



Curriculum and study Guide

Third Year BDS

Subject: General Medicine

Institute of Dentistry,

CMH Lahore Medical College

deaniod@cmhlahore.edu.pk

Table of contents

1. Introduction to study guide-----	1
2. Mission statement-----	2
3. Rationale of curriculum-----	3
4. Introduction to curricular framework-----	3
5. 4 years curricular framework-----	4
6. Third year curricular map-----	5
7. BDS Medicine Program Outcomes-----	6
8. Undergraduate competencies-----	7
9. Coordinators 3rd year BDS 2020-----	7
10. Student representative-----	8
11. Clerkship Subjects-----	9
12. Hours of teaching (according to PM &DC regulations) -----	9
13. Introduction to Medicine-----	10
I. Resources -----	10
a. Teaching resources -----	10
b. Infrastructure resources -----	11
c. Supporting staff-----	11
II. Teaching and learning strategies-----	12
III. Learning methodologies-----	13
IV. Course outline -----	16
V. Course objectives-----	17
VI. Learning resources -----	19
VII. Formative Summative assessment methods and policies-----	28
VIII. Sample MCQs and SEQs-----	34

Introduction to study guide

This study guidebook is designed for Dental undergraduates by consolidated effort of all subjects across the year to provide Dental students of IODCMH Lahore Medical College a resource material which would highlight important aspects of curriculum. The study guide aims to promote self-regulated lifelong learning among students by giving them the control over their learning.

The pervasive curriculum aspects of undergraduates' competencies, assessment policies and curriculum coordinators are mapped in his guidebook. Horizontal integration across the year better conceptual understanding while vertical integration promotes clinically relevant understanding. IODCMH aims to improve health indicators of society by improvement of students and doctors in preventive health service provision and health education provision to society through community programs.

The study guide gives an overview of intended course outcomes and objectives in relation to the course content. The assessment methodology tailored to intuitional strategy is provided.

This study guide has been carefully designed keeping in view PMDC and NUMS curriculum and guide lining dedicated effort by faculty is done to make this guide tailored to student's needs. Students feedback has been seeded and incorporated at all stages during study guide development. Curriculum is a living dynamic entity. Our aim to improve it by every passing day. This humble effort of all faculty acts as a guiding light for our dear students.

Vision Statement

The CMH Lahore Medical College and Institute of Dentistry aims to provide a highly conducive environment to train a new generation of technology savvy and socially responsible healthcare providers who are well-versed with their role within a healthcare team and while serving the community, demonstrate abilities to practice requisite communication skills, empathy, lifelong learning, critical thinking, and decision making at a national or an international facility.

Mission Statement

The mission of CMH Lahore Medical College and Institute of Dentistry is to undertake following steps to materialize their vision:

1. Ensure provision of a conducive educational environment where students feel well-supported through implementation of learner-centered teaching approaches, inbuilt strong feedback loops and physically comfortable learning environment.
2. Sensitization of students about their role in the society as socially responsible professionals through participation in extracurricular activities like community-based programs, patient welfare societies, blood donors' society, and productive contribution to combat local and national calamities.
3. Students' exposure to the healthcare community, where sympathy and empathy are the cornerstones of our practice. Students commit to understanding their patients not only through their medical conditions but also through their emotions, fears, and unique life experiences. By fostering a culture of compassion, students aim to provide not just medical care but genuine understanding and support to enhance the well-being of those we serve.
4. Students' exposure to cutting-edge technology through campus learning management system and development of their e-portfolios.
5. Leadership and Smart Learning Strategies through implementation of interprofessional curriculum for undergraduate health professions' education students enrolled in medical, dental, allied health sciences, and nursing programs.
6. Provision of opportunities to undergraduate and post-graduate students to have practical experience of leading, working as a team member, critical thinking, problem solving, and decision making.
7. Formal teaching and training of professionalism for students to develop their full potential including communication, and lifelong learning skills through portfolio development among undergraduate and postgraduate students.
8. Implementation of a task-based and outcome oriented longitudinal module on 'Research' for undergraduate students, leading to publication of research article/s and for cultivation of evidence-based practices.

Rationale of Curriculum

The curriculum is designed to address both local and international needs. The curriculum is focused to prepare students for the international licencing exams and training abroad as well as empowering them to treat local patients with safety and efficiency. Dentists work as a healer in the community. A dentist should have evidence based and update knowledge about the epidemiology of the practicing area. The curriculum of IOD CMH LMC is planned with a collaboration of clinical and basic sciences faculty in addition to students and family medicine department to ensure that the prevailing health conditions of the society are treated and dealt with effectively. The emergence of new techniques in preservation of existing dentition and restoration of the lost dentition and oral structures has led to changes in the curriculum with more emphasis on new and advanced techniques, procedures and evolution of new and advanced technology (e.g. CAD/CAM & Implants).

Introduction to Curricular Framework

This study guide is developed as resource assistance to the students and faculty. The study guide development process included representation from teaching faculty, management, leadership of college and students. The study guide is made to achieve and alignment between societies' needs, institutional needs, patient needs & student's needs.

The curriculum implemented is a hybrid type of curriculum which has both horizontal and vertical integration. Spiral integration is introduced as an adjunct to horizontal and vertical integration. The curriculum spans over 3 phases

PHASE 1 (Year 1&2): Includes basic sciences Anatomy, physiology, biochemistry, Oral biology, Science of dental Material, Pharmacology and Community Dentistry, it also includes preclinical Prosthodontics, general pathology.

