch**

Date of starting

Date of ending

Components	Written		Oral		Practical		Remarks (Signature & Date)
	Full Marks	Marks Obtained	Full Marks	Marks Obtained	Full Marks	Marks Obtained	
Cellular physiology & Physiology of Blood	100						
Cardiovascular physiology	100						
Respiratory physiology	100						
Gastrointestinal Physiology & Renal physiology	100						
Endocrine physiology	100						
Physiology of Reproduction	100						
Neurophysiology Physiology of Special Senses	100						
1st Term	100		100		100		
2nd Term	100		100		100		
3rd Term	100		100		100		

Department of Physiology

Attendance Record

Components	Total Class held	Total Class attended	Percentage (Attended/Held)	Remarks (Signature & Date)
Lecture (120 hours)				
Tutorial (120 hours)				
Practical (97 hours)				
Integrated teaching (36 hours)				

Sample Question for Physiology

SAQ

Define & draw a synapse, State the sequence of events of neuromuscular transmission in a flow chart. (2+3)

SEQ

Answer the following questions:

- a) Define anemia. (1)
- b) Write down the etiological classification of anemia (2)
- c) Mention the clinical features of anemia. (2)
- d) How does deficiency of maturation factor cause megaloblastic anemia? (2)
- e) What are the changes found in RBC indices in iron deficiency anemia? (1)

MTF

Write 'T' if the statement is true and 'F' if false :

1. Shock may be compensated by		
T	a)	baroreceptor reflex
F	b)	chemoreceptor reflex
T	c)	CNS ischemic response
F	d)	decreased secretion of catecholamine
T	e)	increased secretion of ADH

SBA

Select and put a 'tick mark' on the best answer:

1. Gaseous exchange through the respiratory membrane increases due to		
	a)	increased thickness of the membrane
	b)	decreased surface area of the membrane
✓	c)	increased partial pressure difference of gases between two sides of the membrane
	d)	decreased solubility of gases
	e)	increased molecular weight of gas particlee

BOOK-LIST

S.L	Title	Author & Edition
1	Text Book of Medical Physiology	Guyton and Hall, 14th Edition
2	Ganong's Review of Medical Physiology	26th edition
3	Laboratory Manual Physiology	CL Ghai Prof. Dr. RUHULL Amin & Dr. Selim Reza
Reference Books		
1	Applied Physiology	Samson Wright
2	MCQ & EMQS in Human Physiology	Tan C. Roddie, 6th Edition

Department of Biochemistry

Faculty Members



Dr. Shaheda Ahmed
Professor & Head



Dr. Sheikh Md. Shalahuddin Sharif
Professor



Dr. Md. Zohir Uddin
Lecturer



Dr. Zannatul Kawnine
Lecturer



Dr. Nazneen Hoque Dola
Lecturer



Dr. Mahathir Mahmood
Lecturer



Dr. Abdullah Al Maruf
Lecturer



Dr. Mosammat Farhana Tasnim
Lecturer



Dr. Shahnewaz Arfin Shahin
Lecturer

Departmental Objective

At the end of the course in Biochemistry the students should be able to:

- acquire the basic & integrated knowledge on major biomolecules, enzymes, hormones and nutrients with fundamental chemical process within body system upon which life depends.
- demonstrate skills in performing and interpreting Biochemistry laboratory tests and procedures with emphasis on those used in Bangladesh.
- demonstrate skills in using the modern biochemical appliances.
- equip themselves with requisite knowledge for higher studies and research.
- develop sound attitude towards the need for continuing self-directed learning.

