

Vision, Mission, Goal and Objectives of MBBS Course, Learning Outcomes/Competences of Fresh Graduates

Vision:

Ensuring a learning environment in undergraduate medical programme that encourages and promotes development of clinically, socially and culturally competent professionals motivated to serve the community with compassion and dedication

Mission:

- To provide quality education with basic principles, methods and knowledge adequate to practice preventive, curative and promotive healthcare in the community
- To prepare professionals competent to deal with ethical and professional issues, having communication and decision making skills and attitudes, and capable of providing leadership and conducting research for future progression as a change agent.

Goal:

To produce competent, compassionate, reflective and dedicated health care professionals who:

- consider the care and safety of their patients their first concern
- establish and maintain good relationship with patients, their attendants and colleagues
- are honest, trustworthy and act with integrity
- are capable of dealing with common diseases and health problems of the country and are willing to serve the community particularly the rural community;
- but at the same time acquire firm basis for future training, service and research at both national and international level.
- are committed to keep their knowledge and skill up-to-date through ‘Continuous Professional Development’ all through their professional life.

Objectives of MBBS Course:

At the end of the MBBS Course students shall:

1. Acquire knowledge and understanding of
 - a) the sciences upon which Medicine depends and the scientific and experimental methods;
 - b) the structure, function and normal growth and development of the human body and the workings of the mind and their interaction, the factors which may disturb these, and the disorders of structure and function which may result;
 - c) the etiology, natural history and prognosis of the common mental and physical ailments. Students must have experience of emergencies and a good knowledge of the common diseases of the community and of ageing processes;
 - d) normal pregnancy and childbirth, the common obstetric emergencies, the principles of ante-natal and post natal care, and medical aspects of family planning and psycho-sexual counseling;

- e) the principles of prevention and of therapy, including health education, the amelioration of suffering and disability, rehabilitation, the maintenance of health in old age, and the care of the dying;
- f) human relationships, both personal and social and the interaction between man and his physical, biological and social environment;
- g) the organization and provision of health care in the community and in hospital, the identification of the need for it, and the economic, ethical and practical constraints within which it operates; and
- h) the ethical standards and legal responsibilities of the medical profession.

2. Develop the professional skills necessary to

- a) elicit, record and interpret the relevant medical history, symptoms and physical signs, and to identify the problems and how these may be managed;
- b) carry out simple practical clinical procedures;
- c) deal with common medical emergencies;
- d) communicate effectively and sensitively with patients and their relatives;
- e) communicate clinical information accurately and concisely, both by word of mouth and in writing, to medical colleagues and to other professionals involved in the care of the patient; and
- f) use laboratory and other diagnostic and therapeutic services effectively and economically, and in the best interests of his patients.

3. Develop appropriate attitudes to the practice of medicine, which include

- a) recognition that a blend of scientific and humanitarian approaches is needed in medicine;
- b) a capacity for self education, so that he may continue to develop and extend his knowledge and skills throughout his professional life, and recognize his obligation to contribute if he can to the progress of medicine and to new knowledge;
- c) the ability to assess the reliability of evidence and the relevance of scientific knowledge, to reach conclusions by logical deduction or by experiment, and to evaluate critically methods and standards of medical practice;
- d) a continuing concern for the interests and dignity of his patients;
- e) an ability to appreciate the limitations of his own knowledge, combined with a willingness, when necessary, to seek further help; and
- f) the achievement of good working relationships with members of the other health care professions.

Learning Outcomes of MBBS course:

To achieve the National goal and course objectives, a set of “Essential learning outcomes / competences” which students of the medical colleges/institutes on completion of MBBS course and at the point of graduation must be able to demonstrate has been defined.

These “essential learning outcomes / competences” are grouped under three board headings:

- I The graduate with knowledge of scientific basis of Medical Practice
- II The graduate as a practitioner
- III The graduate as a professional

I. The graduate with knowledge of scientific basis of Medical Practice:

The graduate will understand and be able to apply basic bio-medical (anatomy, cell biology, genetics, physiology, biochemistry, nutrition, pathology, molecular biology, immunology, microbiology, pharmacology and community medicine) principles, methods and knowledge to

- 1.1 understand the normal processes governing homeostasis, and the mechanisms underlying the common diseases and health problems of the country.
- 1.2 understand the psychological and sociological concepts of health, illness and disease and explain psychological and sociological factors that contribute to illness, course of disease and success of treatment.
- 1.3 select appropriate investigations necessary for diagnosis of common clinical cases and explain the fundamental principles underlying such investigative procedures.
- 1.4 select appropriate treatment (including rational prescribing of drugs), management and referral (if in the patient’s best interest) plan for common clinical cases, acute medical emergencies and minor surgical procedures.
- 1.5 understand biochemical, pharmacological, surgical, psychological, social and other interventions in acute and chronic illness, in rehabilitation, and end-of-life care.
- 1.6 understand disease surveillance and prevention, health promotion including wider determinants of health, health inequalities, health risks.
- 1.7 understand communicable disease control in health care facility and community settings.
- 1.8 understand international health status, including global trends in morbidity and mortality of chronic diseases of social significance, the impact of trade and migration on health and the role of international health organizations.
- 1.9 undertake critical appraisal of diagnostic, therapeutic and prognostic trials and other quantitative and qualitative studies as reported in medical and scientific literature.
- 1.10 understand simple research questions in biomedical and population science and the design of relevant studies.