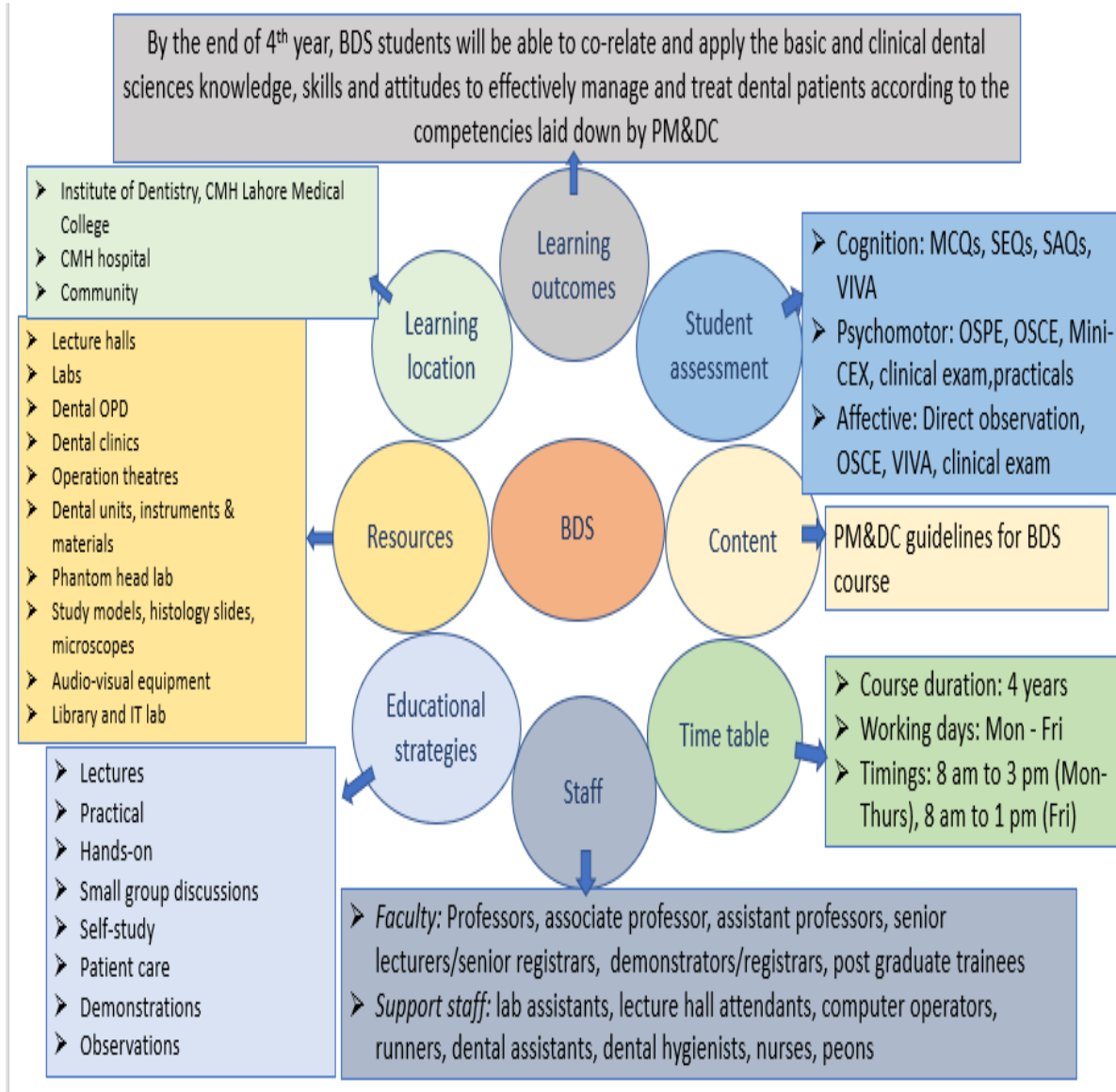
PHASE 2 (Year 3rd& Final Year): includes Periodontology, Oral Pathology, Oral Medicine, General Medicine, General Surgery, Oral Surgery, Prosthodontics, Orthodontics, Operative Dentistry.

4 Years Curricular Framework

BDS SCHEME OF STUDIES

<u>BASIC DENTAL SCIENCES / PRE-CLINICAL YEAR</u>		<u>CLINICAL YEARS</u>	
1 st YEAR	2 nd Year	3 rd Year	Final Year
Anatomy	Science of Dental Material	Periodontology	Prosthodontics
Physiology	Gen. Pathology	Oral pathology	Operative Dentistry
Biochemistry	Pharmacology	Oral Medicine	Oral Surgery
Pak studies & Islamic Studies	Behavioral Sciences	Gen. Medicine	Orthodontics
Oral Biology	Community Dentistry	Gen. Surgery	
	Pre-Prosthodontics	Oral Surgery	
	Pre-Operative Dentistry	Prosthodontics	
Self-Directed Learning Sessions			

BDS Curricular Map



BDS Medicine Program Outcomes

At the end of 3rd year BDS Medicine program, the student should be able to:

1. Independently assess the patients, order relevant investigations and formulate a treatment plan with help of fellow medical colleague
2. Practice evidence-based medicine
3. Refer for modification of medical treatments according to patient's special needs, if any, in the form of medical conditions, physical or mental disabilities etc
4. Assess and refer the patients with case difficulty indices requiring consultation or treatment by specialists.
5. Show empathy and respect in their attitude and behavior towards their patients.
6. Maintain high ethical and professional standards in their pursuit of clinical excellence.
7. Draw upon their existing knowledge and update it through continuing education programs.
8. Exercise infection control protocol guidelines laid out by their local health councils.
9. Exercise management qualities to maintain single or multiple unit private practices where applicable.
10. Work in a team of other health care professionals including doctors and paramedical staff etc.
11. Maintain patient records with emphasis on legal and patient confidentiality aspects.
12. Provide basic life support to patients requiring critical care in or outside medical set up.
13. Identify and manage and ask for help in medical emergencies which might arise during routine dental practice
14. Demonstrate clear verbal and written communication skills.