List of Competencies to acquire:

After completing the course of Biochemistry in MBBS course the students will

- 1) apply the learned knowledge of biochemistry in medicine.
- 2) familiar with the biomolecules forming the structure of human body, their functions and role in health and diseases.
- 3) explain the role of enzymes in the diagnosis and treatment of diseases.
- 4) identify the source of energy in human body and the process by which this energy is derived from food.
- 5) explain metabolism of the body in fed and fasting state and consequences of prolonged starvation.
- 6) explain the role of liver in metabolism and derangement of metabolism in impaired liver function.
Explain dyslipidemia and their clinical consequence

- 7) describe the water and electrolyte content of human body and their functions. Identify the types, causes and consequences of dehydration and over hydration. Explain the causes the consequences of electrolyte imbalance.
- 8) describe the sources of acids and bases in our body and the mechanism of their normal balance. Explain the causes and consequences of acidosis and alkalosis and the parameters to diagnose them.
- 9) demonstrate their basic conception about nutrients, balanced diet. Describe the common nutritional disorders of our country and their causes and consequences.
- 10) describe the components of balanced diet and explain the basic principles of making a diet chart. Attain the skill to assess nutritional disorders anthropometrically.
- 11) explain the basis of genetics and molecular biology and the common genetic disorders and explain the modern technology in molecular biology in the diagnosis and treatment of diseases.
- 12) diagnose diabetes mellitus, impairment of renal, liver and thyroid functions.

Attain the skill to perform and interpret the common biochemical tests in the diagnosis of diseases. Attain the skill to perform common bedside biochemical tests.

Distribution of teaching - learning hours

Lecture	Tutorial	Practical	Total Teaching hours	Integrated teaching for Phase I	Formative Exam		Summative Exam	
					Preparatory leave	Exam time	Preparatory leave	Exam time
117 hrs	100 hrs	100 hrs	317 hrs	36 hrs	35 days	42 days	30 days	30 days
<i>Time for integrated teaching, examination, preparatory leave of formative & summative assessment is common for all subjects of the phase</i>								
Related behavioral, professional & ethical issues will be discussed in all teaching learning sessions.								

Teaching/learning methods, teaching aids and evaluation

Teaching methods			Teaching aids	In course evaluation
Large group	Small group	Self learning		
Lecture Integrated teaching	Tutorial Practical Demonstration	Assignment, self assessment & self study	OHP Video tapes, Audio player Slide projector Charts, Flip charts, Models, Specimens White board & marker Chalk board & chalk Computer & Multimedia & Study guide & manuals.	Item Examination (oral or practical) Card final (only written) Term Examination Term final (written, oral+practical [OSPE & traditional])

Related Equipments:

Glass wares, micropipette, distilled water plant, pH meter.

Laboratory equipments:

Photoelectric, colorimeter, Centrifuge machine, PCR machine, Incubator, Water bath, Hot air oven, Height and weight measuring instrument.

1st Professional Examination:**Marks distribution of Assessment of Biochemistry:**

Total marks - 400

- Written = 200 (Formative- 20+MCQ (SBA+MTF) 40+(SAQ + SEQ) 140)
- SOE = 100
- Practical = 100 (OSPE-50 + Traditional- 40 + Assignment- 10)

Academic Calendar

Term & Duration	Classes	Topics	Term Examination		
1st Term	Lecture	Biophysics and Biomolecules	October '24		
		Food, Nutrition and Vitamins			
	Tutorial & Practical	Biophysics ans Biomolecules			
		Food, Nutrition and Vitamins			
2nd Term	Lecture	GIT, bioenergetics and metabolism Renal biochemistry, body Fluid, electrolytes and acid-base balance	March '25		
		Tutorial & Practical		Git, bioenergetics and metabolism Renal biochemistry, body fluid, electrolytes and acid-base balance	
	3rd Term			Lecture	Clinical biochemistry and clinical endocrinology Fundamentals of molecular biology and genetics
		Tutorial & Practical			Clinical biochemistry and clinical endocrinology Fundamentals of molecular biology and genetics
Preparatory Leave : October '25					

**** 1st Professional MBBS Examination will be held in November '25**

Teaching Hours for Biochemistry

Total Teaching Hours for Biochemistry				
System	Lectures	Tutorials	Practical	Integrated teaching
1. Biophysics and biomolecules	18	25	20	
2. Food, nutrition, vitamins and minerals	18	15	10	
3. Digestion, absorption, bioenergetics and metabolism	29	18	25	
4. Body fluids, electrolytes and acid base balance	20	12	20	
5. Clinical biochemistry and clinical endocrinology	14	15	20	
6. Molecular Biology and genetics (Fundamentals)	18	15	06	
Total Teaching Hours: (353)	117	100	100	36