II. The Doctor as a practitioner

2.1. The graduate will have the ability to carry out a consultation with a patient (Appendix-III):

- 2.1.1. Obtain and record an accurate medical history, including such related issues as age, gender, and socioeconomic status.
- 2.1.2. Perform a both comprehensive and organ system specific examinations, including a mental status examination.
- 2.1.3. Elicit patients’ questions, understanding of their condition and treatment options, and their views, values and preferences.
- 2.1.4. Provide explanation, advice, reassurance and support.

2.2. The graduate will have the ability to diagnose and manage clinical cases or will refer when necessary. (*Appendix I & II*):

- 2.2.1. Interpret findings from the history, physical examination and mental-state examination and make an initial assessment of a patient's problems and a differential diagnosis appreciating the processes by which such diagnosis is tested scientifically.
- 2.2.2. Construct a plan of investigation in partnership with the patient, obtaining informed consent as an essential part of this process appreciating patient's right to refuse or limit the investigation.
- 2.2.3. Interpret the results of investigations, including growth charts, x-rays and the results of diagnostic procedures in *Appendix III*.
- 2.2.4. Synthesize a full assessment of the patient's problems and define the likely diagnosis or diagnoses.
- 2.2.5. Formulate a plan for management and discharge including referrals to the right professional, according to the established principles and best evidence, in partnership with the patient, their careers and other health professional as appropriate.
- 2.2.6. Respond to patients' concerns and preferences, obtain informed consent, recognize and respect patients' right to reach decisions about their treatment and care and to refuse or limit treatment.

2.3. The graduate will have the ability to provide immediate care in medical emergencies in *Appendix IV*:

- 2.3.1. Assess and recognize the severity of a clinical presentation and need for immediate emergency care.
- 2.3.2. Provide basic first-aid and immediate life support.
- 2.3.3. Provide cardio-pulmonary resuscitation or direct other team members to carry out resuscitation.

2.4. The graduate will have the ability to prescribe drugs safely, effectively and economically. *Appendix III*:

- 2.4.1. Obtain an accurate drug history, covering both prescription and non-prescription OTC drugs including complementary and alternative medications and demonstrate awareness of the existence and range of these therapies and how this might affect other types of treatment that patient are receiving.
- 2.4.2. Formulate appropriate drug therapy and record the outcome accurately.
- 2.4.3. Recognize and respect patients' right to information about their medicines.
- 2.4.4. Detect, manage and report adverse drug reactions.

2.5. The graduate will have the ability to carry out practical procedures safely and effectively. *Appendix III*:

- 2.5.1. Perform, measure and record the findings of diagnostic procedures.
- 2.5.2. Perform therapeutic procedures.
- 2.5.3. Demonstrate correct practice in general aspects of practical procedures.

2.6. The graduate will have the ability to apply principles, method and knowledge of health informatics to medical practice:

- 2.6.1. Keep accurate, legible and complete medical records.
- 2.6.2. Use effectively computers and other information systems, including storing and retrieving information.
- 2.6.3. Stick to the requirements of confidentiality and data protection legislation in all dealings with information.

2.6.4. Access and use effectively information sources in relation to patient care, health promotion, research and education.

2.7. The graduate will have the ability to communicate effectively in a medical context. (Appendix III):

2.7.1. Communicate clearly and sensitively with patients, their relatives or other careers, and colleagues from medical and other professions by listening, sharing and responding.

2.7.2. Communicate by spoken, written and electronic methods and recognize and respect significance of non-verbal communication in medical consultation.

2.7.3. Communicate appropriately in difficult circumstances, such as in times of disclosing bad news and discussing sensitive issues, i.e. alcohol consumption, smoking or obesity.

2.7.4. Communicate appropriately with difficult, violent patients and with mentally ill people.

2.7.5. Communicate effectively in various roles, i.e. as patient advocate, teacher, manager or improvement leader.

III. The Doctor as a professional

3.1. The graduate will apply to medical practice ethical, moral and legal principles and will be able to :

3.1.1. Recognize and respect BM&DC's ethical guidance and standards and supplementary ethical guidance that describe what is expected of all doctors registered with BM&DC.

3.1.2. Demonstrate awareness of professional values which include excellence, altruism, responsibility, compassion, empathy, accountability, honesty and integrity, and a commitment to scientific methods.

3.1.3. Make the care of the patient the first concern and maintain confidentiality, respect patients' dignity and privacy and act with appropriate consent.

3.1.4. Respect all patients, colleagues and others regardless of their age, color, culture, disability, ethnic or national origin, gender, lifestyle, marital or parental status, race, religion or beliefs, sexual orientation or social or economic status.

3.1.5. Recognize patients' right to hold religious or other beliefs, and respect these when relevant to treatment options.