Undergraduate Competencies

IOD CMH Lahore medical College envisions to produce graduates who are proficient in following competencies at the end of 3rd year

- ◆ Medical Expertise
- ◆ Communication
- ◆ Critical thinking
- ◆ Management
- ◆ Scholar
- ◆ Professionalism
- ◆ Evidence based practice providing holistic care
- ◆ Empathetic
- ◆ Providing Community service

Class Co-ordinators Third Year BDS 22-2023

Coordinator Name	Department	Extension
Prof. Dr. Yousaf Athar Professor	Periodontology	

Prof. Dr. Faiqa Yasser Professor	Oral Pathology	
Dr. Muhammad Shairaz Sadiq Associate Professor	Oral Medicine	350
Associate Prof. Dr Javed Iqbal Associate professor	GeneralMedicine	0334-5414590
Prof Dr. Imran Daula Professor	General Surgery	

Representative

Name	Designation
Ali Rohan	CR 1 st Year BDS
Lyba Ilyas	GR 1 st Year BDS
Saad Shafi	CR 2 nd Year BDS
Maha Rasheed	GR 2 nd Year BDS
M. Aman Masood	CR 3 rd Year BDS
Janeeta Urooj	GR 3 rd Year BDS
Ali Nadeem	CR Final Year BDS
Azka Taimur	GR Final Year BDS

Clerkship Subjects

Following are the core subjects for Final year BDS for which professional examination will be held at the end of the academic year:

1. Periodontology
2. Oral Pathology
3. Oral Medicine
4. General Medicine
5. General Surgery

Hours of teaching Medicine 3rd year BDS

CMH Lahore Medical College and IOD

Subject	Lectures /Hours	Clinical teaching Hours	Total Teaching Hours
General Medicine	50	150	200

INTRODUCTION TO MEDICINE

Resources

1. Teaching resources
2. Infrastructure resources
3. Supporting staff

Teaching resources

Sr. #.	Faculty Name	Department as per PM & DC certificate	Qualification
1	Dr Muhammad Siddique	Professor	MBBS, FCPS
2	Dr Rizwana Kitchlew	Professor	MBBS, FCPS, FRCP
3	Dr. Javed Iqbal TI (M)	Associate Professor	MBBS, FCPS
4	Dr. Hala Mansur	Assistant Professor	MBBS, FCPS,MRCP
5	Dr. Saba Saif	Assistant Professor	MBBS, FCPS, FRCP
6	Dr. Abdur Rafey	Senior Registrar	MBBS, FCPS
7	Dr. Sahar Farzand	Senior Registrar	MBBS, FCPS

Infrastructure resources

Sr. #.	Infrastructure Resources	Quantity
1	Lecture hall	1
2	OPD	3
3	Medical wards	5
5	Class rooms	1
6	Mini Library	1

Supporting Staff

Sr. No	Name	Designation
1	Muhammad Imran	PA to HOD Medicine
2	Naveed Ishaque Malik	Computer Opearator
3	Shahzad Irshad	Peon

TEACHING AND LEARNING STRATEGIES

Multiple educational methods will be used comprising of self-study, interactive lectures, group discussions, and practical and manual dexterity skill sessions.

(i) Methods for achieving cognitive objectives

- Interactive lectures using audio visual aids on power point presentation
- Group discussions in form of large group and small group
- Collaborative learning
- Distant learning/Online learning
- Self-study and reading from learning resources

(ii) Methods for achieving psychomotor objectives

- Theoretical information provided in lectures
- Clinical demonstrations provided by teaching faculty on models and patients
- Supervised practice on patients

(iii) Methods for achieving affective objectives

- Interaction with peers, group members, teachers, support staff etc.
- Group discussions (small and large)
- Oral presentations by students

LEARNING METHODOLOGIES

The following teaching /learning methods are used to promote better understanding:

- Interactive lectures
- online lectures
- Small group discussions
- Practical
- Skill sessions
- Self-directed learning
- Assignments
- Oral presentations by students

Interactive lectures

In large group, the lecturer introduces a topic which explains the underlying phenomena through questions, pictures, exercise, etc. Students are actively involved in the learning process.

Other learning resources

Distant learning/Online lectures

Online lectures are delivered through CMH online site .Live sessions through audio video are made for the class and recorded lecture material is uploaded on CMH site so that students can read and listen to the lectures later on. On the basis of these lectures online assessments are given to students. During online sessions students interact and can ask questions.

Small group discussions

This format helps students to clarify concepts and acquire skills and attitudes. Students exchange opinions and apply knowledge gained from lectures and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

Practical

In practical sessions students observe demonstrations from faculty members on proper instrument use and handling both inside and outside the patients mouth. The students are trained in diagnosing and treating a periodontal disease as per protocols set by the department.