Academic Calendar for Biochemistry

First Term				
System	Lectures	Tutorials	Practical	Seminar
Card-1, Biophysics and Biomolecules and	18 hrs	25 hrs	20 hrs	2 hrs
Card-2, Food and Nutrition	18 hrs	15 hrs	10 hrs	1 hr
	36 hrs	40 hrs	30 hrs	3 hrs

Second Term				
System	Lectures	Tutorials	Practical	Seminar
Card-3, Digestion, absorption, Bioenergetics and metabolism	29 hrs	18 hrs	25 hrs	2 hrs
Card-4, Bodyfluids, electrolytes, renal chemistry and acid base balance	20 hrs	12 hrs	20 hrs	1 hr
	49 hrs	30 hrs	45 hrs	3 hrs

Third Term				
System	Lectures	Tutorials	Practical	Seminar
Card-5, Clinical Biochemistry and Clinical Endocrinology	14 hrs	15 hrs	20 hrs	2 hrs
Card-6, Molecular Biology	18 hrs	15 hrs	06 hrs	3 hrs
	32 hrs	30 hrs	26 hrs	4 hrs

Biochemistry Lecture

Biochemistry 1st TERM

S.L	Topics	Hrs.	S.L	Topics	Hrs.
1	Introduction of Biochemistry, Acid, Base, pH, pK, Buffer	2	9	Nutrient, Food, Diet, Balanced diet, Dietary fibers	2
2	H.H equation, pH scale, Law of Mass action	1	10	DRI, RDA, Mr, BMI, SDA, BMR	1
3	Solution, Standard solution, Mathematical problems, Molarity, Molality, Osmolarity	3	11	Nutritional importance carbohydrate, lipid protein, EAA & PUFA	3
4	Crystalloid, Colloid, Suspension & emulsion	2	12	Glycemic index of food	1
5	Isomerism of Glucose, D & L glucose	3	13	Minerals (Macro & Micro), Trace elements	2
6	Carbohydrate, Reducing sugar, Invert sugar, Isomerism of Glucose, D & L glucose, epimer, anomer	3	14	Common nutritional disorders, PEM, Iodine deficiency (Goitre)	2
7	Lipids, Fatty acids, Phospholipid, Cholesterol, Eicosanoids, PG, Leukotrienes, Thromboxane, Steroids	3	15	BMI, Obesity	2
8	Amino acids & Protein, Peptide bond, structure of protein & Denaturation of protein, Plasma protein, Hemoglobin.	3	16	Iron metabolism & its deficiency	2
	Enzymes, coenzymes, Isoenzyme, Co-factors, Enzymes inhibition	3	17	Vitamins, Water soluble vitamins, Fat soluble Vitamins	3