3.1.6. Know about laws and systems of professional regulation through BM & DC and others, relevant to medical practice and complete relevant certificates and legal documents and liaise with the coroner and others as appropriate

3.1.7. Use moral reasoning and decision-making to conflicts within and between ethical, legal and professional issues including those raised by economic constrains, commercialization of health care, and scientific advances.

3.2. The graduate will be able to reflect, learn and teach:

3.2.1. Establish the foundations for lifelong learning and continuing professional development, including a professional development portfolio containing reflections, achievements and learning needs.

3.2.2. Acquire, assess, apply and integrate new knowledge, learn to adapt to changing circumstances and ensure highest level of professional care to the patients.

3.2.3. Recognize own personal and professional limits and seek help from colleagues and supervisors as necessary.

- 3.2.4. Work with colleagues in ways that best serve the interests of patients, pass on information and hand over care, demonstrate flexibility, adaptability and a problem-solving approach.
- 3.2.5. Function effectively as a mentor and teacher, contribute to the appraisal, assessment and review of colleagues and give effective feedback.

3.3. The graduate will be able to learn and work effectively within a multi-professional team:

- 3.3.1. Recognize and respect the roles and expertise of health and social care professionals in the context of working and learning as a multi-professional team.
- 3.3.2. Build team capacity and positive working relationships and undertake leadership and membership roles in a multi-professional team.

3.4. The graduate will have the ability to protect patient and improve care:

- 3.4.1. Place patients' needs and safety at the center of the care process and deal effectively with uncertainty and change.
- 3.4.2. Know about the framework of medical practice in Bangladesh including the organization, management and regulation of healthcare provision; the structures, functions and priorities of the National Health Policy; and the roles of, and relationships between the agencies and services involved in protecting and promoting individual and population health.
- 3.4.3. Apply the principles of risk management and quality assurance to medical practice including clinical audit, adverse incident reporting and how to use the results of audit to improve practice.
- 3.4.4. Understand own personal health needs, consult and follow the advice of a qualified professional and protect patients from any risk posed by own health.
- 3.4.5. Recognize the duty to take action if a colleague's health, performance or conduct is putting patients at risk.

Basic Information about MBBS Course

1. **Name of the course:** Bachelor of Medicine & Bachelor of Surgery (MBBS)
2. **Basic qualifications & prerequisite for entrance in MBBS Course:**
 - (i) HSC or equivalent with Science.(Biology, Physics, Chemistry)
 - (ii) Candidate has to secure required grade point in the SSC and HSC examinations.
3. **Students selection procedure for MBBS course:** According to decision by the proper competent authority as per merit.
4. **Medium of Instruction:** English
5. **Duration:** MBBS course comprises of 5 Years, followed by mandatory logbook based rotatory internship for one year
6. **Course structure, subject with duration and professional examination**

The MBBS course is divided into four phases.

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 year	<ul style="list-style-type: none"> • Pharmacology & Therapeutics • Forensic Medicine & Toxicology <p><i>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</i></p>	Second Professional MBBS
3 rd phase	1 year	<ul style="list-style-type: none"> • Community Medicine & Public Health • Pathology • Microbiology <p><i>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.</i></p>	Third Professional MBBS
4 th phase	1½ years	<ul style="list-style-type: none"> • Medicine & Allied subjects • Surgery & Allied subjects • Obstetrics and Gynaecology 	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.

7. Phase wise hours distribution for teaching-learning and assessment:

<i>1st Phase: Hour Distribution</i>											
Subject		Lecture (in hours)	Tutorial (in hours)	Practical (in hours)	Dissection and others (in hours)	Integrated teaching	Formative Exam		Summative exam		Total (in hours)
							Preparatory leave	Exam time	Preparatory leave	Exam time	
Teaching-learning, both formative and summative assessment	Anatomy	115	53	52	307	36 hrs	35 days	42 days	30 days	30 days	527
	Physiology	120	120	97	-						337
	Biochemistry	117	100	100	-						317
	Total	352	273	249	307						36
Generic Topics 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.											8
Grand Total											1225
<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											

<i>2nd Phase: Hour Distribution</i>												
Subject		Lecture (in hours)	Tutorial (in hours)	Practical/ Demonstration (in hours)	Others (in hours)	Integrated teaching (IT) (in hours)	Clinical bedside teaching (in weeks)	Formative Exam		Summative exam		Total (in hours)
								Preparatory leave	Exam time	Preparatory leave	Exam time	
Teaching-learning, both formative & summative assessment	Pharmacology & Therapeutics	100	30	50	Clinical Pharmacology 15	17	-	10 days	15 days	10 days	15 days	195
	Forensic Medicine & Toxicology	100	45	40 hrs Visit to Morgue, Thana & court = 12 days	-							185+12 days
Teaching- learning and only formative assessment	General Pathology	35	40	07	-	-	-	-	-	-	-	82
	General Microbiology	13	07	15	-	-	-	-	-	-	-	35
	Medicine & Allied subjects	28	-	-	-	-	21 weeks	-	-	-	-	28
	Surgery & Allied subjects	35	-	-	-	-	20 weeks	-	-	-	-	35
Total		311 hrs	122 hrs	112 hrs + 12 days	15 hours	17 hours	41 weeks	25 days		25 days		560 hrs + 12 days
Grand Total		577 hrs + 12 days					42 weeks	45 days				560 + 17 (IT) = 577 hrs + 12 days
Generic Topics on Medical Humanities: (i) Communication skill, (ii) Doctor-patient relationship (DPR) & Physicians' bedside manner, etiquette and rapport building with patients will be taught within 2 nd phase.											(iii) 5 hrs	
<i>Time for integrated teaching, examination preparatory leave and formative and summative assessment is common for all subjects of the phase</i>												
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.												
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions												