Skill session

Students are required to practice suturing techniques on inanimate materials.

Self- directed learning

Students take responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours or afterwards for self-study.

Assignments

Students are given written formative assignments on designated topics. Revision of the topics already covered by Medicine departments is given to students as oral presentations.

Oral presentations by students

Students are assigned topics during revision session to enhance their communication skills and group learning.

CURRICULUM IMPLEMENTATION

Curriculum implementation refers to putting into practice the official document including course content, objectives, learning and teaching strategies. Implementation process helps the learner to achieve knowledge, skills and attitudes required of the learning tasks. Learners are a pertinent component of the implementation process. Implementation occurs when the learner achieves the intended learning experiences, knowledge, ideas, skills and attitudes which are aimed to make the learner an effective part of the society. Curriculum implementation also refers to the stage at which curriculum is put into effect. There has to be an implementing agent as well. Teacher is an important part of this process and implementation of the curriculum is the way the teacher selects and utilizes various components of the curriculum. Implementation occurs when the teacher's formulated course content, teacher's personality and teaching and learning environment interact with the learners. Therefore, curriculum implementation is how the officially planned course of study is translated and reflected by the teacher into schemes of work, lesson plans, syllabus and resources are effectively transferred to the learners. Curriculum implementation can be affected by certain factors such as teachers, learners, learning environment, resource materials and facilities, culture and ideology, instructional supervision and assessments.

Personnel involved in teaching and facilitation

(i) Lectures delivery by:

Sr. #.	Faculty Name	Department as per PM & DC certificate	Qualification
1	Dr. Javed Iqbal TI (M)	Associate Professor	MBBS, FCPS
2	Dr. Saba Saif	Assistant Professor	MBBS, FCPS, FRCP
3	Dr. Hala Mansoor	Assistant Professor	MBBS, FCPS, MRCP
4	Dr. Abdur Rafey	Senior Registrar	MBBS, FCPS

(iv) Computer assistant: 1 as nominated by the college

Time frame

Course duration: 36 weeks

Lectures: Tuesday (8:50 to 9:40 am), Thursday (8:50 to 9:40 am)

Clinical rotataion: 9 weeks - Monday and Wednesdays (12:00 am to 3:00 pm),

COURSE OUTLINE

Outline of Clinical Teaching in the Subject of Medicine

3rd year BDS 2022-23

1st Rotation	<ul style="list-style-type: none">• History taking and GPE• Symptomatology and history taking pertaining to CVS + respiratory system• Clinical examination of CVS and respiratory system
2nd Rotation	<ul style="list-style-type: none">• Symptomatology and history taking pertaining to GIT• Clinical examination of GIT• Nomenclature symptomatology and history taking pertaining to CNS and musculoskeletal system• Clinical examination of CNS and musculoskeletal system
3rd Rotation	<ul style="list-style-type: none">• Revision of clinical methods• Case discussion of common clinical conditions
4th Rotation	<ul style="list-style-type: none">• Revision of clinical methods• Case discussion of common clinical conditions

Course Objective

At the end of the year students will be able to know:

Sr. #	Topic
Cardiovascular system	
1.	Acute chest pain differential diagnosis and management principles
2.	Ischemic Heart Disease
3.	Hypertension
4.	Rheumatic fever
5.	Cardiac failure
Infections	
6.	Enteric fever
7.	Dengue fever
8.	Malaria
9.	HIV/AIDS and other STDS
10.	Infective endocarditis
11.	Fungal infections diagnosis and treatment
Gastrointestinal system	
12.	Acute hepatitis
13.	Acid peptic disease
14.	Chronic hepatitis
15.	Cirrhosis of liver
16.	Liver Disease and Dentistry

17.	Ascites diagnosis and management
Respiratory system	
18.	Pneumonia
19.	Bronchial asthma
20.	Tuberculosis
21.	COPD
Nervous system	
22.	Meningitis and Encephalitis
23.	Cerebrovascular accident
24.	Epilepsy
Blood	
25.	Clotting disorders (Hemophilia, Von-Willibrand)
26.	Bleeding Disorders (ITP,DIC)
27.	Anemia classification , diagnosis and treatment
Nephrology	
28.	Nephrotic syndrome
29.	Acute renal failure and Chronic renal failure
Endocrinology	
30.	Hyperthyroidism and Hypothyroidism. Parathyroid disorders
31.	Diabetes mellitus
Bones and Muscles	
32.	Osteoporosis

33.	RA/SLE
-----	--------

Learning resources

Department of Medicine CMH Lahore Medical College
Lecture Schedule in Medicine for 3rd Year BDS 2023

Block-I

Days/ Timings: Tuesdays : (08:00-09:00)

Sr.	Date	Topic	Instructor
1	10-01-2023	Acute chest pain differential diagnosis and management principles	Dr. Saba Saif
2	17-01-2023	Ischemic Heart Disease	Dr. Hala Mansur
3	24-01-2023	Rheumatic fever	Dr. Saba Saif
4	31-01-2023	Infective endocarditis	Brig. Javed Iqbal (R)
5	07-02-2023	Cardiac Failure	Brig. Javed Iqbal (R)
6	14-02-2023	Valvular heart disease	Brig. Javed Iqbal (R)
7	21-02-2023	Hematological malignancies lymphomas	Dr. Hala Mansur
Sports Week 27 Feb to 02 March 2023			
8	28-02-2023	Leukemia (AML, ALL, CML, CLL)	Dr. Saba Saif