2nd TERM

S.L	Topics	Hrs.	S.L	Topics	Hrs.
1	Digestion & absorption, Digestive juices, Mechanism of secretion of HCl, Local hormone of GIT	2	9	Biological Oxidation, ATP, High & low energy compounds, Respiratory Chain, Oxidative Phosphorylation	2
2	Digestion & end products of Carbohydrate, Protein, Lipid	3	10	Kidney, Nephron, GFR, plasma load, tubular load, transport maximum, renal threshold, plasma clearance, osmolar clearance and free water clearance.	2
3	Absorption of Carbohydrate, Protein, Lipid, Micelle, Ferrying action, Emulsification, Bile salt, Bile acid, Entero-Hepatic circulation.	3	11	Body fluid compartments & regulation, ECF & ICF, fluid intake-output chart, Water turnover	3
4	Anabolism, Catabolism, Metabolism, intermediary metabolism, Metabolism of Carbohydrate: Glycolysis, Sources & fates of pyruvate, TCA cycle, Total energy from complete oxidation of glucose Gluconeogenesis, Glycogenesis & Glycogenolysis, HMP shunt, Blood glucose homeostasis, Function of liver, Cori cycle.	4	12	Major electrolytes and their homeostasis	1
5	Metabolism of Lipid, Beta Oxidation of fatty Acid, Sources & Fates of Acetyl-CoA, Degradation of triacylglycerol.	4	13	Volume disorders, regulation of normal water balance, Water deficit & water intoxication	2
6	Ketone Body, Ketosis	2	14	Acid base homeostasis & disorders, compensation & correction	3
7	Uliprotein, Apoproteins, Metabolism of Chylomicron, VLDL, LDL, HDL, Role of LDL & HDL in Atherosclerosis, Reverse cholesterol transport, Cholesterol, Role of HMG Co A reductase inhibitor, Eicosanoids	4	15	Acid base parameters, anion gap and base excess	1
8	Metabolism of Protein: Amino acid pool, Nitrogen balance, Nitrogen loss, Protein turnover, Sources & Fates of AA & Ammonia, Transamination, Deamination, Urea cycle, Ammonia intoxication, Oxidative deamination, Role of liver in integrated metabolism & adjustment of fed, fasting and starvation state	4	16	Diuresis, acidification and limiting PH of urine	2
			17	Abnormal constituents in urine, normal urine volume, obligatory urine volume	2
			18	Urine formation: basic mechanism, (concentrated & diluted)	2
			19	Reabsorption and secretion by renal tubules	1
			20	Role of kidney in water, electrolyte & acid base balance	3

3rd TERM

S.L	Topics	Hrs.	S.L	Topics	Hrs.
1	Clinical Biochemistry, Normal Biochemical values in Conventional & SI unit, Laboratory Hazards	1	9	Molecular biology, DNA and RNA	2
2	Clinical enzymology related to liver & myocardial diseases.	2	10	Nucleic acid, nucleosides, nucleotides	2
3	Lipid profiles & dyslipoproteinemias	3	11	DNA organization, cell cycle	2
4	Organ function tests with interpretation (Liver, Kidney & Thyroid)	4	12	Central dogma, Replication of DNA	2
5	Diagnosis of Diabetes mellitus, OGTT, IFG, IGT, HbA1c	5	13	Transcription & the post transcriptional modification	2
6	Causes & consequences of hyperglycemia & hypoglycemia	6	14	Translation & the post translational modification	2
7	Bilirubin metabolism & Jaundice	7	15	Gene, genome, allele, trait, codon, genotype, phenotype, genetic code	1
8	Proteinuria & the microalbuminuria	8	16	Mutation, mutagens	2
			17	PCR, RFLP (polymorphism), DNA cloning, recombinant DNA technology	2
			18	Medical Biotechnology	1

Evaluation of Biochemistry

Summative Assessment (1st Professional Examination)

Component	Marks	Total Marks
Formative Assessment	10+10	20
WRITTEN EXAMINATION		
Paper-1 MCQ (SBA+MTF)	20	180
SAQ+SEQ	70	
Paper-2 MCQ (SBA+MTF)	20	
SAQ+SEQ	70	
PRACTICAL EXAMINATION		
OSPE	50	100
Traditional methods	40	
Practical Note Book	10	
ORAL EXAMINATION (Structured)		100
Grand Total		400

- * OMR sheet will be provided for MCQ
- * Pass marks 60% in each of written, oral and Practical.

Sample Questions for Biochemistry

MCQ

1. SBA (Single Best Answer)

Q. Following answer is true regarding the diameter of the Colloidal substance

- a. between 1 to 100 millimicrons
- b. 1 millimicron
- c. 100 millimicrons
- d. 1—200 millimicrons (**TRUE**)
- e. < than 1 millimicron

2. MTF (Multiple True-False)

Q. Choose the correct answers about pH:

- a. pH is directly proportional to serum HCO_3^- in arterial blood T
- b. Low pH along with decreased PCO_2 indicates acidosis F
- c. Is 7.4 when it is equal to pK T
- d. pK of ammonia buffer is 7.8 F
- e. pH of ECF is 7.2 F