3rd Phase: Hour Distribution

Subject	Lecture (in hours)	Tutorial (in hours)	Practical/ Demonstration (in hours)	Integrated teaching (in hours)	Clinical bedside teaching (in weeks)	Formative Exam		Summative exam		Total (in hours)	
						Prepa ratory leave	Exam time	Prepa ratory leave	Exam time		
Teaching-learning, both formative & summative assessment	Community Medicine & Public Health	110	155	COME (community based medical education): 30 days (10 days day visit + 10 days RFST +10 days study tour)= 30 days (10+10+10)	18	-	07 days	12 days	07 days	12 days	265 + 30 days
	Pathology	60	54	27	-	-	-	-	-	-	141
	Microbiology	87	38	30	-	-	-	-	-	-	155
Teaching- learning and only formative assessment	Medicine & Allied subjects	48	-	-	-	14	-	-	-	-	48
	Surgery & Allied subjects	103	-	-	-	15	-	-	-	-	103
	Obstetrics and Gynaecology	30	-	-	-	8	-	-	-	-	30
Total	438	247	57 hours + 30 days	18 hrs	37 weeks	19 days		19 days		631	
Grand Total	760 hrs + 30 days				37 weeks	38 days				742+18(IT) =760 hrs +30 days	

Generic Topics on Medical Humanities: (i) Integrity and accountability of medical professionals (ii) Aspects of a good doctor will be taught within 3rd phase. 3 hrs

Time for integrated teaching, examination preparatory leave and formative and summative assessment is common for all subjects of the phase

Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.

Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions

4th Phase : Hour Distribution

Subject	Lecture (in hours)	Small group teaching (in hours)	Departmental integrated teaching (in hours)	Common hours for phase integrated teaching	Clinical teaching (in weeks)	Block posting (in weeks)	Formative Exam		Summati ve exam		Total (in hours)
		PBL, Practical demonstration, Instrumental demonstration, Skill lab, Demonstration on equipment, Demonstration on common clinical procedure, Tutorial & etc.					Preparatory leave	Exam time	Preparatory leave	Exam time	
Teaching- learning, both formative & summative assessment	Medicine & Allied subjects	153	199	20	24	4	Preparatory leave 10 days	Exam time 15days	Preparatory leave 10 days	Exam time 30days	372
	Surgery & Allied subjects	186	134	22	24	4					342
	Obstetrics and Gynaecology	60	58	20	08	4					138
Total	399	391	62	126	56wks	12 wks	25 days		40 days		852
Grand Total	978 hours				68 wks		65 days				852+126 (IT)=978

Generic Topics on Medical Humanities: (i) Medical professionalism, (ii) Inter-professionalism & (iii) Patient Safety & Medical Error will be taught within 4th phase. 5 hrs

Time for integrated teaching, examination preparatory leave and formative and summative assessment is common for all subjects of the phase

Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.

Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions

Generic Topics on Medical Humanities for Internship Period: (i) White coat ceremony, (ii) Career planning & (iii) Continuing Medical Education (CME), Continuing Professional Development (CPD) & Infection Control Practice (ICP) 10 hrs

Medicine & Allied Subjects: hour distribution in 2nd, 3rd & 4th phases in details

Subject	Lecture (in hours)				Small group teaching (in hours) PBL, Practical demonstration , Instrumental demonstration, Skill lab, Tutorial & etc.	Departmental integrated teaching (in hours)	Phase integrated teaching (in hours)	Clinical/Bedside teaching (in weeks)			Total weeks	Block posting (in weeks)	Formative examination (in days)		Summative examination (in days)	
	2 nd Phase	3 rd Phase	4 th Phase	Total				2 nd Phase	3 rd Phase	4 th Phase			Preparatory leave-10 days	Exam time-15days	Preparatory leave-10 days	Exam time-30days
Internal medicine	22	25	90	137	199 hours	(10 topics ×2 hours) = 20 hours	(42 topics × 3 hours) = 126 hours	14	06+ 2 (OPD)	12	34	04 wks	Preparatory leave-10 days	Exam time-15days	Preparatory leave-10 days	Exam time-30days
Psychiatry	02	-	18	20				-	02	03	05					
Dermatology	-	-	17	17				-	02	03	05					
Pediatrics	04	20	22	46				04	-	06	10					
Transfusion medicine	-	03	-	03				01	-	-	01					
Physical Medicine	-	-	04	04				02	-	-	02					
Nuclear Medicine	-	-	02	02				-	-	-	-					
Emergency	-	-	-	-				-	02	-	02					
Total	28	48	153	229	199	20	126 hours	21	14	24	59	04 wks	25 days	40 days		
Grand Total	448 hours						126 hours	63 weeks			65 days					
<i>Time for integrated teaching, examination preparatory leave and formative & summative assessment is common for all subjects of the phase</i>																
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.																
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions																