Sports Day		07 March 2023	
9	14-03-2023	Bleeding disorders (Hemophilia and von willebrand disease)	Prof. Rizwana Kitchlew
Spring Vacations		20 March to 26 March 2023	
10	28-03-2023	Acute kidney injury / Chronic Kidney disease	Brig. Javed Iqbal (R)
Block-I Exam		31 March to 09 April 2023	
Medicine Paper		03 April 2023 (Monday)	

Block-II

Days/Tuesdays : (08:00-09:00)

Thursdays (09:00-10:00)

Sr. #	Date	Topic	Instructor
1	11-04-2023	Pneumonia	Col. Faisal Mehmood
2	13-04-2023	Pulmonary tuberculosis	Dr. Saba Saif
3	18-04-2023	Bronchial asthma	Brig. Javed Iqbal
4	20-04-2023	COPD/Respiratory failure	Prof. Rizwana Kitchlew
Eid ul Fitar		21 April to 25 April 2023	
5	27-04-2023	Headache differential diagnosis	Col. Faisal Mehmood
Labour Day		01 May 2023	
6	02-05-2023	Meningitis	Prof. Muhammad Siddique
7	04-05-2023	Encephalitis	Brig. Javed Iqbal (R)

Medicine Paper 16 August 2023

Block-III

Days/Wednesday : (09:00-10:00)

Lecture Hall-I

Sr	Date	Topic	Instructor
1	12-07-2023	Diabetes Mellitus Type I & II / Diabetes Mellitus complications	Brig. Javed Iqbal (R)
2	19-07-2023	Parathyroid & Osteoporosis	Brig. Javed Iqbal (R)
Summer Vacations		24 July to 18 August 2023	
Block-II Exam		23 Aug to 28 Aug 2023	
General Medicine		24 August 2023	
3	30-08-2023	Addison/Cushing/Conn syndrome	Prof. Rizwana Kitchlew
4	06-09-2023	SLE	Dr. Saba Saif
5	13-09-2023	RA & Osteoarthritis	Dr. Saba Saif
6	22-09-2023	Metabolic syndrome + Gout	Brig. Javed Iqbal (R)
7	27-09-2023	Enteric Fever/Brucecelosis/	Brig. Javed Iqbal (R)
Eid Milad Un Nabi (Tentatively)		28 Sep 2023	
8	04-10-2023	Malaria /Dengue	Brig. Javed Iqbal (R)
9	11-10-2023	HIV + common viral infections	Brig. Javed Iqbal (R)
10	18-10-2023	Revision	Brig. Javed Iqbal (R)
Pre-Annual Exam		19 Oct to 01 Nov 2023	
General Medicine		26 Oct 2023	
Practical /OSPE/VIVA		27 Oct to 03 Nov	
General Medicine Group-B		27 Oct 2023	

Clinical Teaching Schedule

3rd Year BDS Institute of Dentistry 2022-2023

Morning Clinical Teaching Schedule (Amended)

(Mondays, Wednesdays)

Timings: (10:00am to 03:00pm)

The assigned students will be divided into two batches

Batch 1 Dr. Javed Iqbal (Mondays, Wednesdays) (10:00am to 12:30pm)

Batch 2 Dr Abdur Rafey (Mondays, Wednesdays) (12:30pm to 03:00pm)

Brig. Dr Javed Iqbal

Associate Prof.

Course director Medicine

CMH Lahore Medical College.

GENERAL MEDICINE

TOPIC/ THEME	LEARNING OUTCOMES By the end of a unit, candidates will be able to:	LEARNING OBJECTIVES This course enables the student to:	INSTRUCTIONAL STRATEGIES	ASSESSMENT TOOLS
CARDIOVASCULAR SYSTEM	<ul style="list-style-type: none"> • Recognize important cardiovascular conditions • Manage acute chest pain and Vasovagal syncope 	<ul style="list-style-type: none"> • List differential diagnosis of acute chest pain and its principles of management. • List spectrum of ischemic heart disease and its management. • Describe the etiology, diagnosis and guidelines of management of hypertension. • Discuss the etiology, diagnosis and treatment of rheumatic fever/RHD • Describe the pathophysiology, etiology, investigations and management of cardiac failure. • Describe the infectious agents of infective endocarditis and its diagnosis, investigations and management 	Interactive lectures, Small group discussions	MCQs, SAQs
INFECTIONS	Manage the common infections	<ul style="list-style-type: none"> • Diagnose and treat the common infective causes of fever like enteric fever, dengue fever and malaria. • Diagnose common viral infections like influenza, COVID 19 • Identify the infections like HIV/AIDS and other STDs, and important fungal infections like candidiasis 	Interactive lectures, Small group discussions	MCQs, SAQs
GASTROINTESTINAL SYSTEM	<ul style="list-style-type: none"> • Recognize important GI and 	<ul style="list-style-type: none"> • Recognize and approach to common GI symptoms 	Interactive lectures, Small	MCQs, SAQs