WRITTEN

3. SAQ (Short Answer Question)

Q. State the five major steps of cholesterol biosynthesis. Which one is the rate limit step? 4+1

4. SEQ (Short Essay Question)

Q. write a short discussion on 'Physiology of Carbohydrate, emphasizing the following points:

- a. Definition 1
- b. Classification with examples 2
- c. Name of physical properties 1
- d. Name of chemical properties 2
- e. Mutarotation 2

Book - list

S.L	Title	Author	Edition
1	Harper s illustrated Biochemistrty	Robert k Murray	Latest
2	Lippincott's Illustrated reviest Biochemistry	Parmela C. champe	Latest
3	Biochemistry	Satiyanarayana	Latest
4	Labaratory Manual for Practical	Md. Ruhul Amin	Latest
5	Human Biochemistry	Orten	Latest
6	abc of Medical Biochemistry	Moz. Hoque	Latest
7	Tietz Fundamentals of Clinical Chemistry	Burtis	Latest
8	Clinical Chemistry Theory, Analysis	Kaplan	Latest
9	Clinical Chemistry Biology	Marshall	Latest
10	Lehinniger Principles of Biochemistry	Nelson	Latest
11	Medical Genetics	EMERY	Latest
12	Medical Genetics	AK Datta	Latest
13	Textbook of Biochemistry	West, Todd, et.	Latest

* All of these books are available at Central Library of CIMC

* Students are advised to purchase books consulting with teachers of respective department.



Note:

All the 3 departments of Phase I are requested to complete their respective cards with card exam regular and supplementary before the preparatory leave of the particular term begins.

Each term exam duration with preparatory leave and post term leave and re term exam will be of one month duration as per BM&DC curriculum.

First Professional Examination (Marks distribution)

Subject	Written Exam marks	Structured Oral Exam marks	Practical Exam marks		Formative Exam marks	Total marks
			Soft Part	Hard Part		
Anatomy	180	150	75	75	20	500
Physiology	180	150	100		20	400
Biochemistry	180	150	100		20	400
Total						1300

Second Professional Examination

Subject	Written Exam marks	Structured Oral Exam marks	Practical Exam marks	Formative Exam marks	Total marks
Pharmacology & Therapeutics	90	100	100	10	300
Forensic Medicine	90	100	100	10	300
Total					600

Third Professional Examination

Subject	Written Exam marks	Structured Oral Exam marks	Practical Exam marks	Formative Exam marks	Total marks
Community Medicine	90	100	100	10	300
Pathology	90	100	100	10	300
Microbiology	90	100	100	10	300
Total					900

Fourth Professional Examination

Subject	Written Exam marks	Structured Oral Exam marks	Practical Exam marks	Formative Exam marks	Total marks
Medicine & Allied Subject	90	100	100	10	300
Surgery & Allied Subject	90	100	100	10	300
Obstetrics & Gynecology	90	100	100	10	300
Total					900



Academic Discipline

1. Attendance:

- BM&DC and University regulation strictly demands that a student must possess 75% attendance in the class to be allowed for at the Professional Examination, which will be conducted by the university.
- Students must have satisfactory behavior and conduct along with 75% attendance to be sent up for university Examination. A certificate from the Head of each & every Dept. to this extent is necessary.
- Even if a student fails to have 75% attendance for sickness or hospitalization or any other genuine, he/she will not be sent up for University Examination.

2. Student Assessment:

- Student assessments are made through periodic class examinations.
* Item exam. * Card complete * Term exam - every 5 month
- Students must pass all three terms examinations to be eligible for 1st professional examination.

3. Academic Calendar:

Teacher & students should follow academic calendar governed by academic affairs division.