Medicine & Allied Subjects: hour distribution for Clinical/Bedside teaching in 2nd, 3rd & 4th phases in details

Subject	Clinical/Bedside & Ambulatory care teaching (in hours)						Total hours (in three phases)	Total weeks {(2 nd phase wks + 3 rd phase wks + 4 th phase wks = Total three phases wks) × (6 days × 4 or 2 hours)}
	2nd Phase		3rd Phase		4th Phase			
	Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching			
	Morning	Evening	Morning	Evening	Morning	Evening		
	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency		
	21 weeks		14 weeks		28 weeks			
Internal medicine	168 h (14w)	168 h (14w)	96 h (8w)	96 h (8w)	144 h (12w)	144 h (12w)	816 h	{14+(6+2)+12}= 34 w × (6 days × 4 hrs)
Psychiatry	-	-	24 h (2w)	24 h (2w)	36 h (3w)	36 h (3w)	120 h	(0+2+3)= 05 w × (6 days × 4 hrs)
Dermatology	-	-	24 h (2w)	24 h (2w)	36 h (3w)	36 h (3w)	120 h	(0+2+3)= 05 w × (6 days × 4 hrs)
Pediatrics	48 h (4w)	48 h (4w)	-	-	72 h (6w)	72 h (6w)	240 h	(4+0+6)= 10 w × (6 days × 4 hrs)
Transfusion medicine	12 h (1w)	-	-	-	-	-	12 h	(1+0+0) = 01 w × (6 days × 2 hrs)
Physical Medicine	24 h (2w)	-	-	-	-	-	24 h	(2+0+0)= 02 w × (6days × 2hrs)
Emergency	-	-	24 h (2w)	24 h (2w)	-	-	48 h	(0+2+0)= 02 w × (6days × 4hrs)
Block posting	-	-	-	-	48 h (4w)	48 h (4w)	96 h	(0+0+4)= 04 w × (6days × 4hrs)
Total	252 hrs	216 hrs	168 hrs	168 hrs	336 hrs	336 hrs	1476 hrs	63 weeks

Surgery & Allied Subjects: Hour distribution in 2nd, 3rd & 4th phases in details

Subject	Lecture (in hours)				Small group teaching (in hours)	Departmental integrated teaching (in hours)	Phase integrated teaching (in hours)	Clinical/Bedside teaching (in weeks)			Total weeks	Block posting (in weeks)	Formative examination (in days)		Summative examination (in days)	
	2 nd Phase	3 rd Phase	4 th Phase	Total	PBL, Practical demonstration, Instrumental demonstration, Skill lab, Tutorial & etc.			2 nd Phase	3 rd Phase	4 th Phase			Preparatory leave-10 days	Exam time-15days	Preparatory leave-10 days	Exam time-30days
General surgery	35	30	60	125	134 hours	(11 topics × 2 hours) = 22 hours	(42 topics × 3 hours) = 126 hours	15	01	07	23	04 wks	25 days	40 days		
Orthopaedic surgery	-	15	45	60				02	04	04	10					
Radiology	-	-	05	05				01	-	-	01					
Radiotherapy	-	-	08	08				-	01	-	01					
Anesthesia	-	10	-	10				01	-	-	01					
Neurosurgery	-	-	05	05				-	01	-	01					
Pediatric surgery	-	05	10	15				-	-	02	02					
Urology	-	05	10	15				-	-	02	02					
Burn & Plastic surgery/ Emergency & Casualty	-	-	05	05				-	-	01	01					
Dentistry	-	-	-	-				01	-	-	01					
Ophthalmology	-	38	-	38				-	04	04	08					
Otolaryngology	-	38	-	38				-	04	04	08					
Total	324							134	22	126 hrs	20				15	24
Grand Total	480 hours						126 hrs	63 weeks				65 days				
<i>Time for integrated teaching, examination preparatory leave and formative & summative assessment is common for all subjects of the phase</i>																
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.																
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions																

Surgery & Allied Subjects: Hours distribution for Clinical/Bedside teaching in 2nd, 3rd & 4th phases in details