	<p>hepatobiliary conditions</p> <ul style="list-style-type: none"> • Manage common GI and hepatobiliary presentations 	<p>like diarrhea, vomiting, dyspepsia, abdominal pain</p> <ul style="list-style-type: none"> • Describe the pathophysiology of the acid peptic disease and its appropriate investigations and management. • Approach to the patient with upper GI bleeding • Describe the etiology, clinical features, investigations and management of acute hepatitis, chronic hepatitis and cirrhosis of liver with special emphasis on clinical implications of the liver diseases in dentistry. 	<p>group discussions</p>	
RESPIRATORY SYSTEM	<ul style="list-style-type: none"> • Recognize important respiratory conditions • Manage common respiratory presentations 	<ul style="list-style-type: none"> • Explain the risk factors of pneumonia, its classifications, investigations and appropriate treatment. • Describe the etiology, diagnosis and guidelines of management of chronic bronchial asthma and acute severe asthma • Describe the etiology, diagnosis and treatment pulmonary tuberculosis • Describe the pathophysiology, etiology, investigations and management of chronic obstructive pulmonary disease. 	<p>Interactive lectures, Small group discussions</p>	<p>MCQs, SAQs</p>
NERVOUS SYSTEM	<p>Diagnose and manage the common neurological conditions.</p>	<ul style="list-style-type: none"> • Approach to the patient with headache • Describe the etiology, diagnosis and guidelines of management of meningitis and encephalitis. 	<p>Interactive lectures, Small group discussions</p>	<p>MCQs, SAQs</p>

		<ul style="list-style-type: none"> Describe the etiology, diagnosis and management of cerebrovascular accident Describe the classification, etiology, investigations and management of epilepsy. 		
HAEMATOLOGY	Manage common bleeding disorders	<ul style="list-style-type: none"> Identify and discuss the common clotting disorders like hemophilia and Von-Willibrand disease. Identify and discuss the diseases like immune thrombocytopenic pupura and disseminated intravascular coagulation Describe the classification of anemia and its diagnosis, investigations and management Approach to anticoagulant therapy Identify common haematological malignancies 	Interactive lectures, Small group discussions	MCQs, SAQs
NEPHROLOGY	<ul style="list-style-type: none"> Approach the patient with kidney diseases Manage fluid and electrolyte imbalances Manage common UTIs 	<ul style="list-style-type: none"> Describe the classification, etiology, investigations and management of acute kidney injury and chronic kidney disease. Identify and manage fluid and electrolyte imbalances Discuss etiology, management of common urinary tract infection 	Interactive lectures, Small group discussions	MCQs, SAQs
ENDOCRINOLOGY	<ul style="list-style-type: none"> Diagnose common endocrine disorders Manage diabetic emergencies 	<ul style="list-style-type: none"> Describe the etiology, clinical features, investigations and treatment of hypothyroidism, hyperthyroidism and parathyroid disorders 	Interactive lectures, Small group discussions	MCQs, SAQs

		<ul style="list-style-type: none"> Describe the pathophysiology, classification of diabetes mellitus and its appropriate investigations and management. Manage diabetic emergencies 		
MUSCLOSKELETAL SYSTEM	Identify common rheumatological disorders	<ul style="list-style-type: none"> Describe the etiology, diagnosis and management of systemic lupus erythematosus Describe the etiology, investigations and management of rheumatoid arthritis. Describe the etiology, diagnosis and guidelines of management of osteoporosis and osteoarthritis 	Interactive lectures, Small group discussions	MCQs, SAQs

TOPICAL DETAILS OF CLINICAL SKILLS TO BE LEARNED AT THE BEDSIDE

Learning Objective:	Psychomotor Objectives:	Teaching Methodology	Assessment tool
Art Of History Taking	Examination Technique of: <ul style="list-style-type: none"> Abdomen Respiratory System Neurology Cardiology 	Bed Side Teaching/ Skills Lab	OSCE
Formal Structure of Medical History			
Symptoms Pertaining to: <ul style="list-style-type: none"> Abdomen Respiratory System Neurology Cardiology 			
Normal and Abnormal Signs in <ul style="list-style-type: none"> Abdomen Respiratory System Neurology Cardiology 			

Recommended books

- Davidson's Principles and Practice of Medicine
- Kumar and Clarks Clinical Medicine
- Clinical methods (Macleod or Hutchinsons)

FORMATIVE AND SUMMATIVE ASSESSMENT METHODS AND POLICIES

Internal Assessment

- a. Weightage of internal assessment shall be 20 %, each for theory and practical, in BDS Professional Examination.
- b. The Internal Assessment shall comprise of monthly test / PBL / assignments / Clinical tests / clinical vivas etc
- c. The Internal Assessment record shall be kept in the respective department of the College / Institute and after approval of Principal, a summary as per University registration number shall be furnished to the Controller of Examinations, at least two weeks before the commencement of final examination.
- d. The result of all the class tests / tools which contribute towards IA will be displayed to the students during an academic year.
- e. The same internal assessment shall be counted both for annual and supplementary examinations. The students who are relegated, however, can improve the internal assessment during subsequent year
- f. Internal assessment tools of any subject may be changed after the approval of respective FBS

3rd PROFESSIONAL BDS EXAMINATION TOS - 2023
GENERAL MEDICINE

Theory
 Marks of theory paper = 80
 Time Allowed = 03 hrs
 Internal assessment (20%) = 20
Total Marks (MCQs:40%+SEQs:40%+IA:20%) = 100

Pass Marks = 50
Paper-1: (*Marks of MCQ component shall be rationalized to 40% weightage)
 60 x MCQs (1 mark each) (60 Marks) Time =60 min

Paper-2: 8x SEQs/SAQs (05 Marks Each) (40 Marks) Time = 120 min

*If a candidate obtains 50 marks in MCQs it will be rationalized as: $(50/60 \times 40 = 33.33)$