4. Student should follow the dress code strictly

Library:

- Student must have a library card to use library which is fully equipped with internet facilities
- Library is open for all students till 10 pm

Instructions for the guardians:

- All students must abide by the institutional rules
- Dress code is to be strictly maintained
- Students attendance : Minimum 75% class attendance is mandatory for eligibility to seat for institutional and professional examinations
- College lock out time for the students is 08.00 am
- Library works is a mandatory
- Student is to stay in the hostel as per institutional decision
- In case of failure of any payments in schedule time a penalty is implied as per the decision of the authority
- In case of gross violation of the rules subversive to the institution or state, student may be expelled from the college
- All the parents & guardians are requested to communicate with the authority from time to time



Instructions for the Student

1. All students are to carry their "Identity Card" within the college & hospital premises.
2. All students are to attend classes in clean and well dressed as per dress code. (With white Apron with their nameplates on the left front side)
3. Smoking is strictly prohibited in the college & hospital campus.
4. Wall writing, pasting of posters on the walls of the college and the hospital premises are prohibited and students involved in these are liable to be punished.
5. All types of demonstrations, shouting in the college and hospital premises are prohibited and student involved in these are liable to be punished.
6. The student must pay their tuition fees by 15th of each month. If failed, fine will be imposed as approved by the authority.
7. Student must behave properly with staffs, employees of the college and hospital. Acts of misbehavior are also of indiscipline and liable for disciplinary action.
8. The students are expected to maintain the highest moral standard in their academic and personal lives.
9. At the time of admission into the college, the Students and parents/guardians will have to sign an undertaking that their wards shall abide by the rules and regulation of the college.
10. Leave: In case of illness or their unavoidable circumstantial of absent, a written statement from the parents/guardians is to be submitted to the teachers concerned who in turn will send it to the principal for approval.
11. Cost of loss/damage to college/hospital property by the student is liable to be realized from the concerned student.
12. All sorts of extra curricular activities will be Supervised by the ECA.
13. Political activities are strictly prohibited.
14. Mixing of male & female students including reading partnership among the male & female students are strictly prohibited in the college.



College *Discipline*

Excellence of this institution is it's unique discipline.

Students must follow strict discipline in the college. On disciplinary grounds, the following penalties may be imposed on a student (According to nature of the offense committed)

1. Warning.
2. Fines (Amount to be proposed by the AC approved by the GB).
3. Expulsion from the college (temporarily or permanently).

Depending on the gravity of the offence committed, penalties imposed on students will be recorded in transcript/testimonial. A student's name may be stuck off the college register under the following circumstances.

- a) Consecutive unauthorized absence from classes for more than one month.
 - b) On disciplinary ground (on the proposition of the Academic Council).
 - c) On non-payment of the college dues after three months of date of payments.
4. Academic Council is the final authority to take any disciplinary action against students.



Extra Curricular Activities Division (ECAD):

Student life is an extremely challenging phase. In order to allow our - students to realise their potentialities, Chattagram International Medical College established the ECAD to take full advantage of campus happenings. The role and functions of the ECAD are:

- To organize and conduct students programs
- Mentoring to the students
- To celebrate national days & events
- To provide training and instructions to our students
- To explore the potentialities of the students.

Unit: wise ECA Program:

- Blood donation & Social Welfare Club
- Sports Club
- Literature & Cultural Club
- Debate Club
- Management & Beautification Club
- Communication Club

All ECA Activities will be Executed by Following committee

President: Professor Dr. Md. Tipu Sultan, Principal CIMC

In-Charge: Dr. Sheikh Md. Erfan, Assistant Professor, Department of Forensic Medicine

Administration: Mohammad Raquibul Hakim, Admin Officer, ECAD

Member: Elected/Selected Students

Female Hostel Unit:

Female Hostel Unit is specially formed to assist students in locating proper accommodation.

This Unit will do its best, as it is committed to providing the best possible service to deserving students. The hostel super is Professor Dr. Shaheda Ahmed, Professor & Head, Department of Biochemistry, CIMC.