Subject	Clinical/Bedside & Ambulatory care teaching (in hours)						Total hours (in three phases)	Total weeks {(2 nd phase wks + 3 rd phase wks + 4 th phase wks = Total three phases wks) × (6 days × 4 or 2 hours)}
	2 nd Phase		3 rd Phase		4 th Phase			
	Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching			
	Morning	Evening	Morning	Evening	Morning	Evening		
	Indoor/ OPD/ Emergency & Casualty	Indoor/ Emergency & Casualty	Indoor/ OPD/ Emergency & Casualty	Indoor/ Emergency & Casualty	Indoor/ OPD/ Emergency & Casualty	Indoor/ Emergency & Casualty		
	20 weeks		15 weeks		28 weeks			
General surgery	180 h (15w)	180 h (15w)	12 h (1w)	12 h (1w)	84 h (7w)	84 h (7w)	552 h	(15+0+07) = 23 w × (6 days × 4 hrs)
Orthopaedic surgery	24 h (2w)	24 h (2w)	48 h (4w)	48 h (4w)	48 h (4w)	48 h (4w)	240 h	(2+4+4) = 10 w × (6 days × 4 hrs)
Radiology	12 h (1w)	-	-	-	-	-	12 h	(1+0+0) = 01 w × (6 days × 2 hrs)
Radiotherapy	-	-	12 h (1w)	-	-	-	12 h	(0+1+0) = 01 w × (6 days × 2 hrs)
Anesthesia	12 h (1w)	12 h (1w)	-	-	-	-	24 h	(1+0+0) = 01 w × (6 days × 4 hrs)
Neurosurgery	-	-	12 h (1w)	12 h (1w)	-	-	24 h	(0+1+0) = 01 w × (6 days × 4 hrs)
Pediatric surgery	-	-	-	-	24 h (2w)	24 h (2w)	48 h	(0+0+2) = 02 w × (6 days × 4 hrs)
Urology	-	-	-	-	24 h (2w)	24 h (2w)	48 h	(0+0+2) = 02 w × (6 days × 4 hrs)
Burn & Plastic surgery/ Emergency & Casualty	-	-	-	-	12 h (1w)	12 h (1w)	24 h	(0+0+1) = 01 w × (6 days × 4 hrs)
Dentistry	12 h (1w)	-	-	-	-	-	12 h	(1+0+0) = 01 w × (6 days × 2 hrs)
Ophthalmology	-	-	48 h (4w)	48 h (4w)	48 h (4w)	48 h (4w)	192 h	(0+4+4) = 08 w × (6 days × 4 hrs)
Otolaryngology	-	-	48 h (4w)	48 h (4w)	48 h (4w)	48 h (4w)	192 h	(0+4+4) = 08 w × (6 days × 4 hrs)
Block posting	-	-	-	-	48 h (4w)	48 h (4w)	96 h	(0+0+4) = 04 w × (6 days × 4 hrs)
Total	240 hrs	216 hrs	180 hrs	168 hrs	336 hrs	336 hrs	1476 hrs	63 weeks

Obstetrics & Gynaecology: Hours distribution in 3rd & 4th phases in details

Lecture (in hours)				Small group teaching (in hours)	Departmental integrated teaching (in hours)	Phase integrated teaching (in hours)	Clinical/Bedside teaching (in weeks)		Block posting (in weeks)	Formative examination (in days)		Summative examination (in days)	
	3 rd Phase	4 th Phase	Total	PBL, Practical demonstration, Instrumental demonstration, Skill lab, Tutorial & etc.			3 rd Phase	4 th Phase		Preparatory leave 10 days	Exam time 15 days	Preparatory leave 10 days	Exam time 15 days
	8wks	8wks											
Total	30	60	90	58 hours	(10 topics × 2 hours) = 20 hours	(42 topics × 3 hours) = 126 hours	16 weeks		04 wks	25 days		40 days	
Grand Total	168 hours					126 hours	20 weeks			65 days			
<i>Time for integrated teaching, examination preparatory leave and formative & summative assessment is common for all subjects of the phase</i>													
Preventive aspects of all diseases will be given due importance in teaching learning considering public health context of the country and others parts of the world.													
Related behavioral, professional & ethical issues will be discussed in all clinical and other teaching learning sessions													

Obstetrics & Gynaecology: Hours distribution for Clinical/Bedside teaching in 3rd & 4th phases in details

Subject	Clinical/Bedside & Ambulatory care teaching (in hours)						Total hours (in three phases)	Total weeks {(2 nd phase wks + 3 rd phase wks + 4 th phase wks = Total three phases wks) ×(6 days× 4 or 7 hours)}
	2 nd Phase		3 rd Phase		4 th Phase			
	Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching		Indoor clinical/ bedside teaching & Ambulatory care teaching			
	Morning	Evening	Morning	Evening	Morning	Evening		
	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency	Indoor/ OPD/ Emergency/ Out reached center	Indoor/ Emergency		
			8 weeks			12 weeks		
Basic Clinical Skills (in-patient)	-	-	48 h (4w)	48 h (4w)	-	-	96 h	(0+4+0)= 04 w × (6 days × 4 hrs)
Family Planning Clinic	-	-	24 h (2w)	24 h (2w)	-	-	48 h	(0+2+0)= 02 w × (6 days × 4 hrs)
Gynae & Antenatal Out-patient Clinic	-	-	24 h (2w)	24 h (2w)	-	-	48 h	(0+2+0)= 02 w × (6 days × 4 hrs)
Routine Obstetrics	-	-	-	-	36 h (3w)	36 h (3w)	72 h	(0+0+3)= 03 w × (6 days × 4 hrs)
Routine Gynaecology	-	-	-	-	36 h (3w)	36 h (3w)	72 h	(0+0+3)= 03 w × (6 days × 4 hrs)
Emergency Obstetric Care E.O.C (Labour Room)	-	-	-	-	24 h (2w)	60 h (2w)	84 h	(0+0+2)= 02 w × (6 days × 7 hrs)
Block posting	-	-	-	-	48 h (4w)	48 h (4w)	96 h	(0+0+4)= 04 w × (6 days × 4 hrs)
Total	-	-	96 hrs	96 hrs	144 hrs	180 hrs	516 hrs	24 weeks

8. 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.