S. No	TOPIC/THEME	Sub topics	Number. of MCQs (60)		No. of SEQs/SAQs (08) (5 Marks each) (40 Marks)
			Recall:30	Application:30	
1	Cardiovascular System	Acute chest pain and its management	-	01	01
		Ischemic heart disease and its management	01	01	
		Hypertension	01	01	
		Rheumatic fever/RHD	01	-	
		Cardiac failure	-	01	
		Infective endocarditis	01	01	
2	Infections	Common infective causes of fever	01	01	01
		Common viral infections	01	01	
		HIV/AIDS and other STDs	01	01	
		Important fungal infections	-	01	
3	Gastrointestinal System	Common GI symptoms	-	01	01
		Acid peptic disease	01	01	
		Upper GI bleeding	01	01	
		Acute hepatitis, chronic hepatitis and cirrhosis of liver	01	01	
4	Respiratory System	Pneumonia	01	01	01
		Chronic bronchial asthma, acute severe asthma	01	01	
		Pulmonary tuberculosis Chronic obstructive pulmonary disease	02	01	
	Haematology	Common clotting disorders	01	-	01

5		Immune thrombocytopenic pupura and disseminated intravascular coagulation	-	01	
		Anemia	01	01	
		Anticoagulant therapy	01	-	
		Common haematological malignancies	01	01	
6	Endocrinology	Hypothyroidism	-	01	01
		Hyperthyroidism	-	01	
		Parathyroid disorders	01	01	
		Diabetes mellitus	01	-	
		Diabetic emergencies	-	01	
7	Nervous System	Approach to the patient with headache	01	01	01
		Meningitis and Encephalitis.	01	01	
		Cerebrovascular accident	01	-	
		Epilepsy	01	01	
8	Nephrology	Acute kidney injury and chronic kidney disease.	01	01	01
		Fluid and electrolyte imbalances	02	01	
		Urinary tract infection	-	01	
9	Musculoskeletal System	Systemic lupus erythematosus	01	-	01
		Rheumatoid arthritis.	01	01	
		Osteoporosis and osteoarthritis	01	-	
Total			60 (60 Marks)		08 (40 Marks)

Table of Specifications for Annual Exam: Practical

VIVA 40 marks		Practical 40 marks			Total
Examiner 1	Examiner 2	Long case	Short case I	Short Case II	
20 Marks	20 Marks	20 Marks	10 Marks	10 Marks	80 Marks

Annual Examination

- a. The weightage of Annual Examination shall be 80%, each for theory and practical, in BDS.
- b. The examination comprises of a theory paper and practical/clinical examinations as per PM&DC regulations and the Table of Specifications(TOS) of the University.
- c. The gap between two consecutive theory papers shall not be more than two days.
- d. The Theory Paper shall be of 3-hours duration, held under the arrangements of the university. It shall have two parts; MCQs (50%) and SAQs/SEQs (50 %) for the year 2023. It may be changed after the approval of Academic Council.
- e. Allocated time for MCQs for 2023 shall be as under:

25 MCQs	-	30 Minutes
30 MCQs	-	40 Minutes
40 MCQs	-	50 Minutes
45 MCQs	-	60 Minutes
- f. Each MCQs shall have four distracters

Internal Examiner

He/she shall be Professor and Head of Department who has been involved in teaching of the class being examined for at least six months and has delivered 50% of the total lectures. Second preference shall be Associate/Assistant Professor who is involved in teaching of the class and posted there for one year. Third preference shall be a recognized Professor of the subject.

External Examiner

He/she shall be a Professor/Associate Professor of a recognized Medical/Dental College or at least an Assistant Professor with three years teaching experience in the relevant subject.

Conflict of Interest

No person shall serve as an examiner whose close relative (wife, husband, son, daughter, adopted son, adopted daughter, grand-son, grand-daughter, brother, sister, niece /nephew, son and daughter- in-law brother and sister- in-law, parental and maternal uncle and aunt etc) is appearing in the examination. All examiners likely to serve as an examiner shall render a certificate in compliance to this para.

Paper Setting

- a. Each College / Institute shall forward a set of two question papers as per TOS along with the key for each subject to the Controller of Examinations, at least three months in advance of the annual examination. The question paper as a whole / a question without a comprehensive key shall not be considered towards final paper setting.
- b. The set of question papers shall be prepared by the respective Head of Department (HoD) and furnished to Controller of Examinations through Head of Institution (Hol)
- c. The Controller of Examinations shall approve the faculty for the final paper setting having fair representation of each college / institute.

Paper Assessment

- a. The Controller of Examinations shall approve the faculty for the theory paper marking, to be undertaken in the manner as deemed appropriate.
- b. The Examination Directorate shall coordinate directly with the faculty, earmarked for the paper marking
- c. A student who scores 85% and above marks in any subject shall qualify for distinction in that particular subject.
- d. A fraction in aggregate marks of a subject shall be rounded off to whole number. If it is less than 0.5 then it will be rounded off to the previous whole number while 0.5 or more will be rounded off to the next whole number.

Practical / Clinical Examinations

- a. The Controller of Examiners shall approve the faculty to serve as the internal & external examiners.
- b. The number of external and internal examiners shall be equal.
- c. One external & internal examiner each shall be marked for a group of 100 students.
- d. Candidates may be divided into groups in the clinical and practical examinations and be standardized by incorporating clinical exam
- e. Practical/clinical examination shall be held after the theory examination of the subject but in special cases, it may be held before the theory examination with the approval of the Controller of Examinations. For the purpose of practical/clinical examination, the candidates may be divided into sub groups by the examiners.
- f. The assessment of the practical / clinical examination duly signed by internal & external examiner shall be furnished to the Controller of Examinations within one week of the conclusion of examination

Pass Marks

- a. Pass marks for all subjects less Islamic / Pakistan Studies, shall be 50 % in theory and practical, separately.
- b. Pass marks for Islamic / Pakistan Studies shall be 33 % which, however shall not be counted towards final scoring of the professional examination.
- c. No grace marks shall be allowed to any student in any examination.