Chattagram International Medical College (CIMC)

MBBS Class Routine : Phase- 1 ◀ Effective from 05/06/2024

Class Routine

1 st Year MBBS (11 th Batch 2023-2024)					2 st Year MBBS (10 th Batch 2022-2023)				
Day	08 am to 09 am	09 am to 10 am	10:30 am to 12:15pm	12:15pm to 02:30 pm Prayer Break 1:10-1:25 pm	08 am to 10 am		10:30 am to 11:30 am	11:30 am to 12:30 am	12:30 to 02:30 pm Prayer Break 1:10-1:25 pm
Saturday	Anatomy Lecture Room# 311	Biochemistry Lecture Room# 311	A: Anatomy Tutorial/Dissection B: Anatomy Tutorial/Dissection	A: Biochemistry Tutorial- Bio. Lab B: Biochemistry Tutorial- Bio. Lab	A: Physiology Tutorial- Phy. Lab B: Physiology Tutorial- Phy. Lab	T	Biochemistry Lecture Room# 311	Anatomy Lecture Room# 311	A: Anatomy Tutorial/Dissection B: Anatomy Tutorial/Dissection
Sunday	Anatomy Lecture Room# 311	Anatomy Lecture Room# 311	A: Physiology Tutorial- Phy. Lab B: Physiology Tutorial- Phy. Lab	A: Histology B: Anatomy Tutorial/Dissection	A: Anatomy Tutorial/Dissection B: Anatomy Tutorial/Dissection	F	Anatomy Lecture Room# 311	Physiology Lecture Room# 311	A: Biochemistry Tutorial- Bio. Lab B: Biochemistry Tutorial- Bio. Lab
Monday	09 am to 10 am Biochemistry Lecture Room# 311	10 am to 11 am Physiology Lecture Room# 311	11 am to 12:15 pm A: Anatomy Tutorial/Dissection B: Anatomy Tutorial/Dissection	A: Physiology Tutorial- Phy. Lab B: Physiology Tutorial- Phy. Lab	09:00 am to 10:30 am A: Physiology Practical- Phy. Lab B: Physiology Practical- Phy. Lab	N	Physiology Lecture Room# 311	Anatomy Lecture Room# 311	A: Anatomy Tutorial/Dissection B: Histology
Tuesday	Biochemistry Lecture Room# 311	Anatomy Lecture Room# 311	A: Biochemistry Practical- Bio. Lab B: Biochemistry Practical- Bio. Lab	A: Anatomy Tutorial/Dissection B: Histology	A: Anatomy Tutorial/Dissection B: Anatomy Tutorial/Dissection	B	Anatomy Lecture Room# 311	Biochemistry Lecture Room# 311	A: Physiology Tutorial- Phy. Lab B: Physiology Tutorial- Phy. Lab
Wednesday	Anatomy Lecture Room# 311	Physiology Lecture Room# 311	A: Anatomy Tutorial/Dissection B: Anatomy Tutorial/Dissection	A: Physiology Practical- Phy. Lab B: Physiology Practical- Phy. Lab	A: Biochemistry Tutorial- Bio. Lab B: Biochemistry Tutorial- Bio. Lab	R	Biochemistry Lecture Room# 311	Physiology Lecture Room# 311	A: Anatomy Tutorial/Dissection B: Anatomy Tutorial/Dissection
Thursday	Physiology Lecture Room# 311	Biochemistry Lecture Room# 311	A: Biochemistry Tutorial- Bio. Lab B: Biochemistry Tutorial- Bio. Lab	A: Anatomy Tutorial/Dissection B: Anatomy Tutorial/Dissection	A: Histology B: Anatomy Tutorial/Dissection	K	Physiology Lecture Room# 311	Biochemistry Lecture Room# 311	A: Biochemistry Practical- Bio. Lab B: Biochemistry Practical- Bio. Lab
Generic Topic on Medical Humanities (i) Behavioral science, (ii) Medical Sociology, (iii) Etiquette in using of Social Medias, (iv) Self-directed learning including team learning & (v) Medical ethics will be taught within 1 st phase. Each topic is of 1.5 hrs and will be taken in the above routine after necessary adjustment in a prefixed time by community medicine department.									

MASTER PLAN



Chattagram International Medical College (CIMC)

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