9. 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 10marks for SBA and 10marks 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
- H. There will be phase final professional examination within the each academic phase.
- I. Results will be published as per following GPA system with the provision of reflection of marks in the academic transcript

Numerical Grade	Letter Grade	Grade Point
80% and above	A ⁺	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A ⁻	3.50
65% to less than 70%	B ⁺	3.25
60% to less than 65%	B	3.00
Less than 60%	F	0.00

J. 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

K. Pass Marks:

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

L. 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	100	100	20	400
Biochemistry	180	100	100	20	400
Total					1300

Second Professional Examination

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

Third Professional Examination

Subjects	Written Exam marks	Structured Oral Exam marks	Practical Exam marks	Formative Exam marks	Total Marks
Community Medicine & Public Health	90	100	100	10	300
Pathology	90	100	100	10	300
Microbiology	90	100	100	10	300
Total					900

Fourth Professional Examination

Subjects	Written Exam marks	Structured Oral Exam marks	Clinical	Practical	Formative Exam marks	Total Marks
Medicine & Allied Subject	180	100	100	100	20	500
Surgery & Allied Subject	180	100	100	100	20	500
Obstetrics & Gynecology	180	100	100	100	20	500
Total						1500

M. Common Rules for Examinations

- a) University professional MBBS examination will be started from May and November.
- b) University professional MBBS examinations will be completed within the specified time of the concerned phase
- c) No carry on system before passing 1st professional examination. Students who will appear first professional examination can attend the clinical class before publishing results of first professional examination. If any student fail any subject of first phase in the first professional examination he/she will not be able to continue clinical and other classes of second phase before passing first professional examination.
- d) 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.
- e) 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.
- f) 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.

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

- i. Incase 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. Incase 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.

10. Internship :

- I. After passing final professional MBBS examination students have to enroll for one year log book based mandatory rotatory internship programme. Internship programme will be more structured and supervised. It is compulsory to complete MBBS course & one year supervised internship programme to get permanent registration for doing independent practice.
- II. MBBS graduates must join internship within one month after passing the final professional MBBS examination. Exception can be considered based on the only valid personal medical ground upon approval of the Director of the Medical College Hospital;
- III. Within one year (12 months) of internship period 11 months at respective medical college hospital and one month at Upazila Health Complex (UHC)/field level.
- IV. Timeline of completion of internship will be two years once after joining internship. i.e. it must be completed within two years from the starting date. Exception can be considered based on the only valid personal medical ground upon approval of the Principal of respective Medical College and Director of Medical College Hospital;

Generic Topics on Medical Humanities to be Taught in MBBS Course

The following sixteen generic topics on medical humanities will be taught within 1st, 2nd, 3rd & 4th Phase of MBBS course & Internship period under supervision of the concerned Phase 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.

Topics to be taught in Phase-I

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

Topics to be taught in Phase-II

1. Communication skill
2. Doctor–patient relationship (DPR)
3. Physicians’ bedside manner, etiquette and rapport building with patients

Topics to be taught in Phase-III

1. Integrity and accountability of medical professionals
2. Aspects of good doctors

Topics to be taught in Phase-IV

1. Medical professionalism
2. Inter-professionalism
3. Patient Safety

Issues for Internship Period

1. White coat ceremony
2. Career planning
3. Continuing Medical Education (CME) & Continuing Professional Development (CPD)
4. Causes of death
5. Basic Infection Control Practice (ICP)

Integrated Teaching in Phase I

Teachers of all departments of Phase -1 (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 hour. Each session will be for 3 hour

A) Term-I:

1. Coronary artery disease
2. Chronic obstructive pulmonary disease (COPD)
3. Anaemia

B) Term-II:

4. Diarrhea
5. Diabetes Mellitus (DM)
6. Jaundice
7. Electrolyte imbalance
8. Proteinuria

C) Term-III:

9. Thyroid disorder
10. Cerebro-vascular disease (CVD)
11. Deafness
12. Errors of refraction

Integrated Teaching in Phase II

All the departments of Phase II (Pharmacology, Forensic Medicine & Toxicology) must be present and take part in the integrated teaching while the faculty representatives from concerned clinical & others departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase II should be ensured. Concern audiovisual aid, equipment and patient will be used. Students need to get some 'take home message' from every session. To ensure presence of the students 10 (Ten) marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule for integrated teaching session will be set at the phase II committee meeting in collaboration with medical education unit (MEU).

Total -17 hour. Each session will be for at least 2 hour

1. Electrocution and lightening
2. Burn
3. Drowning
4. Death
5. Poisoning
6. Substance abuse
7. Pulmonary Tuberculosis
8. Malaria

Integrated Teaching in Phase III

All the departments of Phase III (Community Medicine & Public Health, Pathology, Microbiology) must be present and take part in the integrated teaching while the faculty representatives from concerned clinical & others departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase III should be ensured. Students need to get some 'take home message' from every session. To ensure presence of the students Schedule for integrated

teaching session will be set at the phase III committee meeting in collaboration with medical education unit (MEU).