Declaration of Result.

Every effort shall be made to declare the result of each examination within one month of the last practical examination or earlier.

Promotion.

No student shall be promoted to the higher classes unless he/she passes all the subjects of the previous class

Re-Totaling.

Any student may apply to the Controller of Examinations on a prescribed form along with the specified fee.

Supplementary Examination.

The interval between a supplementary examination and the previous professional examination shall not be more than two months. There shall be no special supplementary examination.

Sample MCQ and SEQs

The distribution of SAQs/SEQs as well as MCQ difficulty levels for BDS annual examinations is as under: -

Program	BDS 3 rd year
Professional Year	3 rd year
Subject	Medicine
Topic	CVS
Sub Topic	IHD and management
Sub Topic Detail	

Stem/ Question (Attach Image if any)	A 70 years old male diabetic, smoker and hypertensive presents with sudden severe chest pain of 4 hours. He is in considerable distress. ECG shows ST segment depression in V1 to V4 leads. Trop I done and is markedly raised. Next step after Aspirin/clopidogrel loading dose is
a.	Amiodarone
b.	Coronary artery bypass grafting
c.	Heparin
d.	Streptokinase
Key Answer	c

* **Check (✓) the appropriate choice**

Domain/ Cognitive Level	Recall		<input checked="" type="checkbox"/> Application
Difficulty Level	<input checked="" type="checkbox"/> Easy	Moderate	Difficult
Importance	Good to Know	Nice to Know	<input checked="" type="checkbox"/> Must Know

Program	BDS 3 rd year
Professional Year	3 rd year
Subject	Medicine
Topic	Infections
Sub Topic	Pneumonia
Sub Topic Detail	Diagnosis and treatment

Stem/ Question (Attach Image if any)	<p>1. A 40 years old presents with high grade fever of 103F` with chills and shortness of breath from 2 days. He also has purulent green sputum. Diagnosis of acute pneumonia is made.</p> <p>a. What is CURB 65 score (1)</p> <p>b. What is most likely cause of pneumonia (1)</p> <p>c. What is light`s criteria for pleural effusion? (2)</p> <p>d. Name 4 antibiotics to treat pneumonia (1)</p>																														
Key/ Answer (Attach Image if any)	<table border="1"> <thead> <tr> <th>CURB-65</th> <th>Clinical Feature</th> <th>Points</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>Confusion</td> <td>1</td> </tr> <tr> <td>U</td> <td>Urea > 7 mmol/L</td> <td>1</td> </tr> <tr> <td>R</td> <td>RR ≥ 30</td> <td>1</td> </tr> <tr> <td>B</td> <td>SBP ≤ 90 mm Hg OR DBP ≤ 60 mm Hg</td> <td>1</td> </tr> <tr> <td>65</td> <td>Age > 65</td> <td>1</td> </tr> </tbody> </table> <p>a.</p> <p>b. Streptococcus pneumoniae</p> <table border="1"> <thead> <tr> <th>Pleural fluid</th> <th>PF/serum protein ratio</th> <th>PF/serum LD ratio</th> <th>PFLD (U/L)</th> </tr> </thead> <tbody> <tr> <td>Transudative</td> <td>< 0.5</td> <td>< 0.6</td> <td>< 2/3 URL</td> </tr> <tr> <td>Exudative*</td> <td>≥ 0.5</td> <td>≥ 0.6</td> <td>≥ 2/3 URL</td> </tr> </tbody> </table> <p>c.</p> <p>d. Levofloxacin, Moxifloxacin, Azithromycin, Clarithromycin, Amoxicillin/clavulanic acid, 3rd gen cephalosporins (any)</p>	CURB-65	Clinical Feature	Points	C	Confusion	1	U	Urea > 7 mmol/L	1	R	RR ≥ 30	1	B	SBP ≤ 90 mm Hg OR DBP ≤ 60 mm Hg	1	65	Age > 65	1	Pleural fluid	PF/serum protein ratio	PF/serum LD ratio	PFLD (U/L)	Transudative	< 0.5	< 0.6	< 2/3 URL	Exudative*	≥ 0.5	≥ 0.6	≥ 2/3 URL
CURB-65	Clinical Feature	Points																													
C	Confusion	1																													
U	Urea > 7 mmol/L	1																													
R	RR ≥ 30	1																													
B	SBP ≤ 90 mm Hg OR DBP ≤ 60 mm Hg	1																													
65	Age > 65	1																													
Pleural fluid	PF/serum protein ratio	PF/serum LD ratio	PFLD (U/L)																												
Transudative	< 0.5	< 0.6	< 2/3 URL																												
Exudative*	≥ 0.5	≥ 0.6	≥ 2/3 URL																												

* **Check (✓)the appropriate choice**

Domain/ Cognitive Level	Recall		<input checked="" type="checkbox"/> Application
Difficulty Level	Easy	<input checked="" type="checkbox"/> Moderate	Difficult
Importance	Good to Know	Nice to Know	<input checked="" type="checkbox"/> Must Know