Total -18 hour. Each session will be for at least 2 hour

Topics:

1. Occupational and Environmental hazard
2. Snake bite
3. Transportation injuries
4. Disaster management
5. Shock
6. Glomerulonephritis
7. Rheumatoid Arthritis/ Osteomyelitis
8. Different Viral Fevers (Covid-19, Dengue, Chikungunya)
9. Carcinoma Cervix

Integrated Teaching In Phase IV

All the departments of phase iv (Medicine & Allied Topics, Surgery & Allied Topics and Gynecology & Obstetrics) must be present and take part in the integrated teaching while the faculty representatives from concerned clinical and other departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase IV should be ensured. Students need to get some take home message from every session. To ensure presence of the students 10 (ten) marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule of integrated teaching session will be set at the phase IV committee meeting in collaboration with medical education unit (MEU).

Each session will be for at least 3 hours

Topics :

- | | |
|-------------------------------|---------------------------------------|
| 1. Hypertension | 22. Low Back Pain |
| 2. Tuberculosis | 23. Joint Pain |
| 3. Thyroid Disorder | 24. Osteoporosis |
| 4. Acute Kidney Injury(AKI) | 25. Acute abdomen |
| 5. Fever | 26. Thrombophlebitis/Phlebothrombosis |
| 6. Oedema | 27. Sepsis |
| 7. Chest pain | 28. Infection Prevention & Control |
| 8. Acute respiratory distress | 29. Shock |
| 9. DM | 30. Fluid and Electrolytes- |
| 10. Jaundice | 31. Burn |
| 11. Diarrhea and vomiting | 32. Per rectal bleeding- |
| 12. Nutrition | 33. Vertigo |
| 13. Pediatric Emergency | 34. Congenital anomalies |
| 14. Headache | 35. Wound infection |
| 15. Anxiety | 36. Urinary Tract Infection (UTI) |
| 16. Depression | 37. AUB |
| 17. Psychosis | 38. Convulsion |
| 18. Drug reaction | 39. Abdominal Lump |
| 19. Generalised pruritus | 40. Anaemia |
| 20. Purpura | 41. Unconsciousness |
| 21. STI | 42. Delirium & Dementia |

Medicine & Allied Subjects Departmental Integrated Teaching- Phase-IV

Medicine and Allied subjects of phase IV will organized the departmental integrated teaching on the following topics where faculty members of internal medicine and concerned allied subjects must be present and take part in the integrated teaching. While the faculty representatives from concerned clinical and other departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase IV should be ensured. Students need to get some take home message from every session. To ensure presence of the students few marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule of the departmental integrated teaching session will be set by the department in coordination with the phase IV committee.

Each session will be for at least 2 hours

Topics :

1. Heart Failure
2. Congenital Heart Disease
3. Bronchial Asthma
4. Liver Abscess
5. Malabsorption syndrome
6. Irritable bowel syndrome(IBS)
7. Psoriasis
8. Leprosy
9. Autism spectrum disorder (ASD)
10. Somatoform disorder

Surgery & Allied Subjects: Departmental Integrated Teaching- Phase-IV

Surgery and Allied subjects of phase IV will organized the departmental integrated teaching on the following topics where faculty members of General Surgery and concerned allied subjects must be present and take part in the integrated teaching. While the faculty representatives from concerned clinical and other departments will also participate actively. Teachers will be the speakers in each session. Participation of the students of phase IV should be ensured. Students need to get some take home message from every session. To ensure presence of the students few marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule of the departmental integrated teaching session will be set by the department in coordination with the phase IV committee.

Each session will be for at least 2 hours

Topics :

1. Malignant Bone Tumour
2. Inflammatory Bowel Disease
3. Gastric Outlet Obstruction
4. Sub acute Intestinal obstruction
5. Neck Swelling
6. Epistaxis
7. Stridor in Children
8. Bladder Outflow Obstruction
9. Metabolic Bone Disease
10. Spinal Injury.
11. Proptosis

Obstetric & Gynecology : Departmental Integrated Teaching-Phase-IV

Obstetric & Gynecology of phase IV will organized the departmental integrated teaching on the following topics where faculty members of Obstetric & Gynecology and concerned other subjects must be present and take part in the integrated teaching. Teachers will be the speakers in each session. Participation of the students of phase IV should be ensured. Students need to get some take home message from every session. To ensure presence of the students few marks will be allocated from practical part of the professional examination as a part of integrated teaching and submission of write up on what was learned by the student as summary. Schedule of the departmental integrated teaching session will be set by the department in coordination with the phase IV committee.

Each session will be for at least 2 hours

Topics :

1. Pelvic Inflammatory Disease (PID)
2. Vaginal Discharge
3. Ovarian Tumour
4. Contraceptives
5. Pelvic tuberculosis
6. Normal labour
7. Antenatal care
8. Vital statistics (maternal & perinatal mortality)
9. Puerperium
10. Puberty